

BRITISH SCHOOL OF ARCHAEOLOGY
IN EGYPT
AND EGYPTIAN RESEARCH ACCOUNT
FIFTEENTH YEAR, 1909

**THE PALACE
OF APIES
(MEMPHIS II)**

BY
W. M. FLINDERS PETRIE

WITH A CHAPTER BY

J. H. WALKER

LONDON

SCHOOL OF ARCHAEOLOGY IN EGYPT
UNIVERSITY COLLEGE, GOWER STREET, W.C.

AND

BERNARD QUARITCH
11, GRAFTON STREET, NEW BOND STREET, W.

YPT

1909

The
McAfee
Library
of Ancient
Art



NEW YORK UNIVERSITY LIBRARIES
INSTITUTE OF FINE ARTS



BRITISH SCHOOL OF ARCHAEOLOGY IN EGYPT
AND EGYPTIAN RESEARCH ACCOUNT
FIFTEENTH YEAR, 1909

THE PALACE OF APIES (MEMPHIS II)

BY
W. M. FLINDERS PETRIE

HON. D.C.L., LL.D., LITT.D., PH.D.
F.R.S., F.B.A., HON. F.S.A. (SCOT.)
MEMBER OF THE ROYAL IRISH ACADEMY
MEMBER OF THE IMPERIAL GERMAN ARCHAEOLOGICAL INSTITUTE
CORRESPONDING MEMBER OF THE SOCIETY OF ANTHROPOLOGY, BERLIN
MEMBER OF THE ROMAN SOCIETY OF ANTHROPOLOGY
MEMBER OF THE SOCIETY OF NORTHERN ANTIQUARIES
MEMBER OF THE AMERICAN PHILOSOPHICAL SOCIETY
EDWARDS PROFESSOR OF EGYPTOLOGY, UNIVERSITY OF LONDON

WITH A CHAPTER BY
DR. J. H. WALKER

LONDON
SCHOOL OF ARCHAEOLOGY IN EGYPT
UNIVERSITY COLLEGE, GOWER STREET, W.C.
AND
BERNARD QUARITCH
11, GRAFTON STREET, NEW BOND STREET, W.

1909

Fine Arts

DT

57

B8

no 17

PRINTED BY
MAZELL, WATSON AND VINET, LTD.,
LONDON AND ATLESBURY.

BRITISH SCHOOL OF ARCHAEOLOGY IN EGYPT AND EGYPTIAN RESEARCH ACCOUNT

Patron:

THE EARL OF CROMER, G.C.B., G.C.M.G., K.C.S.I., Etc., Etc.

GENERAL COMMITTEE (*Executive Members)

LORD AVEBURY	*Prof. ERNEST GARDNER	Sir C. SCOTT MONCRIEFF
WALTER BAILY	Prof. PERCY GARDNER	ROBERT MOND
HENRY BALFOUR	Rt. Hon. Sir G. T. GOLDFIE	Prof. MONTAGUE
FREIHERR VON BISSING	Prof. GOWLAND	WALTER MORRISON
Dr. T. G. BONNEY	Mrs. J. R. GREEN	*Miss M. A. MURRAY
Rt. Hon. JAMES BRYCE	Dr. A. C. HADDON	Prof. P. E. NEWBERRY
Prof. J. B. BURY	JESSE HAWORTH	Dr. PAGE MAY
*SOMERS CLARKE	Dr. A. C. HEADLAM	F. W. PERCIVAL
EDWARD CLODD	*Sir ROBERT HENSLEY (<i>Chairman</i>)	Dr. PINCHES
W. E. CRUM	D. G. HOGARTH	Dr. G. W. PROTHERO
Prof. BOYD DAWKINS	Sir H. H. HOWORTH	Dr. G. REISNER
Prof. Sir S. DILL	Baron A. von HÜGEL	Sir W. RICHMOND
*Miss ECKENSTEIN	Prof. MACALISTER	Prof. F. W. RIDGEWAY
Dr. GREGORY FOSTER	Dr. R. W. MACAN	Mrs. STRONG
Dr. J. G. FRAZER	Prof. MAHAFFY	Mrs. TIRARD
ALAN GARDINER	*J. G. MILNE	E. TOWRY WHYTE

Treasurer—*H. SEFTON-JONES

Honorary Director—Prof. FLINDERS PETRIE

Honorary Secretaries—Mrs. HILDA PETRIE and *Dr. J. H. WALKER.

The need of providing for the training of students is even greater in Egypt than it is in Greece and Italy; and the relation of England to Egypt at present makes it the more suitable that support should be given to a British School in that land. This body is the only such agency, and is also the basis of the excavations of Prof. Flinders Petrie, who has had many students associated with his work in past years. The great enterprise of the excavation of the temples and city of Memphis, which has now been undertaken, promises the most valuable results. But it will necessarily be far more costly than any other work in Egypt, and it cannot be suitably carried out without increasing the present income of the School. Active support is required to ensure the continuance of such work, which depends entirely on personal contributions, and each subscriber receives the annual volume. The antiquities not retained by the Egyptian Government are presented to Public Museums, after the Annual Exhibition, during July, at University College. The accounts are audited by a Chartered Accountant, and published in the Annual Report. Treasurer: H. SEFTON-JONES.

ADDRESS THE HON. SECRETARY,

BRITISH SCHOOL IN EGYPT, UNIVERSITY COLLEGE,

GOWER STREET, LONDON, W.C.

CONTENTS

SECT.	CHAPTER I	PAGE	SECT.	CHAPTER IV	PAGE
	THE PALACE OF MEMPHIS.			THE OBJECTS FROM THE PALACE.	
1. The palace mound	.	1	25. Scene of Pl. IV	.	9
2. The walls	.	1	26. Scene of the dance, Pl. V	.	9
3. The approaches	.	1	27. The arms of consecration	.	10
4. The new Broadway	.	2	28. Scene at lake of Heliopolis, Pl. VI	.	10
5. The Great Hall	.	2	29. Scene in temple of Ra, Pl. VII	.	11
6. The columns	.	3	30. Scene with shrines, Pl. VIII	.	11
7. The northern part	.	3			
8. The tower	.	4			
9. The limestone building	.	4			
10. The brickwork	.	4			
	CHAPTER II			CHAPTER V	
	THE SCULPTURED PYLON.			SCULPTURES FROM TEMPLES AND CITY.	
11. The discovery and copying	.	5	40. Lion shrine	.	13
12. The date	.	5	41. Rose-lotus capitals, etc.	.	13
13. Arrangement of the blocks	.	6	42. Sculpture from camp, etc.	.	14
14. Construction of Pl. III	.	6	43. Negro heads and lintel	.	14
15. " of Pl. IV	.	6	44. Siamen inscriptions, etc.	.	14
16. " of Pls. V, VI	.	7			
17. " of Pl. VII	.	7			
18. " of Pl. VIII	.	7			
19. Fragments and courses	.	7			
	CHAPTER III			CHAPTER VI	
	THE SUBJECT OF THE PYLON SCENES.			THE SMALL OBJECTS.	
20. The Sed festival	.	8	45. From Proteus temple	.	15
21. The investiture of the prince	.	8	46. Cretan plaque, etc.	.	15
22. Opening scene, Pl. III	.	8			
23. The standards	.	9			
24. The officials	.	9			

SECT.	PAGE	CHAPTER VIII
47. Khabash bullet, etc.	16	THE INSCRIPTIONS.
48. Bronze work	16	<i>By DR. J. H. WALKER</i>
49. Glazed bowls	16	
CHAPTER VII		
THE TERRA-COTTA HEADS.		
50. The named types	16	53. Dedications, camp sculpture, Pls. XIIIa, XIX
51. The Greek types	17	54. Lintel of Merenptah, Pl. XXI
52. Unknown types	17	55. XIth and XXth dynasty inscriptions, Pl. XXIII
		19
		56. Siamen inscriptions, Pl. XXIV
		19
		57. XIXth and XXXth dynasty inscriptions, Pls. XXV, XVII
		20
INDEX		23

LIST OF PLATES

WITH PAGE REFERENCES TO THE DESCRIPTIONS

PAGE	PAGE
I. Plan of palace	1-3
II. Sculptures of pylon	5
III. Pylon: opening scene	8
IV. " second scene	9
V. " dancing scene	9, 10
VI. " lake and palms scene	10
VII. " scarf scene	11
VIII. " shrines scene	11
IX. " general view	8
X. Palace mound; old entrance	1, 2
XI. Courts with columns	3, 4
XII. Stone work in palace	4
XIII. " chambers in palace	2
XIIIa. Details of stone building	4, 18
XIV. Silver, ivory, glaze from palace	11, 12
XV. Bronze, seals, etc., from palace	12
XVI. Alabaster and armour from palace	12, 13
XVII. Slab of Aahmes-si-neit-rannu	11, 13, 18, 20, 21
XVIII. Rose-lotus capital, etc.	13
XIX. Sculptures XVIIIth-XXVIth dynasty	14, 18
XX. Negro heads and Set stele	14
XXI. Lintel of Merenptah (Proteus)	14, 18
XXII. Objects from Proteus temple	15
XXIII. Inscriptions, Ramessu III, etc.	14, 19
XXIV. " Siamen	14, 19
XXV. " XIXth and XXVIth dynasty	15, 20, 21
XXVI. Small objects	15, 16
XXVII. Glazed pottery and stamps	16
XXVIII. Terra-cotta heads: Iberian, Karian, Hebrew, Kurd.	17
XXIX. Scythian, Indian, etc.	17
XXX. Female heads	17
XXXI. Greek peoples	17
XXXII. Helmeted heads, etc.	17
XXXIII. Mesopotamian	17
XXXIV. Unknown types.	17

THE PALACE OF APIES (MEMPHIS II)

CHAPTER I

THE PALACE OF MEMPHIS.

1. AFTER the close of the excavations at Qurneh our camp was moved to Memphis to continue the work of the previous season, recorded in *Memphis I*. Mr. Wainwright left Qurneh three weeks before me, in order to study at the Cairo museum, and to begin the arrangements at Memphis. I went down on 10 February, and Mr. Mackay followed twelve days later after packing. I left on 21 April and Mr. Wainwright soon after, Mr. Mackay staying on till near the middle of May.

The greater part of our work was spent upon the large mound at the north end of Memphis, which we found to be the site of the royal palace of Apries. The general appearance of it is a long ridge about two hundred feet wide, and four hundred feet from the north end up to some immense walled enclosures of brick at the south end. The view of the whole, from the east, is in Pl. X, and the plan of the palace in Pl. I. The plan was entirely measured by taping, from a sighted line laid out along the wall east of the new broadway, with diagonal ties across the great court to fix the squareness of the whole. Plumb-lines were constantly used for sighting and measuring. The clearance was over two acres of ground, to a depth of ten or fifteen feet in most parts, the largest clearance made this year in any site. Last season I had seen that there were walls remaining on the top of the mound, and therefore we ranked a row of workmen along each side of the ridge, and began steadily clearing inwards until they met in the middle.

2. The walls are all of black mud brick, with stone linings around the lower part of the halls, stone floors to the halls, and stone doorways and stairways. The walls are from 10 to 22 feet in thickness, generally being about 14 feet. They vary in age, some being patched on the top with later brickwork, some being built up from the floor of Apries, while many extend down far into the mound, covered with plaster,

and evidently have served for previous palaces. It may be said that the level of Apries is inserted some way up the older walls, with some repairs, and some new construction added. The disentanglement of the history of construction, and of the changes of levels, will need careful work in future; but for the present we only deal with the level of Apries. The history of these changes seems clear. As a dynasty decayed, the roofs were not kept in good state, the winter rains ran into the walls, large masses fell off the tops of the walls after a heavy storm, some roofs fell in; then when a new order of things arose, the damaged parts were taken down, the floors were all levelled up with the rubbish, the sound walls were trimmed and patched, new walls were built where the decay was beyond repair, and the whole palace was restored at a higher level. Thus about seventy feet depth of artificial construction stands between the primitive ground level and the floor of Apries. Much of the north end has been successively extended by building up a cellular substructure of brick shafts domed over, like the platforms of the forts of Naukratis and Daphnae; but the rest of the site shews earlier courts in the lower levels.

3. The general scheme of the building was that it occupied the north-west corner of the great fortified camp of about thirty acres, at the north end of the ruins of Memphis. Along the west side of the camp was a line of three great enclosures, and the palace-fortress mound. The enclosures to the south are ruined and built over; that next to the palace has been cleared out by the *sebakhin* for earth, leaving a square of massive walls standing about forty feet high; all the interior of this is empty, and we cannot know what it contained before it was destroyed. Through this great square there was a roadway, with a wide gate on the south, and another on the north opposite to it. This latter is shewn on the plan, Pl. I, by two white lines across the thick wall at the foot of the plate. They mark the sides of the gate, subsequently built up with brickwork. This

gateway led to another in the south face of the palace from which the "old broadway" led to the great court. The view up the old broadway is given on Pl. X, and the front of the brick blocking of the entrance is shewn at the base of Pl. XII. After this entrance was blocked there was a later entrance above it, of which a corner of the stone wall and paving still remains, see on the left of Pl. X, and on the plan, the shaded corner. The whole of this account is written to accord with reference to Pl. I which should be kept in view.

In the reconstruction of Apries a new approach to the palace was laid out, through a mass of building rather more to the east. A gateway in the wall, seen at the foot of Pl. I, is exactly opposite the end of the "new broadway." Between them, isolating the palace, is a fosse about twenty feet deep, though the bottom of it is far above the level of the fields. This was doubtless crossed by a draw-bridge. Each side of the fosse has been partly built up as a berm, so that the space of 33 feet wide is narrowed to 9 feet between these berms. The two faces of the berms are marked by lines on the plan: the southern berm does not extend beyond the east part of the fosse, the northern berm runs the whole length of the palace wall.

4. On going up the new broadway there was a hall opening on the west, with a bench along the west and north sides. By its position this was doubtless the guardroom. Next beyond that was the kitchen, with the brick fire-places still standing against the north wall. Then a wide doorway, D, opened on the right, leading to the stone-lined halls. South of the doorway was a stone door, C, E, of which the sill and lintels still remain: the lintels are shewn at the top of Pl. XIII. This door led through one hall to another, on the south, which is the best preserved of the halls. It is marked XIII in the plan, and shewn in the photograph in the upper part of Pl. XIII. The floor was built sloping down to a drain, which had a leaden tank in the head of it. This tank was $290 \times 34\frac{1}{4}$ inches, and 7 to $10\frac{1}{2}$ inches deep; it was removed to the Cairo Museum. The covering of the drain was partly gone, as seen in the view; I had it thoroughly searched as far as possible, but nothing was found. Doubtless it discharged into the fosse on the other side of the wall. The limestone flooring consisted of deep beams of stone with thick slabs laid over them. The lining slabs are of fine white Mokattam limestone, about 8 inches thick, $3\frac{1}{2}$ feet high and up to 10 feet

in length. To the east of this are remains of another hall, the outline on the plan across the hall marking the stone paving yet in place.

Along the eastern side of the palace there must have been a corridor giving access to the group of three halls in the middle of the east side. But denudation of the mound has removed that part. These three halls were all stone-paved and lined, like that shewn in the photograph. But nearly all the stone has been removed, and it is only marked by the white plaster from behind it which is left on some parts of the walls. Two stone tanks or cists are marked here in the broadway.

Beyond these halls the broadway has been blocked across. It seems that this block cut off the direct access to the *mandara*; it could still be reached through the Great Court and a hall, or perhaps by some passage now destroyed round the north-east corner. In the north-east halls the stone lining was thinner, as in the section L on Pl. XIII A; one slab fell partly forward, and is shewn at the foot of Pl. XIII, leaning out, with the cast of the brick courses in the plaster on the back of it. Half of the stone doorway between these halls is still in place. A thin dividing-wall of brick has been added in one hall, built against the stone lining.

5. Returning now to the Great Court, the entrance to it has been partly cut away at the south-east. The rains had settled down in a hollow region here, and so hardened the ground that the workmen did not distinguish the wall from the fallen bricks around it. As I was unwell, and not able to visit it myself just then, the end of the wall was removed. The court is nearly square. On the west it is 1383 $\frac{1}{2}$ inches (115 feet), in the middle 1383 $\frac{1}{2}$, at the east, by sighting out the wall, 1392 $\frac{1}{2}$ (116 feet). On the north it is 1292 $\frac{1}{2}$ inches (107 feet). The walls on all sides are older than the work of Apries, and descend far below his floor-level, covered with plaster facing.

In the midst of the court is a stone cist sunk in the floor, shewn at the base of Pl. XII. It is accurately placed, being only 8 $\frac{1}{2}$ inches west of the centre of the court, and but one inch north of the centre. Over all the block is 857 \times 64 $\frac{1}{4}$ and 64 $\frac{1}{2}$ inches; inside it is 68 $\frac{1}{2}$ to 68 $\frac{1}{4}$ \times 470 to 47 $\frac{1}{2}$ inches. The seating for a cover is N. 78 $\frac{1}{2}$, S. 78 $\frac{1}{2}$, E. 57 $\frac{1}{4}$, W. 57 $\frac{1}{2}$. The accuracy of it is therefore a matter of hundredths of an inch. The depth is less regular, being at N.E. 34 $\frac{1}{2}$, S.E. 31 $\frac{1}{2}$, S.W. 32 $\frac{1}{4}$, N.W. 34 $\frac{1}{2}$ to the ledge. The ledge is 1 $\frac{1}{2}$ to 1 $\frac{1}{4}$

deep, to be added to the above depths. The sides draw together 1 to 2 inch at the corners, but as a whole they are very flat and finely wrought. The purpose of this cist is not known. It was not for water, as there is no hole in it, and no drain or catch to gather in water at the top. It is a monolith, so that it must have been protected from the rain, or it would hold what fell on it. The contents up to the ledge do not agree with any of the large standards of measure used in Egypt or other countries, nor have the dimensions any exact relation to each other. The outside is rough, and was not intended to be seen. The only purpose that I can suggest is that the throne in the centre of the court was lowered into it, and covered with a stone slab, so that it could not be robbed of its gold fittings. But it would seem strange to prefer such protection instead of removing the throne to a locked chamber.

To the south-east of it is another monolith cist, circular in form. This is 43.5 inches across inside, 23.5 deep, and 5 inches thick in the sides.

6. About the middle of the Great Court are lying the drums and capitals of limestone columns, inscribed on each quarter "Horus, uah ab; suten baty; nebti, neb khopesh; Horus (on) nubti, suaz taui; Haa-ab-ra; si en Ptah." These blocks mainly lie from 12 to 16 feet south of the central cist. But no pavement or bases exist to shew the original place of the columns. There were certainly three of them, and probably many more. The diameters are 59.7 inches under the capital, 63.0 inches at 93.6 down, and probably 72 at the base. The blocks of the capital are 32 ins. high at the top of the palm, then one block lost, 29.7 high below that, and 25.9 high divided into 5 bands. Probably the whole capital was 118 inches high, agreeing with the proportions of the monolith capital found in one of the halls, Pl. XII. From a comparison of the dimensions with those of the standard palm capitals at Ehnasya, the total height must have been about 520 inches, or 43.2 feet.

To what kind of structure could these columns have belonged? There are but three proven, and those all together near the middle. It seems difficult to suppose a peristyle colonnade around the sides of the court, as in the courts of Egyptian temples; or a general hypostyle, like the temples, and like the Persian palaces, as no fragments were found except in the middle of the court. To realise the situation, we must consider what the relation of the columns to the court must have been. Approximately the

court is 107 feet wide; the columns 43.2 feet high, 6 feet wide at base, and 16 feet between them if spaced as in the portico of Ehnasya. If the columns filled the court there would have been 4×4 ; being 6 feet diameter, the spaces would be 16.2 feet E. to W. and 18 feet N. to S. Such a space is not at all improbable, as cedar beams were used for roofing. If there were only a central group of columns to shade the throne, two each way would not suffice, as there would be only 14 feet of roof from the middle, which at 43 feet high would be useless against sun, wind, or rain. There might be 3×3 columns, but then the centre and axis would be occupied by columns, leaving no space for a throne or central ceremony. It seems then that a closed hypostyle hall of 4×4 columns filling the whole of the Great Court is the only form that is likely for a columnar structure here.

7. Beyond the Great Court a large stone gateway led into the hall, about 35×29 feet. On each side of this is a narrower hall. That on the west, marked "workshop," had a bench all round the sides, shewn in the right side of the photograph at the top of Pl. XII. This bench is about 39 to 46 inches wide, doubtless for workmen to sit on as a diwan. In the middle area was a rough box of stone slabs, probably a tank for water used in work. It was destroyed by stone-seekers before being planned. All about this room large quantities of scrap bronze were found, mainly many pounds of nail tips, broken off after long bronze nails had been driven through planks. At the west edge of the area was a small hole in the floor filled with sand, evidently a workman's hiding-place. In it was the silver and gold fitting shewn on Pl. XIV.

North of all the other buildings is a wide space, with walls on three sides; the north end has been entirely denuded away. This open space seems to be the equivalent of the wide court with a colonnade found on the north of private mansions, as at Kahun; it was used for general public reception, in the shade of a portico facing the north. In the mansions this public use is shewn by there being a long passage to give direct access from the entrance door, without interfering with the rooms of the house. It was therefore the same as the modern Egyptian *mandara* or reception hall. The plan of the whole palace is closely on the same lines as the mansions of the XIth dynasty—the entrance on the south, the long straight passage leading right through to the *mandara* on the north, the servants' quarters and kitchens to

the west, the great court behind them, and the best rooms of the women's quarters on the east.

Of the portico in the *mandara* there remain the tops of two capitals. They were of nearly the same size as the other columns of the Great Court, so that they were probably all alike. They are shewn in general position in Pl. XII, middle, and in near view in Pl. XI; the title of 50-foot columns is given because of the breadth across the palm tops; this is 110.4 as against 97.6 inches in the Great Court, which would imply height of 49 or 50 feet; but the size of the abacus would imply that they were the same size as the other columns. The inscriptions are very carelessly cut, being merely scratched on one side of the abacus: but they were brilliantly painted.

The full height of the Great Court walls must have been about 1.5 feet for base, 4.5 feet column and abacus, 1.5 feet of beams, and 1 foot of rafters and roof, or about 47.5 feet over all. The *mandara* portico may however have been higher.

8. The south-west corner is not clear in its meaning. The three narrow passages, instead of chambers, and the extreme thickness of the walls (19 and 22 feet), suggest that a tower stood here dominating the fosse. Such would be the most suitable position for a tower, and it is likely that some higher look-out would be provided at the palace-fort. As the mound now stands, it gives a good view of the desert valleys on both sides of the Nile, and a high tower rising above that would be of the greatest value for observing up and down the Nile plain, as well as over the deserts.

The chamber marked XII, south-west of the Great Court, has most of the stone doorway still in place, shewn in Pl. XII.

9. In connection with the general plan we must notice the various blocks of stone-work which lie about the ruins. The columns we have already described.

Six limestone lintels are lying perfect on the ground. The profiles of them are given in Pl. XIII A, the reference letters are on the plan Pl. I. That marked A is at the gateway of the building south of the fosse, the block below the roll is lost. B lies at the entrance from the old broadway to the Great Court. C and E are the inner and outer sides of a doorway to the south-east halls. D is from the adjacent doorway in the new broadway. F belongs to the door of the middle north hall. The length of C is 150.9 at top and 126.6 below, the ends turning outward in a cavetto. The heights from below the roll to the top

vary from 52.0 to 33.9. The tallest lintel of which the lower block remains, D, is 72.5 high, over all.

In the old broadway lies a block of stone steps, G in Pl. XIII A. These shew that there was a regular access to a higher level; and they may well have come from the tower, which appears to have been immediately to the west of this. The width of step is 38.0, the tread 13.5 to 14 inches, the rise 3.5 to 5 inches.

At the east end of the north berm is the lintel (H in XIII A) or head-block of a small doorway, only 21.2 wide inside, less the door thickness, leaving 18 inches or less when open. It must have been a small postern door. It has running round it an unusual moulding of a beading with sloping sides.

In the fosse opposite the new broadway lies the sill of a small doorway (J in XIII A). It was an outer door much exposed to the weather. The jamb seems to have been advanced over the line drawn for it, as the weathering does not reach that. The actual opening of the jambs was only 15.3 wide; so that it must have been needful to sidle through the doorway J. The narrowness of these doors opening from the palace on to the berm shews how much was sacrificed for strength and defence.

Inside the mouth of the new broadway is a block, K, from a gateway side. It has a strong batter, with a roll moulding well back from the gateway. From the lock or bolt hole it was probably the outer face. It is possible that H, J, and K all belong to the one entrance to the broadway, K being the side of the main gate, J the outer sill of the postern, and H the inner top of the postern or side entrance. The breadth of the inner side of J, 20.3, might expand to 21.2 of H in the length of the gateway.

The section of the stone lining of the N.E. hall is given as L in XIII A.

10. The brickwork of the palace should be noticed. The sizes of bricks were measured in twenty-nine walls, several measurements in each wall being taken on the best defined parts. The average size in each wall is here quoted. The various sizes may be mostly put in groups, with not more variation in a group than might well occur in one lot of bricks.

11.4	5.6	4.1	Late, square room in old broadway.
11.9	5.7	4.7	Late, E. wall of N.E. hall.
12.1	5.9	4.5	Filling up of old broadway.
13.1	7.2	5.1	Early, E. wall of <i>mandara</i> .
13.3	6.7	5.2	South berm in fosse.

147	78	48	Enclosure S. of old broadway.
149	71	53	North berm in fosse.
156	78	51	S.W. walls below tower (?).
166	79	48	Passage hall N. of Great Court.
166	?	5?	Gate filling S. of old broadway.
160	{70	?	W. side of old broadway, very fine
	182		brick and joints.
162	76	52	E. of same. Pl. XIII base.
168	80	54	E. of same, low.
180			
170	85	56	Gate filling S. of old broadway.
171	83	52	East wall of Great Court, low.
172	86	52	Block across new broadway, late.
174	84	53	Kitchen.
175	82	54	Pit sides below S.W. tower, low.
175	84	52	Pit sides at E.N.E. corner, low.
176	85		N. wall inserted in same, low.
175	91	51	N. wall of Great Court, low.
176	84	48	Top E. wall of <i>mandara</i> , late.
178	85		W. wall of Great Court, low.
179	84		S. wall of Great Court.
179	87	60	N. wall of N.E. hall.
179	88	57	W. wall of Armour hall.
179	89	45	Building S. of palace, at A.
181	91	56	S. face of palace.
182	89	50	Pit side, W. in E.N.E. corner.

We can distinguish some parts as being probably contemporary by the sizes of the bricks, such as the 179 x 89 and the 181 x 91; and this gives some presumption of relative age. But it is clear that the same size might recur later, such as 176 x 84, which must be far later than the other 175-179 bricks.

CHAPTER II

THE SCULPTURED PYLON.

11. QUITE independently of the work on the Apries palace a discovery of a different age was made there, in the course of beginning part of the clearance. At a much lower level, in the west end of the fosse, heaps of some dozens of blocks of limestone were found, each with one face sculptured. They had evidently belonged to a large pylon, intentionally taken down. It had been about 22 feet high below its lintel, and 7 feet wide on each side. Most of this has been recovered, and is shewn as a whole in Pl. IX, with the separate scenes in Pls. III to VIII. In these plates I have drawn every part

which could be completed by copying from similar figures and scenes of the pylon, all such restorations being shewn by broken lines; but no mere guess has been inserted as to the position of any part or the existence of any figure. This completion of the features that are certain is useful in order to see the amount of uncertainty as to missing parts. The drawings were all made on full-sized impressions, and then reduced by photo-lithography. Mr. Griggs' success in Pl. IX is noteworthy.

12. The dating of this pylon is not fixed by any inscription, and depends wholly on the style. The judgment of style needs an intimate sense of the work of each period, which can only come from frequent drawing of absolute facsimiles. No man knows form who has not drawn it, just as no man knows colour who has not painted it. The drawing of some two dozen square yards of this sculpture has impressed me with the hopelessness of copying the full delicacy of the outline, and that inimitable quality is never found after the XIIth dynasty. When the copyist is saturated with the quality of the early work, all later styles of the XVIIIth or XXVIth dynasties seem coarse and easy; and the XIXth or Ptolemaic work merely invites improvement at every turn, and can scarcely be made worse.

What the actual refinements of the work are can be seen in the photographs given in Pl. II. The faint low relief of the king's head, full of almost imperceptible surface modelling, is finer than in any later work; and the controlled grace and dignity of the profile are full of life. See also the fine work and proportions of the hieroglyphs in figs. 3, 7. Note the vigorous figure of a hawk, 5, which is of the same work, and was found along with the pylon scenes, though not actually joining them. Then compare the poverty and stiffness of the hawk, 4, of the XXVIth dynasty, also from the palace, but of the work of Apries. As a question of artistic quality alone, this work of the pylon could not be put after the XIIth dynasty. We may note that in Pl. II, fig. 1 is drawn on Pl. III, 2 on Pl. VI, 3 on Pl. VII, 6 on Pl. IV, and 7 on Pl. III.

On comparing this with earlier work, we do not see here the noble boldness and directness of the Old Kingdom. But an exact parallel to the very low and delicate relief is seen in the temple scene of Amenemhat I, found at Koptos. Further, a parallel to the nature and arrangement of these scenes is found in the scene of Sankh-ka-ra from Elephantine (*Recueil*, XXXI, 64), though that is coarser in execution. And

if we look closely at the profile of the ruler in these scenes we shall see that it is exactly that of Senusert I, as shewn in his statues, when we remember that this is a young portrait and those are old. I can but conclude therefore that this pylon is of the early part of the XIIth dynasty, and probably represents the investiture of Senusert I in the twentieth year of the reign of his father Amenemhat I.

13. We must now deal with the evidences for the arrangement of the blocks and scenes as here published; those readers who only wish for the results are advised to proceed to the next chapter.

To begin with it is clear that there are six scenes. Looking at the right-hand edges of the scenes (Pl. IX) it is found to be impossible to put any figures into Pls. III to VI; and the figures of VIII could not be pressed into VII. There are also five back hands of the king, shewing a minimum of six scenes. But there is nothing which necessitates eight scenes. Next, these scenes have always a smooth edge behind the king's figure, and a rough edge before the king; the smooth edge being the corner of the entrance, the rough edge having been built in to the mass of the brick pylon. These edges prove the right and left arrangement, and shew that the king's figure was always placed as coming out from the gate. This being fixed we see that all three of the right-hand figures have the crown of Lower Egypt. Of the left-hand figures, the bottom one has the crown of the south, and the same crown is necessary in the two other figures of this side, as the other crown would come into contact with the hawk. Hence the crowns were uniform on each of the sides. The blocks of limestone, of which the scenes were built, vary between 26·8 and 30·9 inches thick, except two courses of 21·7, 21·8, at the top of Pl. VI. No vertical joints were found, hence the blocks were usually about 80 x 30 inches on the face. Yet there are some difficulties which oblige us to assume vertical joints in Pls. III, IV, rather than assume two additional scenes for which there is no warrant in the sculpture. We now turn to the separate subjects.

14. Pl. III. The left side is certainly the top of the pylon, as the stone runs on blank, and with unfinished edge, 3½ inches above the stars. The stars also are much larger than elsewhere, and therefore were placed the highest. Pl. IV could not be brought up, and these figures put into it, as there is not width enough in IV in front of the jackal standard. The right side must belong here, as there is continuity in the two other scenes lower down this side. The figure of the king

is fixed by the back, shoulder, arm, and leg. The vulture being completed, there remains only just enough space for the shortest of the jackal standards. That being put in, the other standard must have been before it, or there would be no space for the king's staff. The unexpected feature is the deep band of stars below the left side, and the continuity without any horizontal joint up the whole of the left side, the slab of which was 69 inches high before it was broken; whereas on the right side are joints through the middle of the *sa* sign and the middle of the *kharp aha* figure. As we have shewn that it is impossible to place these figures of either side in any other scene, we must accept this change of jointing. But it is still a difficulty to assign a reason for so deep a band of stars in the middle of a side. (Liverpool Museum.)

15. Pl. IV. The block on the left could not be put into the scenes above or below this; and its level is proved by its bottom joint. The lower part of the king's figure, two officials behind him, one man before him, and a corner of a shrine, are all continuous, so that this part is beyond question. And the joint running through at the base of *heb* leaves the feet connected to the scene below, the relation of which is therefore certain. The less clear points are the relations of the palanquin and *suten mes* block, and the hawk and vulture block. The *suten mes* block has a smooth right-hand edge, shewing that it must come down this side of the gateway. There is no other place possible for it but here. The hawk and vulture block with the tip of the flying vulture's wing and two standards, cannot go in Pl. III by the space to the left of the standard, nor in Pl. V which is complete in that part. Its place here is fixed by the lower ends of the standards and the usual height of the flying vulture. The top of the jackal is separate, and might belong to the scene above. Two fragments of the lower wing of the vulture must be left-handed, and cannot go in either of the other scenes. The tips of two *wa* signs are connected with the palanquin, and the tips of a *res* sign. These indicate the name "Up-utati of the south" for which there is just room. Here again is another puzzle in the jointing. While there is a joint at the king's waist, (the upper end of the continuous outlines), there is no other joint possible in the blocks above as far as the middle of the jackal's legs, that is, for 44 inches; and as a joint occurs at 57 inches up, it is almost certain that there was a double course of this height. If there were any other evidence for a fourth register with abnormal jointing, yet we could not place this deep stone along with the

deep stone to the left of Pl. III as the spacing at the top could not agree. The hippopotamus slab is at Brussels, the rest of the figures at Oxford.

16. Pl. V. In this there is no question of connections, as there is continuity of every part shewn here. The restoration of the standing figure of Nut is proved by the vulture head-dress, arm, breast, and two scraps of the outline on the body and leg. The jagged line indicates where the actual edge of the stone comes over the figure. (Cairo Museum.)

Pl. VI. Here again there is continuity throughout and no question arises. The palanquins are shewn by their bases. There is continuity between this scene and the next, proving their order, as the joint runs at nearly two inches up the bases of the palm trees. The place of these scenes above the bottom scene is shewn by the harmonious joining at the base of VII and top of VIII; and if Pl. VIII had been a top scene it is certain that the band of stars would be completed upon it, and not half an inch left over unfinished. (Ny Carlsberg.)

17. Pl. VII. Here one of the most intricate connections arises. There are two top left corners of scenes on this side of the gate, as shewn by the smooth outer edges. These are here placed as the *res* group of VII, and the top of the fan of VIII. The fan has the tail of the vulture adjoining it, so it cannot belong to VI where the tail is perfect. *Res* fits to a piece which joins below VI and cannot therefore belong to VI. Nor could it go over VI as it joins to a piece of *fu*, and these signs would not co-exist with the birds which form part of VI. The fan and *res* therefore belong to VII and VIII. The fan stem is too near the border band, by the amount of its whole breadth, to go over the base of the fan which is all one with scene VII. Therefore the fan belongs to VIII and the *res* to VII. Also, if the fan were put on to VII its stem would be 2 inches too long, and the vulture 4 inches too long. Then the curious result is that there is a continuity of VII with a *kherp aha* behind the king; and also continuity of another figure of the *kherp aha* below VI; hence the latter belongs also to scene VII, and it shews that there could be two figures of the same official in one scene, one accompanying the king, the other acting in the ceremony. (Metropolitan Museum, New York.)

18. Pl. VIII. Of this scene there are very few pieces. There is not length enough for the *behudet* inscription in either of the scenes above, hence it must come here, as its direction precludes its fitting

the other side of the pylon. But its position may be anywhere to the left of the jackal standard which is restored in Pl. IX. Of the vulture there is a fragment of the wing. As there is the tail of the vulture next to the fan it is impossible that the wing belonged to the usual *behudet* winged disc. Of the king there is only the tip of the curl (the ancient ostrich feather) in front of the crown, but that proves the whole figure. A scrap of the inner bend of a back arm can only belong to this figure, and proves that it was not dancing as in the parallel scene Pl. V. There are two parts of scenes from before this figure. One is a piece of a *kherp aha* title, and an *s* of a lower title. The other is a group of fragments which join, and cross over a joint in the stones, shewing three shrines, a *kher heb*, and the tip of the dress of a *sam* priest. From the place of this joint in the group it must come where shewn, if the courses are the normal 28 to 30 inches in height. If it were exchanged with the upper fragment, the heights of the figures would require the courses to have been five inches out of place. Moreover these figures cannot come in any of the other scenes, as there is nowhere room for two figures one over the other. A portion of the border band proves that the lower group belongs to the right side of the scene, and the facing of the figures shews the same. (University College, London.)

19. Thus it is clear that there is no uncertainty about the positions of any part of the scenes as drawn, except in a few slight shifts that might be made, such as the exact position of the *behudet* inscription. The fragments that remain over are lettered on Pl. VIII. A is part of a *res* which by the direction probably belongs to a right-hand scene; it may well be part of a title of Nekheb from the top of Pls. VI or VIII, like those over Pls. V and VII. B is part of a palanquin with a *suten mes*, royal child, like that in Pl. IV. It might come from Pl. V, or some other. C is part of the paneling of a palanquin, which by the work does not belong to Pl. V, nor by the base to IV or VI. It shews that there were palanquins in other scenes. D is either a plural three strokes, or three *neters*, over *neb*. E is a *neb* and a raised rectangle. F is the lower corner of a raised rectangle, perhaps from a *ka* name. G is *dy s*, too small for part of *dy ankh* behind the king. H is part of *an an* like the speech in front of Nut on Pl. V, but from its direction probably from a right-hand scene.

The courses on the left side are as follow. Middle of foot Pl. V = 0, 29'6, 59'2, (footline 830), 860,

113'9, 170'9, (footline 1726) 199'4, 230'3, 260'3. The continuous courses on the right side are from the top of Pl. VIII = 0, (footline 1'5), 29'5, 58'3, (footline 870), 88'9, 116'9, 144'9, 166'6, 188'4.

CHAPTER III

THE SUBJECT OF THE PYLON SCENES.

20. FROM the presence of the palanquins of the *suten mes* or royal children, and from other objects, it is clear that these scenes are connected in some way with the *sed* festival. The nature of the feast we must first notice, in order to see the meaning of these scenes.

In a discussion of this festival, three years ago in *Researches in Sinai*, I concluded that the ceremony was connected with the slaying of an old king and investiture of his successor, which is found in ancient Ethiopia and in modern Africa and India. Also that this ceremony was changed before historic times into the deification of the old king as Osiris, after which he reigned as already deified, while his successor was at that time appointed and became Crown Prince. The careful study of the *sed* festival by Dr. A. Moret (*Du Caractère religieux de la Royauté Pharaonique*) agrees completely in its results with this view, although the ceremonial death of the king is not considered by him.

The summary of Dr. Moret's outline of the festival is as follows. The king started ceremonially for the festival (p. 238). He went to the special pavilion which was erected in the "large hall of the *sed* feast." This consisted of two or four shrines raised on steps, in which he was seated as Osiris (238). Priests in divine dress put on the king the two crowns, and tied the plants of south and north under his feet (241). He was then led by the priest-gods to the cycle of temple gods (243). There the gods embrace him and give him emblems of the feast (244). He then returned seated on a throne borne by the priest-gods, as being fully a god himself. He went with the queen to a feast where he ate with the gods (247). He was then served with food, seated as Osiris (249-252). Lastly the gods dispersed to their sanctuaries (253). "The king enthroned, crowned, embraced, deified by the gods, was then in all the splendour of his royal and divine power (252) . . . the divinity of the king acquired by the *sed* feast the new character of being solemnly proclaimed in public" (255). All of these statements accord perfectly with

the Osirification of the king, and that being the ceremonial of his entering on a divine life, and dropping his mere humanity.

The details of the chapel of Sankh-ka-ra which I cleared this year at Thebes (*Qurneh*, 4-6, Pls. V-VII) also accord closely with this view. Not only was the Osiride seated figure there, but parts of a cenotaph or imitation sarcophagus, which had stood openly in the chapel.

21. Of the acts of the crown prince we have much less recorded. He wore the crown, and danced before the old king seated as Osiris, as shewn on the tablet of Den. And on the curious coffin with the *sed* feast of Osiris figured upon it (*Aeg. Zeits.* XXXIX, taf. V, VI) the prince is shewn dancing or running before the king of Upper Egypt holding a *kha* bird and an oar, and before the king of Lower Egypt holding a whip and apparently a short roll or stick, as in Pl. V here. He also dances with oar and whip at the raising of the obelisks in Heliopolis.

It will be seen that none of the royal figures in our scenes, Pls. III-VIII, (or all together in Pl. IX,) are in the Osiris dress worn by the king in his deification. Again, in one scene, V, the royal figure is dancing or running as the crown prince dances. Hence we must conclude that these are figures of the crown prince; and that the subjects of the scenes are the ceremonies of his investiture. Agreeing with this is the curious fact that none of the *ka* names have been carved, they are all blank. Now the *ka* name was only taken on coronation, and the prince would therefore not have a *ka* name yet, at the time of his investiture. These scenes are therefore of much interest, as they shew a series of ceremonies of which we have no such consecutive representation as on this pylon. It may be that this pylon was the entrance to the quarters of the crown prince in the palace.

22. Pl. III. This seems to be the first of the scenes, as the apparatus of the ceremonies is being brought out, and there is the address of the officials, "He is the leader of the living *kas*, his heart is enlarged before the gods." Such an address is given to the ruler on the opening of the ceremonial at Luqsor (Moret, fig. 68). The same phrase "leader of living *kas*" frequently occurs in the description of the sovereign when offering to the gods, e.g. *Deir el Bahari*, Pls. XI, XVIII, XIX, XXII.

The objects brought are the two fans, which were used in the *sed* ceremony (*Hierakonpolis* i, XXVIb), and which continually appear as insignia of a royal attribute, behind the king, as on this same plate.

Below are two objects like half of the sign for heaven (*jet*) ; these also appear behind the king, usually beneath the fan. It is possible that they belong to some part of the miracle-play concerning the parting of the heaven to receive the king. The lowest line shews the *an-mut-f* priest in the leopard's skin, who led part of the ceremonies ; and before him a man bearing an object representing human shoulders and arms, covered with a cloth which hangs down over the bearer. The meaning of this we shall notice with Pl. V. In front of these are three semicircles ; these continually occur behind the sovereign, like the fan and half heaven, especially in the dancing scenes as on Pl. V. The source of these is shewn on the mace-head of Nar-mer (*Hierakopolis* i, XXVIB) where these semicircles touching are on either side of the ceremonial dancers, and appear to represent the hangings or curtains which secluded the scene of the ceremony. As such, they are naturally brought with the other apparatus of the feast.

23. Before the ruler were doubtless two standards as in the four other scenes where this part is preserved. One is the jackal standard of the god Up-uaati of the South, "the lord of Siut" as he is called on the coffin scenes (*A.Z.* XXXIX, V). He was the "opener of the ways," as the jackal finds the best paths over the desert ravines, and opens the way to the wanderer. The uraei before the jackal may be also way-finders, as in the myth of Alexander's being guided to the Oasis by two serpents who went in front of the army and showed the way to the oracle and back again (Arrian, *Anabasis*, III, iii). The curl in front is an ostrich feather, emblem of lightness or space, "the *shed-shed* which is in front" in which the king's soul was believed to ascend into heaven. The whole group is that of the god who was to guide the soul across the western desert to its heavenly home. A feature, which has not been so clearly shewn before in this standard, is the arrow which pierces the jackal's heel, shewing him to be a god wounded in the heel : see Pl. VI. The other standard is that of Letopolis, representing a piece of flesh, but its meaning here we cannot trace.

Over the king is the flying vulture, the emblem of maternal protection, the goddess Nekheb as she is called in Pl. V. She presents to him the ring of "infinity." The inscription above is unfortunately lost, except the legs of a bird and a linear sign.

24. Behind the ruler are the three great officials who always here accompany him : the *kher heb*, or reciter of the sacred books and services ; the *semur*

uati kherp aha, or peer and commander of the palace ; and the *em khent* who is otherwise written *am khent*, he who is within the harem or private rooms of the palace, apparently another form of the *am khennu*, he who is in the inner quarters of the palace. The official who has the latter title (Lepsius, *Denk.* ii, 43) is shewn riding on a donkey holding his seal and stick, while the threefold whip is carried by an attendant behind, thus connecting his office with that of the *em khent* who always has this whip in these scenes. Thus the royal chaplain, lord steward, and lord chamberlain directed the ceremonies.

The dress of the steward should be noticed ; it is most complete in Pl. VII, but other examples should be compared. In the right hand he holds a long staff vertically. Around his neck is slung a sort of kilt of the Hathor head, by a band marked off in divisions. This Hathor kilt of the *kherp aha* is seen again on the stele of Zara, the *heq aha*, or ruler of the palace, placed beneath his chair (*Qurneh*, Pls. II, III). It is more or less connected with the row of four Hathor heads hanging from the belt of Nar-mer (*Hierakopolis* i, XXIX). Across the chest there is a double band, diagonally. Hanging down over the shoulder is a string of alternately long and ball beads, ending in a tassel ; it is not clear to what this belongs, but it may be a counterpoise on the cord supporting the Hathor kilt, to prevent that dragging on the neck.

25. Pl. IV. In front is a mention of the festival of the *hez* determined by a hippopotamus. This might refer to the conquest of the "destroyer," as *hez* is to waste or destroy, and the hippopotamus who ate up the crops would have this character. The steward superintended this festival. Below it is a man, with a corner remaining of a shrine which was before him. The vulture Nekheb, on a *neb* sign, rests on a plant of the south, in the fullest form that we know, splendidly designed.

Behind the king is a mention of Upuati of the south, shewn by the tips of two *ua* signs and of a *res* sign. There is also the corner of a rectangular sign, the nature of which is not clear, any more than the meaning of Upuati coming here. The palanquin containing the royal child, *suten mes*, is often shewn in these scenes ; there are here two in V, and two in VI. It is probable that the original purport of the presence of the royal daughters was for their marriage to the new king, so that he might inherit the kingdom through them.

26. Pl. V. At the left is a mention of the

"chiefs of the palace." The *hes* mace in the palace probably denotes the palace of Memphis, the mace being apparently the emblem of Memphis (*Qurneh*, Pl. XLIV, p. 13). Next is the "festival of Upuati" mentioned. Below much is lost, but the palanquins of the royal children were there; the carved feet are made in the form of couchant ibexes. Below these is the goddess Nut supporting the heaven, and calling "Come and bring, come and bring." Compare the speech of the Osiris-king "Come in peace" addressed to the crown prince before him (A.Z. XXXIX, VI).

The title along the top is apparently "The good deity of the place Nekhebt and of the place Hezt with the vulture head-dress, mistress of the southern palace." For the place Hezt see Lanzone, *Diz. Mitol.* CCCXLIX, 3, and CCCL; and for the head-dress see the same, p. 1022.

The king is called "Son of Ra beloved by the gods." His attitude and objects are those seen in his dance before the Osiris-king. Before him is Uazit the serpent goddess of the north in conjunction with the hawk name. The base of the northern plant is seen to be really copied from the scales or horny plates which surround the stems; it is often confounded with water lines in later times. Below that is the title of Tahuti "lord of Khemennu," apparently over the figure of the god. Parts of other signs remain below the king's elbow.

27. Behind the king is carried the strange object which we noticed in the first scene. This is frequently represented, along with the emblems of the fan and half heaven, behind the kings, as for instance on the lintel of Merenptah Pl. XXI. It has been generally thought to be a scorpion, and connected with the goddess Selket. But no meaning has been discovered for it. In the exquisitely delicate carvings of this pylon, the details of it plainly shew that it is certainly not a scorpion, but that the arms and shoulders are clearly those of a man. In this instance it has a cylinder seal hanging from one arm; this is never borne by the gods, but belongs to royalty or deputies of a king. In other cases it has an *ankh* hanging from each arm (*Deir el Bahari* XI, XLV, XCIII) and sometimes two *ankhs* on each arm (*D.B.* CX). This shews that it is a potent agent, having or giving life. A further step is gained when we see the same emblem appear as a standard in the scene of Sety I (*Ahydos* i, 28 d). This shews that it belongs to a nome; and it occurs between the standards of Sais and Letopolis. Probably therefore

it belongs to a neighbouring nome, Prosopis, Libya, or Metelis. Being part of a body it is likely that it is a relic of Osiris; and of all those the only one that it can be is the *seruu* preserved in the Metelite Serapeum (De Rougé, *Geographie* 41). This word, denoting limits or boundaries, appears to mean sides of the body or chest, but it is also applied to other limits such as the soles of the feet or the temples. Now the chest and arms which appear here would agree well to such a meaning. We reach the position then that this is a human chest and arms, possessing authority and life; that it therefore belongs to a deified king, and that it therefore is probably the relic of the king Osiris preserved in the Metelite nome.

Of what use was this in the investiture of the heir to the throne? Here we turn to a survival of custom in Christianity. In the Metelite nome was Alexandria, with its great seat of Osiris-Serapis worship in the immense Serapeum. The high priest was called the patriarch (Philostratos, *Life of Apollonius*, V, 25), whence the title seems to have been assumed for the bishop on taking over the Serapeum to Christianity. And each Christian patriarch was consecrated by laying on him the dried hand of the first patriarch (Stanley, *Lectures on the Eastern Church*, I, iii, 7). We can hardly doubt that this was a custom taken over with the Serapeum, and with the title of Patriarch, from the older worship. If then in the principal Serapeum of the Metelite nome an arm was used for consecration, it seems to descend from the arms of Osiris which were preserved there, and which were used in the investiture of the ruler from early times as we see in these scenes.

These arms therefore were perhaps at first the actual dried arms of the Osiris-king, preserved when his body was cut up in far prehistoric times. In historic ages they were probably a cartonnage model of a chest and arms which were carried to the investiture, and laid on the shoulders of the new ruler to confer the virtues of the royal office.

28. Pl. VI. Most of these figures we have already described in previous parts. The main group is the cluster of six palm trees around a lake, with shrines between the palms. The two left shrines are drawn in broken line, as being mostly destroyed. The locality of this group is shewn by the *bennu* bird on a stand, which belonged to Heliopolis. Further, the *bennu* occurs, with the same place name Deba-kheru, in the entry on the Palermo stone under king Userkaf, and in connection there with Heliopolis, as

Mr. F. W. Green has pointed out. This grove of palms around a lake was, then, at Heliopolis. Now Piankhy in his investiture (stele, 101, 102) when at Heliopolis went to wash in the pool of Kebh, and bathed his face in the river of Nun in which Ra bathes. The king therefore is here going to the lake of Heliopolis, the Ayn esh Shems, or Fountain of the Sun, as a part of his ceremony of investiture.

29. Pl. VII. The inscription at the top was similar to that on Pl. V, naming Nekhebt as mistress of the south land. The king is here invested with a long woollen scarf over the shoulder. Now Piankhy after bathing at Heliopolis went to the temple of Ra wearing the *sedeb* garment, which is determined by the loop of a scarf (line 103). It seems then that this scene is his visit to the temple in the ceremonial dress. At the top the steward, and probably the chaplain, were shewn engaged in the ceremony, after having accompanied the king to the temple following behind him. Before him are two men dancing, superintended by the chamberlain. One is the man of the *Am* or country camp, the other of the *U* or town districts. There may be an allusion to the *am*, or camp, where the king resided for the ceremonies, as Piankhy states (line 101).

30. Pl. VIII. This is by far the least complete of all the scenes. Probably the two standards should be inserted, as I have done in the drawing of the whole pylon on Pl. IX. We can only say that the king was going to a group of shrines where the three high officials and the *an-mut-f* priest awaited him. Possibly this represented the visit to the temple of Ra, the bark of Ra, and the bark of Atum, described by Piankhy as the last of his ceremonies of investiture.

We have now traced these ceremonies so far as the defective state of this pylon allows. Possibly more fragments may be found in future work, and help to explain the subjects further.

CHAPTER IV

THE OBJECTS FROM THE PALACE.

31. THE things found in the palace were not numerous, but they were mostly of unusually fine quality, as we might expect, and they throw light on the length of use of the building after the time of Apries.

Among some small pieces of late coloured sculpture, there was one with a fragment of a blank

cartouche, on which had been painted the beginning of the name of Cambyses. The next dated object is the sling bullet of Khabbash (XXVI, 10) who held Memphis 486-484 B.C. There was rough reconstruction after the XXVIth dynasty, as the slab of Tha-ast-en-amu, who appears to have been also called Aahmes-si-neit-rannu, was brought probably from his tomb (Pl. XVII). Of the time of Artaxerxes II, 402 B.C., there is a copy of a date on a document in Aramaic (Pl. XVI). Probably of the Persian age is the large quantity of scale armour. Herodotus mentions the Persians wearing "sleeved breastplates with iron scales like those of a fish" (VII, 61); and, much later, Ammianus describes that "they had plates of iron closely fitting over every limb" (XXIV, ii, 10), they "were covered from head to foot with thin plates of iron like the feathers of a bird" (XXIV, iv, 15), "this armour of theirs being singularly adapted to all the inflections of the body" (XXIV, vii, 8); and "all the troops were clothed in steel, in such a way that their bodies were covered with strong plates, so that the hard joints of the armour fitted every limb of their bodies" (XXV, i, 12). Then there is the bowl of Zeher, the last Pharaoh but one, 361-359 B.C., which shews that this was still the royal residence to the end of the kingdom. The moving of the court to Alexandria seems to have left the place deserted; no Ptolemaic pottery has been found in the palace, but some little lead models of silver trays cannot be earlier than the first century B.C., and might well be of the second century A.D. There must have been some residents here even down to Roman times.

32. Pl. XIV. In the workshop of the palace there had been hidden, in a hole in the floor, a massive silver casting, weighing a pound, with gold and bronze inlay of the head of Hathor. The square silver frame has two horizontal bars from the lower corners, which run back some way and then turn up into two upright bars. On examination the whole of the silver faces were seen to be polished—the polish still reflecting—except the upright bars which shewed the file marks remaining. It is evident then that the upright ends were let into another body and hidden. In the square front all the edges are sharp except the under side of the top bar which is round; this shews that a strap passed through it to pull upwards. The original position of this piece seems to have been on the pole of a palanquin to attach a strap of the awning. The upright spikes were fixed into the under side of the pole, the horizontal bars passed beneath the pole, and the

Hathor face appeared on the side of the pole. The gold face is highly burnished. The hair and collar were of bronze inlaid with strips of gold; the bronze has changed to bright green carbonate of copper, amid which shine the polished gold threads of inlay. Of course this unique piece stays in the Cairo Museum.

33. Two fine pieces of ivory work are the lotus, and the man bearing offerings of birds (Edinburgh). Probably both of these were attached to ebony furniture. The lotus may have come from the side of a throne, and the offerer from a casket or small object. Though the work is minute and careful, it is but a crude copy of the early style, and cannot be compared with works of the Pyramid age.

The head of a sistrum in pale green stone-ware is a good piece of the conventional style. It is rare to get these fragile articles even as complete as this, which lacks the handle. (Oxford.)

The piece of a bowl of deep blue glaze was found in the fosse opposite the old broadway. It belonged to King Zeher, in Greek Teos, of whom only two stone inscriptions are known. It reads "Son of the sun, lord of the crowns, Zeher sotep en Anhur, king of Upper and Lower Egypt, lord of both shores, Ar-maat-en-Ra, gifted with life like the sun. Manifested in heaven (beloved?) of the gods." (University College, London.)

34. Pl. XV. In the N.E. hall of the palace some bronze figures were found: an Amen (Reading Mus.), large but of ordinary work, a very perfect Ptah (Reading), an Ibis with very thick legs (Reading), and a baboon (Boston). The latter has an inscribed base, drawn at the foot of Pl. XIII A. It reads "Tahuti lord of truth give life to Aqanush, son of Pe-dy-bastet, his mother Ta-dy-hor-nezem." An Akanuash was prince of Sebennytos about 730-710 B.C., and this figure may well have been dedicated by a son or grandson of his.

Another bronze base, without a figure (foot of Pl. XIII A) reads "Horus the child (Harpokrates) the great god who is over Letopolis give all life and health to Pe-dy-asar, son of Pa-khred-em-shedu, born of the lady of the house Ta-adh-en-mer" (the papyrus of the lake).

Two lead models of the Roman *lanx* with embossed figures are unusual. The subjects are a gryphon fighting a boar, another chasing a stag; two cupids on dolphins; and two cupids and a crane. The other dish has cakes, flowers, grapes, and a crater. (University College, London.)

A very unusual figure is that of the god Tahuti as an ibis-headed man, made in green glaze of the style of the Persian age. The absence of a waist cloth is unknown in such figures, the holes for earrings are unusual, and the hole at the back to hold a relic is very rare in pottery figures. (University College, London.)

35. A piece of a clay impression of a Persian seal shews the king fighting a winged demon. Many clay jar-covers were found, which had been sealed in a curious way. A finger-hole was left through the clay cap after fixing; the official tester could dip a rod in and verify the contents of the jar, and then a little dab of clay over the finger-hole could be stamped with the signet of the inspector. This enabled the actual sealing to be done cleanly and quickly. The subjects of the seals are (1) Victory offering a wreath to a crowned uraeus, a record of triumph by some Egyptian king; (2) Bull-headed man in short tunic, the human Apis; (3) A woman holding a spear and feeding an ibis; (4) An heroic figure standing with the left knee bent upward. The photographs are one half larger than the seals, and the surrounding rough ground has been darkened to shew up the seals more clearly.

36. Pl. XVI. In a hole on the south side of the Great Court there were found the pieces of the four alabaster jars shewn in this plate. They had evidently been deliberately thrown in and broken; and this must have been done by the owner at some invasion, when it was wished to prevent them falling into a conqueror's hands, probably on the Persian invasion. (Boston, Bristol, Univ. Coll. London, 2.)

37. The fragment of limestone with an Aramaic graffito has also a bird, a ship, and other stray marks. The scratched graffito is a rough copy of a better written ink one just above it, which is not visible in the photograph. The copy and transliteration into Hebrew are given at the base of Pl. XIII A. I have to thank Mr. Cowley of the Bodleian Library for the reading of this. He writes:—"The upper line (in ink) was evidently written first. The lower (scratched) line is a very rough copy of it. The four letters to the right were the most difficult. In the lower line they are almost unrecognisable, and the *beth* just on the edge is very faint. However there is no doubt about the reading 'On the first of Ab, year 2 of Artaxerxes.' The formula is the same as that used in the Assuan papyri published by Sayce and me, and in similar documents. The inked writing does not seem to have been done by a person who was

really familiar with the character. It looks as if he had tried to imitate the writing of a document dated in the reign of Artaxerxes II. It may have been a Jewish document, but not necessarily. The scratched line is too roughly done to give any indication of date." (Oxford.)

38. The scale armour is of the size here shewn, Pl. XVI; we have already noted its Persian origin at the beginning of this chapter. The scales 5-15, 29-32 are of iron, 16-28 are of bronze. From the thinness of the iron scales it is probable that they were of steel, as soft iron would be too flexible; steel was already used centuries before this by the Assyrians, so it may well have been common to the Persians. The short small scales, 18, 19, were probably for the gauntlets, where the lightness of the hand prevents any very heavy cut being given. The longer scales were for the flexible parts, some which are very thick being probably for the shoulders and hips, where the whole weight of the body is behind them. The long plates with a mid-rib were for the limbs where no flexure was required. The block of plates, 5, shew how they were placed together; each plate overlapped the previous up to the mid-rib, which prevented any weapon from catching in below a plate. How the mid-ribs were made is not clear; there is no trace of any groove on the back. The only method that seems possible is that they were stamped with a swage while hot, being struck from a rod about as thick as the rib, and about a quarter of the width of the present plate. Most of the plates have a slight dome curve in them both ways, which must have been given by the swages; this rendered them far stiffer against blows, and made the edges keep close when the muscles shifted beneath them. The lines of stitch holes are seen clearly in 24, 29, 30 along the edge, beside the end holes which occur in all the plates and scales. The scales 16, 17 with two rows of stitching were for parts where they were laid three or four deep, and only the curved tip shewed outside. (Univ. Coll. and twelve museums.) With the armour were two types of arrow-heads of bronze, five with three blades and sharp edges, and six of solid triangular form. The blade type was for flesh wounds on bare parts; the solid head for piercing armour. It should be noted that both types are wanted at the same period, and were used together, as otherwise they might be supposed to be of different ages. For a summary of the dispersion of the three-bladed form see Pumppelly, *Prehistoric Civilizations of Anau*, i, 183-6.

39. Pl. XVII. In the south-west corner of the

palace, under the tower, there was found an inscribed slab used in reconstruction along with brickwork. It seems to have been brought from a tomb, and to have probably been a door-jamb. The moulding has been broken away from the reverse side to fit it for building. The obverse is in relief, and coloured. It is clearly incomplete along the top lines as the other cartouche is wanting after "son of the sun, lord of the diadems." It is not obvious at first whether the royal name *kheper-ka-ra* is that of Senusert I in remembrance, or whether it is of Nekht-neb-f in the XXXth dynasty. The inscription of the reverse is copied on Pl. XXV. The massive block was unfortunately broken by extreme violence in shipping. It is now at Cambridge. The inscription will be dealt with by Dr. Walker in the last chapter.

CHAPTER V

SCULPTURES FROM TEMPLES AND CITY.

40. Pl. XVIII. IN the foundations of Ramessu II in the temple of Ptah, among other re-used blocks of earlier dates, there is one which is probably from the Old Kingdom temple. It represents a god standing holding the *was* sceptre, and in front of him the shrine of the lion god. Although weathered, the lion is clearly seen, regardant, upon a stand looking to the right; the stem of the stand must have occupied the space below, down to *neter ast*, the divine dwelling being shewn below in the primitive form, made of interwoven palm sticks. The main place of lion worship was Leontopolis in the Delta near the northern Athribis; but there was probably also a "town of the lion" in the XIXth nome of the Delta, on the north-east border; and it is quite possible that lion worship existed in the early times at Tell el Yehudiyeh and at Bubastis where the lion-headed goddess was dominant. We cannot prove to which of these centres the shrine here should be referred. (Brussels.)

41. In the temple enclosure of Merenptah, in the foreign quarter, a part of the actual temple has been cleared this year. The plan will appear in future, after the whole site is examined, but here we publish a capital which is obviously an older sculpture, re-used there in the XIXth dynasty. Just as we recovered an early lotus capital from that site last year (*Mempisis* i, III), so we have now recovered two other capitals, probably of the Vth dynasty, brought away —like so much other material—from the cemetery of Abusir or Saqqara. These are of a type which is

known represented in relief-carvings of scenes of the Vth dynasty, but which has never been seen in the round as an actual capital. It is copied from the Rose-lotus or *Nelumbium*, with flowers of the blue lotus placed in the intervals between the points of the buds.

The shafts of columns found in the same region were of the same diameter as these capitals and doubtless belonged to such. The shafts are 14'3 to 150 inches wide at base, and 13'2 to 13'6 at the top; their length is 59 inches in two cases, which with the capital of 30 inches makes 89 inches, or 7 feet 5 inches. This with about 7 inches of base would give a room of 8 feet, which is quite likely in a mastaba. The shaft and capital are both in the Cairo Museum. The second capital is inferior, by the omission of the flowers between the buds and some cutting due to re-use; it is at Manchester.

A small hard stone figure of a man bears the inscription "Devoted to Ptah Sokar, Nefer-Tum-hotep." It will be seen in the plate that two female relatives stand on one side; there are likewise two on the other side. (Cambridge.)

The finest of the steles from the Ptah temple is that of Amenhotep and Piay. It is photographed on Pl. XVIII and copied on Pl. XXV. The adoration of the two human-headed birds on a *dad* is unusual. Probably they represent the *ba* birds or souls of the two deceased persons in the doorway of their tomb, to whom offerings and adoration are being made. (Manchester.)

Pl. XIX. Another piece of clustered column was found like that of last year (*Memphis I*, XXV). It has a band of ducks hanging round the upper part, the same design as in the work of Akhenaten (*Tell el Amarna*, VII). But it is finer than his work and probably therefore of Amenhotep III. (Brussels.)

42. In the camp, to the east of the palace-fort, many pits and trenches were cut; only in one place were definite remains of a building plan found, a great structure with sand-bed for foundations, about ten feet wide. No sculpture was discovered there; but apart from any building some reliefs were found, one with the names of king Ay (Boston), and another slab with a Sekhmet and king standing, the name unfortunately lost (Rochdale). Work will be continued on this ground in future; but as it covers thirty acres, its whole clearance cannot be attempted.

Further work was done on the building of Siamen; but it was suspended, as we found fragments of stone vases of the earliest dynasties, and it seemed needful

to work on a large scale with deep pumping before the site could be finished. No more work of Siamen was found, so the lintels previously obtained are published here, and will be described with Pl. XXIV. One lintel of Osorkon was found, now at Munich. The cartouche of Haa-ab-ra is one of those from the columns of the Great Court, already described. (Bristol.)

43. Pl. XX. To the west of the court of the temple of Merenptah a wide cutting was made, to water level, to try to recover the side wall of the court. It seemed to have been ruined and built over; but among the ruins were two colossal negro heads in limestone, which are shewn in front face and profile here. They are flat at the back, and their purpose and position are quite unknown. The work would agree best with the style of the XIXth dynasty. (Ny Carlsberg, and Bristol.)

A piece of a stele is of interest as bearing a good and uninjured head of the god Set.

Pl. XXI. The great lintel of Merenptah is over the gateway to the court of his temple; it is cracked and injured by salt, but would be worth removal and proper conservation.

44. Pl. XXIII. At the top is a red granite lintel of Amenemhat II. This is lying amid other blocks of granite of later date, apparently ruins of a late temple, to the east of the Lake of Ptah, marked T on the plan Pl. I *Memphis I*. On the left side are two blocks of much defaced inscription from limestone columns, which are shewn in Pl. XXV of *Memphis I*. The inscription in the middle of the plate is on a thick block of limestone, the top of which is sloped. Perhaps it belonged to an inscribed side-wall of a sloping ascent. It was found in the building of Siamen. The single column in the middle below bears the *ka* name of Aahmes-si-Neit; it is on a granite stone which was in the group with the lintel of Amenemhat first named. At the right of that, below, are two door-jambs from the building of Siamen, recording the same person Ankh-ef-en-mut who appears on the lintels. Down the right side is the inscription of Siamen on the column 13 feet high which stands upright beneath the court of the house of the British School. It was copied by Mr. Wainwright, and I have not had the opportunity of verifying it.

Pl. XXIV. At the top is the largest of the lintels of Siamen. On the left is Siamen adoring Ptah and Hathor. Around the face of Ptah the ground has been sunk in a square, as if a thin plate

of metal had been inserted. Behind the king is a curious portrait of the high priest wearing a disc earring with three pendant balls, and carrying a plant in the hand. Over his shoulder appears the jackal-head of the official collar. He is called the hereditary prince, divine father, over the secrets of heaven and earth and the underworld, going in the realm of Osiris, priest, great chief of workmen of Ptah (high priest) Nuter-kheper-ra-mer-ptah (named after Siamen) called Pupui. On the right is the king offering to Ptah, and Sekhmet who holds the standard of their son Noferatum, followed by Ankh-ef-en-mut who set up all the other lintels. He was son of Aay scribe of the temple of Ptah and of the accounts of the cattle of Ptah. This lintel and the whole jamb, with half of another jamb, are in the Ny Carlsberg Museum, Copenhagen.

Below this is a whole lintel of the smaller type, and the inscriptions from three other similar lintels. These lintels are at the British Museum, Manchester, Philadelphia, and Pittsburg. Also part of a door-jamb inscribed by the same official.

Down the right side is the whole jamb with dedications to Ptah and Hathor, set up by Ankh-ef-en-mut.

Pl. XXV. At the top left is an inscription of Khaemuas from a column. Here is another instance of the formula *hotep dy Ptah* without *suten*; apparently Khaemuas gives the offering to Ptah instead of the king.

Below is an interesting tablet with the adoration of the two *ba* birds in the doorway of their tomb, photographed in Pl. XVIII and noted in describing that plate.

At the right is the stone photographed in Pl. XVII and noted in description.

CHAPTER VI

THE SMALL OBJECTS.

45 Pl. XXII. THE work on and around the temple of Merenptah has produced some fragments which shew how richly decorated it must have been, as Herodotus writes in describing this temple of Proteus.

The glazed tile work comprised:—

Base of cartouche of Sety I (fig. 3);

Two pieces of lilac, white and yellow lotus (figs. 1, 2);

Legs of a hawk;

Piece of leg of figure about 2 feet high; Two whole rosettes, and 17 pieces; Strips of inlay from a cornice 1'2"-1'5" wide; Much plain tile in fragments.

The alabaster work comprised:—

Leopard head from inlay (fig. 14); Inlay of rhomb, vesica, square, rosette, etc.

These shew that there must have been large surfaces and architectural structure covered with coloured tiling and alabaster inlays, with figures and patterns on a large scale.

Pottery of various ages was found. A scrap of Mykenaeian vase, about 1400 B.C. (fig. 4). A handle of a Cypriote bowl 1300-800 B.C. (fig. 5). Drab pottery of fine hard body with smooth face, painting of scales, diagonal lines, and plants (figs. 6, 7). Part of a flat dish probably of Rhodian origin, red ochre wash on drab body (fig. 8). Pieces of a rude pottery stand, with lotus flowers in relief, and the feet, and hand, of figures (9, 10, 11). It is coloured red with yellow and black on parts; of the same family as figures found last year, and published in upper left quarter of Pl. XLIV, *Memphis I*. A well-modelled hollow terra-cotta figure of a lion (fig. 12) also has black and red paint on it. A little to the south of the Merenptah temple a *sebakh* digger found an alabaster figure-vase (fig. 13), which apparently had a spout at the left arm, which is missing. Such hollowed figures of alabaster belong to the XIXth dynasty in Egypt, but the design of this is obviously of the Greek island-figure class. All of the objects from this foreign temple are kept at the Greek department, British Museum.

46. Pl. XXVI. (1) A half of a cylinder of Pepy I with the *ka* name "Mery (taui)" was found in a pit on the west of the city. (Manchester.) Not far off were copper axes of the VIth dynasty, and pieces of stone vases of probably the IIInd dynasty. It seems then that the town of the pyramid-builders is quite accessible above water-level, on that side.

(2) A remarkable steatite plaque was sold to me at Memphis. One side has five columns with 22 strokes in each. The other has two men seated with knees drawn up, and one arm of each raised and meeting between them. This is completely in the style of the button-seals which belong to the VIth-VIIIth dynasties, on which the geometrical reduction of men and animals to straight-line devices is usual, and which are clearly foreign. Below these figures is a true labyrinth. On completing the corner it appears that there were five false turns to be avoided before

reaching the centre. The idea of the square labyrinth in classical times is essentially Cretan; and it is so similar to this example that if this appeared on a coin it would never be suspected of any origin outside of Crete. We have then a strong link here between the geometric button-seals and the Cretan civilisation. (Univ. Coll.)

(3) A large coarse stamp, of rough paste which has been glazed, bears some unusual signs. The pentacle and the looped cord are neither of them Egyptian. The circles, with lines between, seem like a clumsy copy of a Mykenaean wave pattern, while the *nefer* and the serpent of Rannut with the title *neb ka s* is a group well known. This shews then a mixture of Egyptian and foreign design. (Univ. Coll.)

4. 5. These belong to Qurneh, but the inscription being too small in *Qurneh XXXIII* they are here republished, enlarged from the originals. The rectangular plaque is of the "high priest of Amen Nebunnef," and the cartouche of Ramessu II with the unusual early spelling of the *user* on legs. From Memphis: 6 is a button-seal of limestone; the figure wears a tunic and holds a stick across the shoulders, a European not an Egyptian attitude. (Univ. Coll.) 7 is a button-seal with a bird flying, not of Egyptian work. (Univ. Coll.) 8 is a clay impress of a Greek gem. 9 is a silver ring with a galloping winged bull of Persian work, found in the palace. (Oxford.)

47. No. 10 is a leaden sling-bullet, also from the palace, with a demotic name read by Mr. Griffith as Khabbash, the Egyptian pretender in 486-484 B.C. of whom scarcely any remains are known. (Univ. Coll.) 11 is an impression from a remarkable pottery mould. Beneath a cornice, supported at each end by large heads of Bes wearing feathers, is a king driving a chariot. He wears the crown of Lower Egypt, and holds a bow. Before him is a bound captive kneeling and two others sitting with raised hands. The elements of this are all Egyptian; but the combination of these, and the workmanship, are un-Egyptian, and probably due to a Phoenician in Egypt, like the silver bowls with mock-Egyptian subjects. (Univ. Coll.) 12, 13 are two figures of green stone ware, of the dwarf Ptah-Sokar type; but both are female. (Univ. Coll.) 12 has a garment over the shoulders and back with fringed edge, and holds apparently a pine cone. 13 holds the two ends of a cord which passed over the shoulders.

48. Nos. 14, 15 are bronze beaks of hawks; 16, 17 bronze eye-sockets from statues of birds; 18 a bronze ear from a statuette; 19 a bronze nail; 20 a bronze

ram's-head amulet, all from the palace. 21 is an unusual amulet in bronze, of a child being carried off by a crocodile. (Univ. Coll.) 22 is a bronze ichneumon. 23 is a pottery head of Bes of fine work, made as a die for impressing moulds. (Univ. Coll.) 24 are two hollow bronze tubes with projections, use unknown. The two pieces of 25 were originally all one length, probably representing a spiral curl attached to a life-size bronze head. (Manchester, Univ. Coll.) 26 is a quaint terra-cotta figure of an infant, shewing how the loose garment was caught up front and back by a loop, so as to be out of the way when crawling about. (Univ. Coll.) 27, a Victory (?) with the arms stretched back, of base Roman work. 28 is a clay lion modelled. 29, a lotus-flower ornament of late design. (South Kensington.) 30, a bronze crown of the head (?) from a figure. 31 is a slug hieroglyph formerly attached to wood as part of an inscription. (South Kensington.) These last three bronzes are from the palace.

49. PL XXVII. Scattered in various places were fragments of fine glazed bowls, 32-39. (Oxford.) 33 shews the bottom rosette to the cup and two divisions of the side; it was evidently intended to rest mouth down. 40 is a well-modelled head of Sekhmet, and 41 the same goddess holding an aegis. 42 is a small glazed vase with hawks around it. The body was probably blue and the hawks inlaid in green.

At Memphis a large number of stamped Rhodian wine-jar handles are found. The names have all been copied; but, on comparison with the publication of the Lindos and other series by Nilsson, so many new names appear that a full verification is needed. The types therefore appear in this plate 1-20, and the list of names will be given in the next volume.

CHAPTER VII

THE TERRA-COTTA HEADS. PLS. XXVIII-XXXIV.

50. AGAIN a large number of the modelled heads have been obtained from Memphis. The absence of any collection of ancient portraiture of races, beyond that which I made in Egypt twenty-two years ago, leaves the identification of these very varied types to depend entirely upon chance observation. If any of the classical students would deal with this branch of Greek art, and collect a uniform series of photographs of every representation of racial types from sculpture and coins, a very necessary and important branch of study would take its proper place. Unfortunately archaeology, like literary scholarship, too

often takes tithe of the mint, anise and cumin, and leaves the weightier matters of the world's history neglected. There is not even any series of composite portrait heads from coins, which are greatly needed for the character study of celebrated kings.

At present we can identify some of the new heads; but most of them, though of strongly marked character and dress, remain anonymous from the lack of all comparable material. The numbers here follow on from the first series in *Memphis I*; and both series are at University College. The Iberian (70) is identified by the resemblance of the profile to the Shardana or Sardinian of the XIXth-XXth dynasty, in the long low head and the mutton-chop whisker, and the general resemblance of the front face to the Spanish matador type at present. There is no other ancient race, so far as I remember, which has shaved in this fashion.

The Karian (71) is named on the strength of the description of Herodotus, that the Karians wore helmets with a crest like a cock's comb. There is no other helmet type which would agree to this, and the Karian as being the chief mercenary soldier race of the time, and settled in Egypt, must have been familiar in Memphis.

The Hebrew (72) is named only on the ground of resemblance to a modern Jewish type, coming from Germany.

The Kurd (73) has the crossed turban which belongs to the Central Asian and Kurd race, but not to the Semitic peoples. Mr. Hogarth informs me that the type of face agrees to that of the modern Kurds, who were well known to the Greeks as the Karduchi. This is the finest piece of modelling among all the heads; the delicacy with which the features are worked, the detail of the ear being pressed forward by the turban, wrinkling it on the inner side, and the spirit of the expression put this in the front rank.

The heads 74-77 cannot be identified.

The Scythians are again found in the heads 78-81. In 78 we have probably an eastern Scyth by the Mongolian slope of the eyes. 80 appears to be partly Persian, by the better profile and the clubbing of the hair in a rounded mass. 82 shews the jockey attitude of riding, and is probably Scythian, like all the other horsemen. 83 is of the Indian type, similar to 37-40 in *Memphis I*. 84 is the usual Scythian horseman, with the round shield. 85-87 are not identified.

51. Nos. 88-91 are an interesting class, having

much expression and character. They seem to be all female heads, and not Egyptian. Foreign women are very rarely found among these portraits, but the Rhodopes of the foreign colonies were known to Herodotus. 92-94 are less carefully wrought, but seem to be also women. 95-97 are the usual Greek type of Asia Minor.

98 is a graceful Greek head of the Ionian type, as seen in terra-cottas from the Smyrna region. 99 is a Greek of the Mausolos type, probably from the south-west of Asia Minor. 100 and 101 are also familiar Greek types. 102 with long ringlets shews a mode of hair which is familiar among the Ptolemaic queens, but not elsewhere. As they prided themselves on being Macedonians, this is probably the Macedonian type. 103 appears to have the same profile, but is a later head, as it is moulded hollow, and not modelled solid. 104-107 are also Greek types, which I cannot locate at present.

52. No. 108 is remarkable for having a royal Egyptian cloth head-dress, and yet being bearded. It is on the neck of a vase, and is painted with purple stripe. Can it possibly be a Persian king in his costume as Egyptian ruler? 109 bears an extraordinary helmet, which from its shape and folds seems made of leather. Perhaps the slits were attached to a moveable visor which is here shewn folded back, but which could be drawn down over the face. 110 is another head on a vase-neck. 111 has a helmet with long cheek-pieces. From the heaviness and straightness of the form it was probably of iron, like the Norman pot helmet, and this points to the Assyrian side, but the source of the form has yet to be found. 112 may probably be represented with a felt cap. The type of face and tall cap seem to belong to Asia Minor. 113 is a peculiar type with apparently a flat-folding cap having a flap or tassel at the side. 114, though very roughly made, is distinctive in the slope of the head backwards, the hair and short beard, unlike any other head. 115 has a row of buttons down from each shoulder, which may identify the dress.

The head 116-124 are probably all from the Mesopotamian region, though perhaps of different races. The shaved head does not seem to be found anciently outside of that basin, except in Egypt where such physiognomy is not found. 119 is closely like the Sumerian heads of last year, 22, 24.

The various types 125-132 are not yet connected with known localities. 128 has closely the Mark

Antony features; he did not get that type from Julia, and if of the Antonia stock it might be sought among the Dorian Herakleidae from whom they claimed descent. The usual type of Herakles is somewhat like this.

The present position of objects found this year and published in *Qurneh* may be here stated. Pl. I, Oxford, II, 1, Brussels; 2, Cairo, VII, Munich, VIII, 1-8, Univ. Coll. London, IX, Black-topped vases and bird, Univ. Coll. X, Manchester, XII, Amenhotep steles, Bristol, Univ. Coll. XXII-XXIX, Edinburgh, Royal Scottish Museum, XXX, 1, Bristol; 2, Reading; 3, Manchester; 4, 5, Univ. Coll. XXXI, 4, 5, 16-20, 30, Univ. Coll. XXXII, XXXIII, 1, Boston. Deposits, Univ. Coll., Manchester, Brussels, New York, Boston, Munich, Oxford, etc. Trial piece, Univ. Coll. LII, upper mummy, Bristol; lower, Manchester; with their relative furniture LIII.

CHAPTER VIII

THE INSCRIPTIONS.

By DR. J. H. WALKER.

53. Pl. XIII A. THE first inscription, from the base of a baboon, opens with the invocation to Tahuti: "May Tahuti the lord of truth give life to Akenush, the son of Pedubast, his mother was Nedhornezem." The next inscription, from a bronze base, reads: "Horpakhred the great god who is over Letopolis, all life and health for Peduasar, the son of Pa-shere-m-shedt, born of the lady of the house Ta-adh-en-mer."

Pl. XVII. The translation of this inscription is given under Pl. XXV, where a hand-copy of the side with the longer portion of the inscription occurs.

Pl. XIX. Cluster column XVIIIth Dyn. This inscription begins in an unusual manner; instead of invoking the mediation of the king, "May the king give an offering-table to the god," the god is here directly invoked: "May Ptah-Tathenen, the eldest and great one of the gods, give an offering-table with all the good things upon it, which he has created [or "which are created for him"] in heaven and (earth). . . ."

Inscription of Ay. The hawk holding the sign of eternity in his claws, "The great (god) lord of heaven." On the right is the opening portion of the king's *nebti* (vulture and uraeus) title, *sekhem pehiti*,

"possessor of might," and on the left, the opening portion of his Horus the conqueror of Set title, *hek maat*, "prince of truth."

Sekhmet and king. Over the goddess: "Sekhmet, she makes her powers shine forth, the lady of heaven and mistress of the two lands North and South." The king wears the *atef*-crown, and above him is inscribed "life like the Sun."

Lintel of Siamen. On the left is the king's cartouche, "Neter-Kheper-ra, chosen of Amen," and underneath it "Beloved of Ptah beautiful of face." His second cartouche reads "Siamen, beloved of Amen," and underneath it is "Beloved of Amen (the lord of) true lapis-lazuli." The goddess Mut stands behind Amen; in front of her is the inscription "... in the temple of Ptah, the lady of heaven, and mistress of true lapis-lazuli." In front of Amen, the inscription reads: "Amen-ra, the lord of true lapis-lazuli. I have given to thee all stability, life, and power before me." In front of the king: "Making an offering of incense and cool water to his father, in order that he may bestow life."

54. Pl. XXI. On the left is the figure of the king smiting two foreigners with his scimitar. Concerning the meaning of the interesting signs behind the king see Prof. Petrie's remarks on pp. 8-10, and an interesting paper by G. Jéquier in *Recueil des Travaux*, 27 (1905) p. 170 ff. In front of the king stands the god Ptah in his shrine, holding a scimitar and a staff with the three symbols of life, stability, and power. Above him is inscribed "Ptah of Merenptah Hetep-her-maat." On the right, the king, seated on his throne under a canopy, receives from Horus a wand consisting of the same three symbols, with the *shen* symbol of eternity at the base. Horus in the form of a hawk-headed animal is seated upon the sacred perch, from which spring two human arms, from each of which is slung the symbol of the *sed-heb* festival. In the right-hand column under the *sed-heb* festival sign occur the signs for millions, hundreds of thousands, and thousands. In the left-hand column, the remaining signs read hundreds of thousands and tens of thousands. On each side of Horus is the sign for millions of years, from the ends of which chains of the symbols for life, stability, and power hang down. The king holds this same sign in his left hand. Above Horus the inscription reads: "He of Behudet (Edfu), the great god presiding over the shrine of the North." In front of the king are his two cartouches, "Lord of the two lands, Ba-en-ra Meriamen, Lord of diadems"—with the cartouche

reading the same as in shrine over Ptah. Above and behind the king is the winged disc of the Sun with human arms, holding chains of the symbols for life and power.

The continuation of the lintel below is nearly the counterpart of the foregoing. Set replaces Horus, and above him is "He of Nubt (Ombos) the great god, presiding over the shrine of the South." In front of Ptah and under the king's cartouches, "I have delivered up to thy sword those who traverse the mountains, as lord of all lands." Behind the king is his *nebti* (vulture and uraeus) title, "He who acts with his two arms, the good god, the lord of the two lands."

55. Pl. XXIII. In the upper horizontal line are the cartouches of Amenemhat II. Below, on the left, the cartouches of Ramessu III: "Beloved of the living Apis. The lord of the two lands, Usermaatra beloved of Amen. The lord of diadems, Rameses, prince of Heliopolis." Below the cartouches is another occurrence of the formula usually written *suten di hetep*, in which *suten* has been omitted as in Pls. XIX. and XXV. It is probable that here the cartouches are taken to represent *suten*. Only the first few signs remain at the top of these six columns. The two right-hand columns read from left to right: "(May the king) give an offering-table . . . wideness of heart, and health. . . ." The four left-hand columns read from right to left: "(1) Opening the two eyes . . . (2) his beauties to . . . (3) in peace . . . (4) his *ka*, making prosperous the house. . . ." The left-hand column below contains the *nebti* title "the protector of Egypt, the conqueror of foreign countries." Below this is a broken fragment containing the cartouche of Ramessu III, and probably the names of the three gods Apis, Tum, and Horus. Lower down on the right is a column containing the *ka* name of Aahmes-si-neit, "The establisher of truth (beloved of) Ptah, the son of his body." The fragment of four broken lines evidently gives some biographical details. It reads from right to left: "(1) All the festivals (?) which were celebrated in it, together with everything which was done in the temples (of the whole [?] land. (2) The great one of the body-guard of the palace, belonging to each private apartment in the palace, in consequence of my nobility before the king. (3) . . . each wanderer by the living prisoners from Ethiopia (?) . . . (4) . . . like every king's son. Never was the like granted to any servant . . ."

On the right, the long column begins with broken cartouches of Siamen, then comes Ptah in his shrine, with the inscription "Ptah, the lord who establishes truth." Behind him stands "Hathor, the mistress of the sycomore tree of the South, the mistress of heaven." The remainder of the column reads: "His beloved (priest ?), his beloved divine father (*it ntr mrf*), set over the mysteries of Ptah. The prince of Memphis, the superintendent of the cattle of the southern pastures (?) of the temple of Ptah, the superintendent of . . . the school (?) [*ht 3d*] of Nefer-Tum." Of the two remaining vertical columns, the left-hand one reads from right to left: "The lord of the two lands Neter-Kheper-ra the chosen one of Amen, with stability, life, and wealth. His beloved priest, his beloved divine father, set over the mysteries of Ptah, the priest Ankh-ef-en-mut of Amen (lord of) true lapis-lazuli." On the right, reading from right to left: "His beloved priest, his beloved divine father, the opener of the doors of heaven in the house of mysteries, the priest Ankh-ef-en-mut of Amen. . . ."

56. Pl. XXIV. Top line. In the middle are the two cartouches of Siamen, "Neter-Kheper-ra, the chosen one of Amen," and "Siamen, beloved of Amen." On the left stands the cow-headed Hathor with papyrus sceptre, usually carried by goddesses, in her hand, and the inscription "Hathor lady of the sycomore of the South, lady of heaven, the mistress of Memphis." In front of her is Ptah in his shrine, "Ptah, beautiful of face." The king offers to him a figure of the goddess Maat, "Offering truth to his father Ptah, the lord of truth." Behind the king stands the priest Neter-Kheper-ra in the leopard-skin dress of a *sem*-priest. Above and behind him is the inscription "Adoration to Ptah, and praise to his beauties, by the hereditary prince, his beloved divine father set over the mysteries in heaven and earth and the underworld, Master of the order of processions in Resta, the *sem*-priest, the great one the master of the workmen of Ptah Neter-Kheper-ra beloved of Ptah, who was called Pau-pau, deceased." On the right of the king's cartouches stands the lioness-headed Sekhmet with a lotus sceptre, of the same form as the lotus flower worn on the head of Nefer-Tum. "Sekhmet lady of the two lands, and Nefer-Tum the protector of the two lands. Horus Hekennu." "Ptah lord of truth" stands in his shrine whilst Siamen offers to him two jars of wine. The inscription in front of the king reads, "Making an offering of wine to his

father, in order that he may give life." Behind the king stands Ankh-ef-en-mut carrying the feather fan. Above and behind him is the inscription "Adoration to Ptah, and a magnifying of his beauties by his beloved divine father, set over the mysteries of Ptah, the scribe of the temple in the temple of Ptah, the reckoner of the cattle in the temple of Ptah, the priest Ankh-ef-en-mut, son of the prince Auy, of Amen (lord of) true lapis-lazuli."

In the second scene the king's cartouches are in the middle, with his Horus title on each side, "The mighty bull, beloved of Maat." On the left the inscription reads: "The worshipper of the king the lord of the two lands, Horus great of might, his beloved priest, his beloved divine father set over the mysteries of Ptah, master of the order of procession in the sacred place, the precentor (?) in the recitation of praises, the one who conducts the god to his shrine (?), the priest Ankh-ef-en-mut of Amen lord of true lapis-lazuli." On the right: "The worshipper of the king the lord of diadems, Horus rich in kingdoms (?), his beloved priest, his beloved divine father set over the mysteries in the horizon of eternity, master of the order of processions in the great house, the scribe of the temple in the temple of Ptah, the reckoner of the cattle in the temple of Ptah, the priest Ankh-ef-en-mut of Amen (lord of) true lapis-lazuli."

Door-jambs on right. R. hand column: "May the king give an offering-table to Ptah the great one, South of his wall, the lord of Memphis, beautiful of face and bounteous in love, in order that he may cause the king Siamen to participate in stability, life, and power. His beloved priest, his beloved divine father, set over the mysteries of Ptah, who devotes his attention to the making of offerings to the good god in . . ., the priest Ankh-ef-en-mut of Amen-ra, lord of true lapis-lazuli." L. hand column: "May the king give an offering-table to Hathor, mistress of the sycomore tree of the South, the mighty cow, mistress of Memphis, in order that she may cause the king Siamen to participate in stability, life, and power. His beloved priest, his beloved divine father, set over the mysteries of heaven, earth, and the underworld, the regulator (?) of the processions (?) in the desert, the master of the order of processions in the Necropolis, the priest Ankh-ef-en-mut of Amen-ra lord of true lapis-lazuli."

In the two broken columns on the left, Ankh-ef-en-mut is mentioned with his usual titles, but

in the right-hand column is styled "son of Kha-em-uast."

The inscriptions on the three remaining doorways, read in the same way as the one given in full, with figures and cartouches. Beginning in the middle, the five left-hand columns read from right to left, and the five right-hand columns read from left to right. The first of the three: "The worshipper of the king, the lord of the two lands, Horus, the protector of Egypt." Then Ankh-ef-en-mut with his usual titles. A very interesting new title, however, is added: "Joining the measuring cord, in the festival of Sokaris." This evidently refers to some function during the fixing of the outline for the foundations of a temple. The outline was defined by stretching a measuring cord round pegs fixed in the ground. Ankh-ef-en-mut is here again named "son of Kha-em-uast." The five right-hand lines: "The worshipper of the king, the lord of diadems. Horus, great of might." Here also Ankh-ef-en-mut has an additional title, "Governor of the library (?) of Sokaris."

In the second of these three doorways, a title is slightly changed in the third column on the left. Ankh-ef-en-mut is "set over the mysteries of the temple of the *ka* of Ptah." In the third column on the right he "satisfies the heart of Ptah with . . ." In the last doorway, the king's title on the left is "Horus, the great one of might"; on the right, "Horus, the uniter of the two lands."

57. Pls. XXV and XVII. In the broken inscription at the top of Pl. XXV, another instance occurs of the common *suten di hetep* formula without the *suten*, as on Pls. XIX and XXIII. The left-hand column reads: "which Ptah has created for his *ka*, for the *sem*-priest, the king's son Kha-em-uast." The right-hand column reads: "May Ptah, . . . his beauties, the sacred one, the great one, rich in gifts, give an offering-table."

On the right is a hand-copy of the photograph on Pl. XVII. The form of the man's name, Tha-ast-en-amu, in whose honour the inscription was written, is very interesting. Many instances are now known of this type of name, and it was evidently a favourite form of name at Memphis. In the different names one deity replaces another. In this man's name Isis is the goddess. In *Memphis I.* Pl. XXXII, Apis is the god in the name of Tha-hap-amu. It is interesting to note that the last name is spelt, in the last line on the back of the statue, Tha-hap-en-amu, corresponding exactly to

the form Tha-ast-en-amu. It seems probable that the other name of Tha-ast-en-amu was Aahmes-si-neit. If this is so, it is placed in a most unusual manner, at the end of the opening phrase of his speech, after the cartouche of the king Khnum-ab-ra, whose name was also Aahmes-si-neit. It is hardly possible, however, to consider that this is meant for the king's name and not enclosed in a cartouche. It is less improbable, therefore, to consider that the name has been transferred from the usual place, immediately following the first name, to the place where the king's similar name would have occurred if the second cartouche had been written. Several of the *neb* signs should read *k*; the handle of the basket has been omitted. "(1) The hereditary prince, the royal treasurer, the confidential friend, the one who is in the palace, the king's reporter, the scribe of the royal archives in the royal presence, Tha-ast-en-amu. He says, I made for thee (read *k* for *neb*) the judgment (?)-hall of (2) the king of Upper and Lower Egypt Khnum-ab-ra. He was called Aahmes-si-neit. Thou (*k* for *neb*) madest me chief judge [lit. "over the listeners"] and possessor of the reward of merit in thy time (*k* for *neb*). I carried out all orders, and renewed thy works in (3) thy festival (? *heb*) of . . . upon earth. I established thy name firmly on every place in the great hall. I built this palace, for the noblewoman Nebt-anhk, which the noblewoman Semset gave. (4) It was furnished with a lake, together with all beautiful gifts by the god, . . . the years of the king of Upper and Lower Egypt Kheper-ka-ra living for ever, in whose time I worked these things for thee (*k* for *neb*)."

On Pl. XVII the left-hand photograph gives the inscription on the other side of this stele: "(1) The confidential friend Tha-ast-en-amu. (2) Speech. Mayest thou be nourished with (3) her life. May thy limbs be made firm, (4) which have been fashioned by the great goddess, (5) Semset of the house of provisions."

The stele in the lower half of Pl. XXV has an unusual representation, in the middle, of a shrine decorated with a *dad*-column upon which are perched two hawks crowned with the disc of the sun. On the *dad*-column is inscribed "Ptah, the great one of might, the creator (?) of the gods [*mes* (?) *en* *neteru* (?)]."

On the right of the hawks: "Ptah, lord of truth, greater than the gods, the great god, creator of everything that exists, the king (*ity*) of the whole cycle of the gods." On the left of the hawks: "Ptah, the beautiful one of the beautiful ones [*nefer neferu* (?)], the lord of lords, . . . of the gods, the great one. . . ." The long inscription from right to left reads: "(1) Adoration to Ptah, the lord of truth, the creator of all that exists, and a kissing of the earth to his *ka*, by the royal scribe, the superintendent of the house Amenhetep, (2) deceased. He says, I have come into thy presence, O Ptah South-of-his-wall, the noble one of the gods; I have beheld thy beauties and my heart is glad. (3) How joyful art thou in thy beautiful plans. I wrought truth for thee in my heart, for I knew that it is that with which thou art satisfied. I approached not (4) fraud in my heart, I have not associated myself with wrong-doing. Grant that my name be in thy temple, and that it may flourish (5) in men's mouths daily, and that my statue may be established in it (the temple), in order that I may be carried in procession with thy praised ones who are in thy temple, and that I may inhale (6) the incense, which comes forth in the presence and the oblations upon thy altar-table, and that I may behold thy Majesty on each occasion (7) of thy appearance at the time of all thy festivals. Behold, I am praised by the beautiful-one-of-face, the lord of truth (?). (8) A happy old age to the *ka* of the royal scribe, the superintendent of the house, the superintendent of the granary Amenhetep. (9) This was made by his son beneficent of heart, and true of heart, the scribe Piay."

The inscription on the lower half of the stele reads: "(1) Adoration to Ptah, by . . . (2) of the lord of the two lands Piay. He says . . . (3) mayest thou make to prosper . . . (4) coming to its place, an upright heart . . . (5) He says, I have come into thy presence, O Ptah . . . (6) with praise, for the purpose of beseeching thee, that thou mayest cleanse . . . (7) that the superintendent of the granary, Amenhetep, deceased, may be to eternity amongst the praised ones . . . (8) healthy, his limbs protected, and that there may be no evil . . . (9) I continue to pray to thy beautiful face which is . . . (10) hearts, that thou mayest grant success during a happy life to the scribe Piay."

INDEX

Aahmes-si-neit, 14, 19, 21
 Aahmes-si-neit-rannu, 11
 Alabaster figure, 15
 inlay, 15
 jars, 12
 Alexandria, consecration of patriarch of, 10
Am or camp men, 11
Am khent, 9
 Amenemhat, cartouche of, 19
 lintel of, 14
 Amenhotep and Piaay, stele of, 14, 21
 Ankh-ef-en-mut, 14, 19, 20
An-mut-ef priest, 9, 11
 Antony, type of, 18
 Apries palace site, 1
 new broadway, 2
 arranged like a mansion, 3
 (see BRICKWORK, BROADWAY, COL-
 UMNS, GREAT COURT, MANDARA, ETC.)
 Aqanush, son of Pe-dy-bastet, 12, 18
 Aramaic graffiti, 11, 12
 Arm used in consecration, 10
 Arms and shoulders carried for investiture, 10
 Arrow in Uputai's heel, 9
 Artaxerxes II, graffiti of, 11, 12
 Ay, king, relief of, 14, 18

 Baboon, bronze, inscribed, 12, 18
Bennu bird, 10
 Berms in fosse, 2
 Bes, head of, 16
 Brickwork, sizes of, 4, 5
 Broadway, new, 2
 old, 2
 Bronze figures, 12
 hair curl, 16
 portions of figures, 16
 scale armour, 13
 Button-seals, 16

 Cambyses, name of, 11
 Camp of Memphis, 1
 Capital of rose-lotus, 13, 14
 Cellular substructures, 1
 Cists of stone in floor, 2, 3
 Column, inscription on, 18
 Columns of Apries (Haa-ab-ra), 14
 of Great Court, 3
 of *Mandara*, 4
 Cowley, Mr., on Aramaic graffiti, 12
 Cretan labyrinth, 15, 16
 Crocodile carrying child, 16
 Crown-prince, investiture of, 8-10
 Curtains of dancing place, 9

Deba-kheru, near Heliopolis, 10
 Door-jambs, inscriptions on, 20
 Doorways, 4
 Drain in palace, 2
 Drawbridge required, 2
 Dress of steward, 9
 Ducks on column, 14

Em khent, 9

 Fans used at investiture, 8
 Flooring, stone, of halls, 2
 Fosse before palace, 2

 Glazed tiles of Merenptah, 15
 bowls, fragments, 16
 Great Court, arrangement of, 3
 columns of, 3
 height of, 4
 size of, 2
 Green, Mr. F. W., 11

Guardroom of palace, 2
 Haa-ab-ra, cartouche of, 14
 Hathor, gold head of, 11, 12
 Hathor head kilt, 9
 Hawk on early and late sculpture, 5
 Hawks on vase, 16
 Heads of foreigners, 16-18
 Hebrew type of head, 17
 Heliopolis, scene at lake of, 10
Her mace, standard of Memphis, 10
Hest festival, 9
Hest place, 10
 High priest of Memphis, 15
 Hippopotamus, the destroyer, 9

 Iberian head, 17
 Ibex feet to palanquin, 10
 Ibis, bronze, 12
 Infant-dress, terra-cotta, 16
 Inscriptions, 18-21
 Investiture of Crown-prince, 8-10
 apparatus for, 8
 Ivory carvings, 12

Jackal "opener of the ways," 9

Ka-name left blank, 8
 Karduchi, 17
 Karian head, 17
 Kha-em-uas, inscription of, 15, 20
 Khabbush, sling bullet of, 11, 16
Kher-keb, 9
Kherf-aha, 9
 Kitchen of palace, 2
 Kurd type of head, 17

Labyrinth plaque, 15
 Lapis-lazuli, 18, 20
 Lead dishes, Roman, 12
 Lead drain-head, 2
 Letopolis, standard of, 9, 18
 Lintel of stone, 2, 4, 18
 Lion-god shrine, 13
 Lion of pottery, foreign, 15
 Lotus capital, 13

Mackay, Mr., 1
Mandara of palace, 2, 3
 columns of, 4
 Mausolos type, 17
 Merenptah, lintel of, 14, 18-19
 temple of, 15
 Metelite nome, relic of Osiris, 10
 Mongolian type, 17
 Moret, Dr., on *Sed* festival, 8
 Mould with king in chariot, 16
 Mykenaean pottery, 15

Neb signs and *k*, 21
 Nebunnef high-priest, 16
 Nefer-Tum-hotep, figure of, 14
 Negro heads, colossal, 14
 Nekheb, goddess, 9, 10, 11
 Nekht-neb-ef, 13
 Nelumbium capital, 14
 Nut, goddess, 10

Osiris relic in Metelite nome, 10
 Ostrich feather on standard, 9

Palace-mound, position, 1
 depth of, 1
 Palace, survey of, 1
 walls of, 1
 brickwork, 4
 stonework, 2, 4
 (*see* various parts)
 Palanquin, royal, fitting of, 11
 Palanquins with royal children, 9, 10
 Palm trees at Heliopolis, 10
 Patriarch of Alexandria, consecration of, 10
 Pe-dy-asar, 12, 18
 Pentacle, 16
 Pepy I cylinder, 15
 Persian scale armour, 11, 13
 seal, 12
Pet signs, used at investiture, 9
 Phoenician mould, 16
 Piankhy, investiture of, 11
 Ptah, 18, 19
 Ptah-Sokar type, female, 16
 Pupui, high-priest, 15
 Pylon, sculptured, date, 5
 drawing of, 5

Pylon, sculptured, restoration of, 6
 courses of, 6, 7
 subjects of, 8-10

Qurneh, distribution of objects from, 18

Ramessu II, 16
 Ramessu III, 19

Reliquary statuette, 12

Rhodian jar-stamps, 16

Rose-lotus capital, 13, 14

Scale armour of Persians, 11
 found, 11, 13

Scythian figures, 17

Sealing of jars, 12

Seals, Persian, 12; Greek, 12
Sed festival, nature of, 8
Sedeb scarf, 11

Semicircles behind prince, 9

Serpents guiding Alexander, 9

Set, stèle of, 14

Shardana, type of, 17

Siamen, building of, 14
 lintel of, 18

Silver fitting of royal palanquin, 11

Sistrum of green glaze, 12

Sling bullet of Khabash, 11, 16

Spanish type of head, 17

Steel scale armour, 13

Steps of stone, 4

Steward, dress of, 9

Stone flooring, 2
 lining of walls, 2
 lintels, 2, 4
 steps, 4
 doorways, 4

Sumerian types, 17

Tahuti in scene, 10; statuette, 12

Tank of lead in drain, 2

Teos (Zeher), bowl of, 11

Terra-cotta heads of foreigners, 16-18

Tha-ast-en-amu, slab of, 11, 13, 21

Tiles, glazed, of Merenptah, 15

Tower, site of, 4

U or townsmen, 11

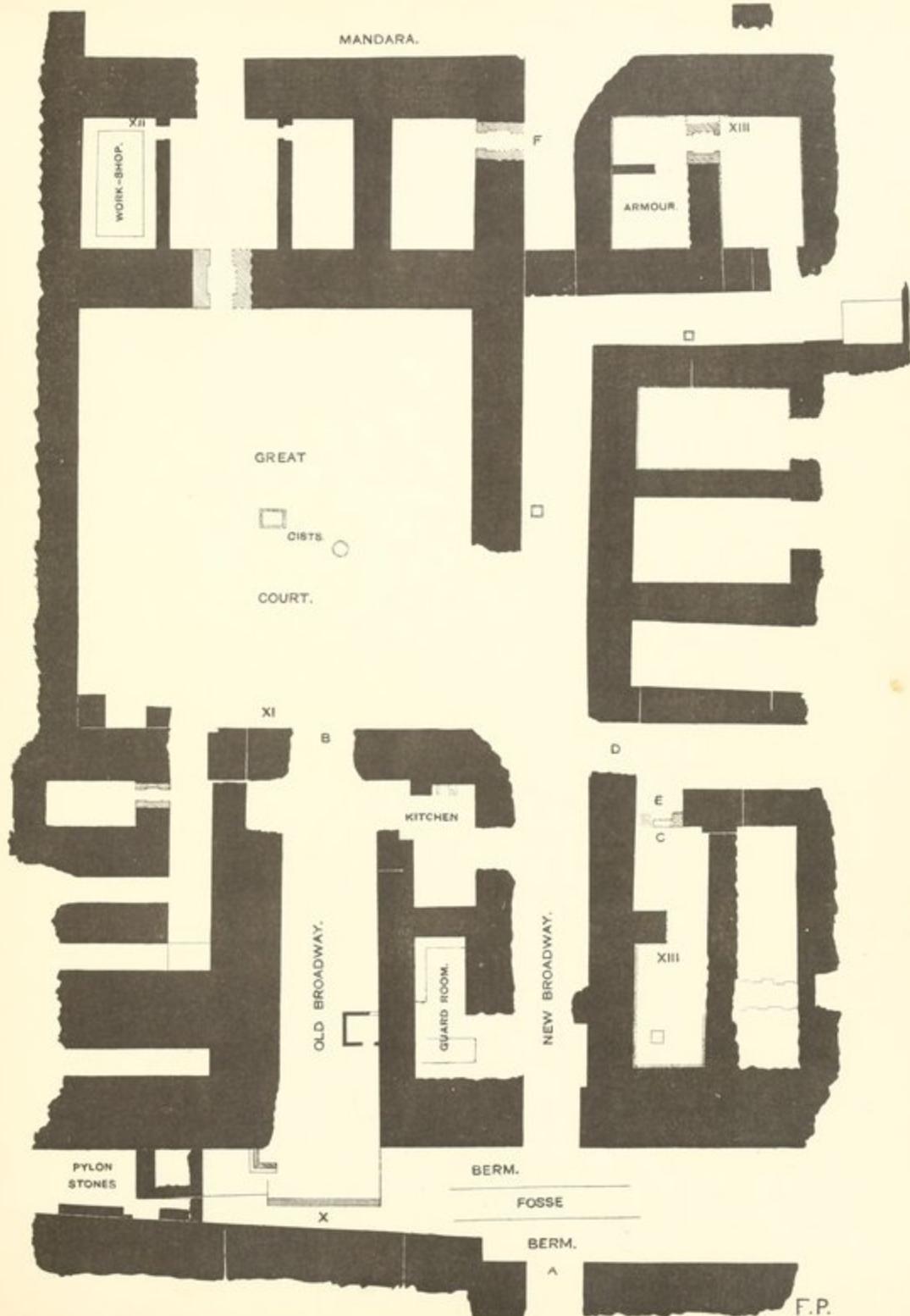
Upuati, standard of, 9
 wounded in heel, 9

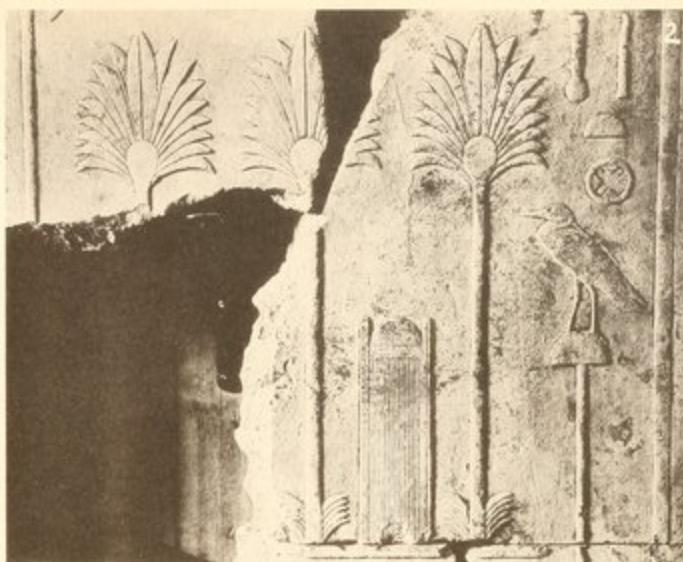
Wainwright, Mr., 1

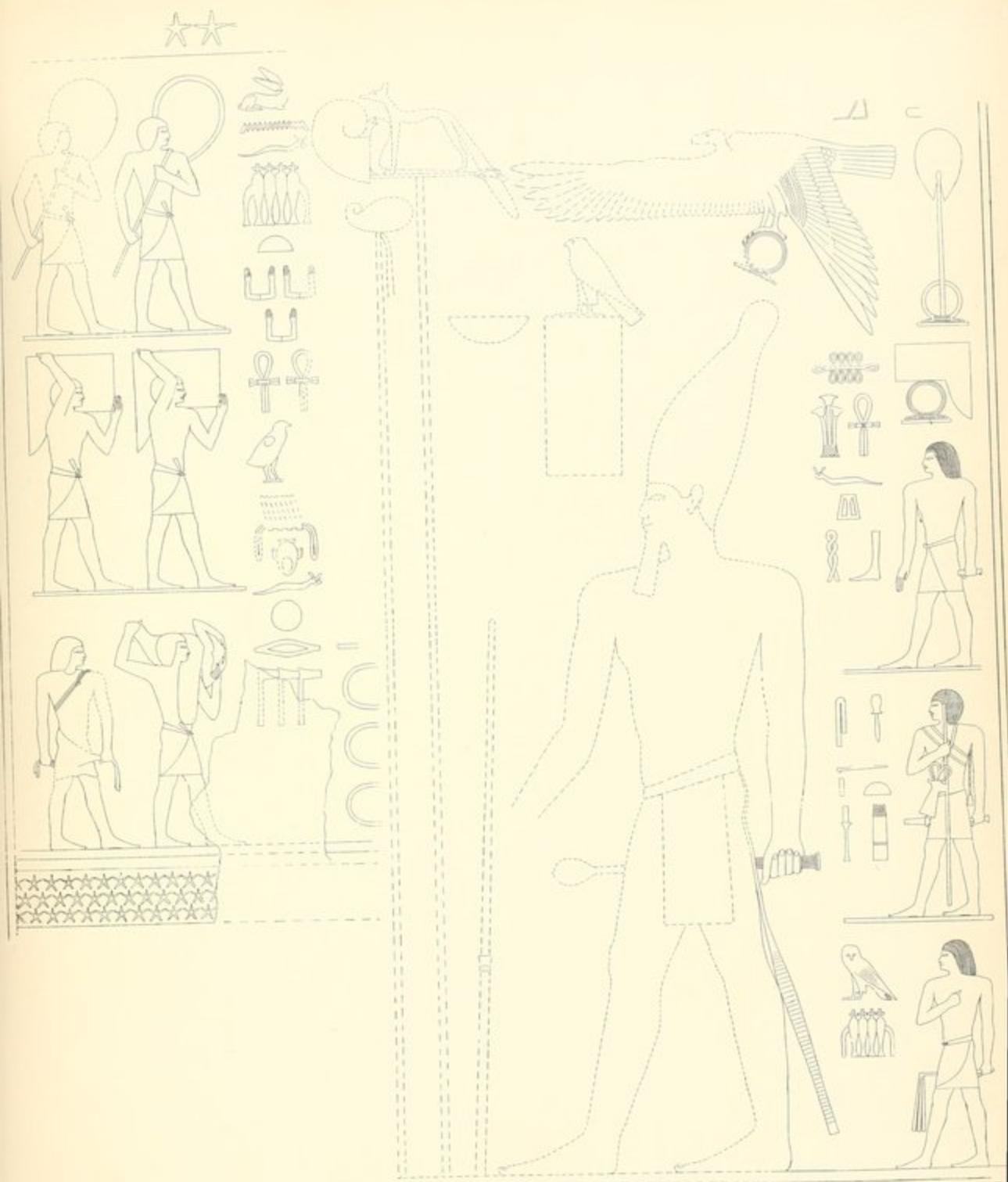
Women, heads of, 17

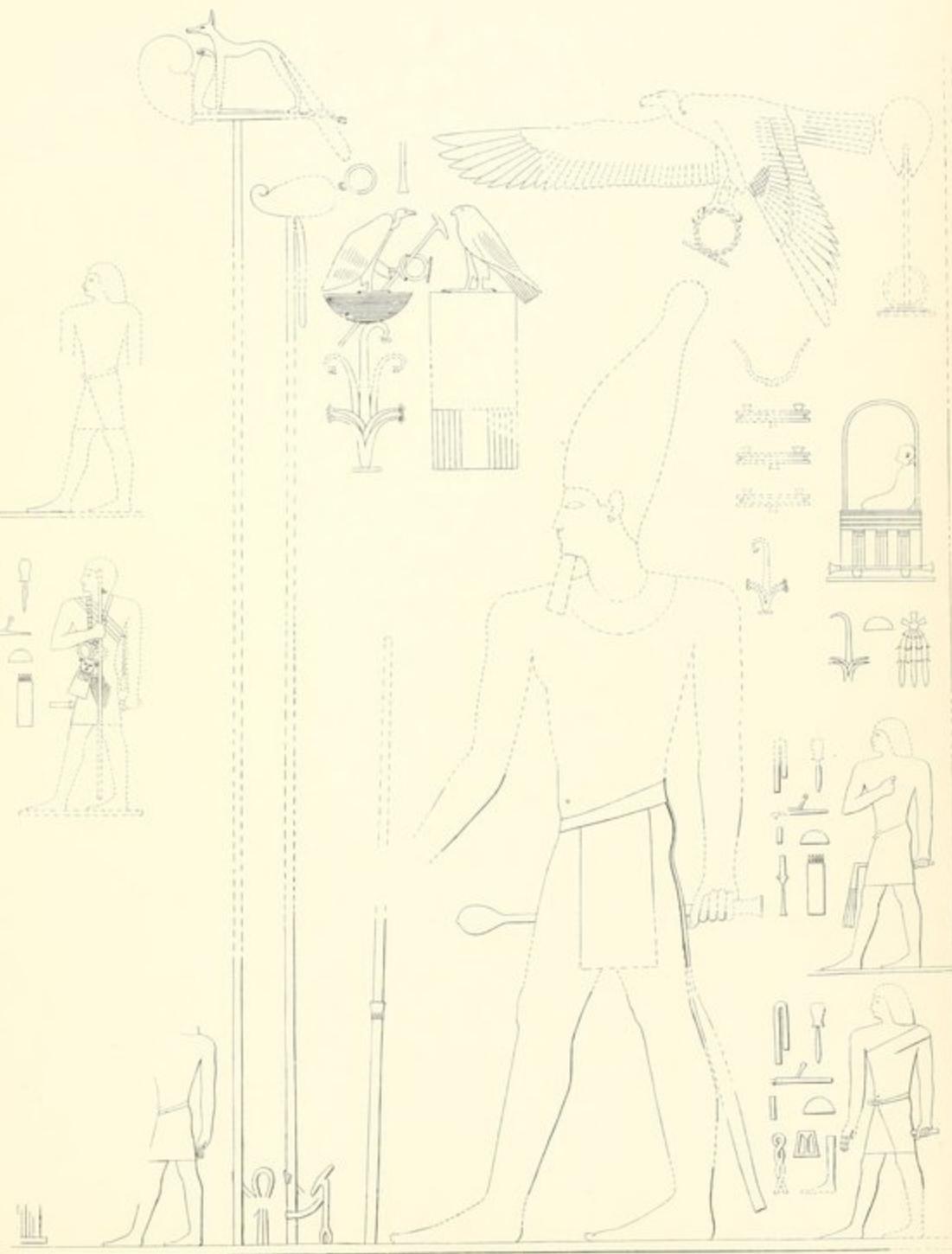
Workshop in palace, 3, 11

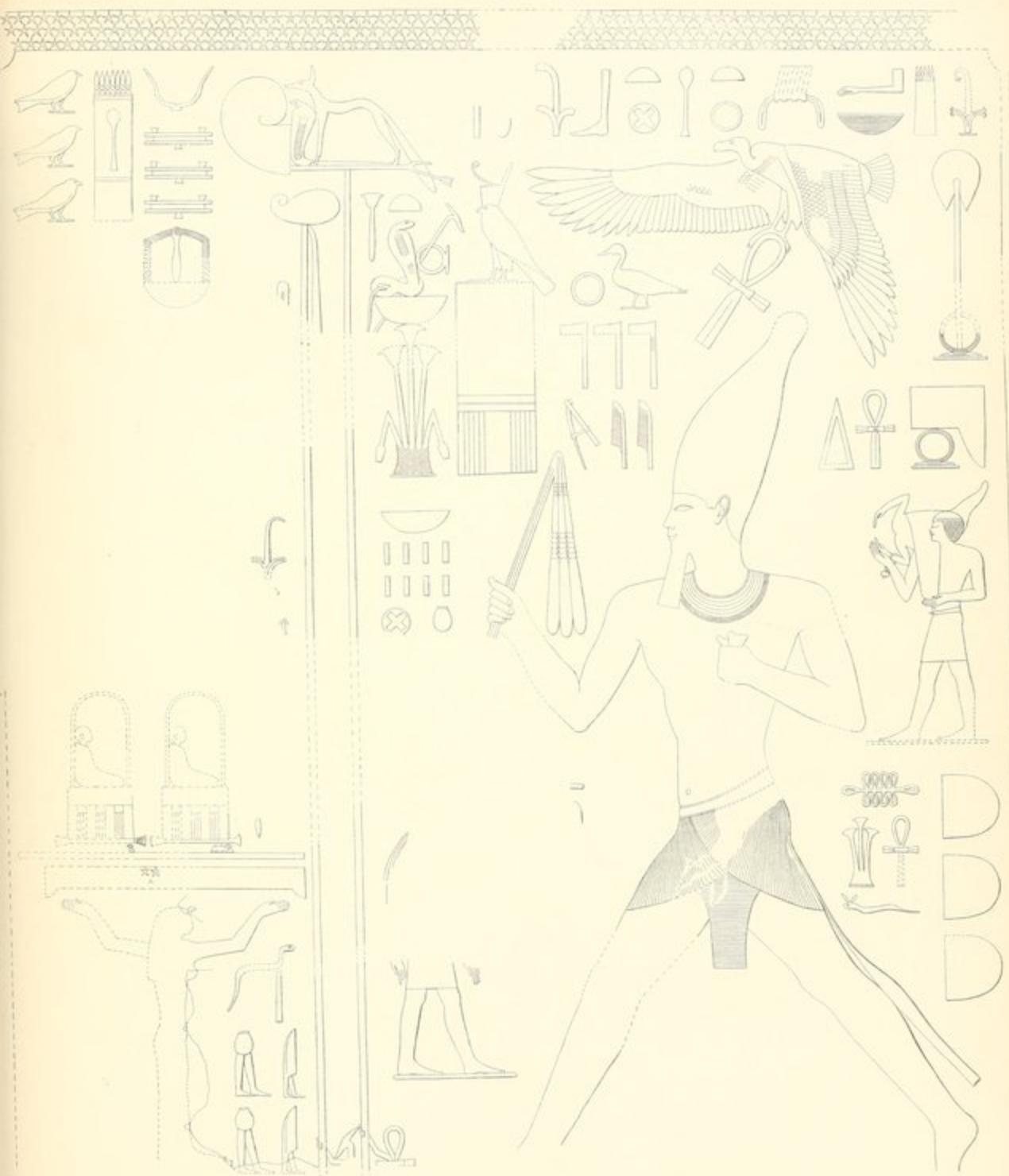
Zeher, bowl of, 11, 12



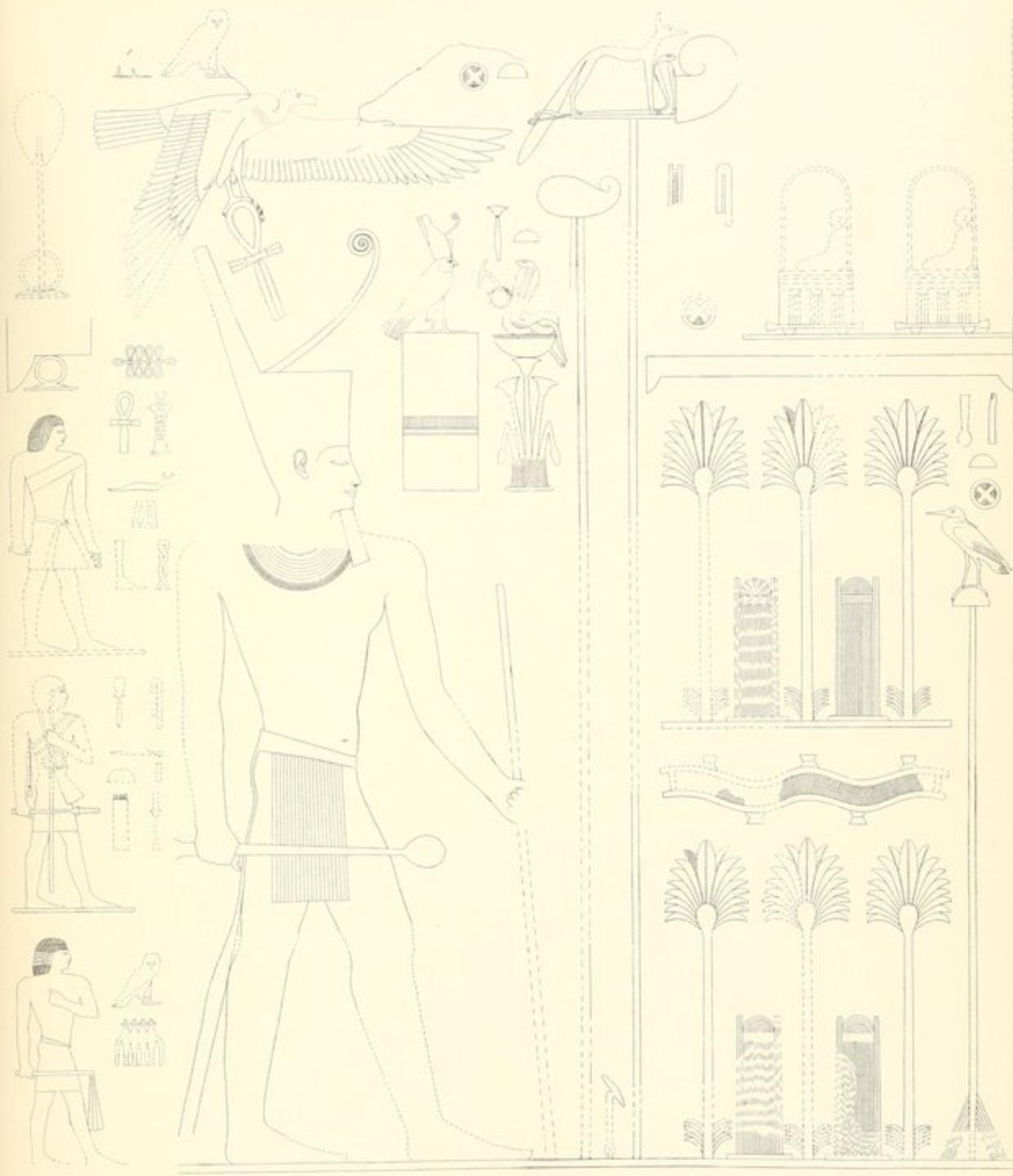




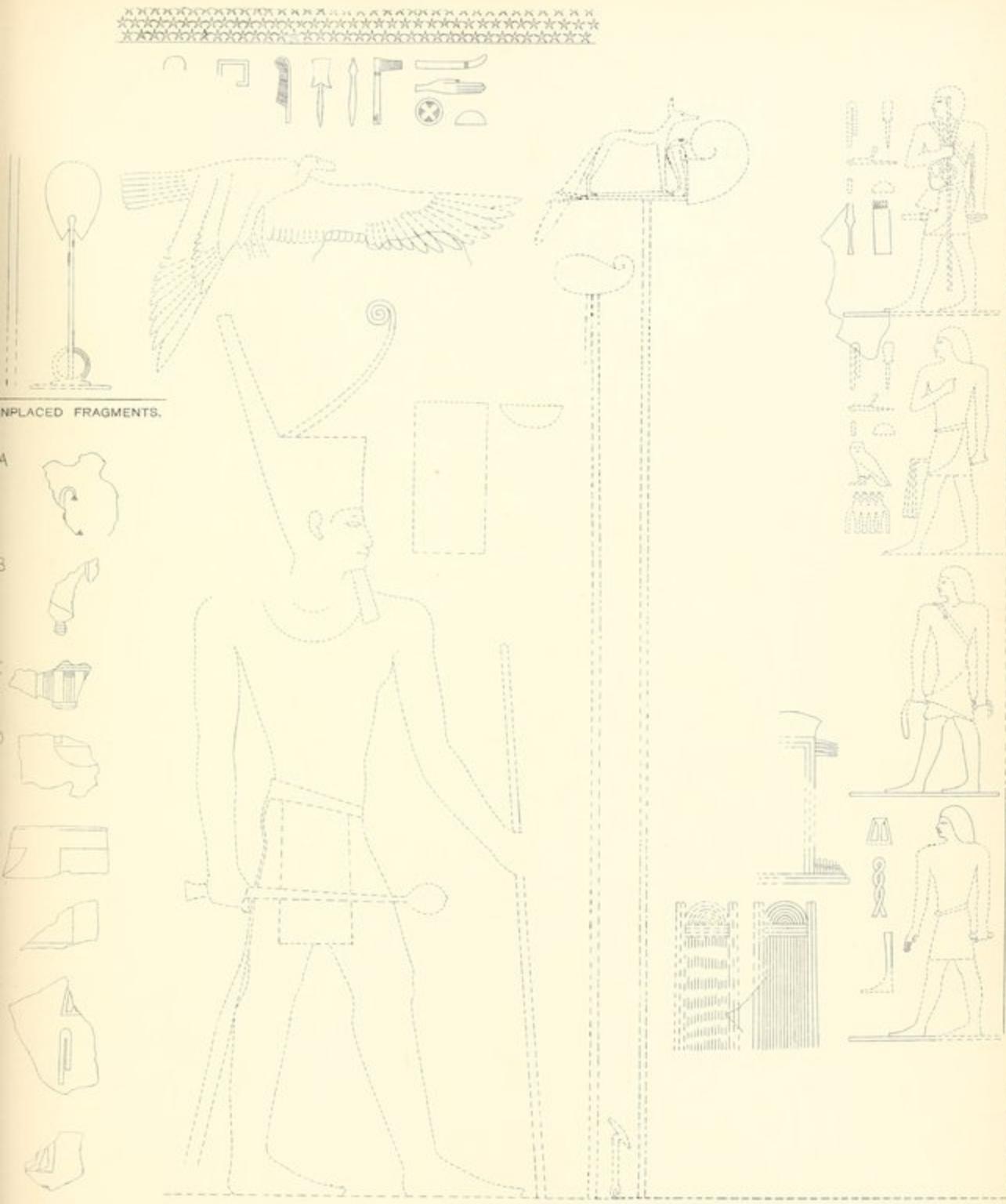


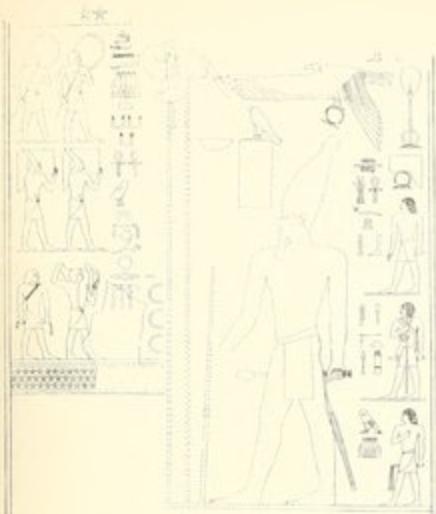


Lepsius No. 66
ABIAS 1046

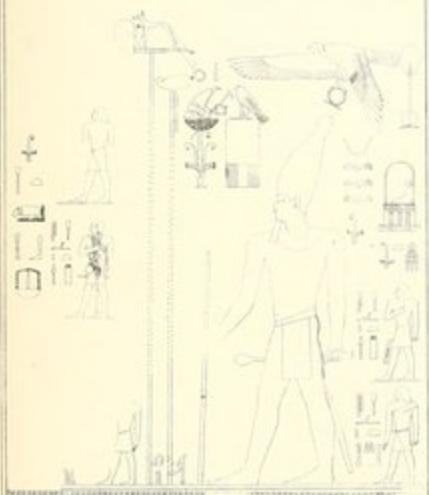








U. (WINGED)



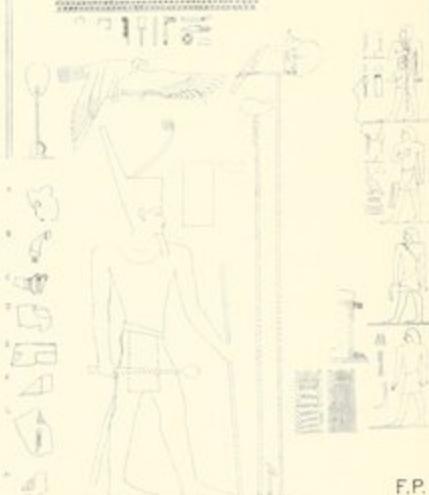
H.M.P.



C.I.R.O.



H.M.P.



F.P.



PALACE MOUND FROM SOUTH-EAST.



OLD ENTRANCE WAY LEADING TO GREAT COURT.



GREAT COURT, LOOKING NORTH.



CAPITALS OF 50-FOOT COLUMNS IN NORTH COURT.



GREAT COURT AND WORK CHAMBER.



PALM CAPITAL, NORTH CHAMBER.



CAPITALS OF 50-FOOT COLUMNS, NORTH COURT.



DOORWAY OF WEST CHAMBER.



BLOCKING OF OLD ENTRANCE IN FOSSE.



MONOLITH CIST IN GREAT COURT.

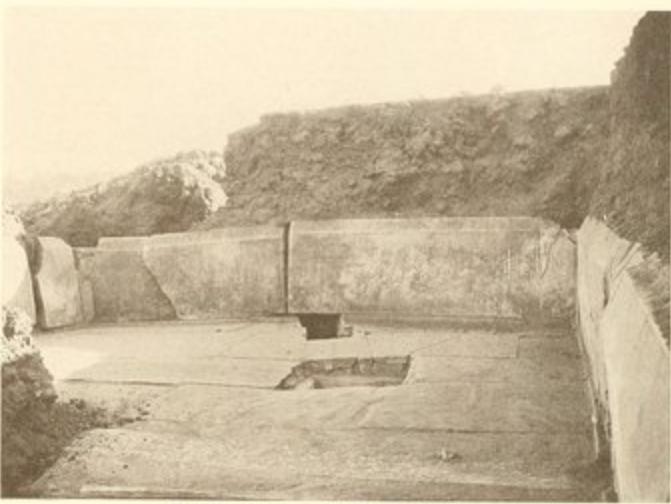


STONE LINED HALL.

LINTEL OF DOOR.



LEAD TANK OF DRAIN



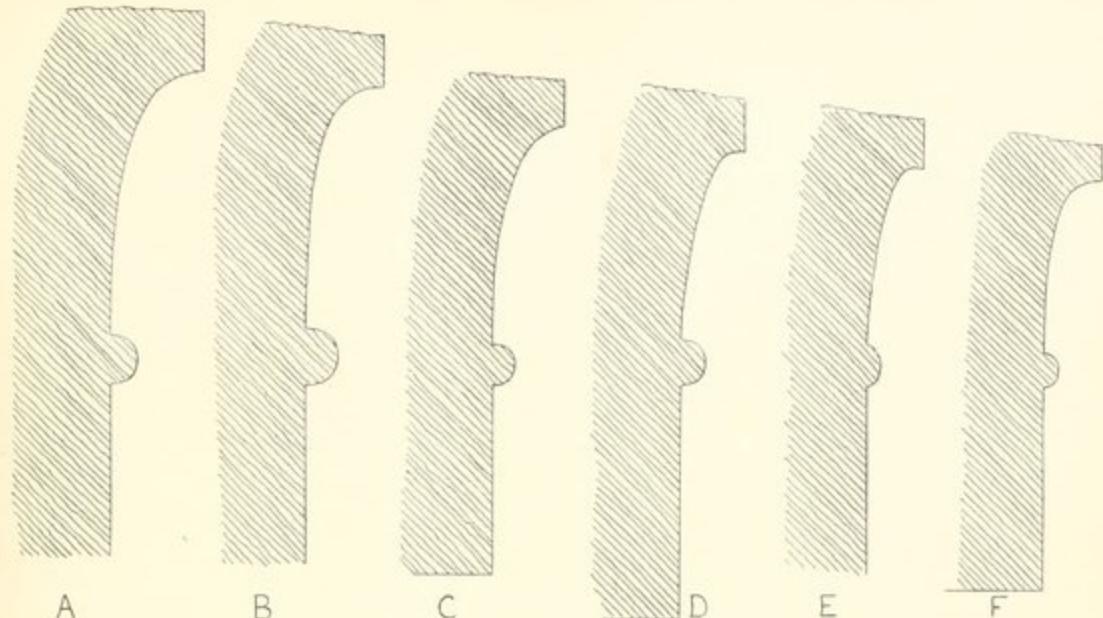
STONE LINED HALL WITH DRAIN.



STONE LINING PARTLY FALLEN FORWARD.



WALL OF EARLIER PALACE AND BLOCK OF STONE STEPS.



A

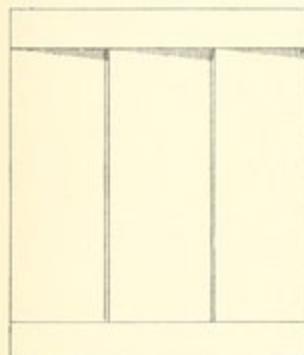
B

C

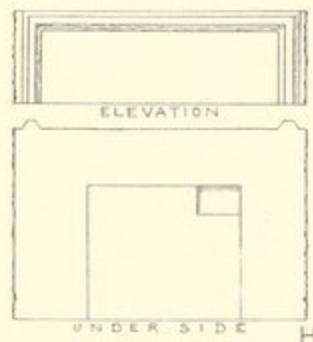
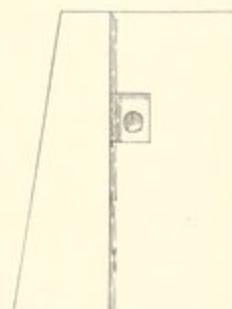
D

E

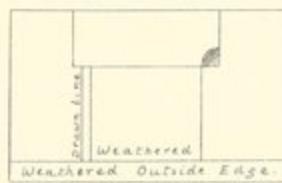
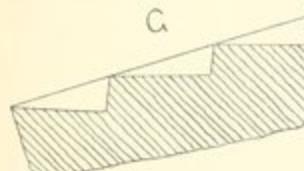
F



G

DOOR HEAD
DOOR SILL

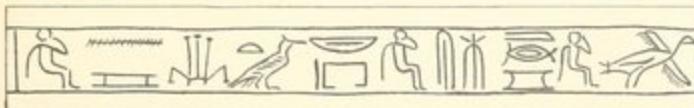
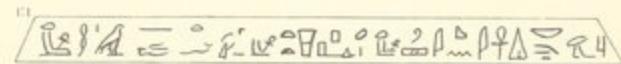
K



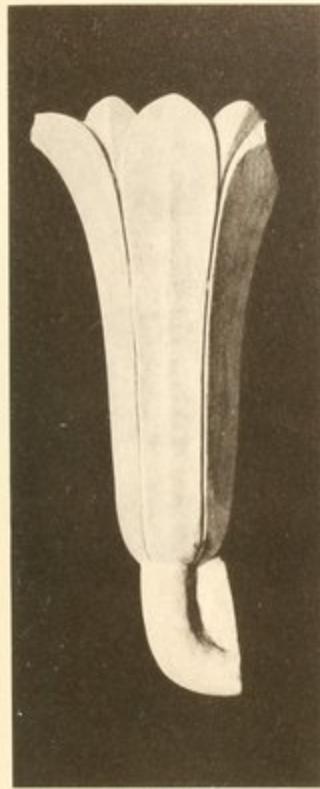
L



לטבָא אַלְמָלְקָה אַלְמָלְקָה
בְּחֵדָא לְאַבְשָׁתָה אַרְתָּחָשָׁה



F.P.



4:3 IVORY LOTUS.



1:1 SILVER FITTING WITH GOLD FACE OF HATHOR.



5:4 IVORY CARVING.



2:3 GLAZED SISTRUM.



1:1 BLUE GLAZED BOWL OF ZEHER, TEOS.

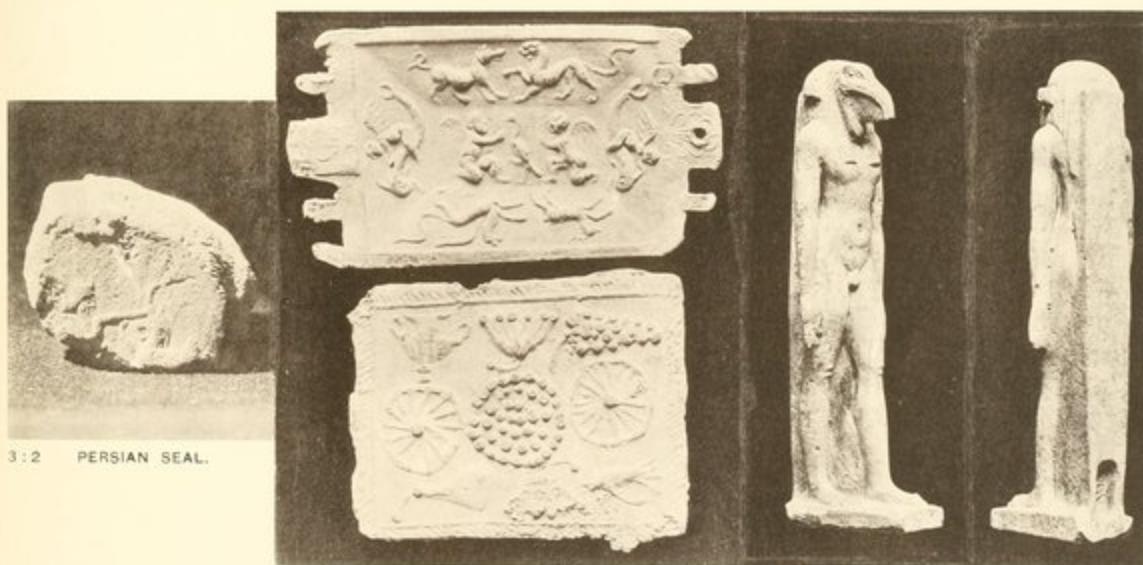


2:3

BRONZE IBIS.

BABOON.

PTAH.



3:2 PERSIAN SEAL.

5:4

LEADEN MODEL TRAYS.

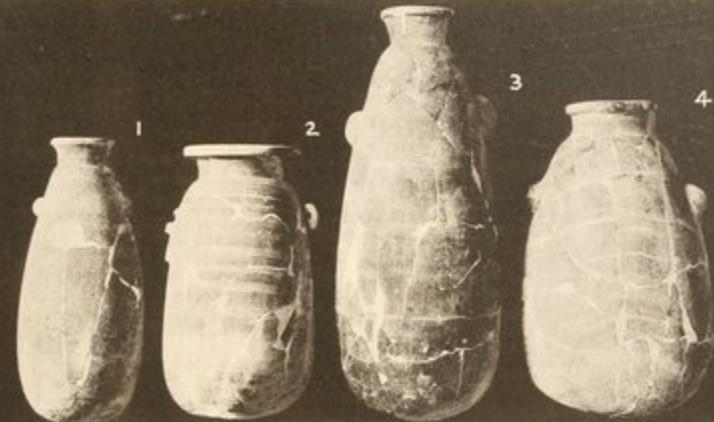
2:3

TAHUTI, GREEN GLAZE.

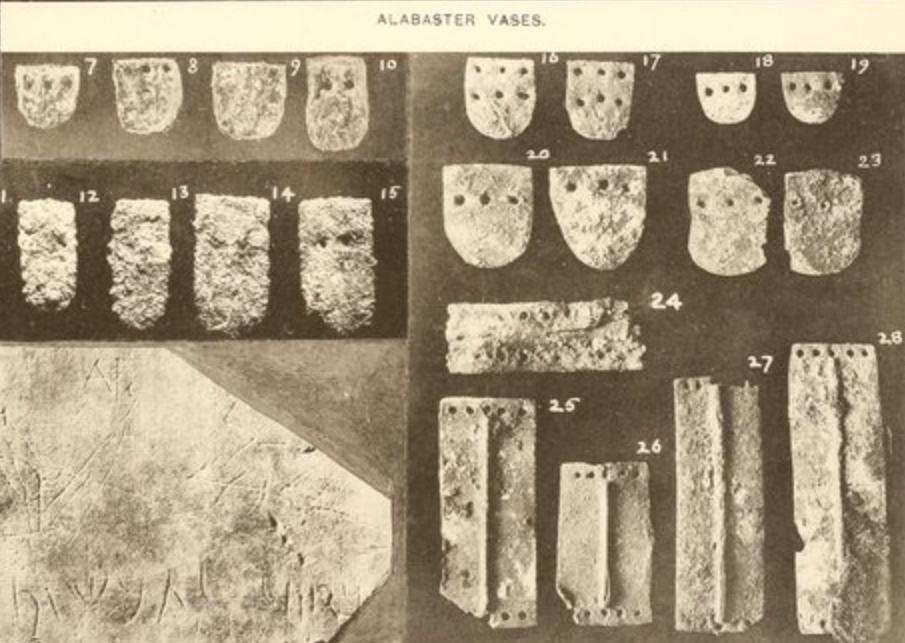


3:2

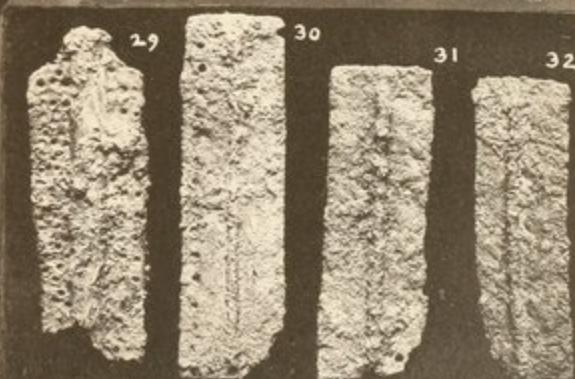
MUD IMPRESSIONS OF SEALS FROM AMPHORAE.



ALABASTER VASES.



ARAMAIC GRAFFITO.

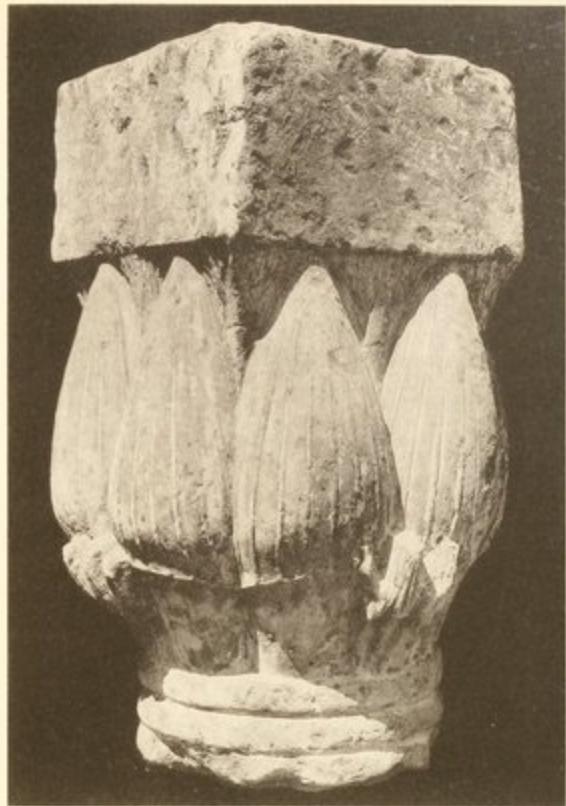


IRON AND BRONZE SCALE ARMOUR.

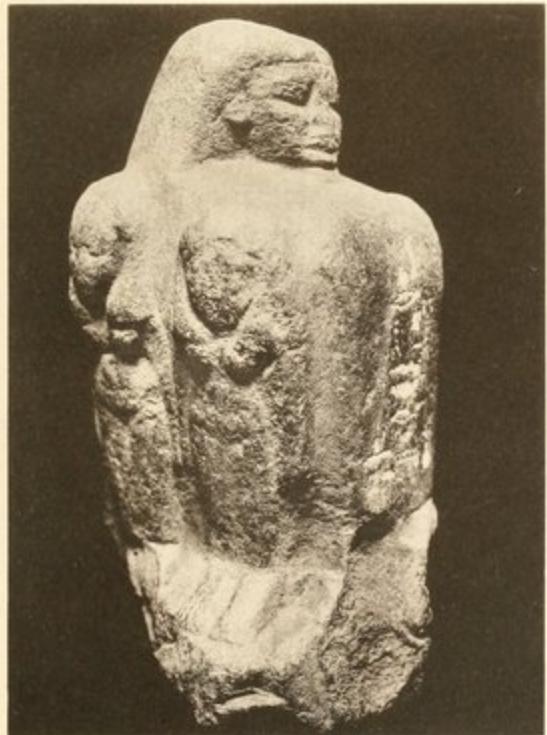




SHRINE OF LION GOD; TEMPLE OF PTAH.



OLD KINGDOM ROSE LOTUS CAPITAL.

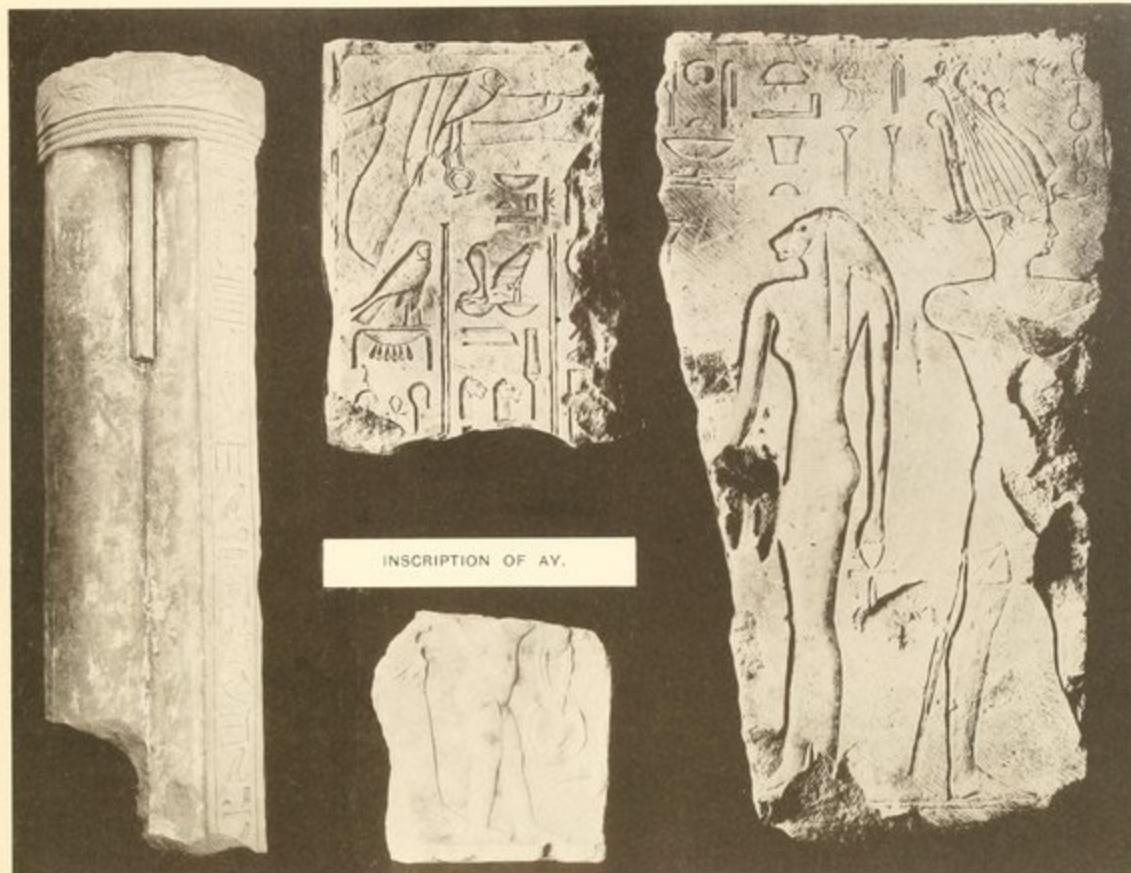


NEFER-TUM-HOTEP AND FAMILY.



STELE OF AMENHOTEP AND PIAAY.

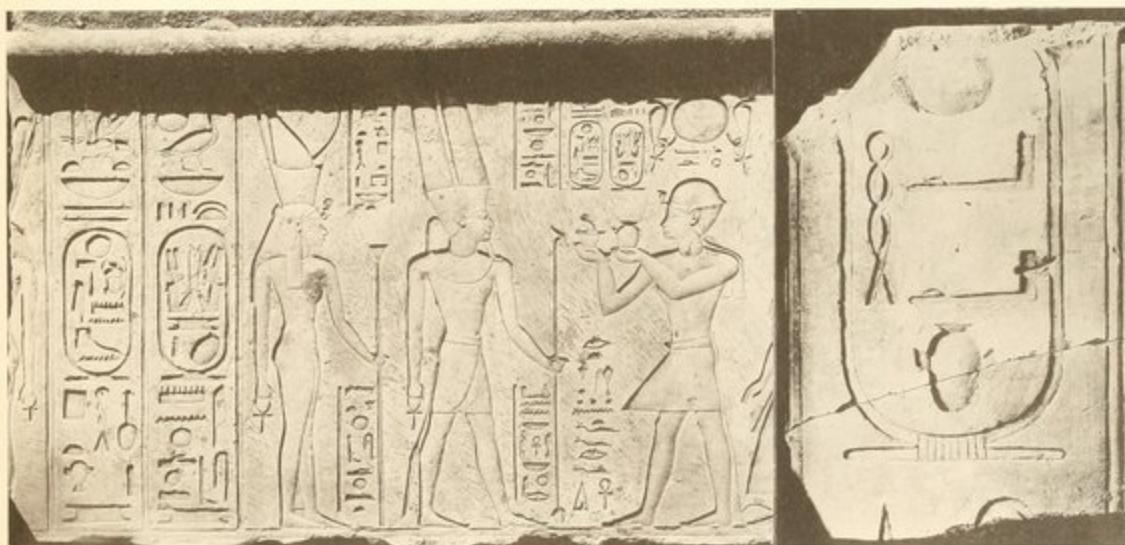




CLUSTER COLUMN XVIII DYN.

TRIAL PIECE.

SEKHMET AND KING.

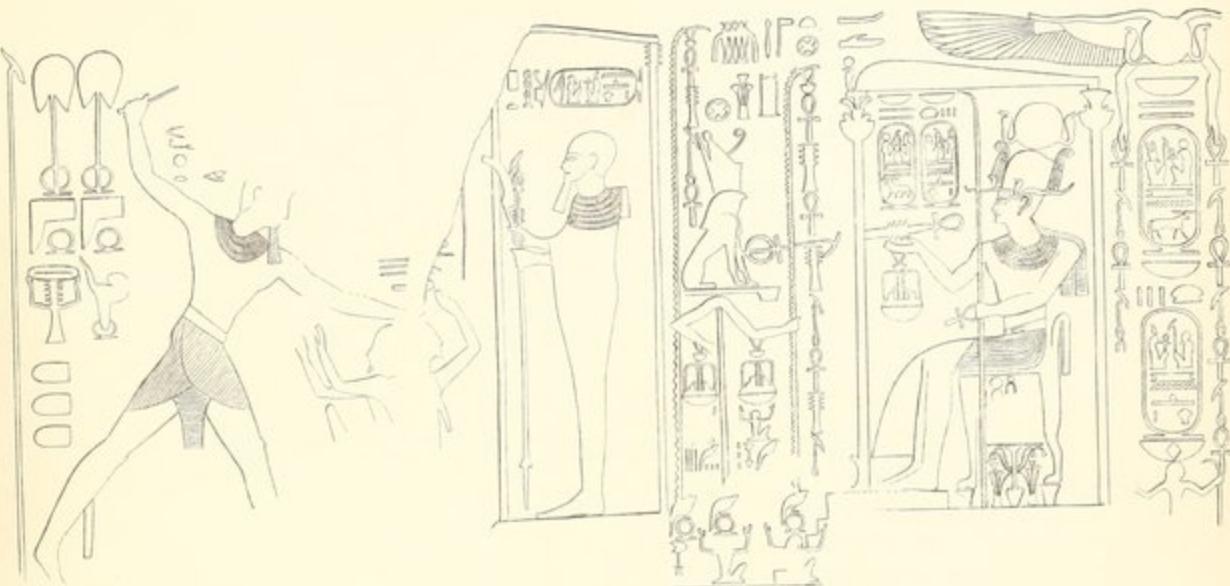


LINTEL OF SIAMON.

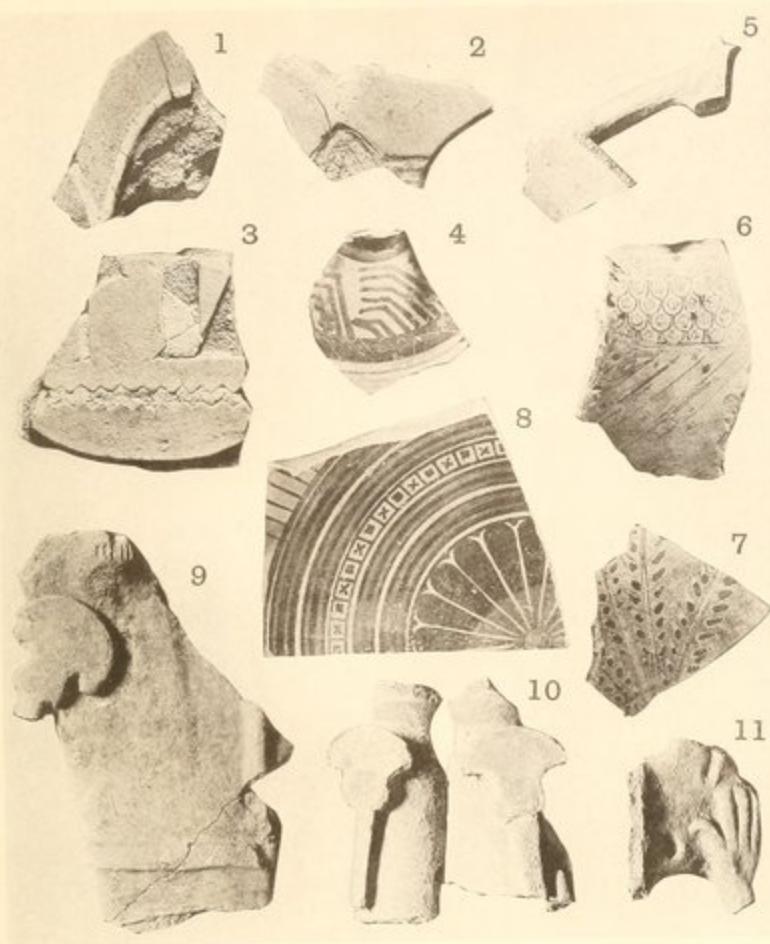
HAA-AB-RA (APRIES).

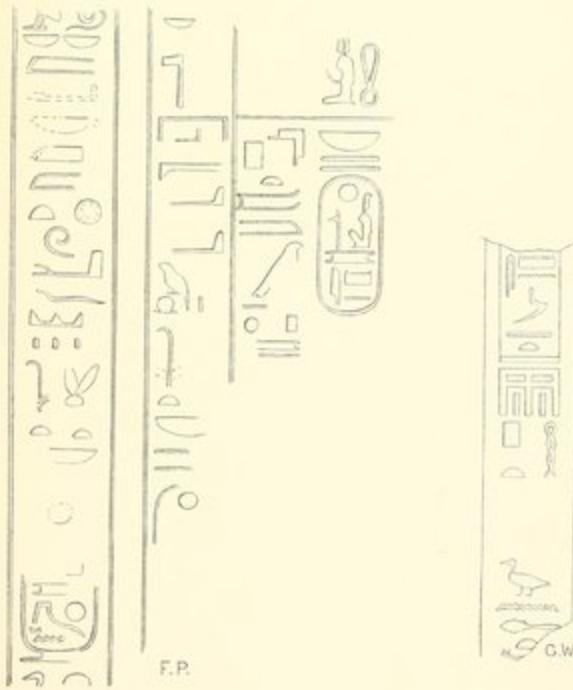
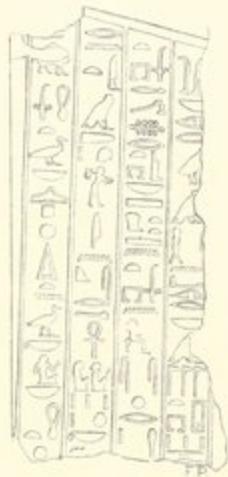
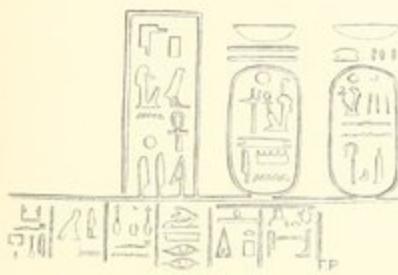
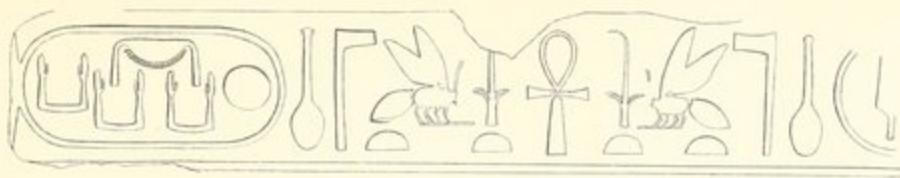












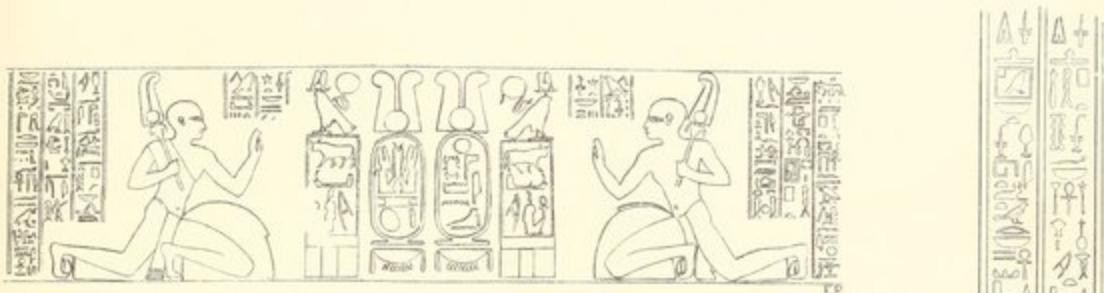
F.P.

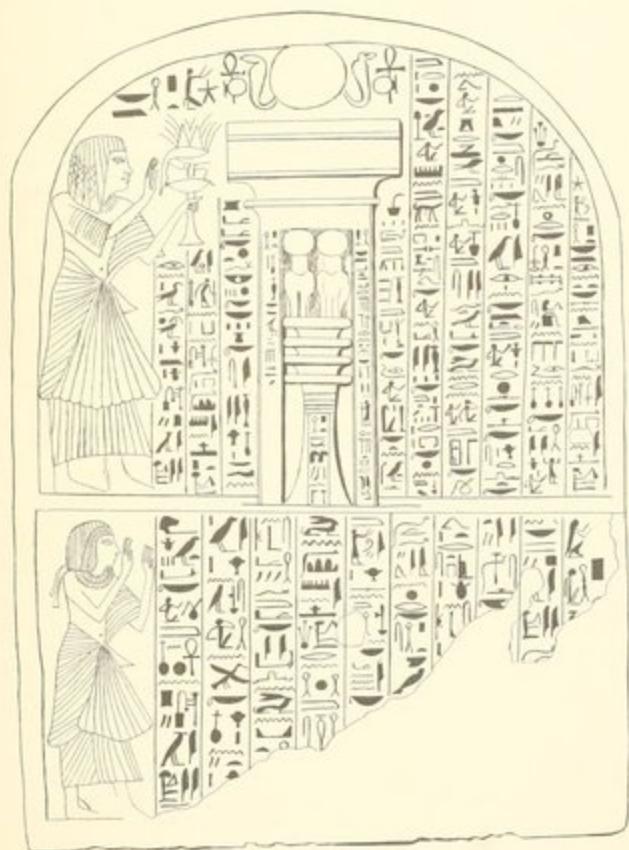
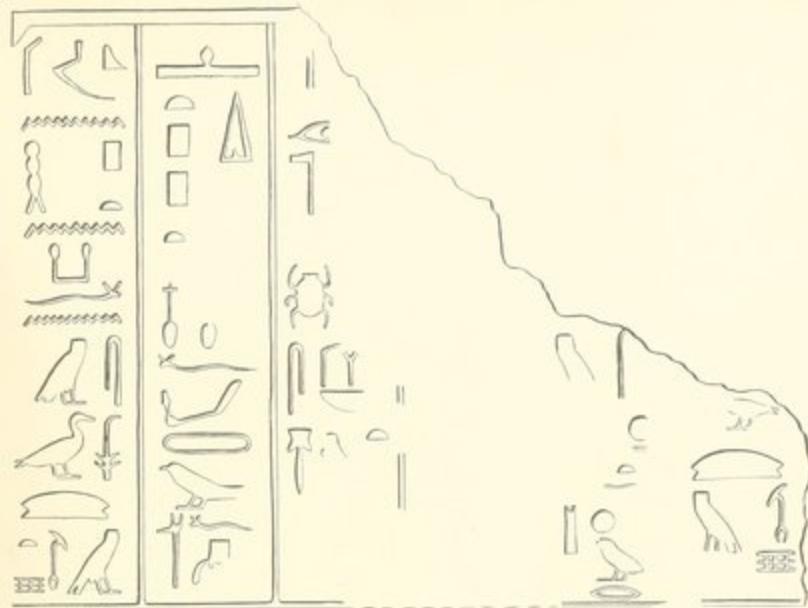


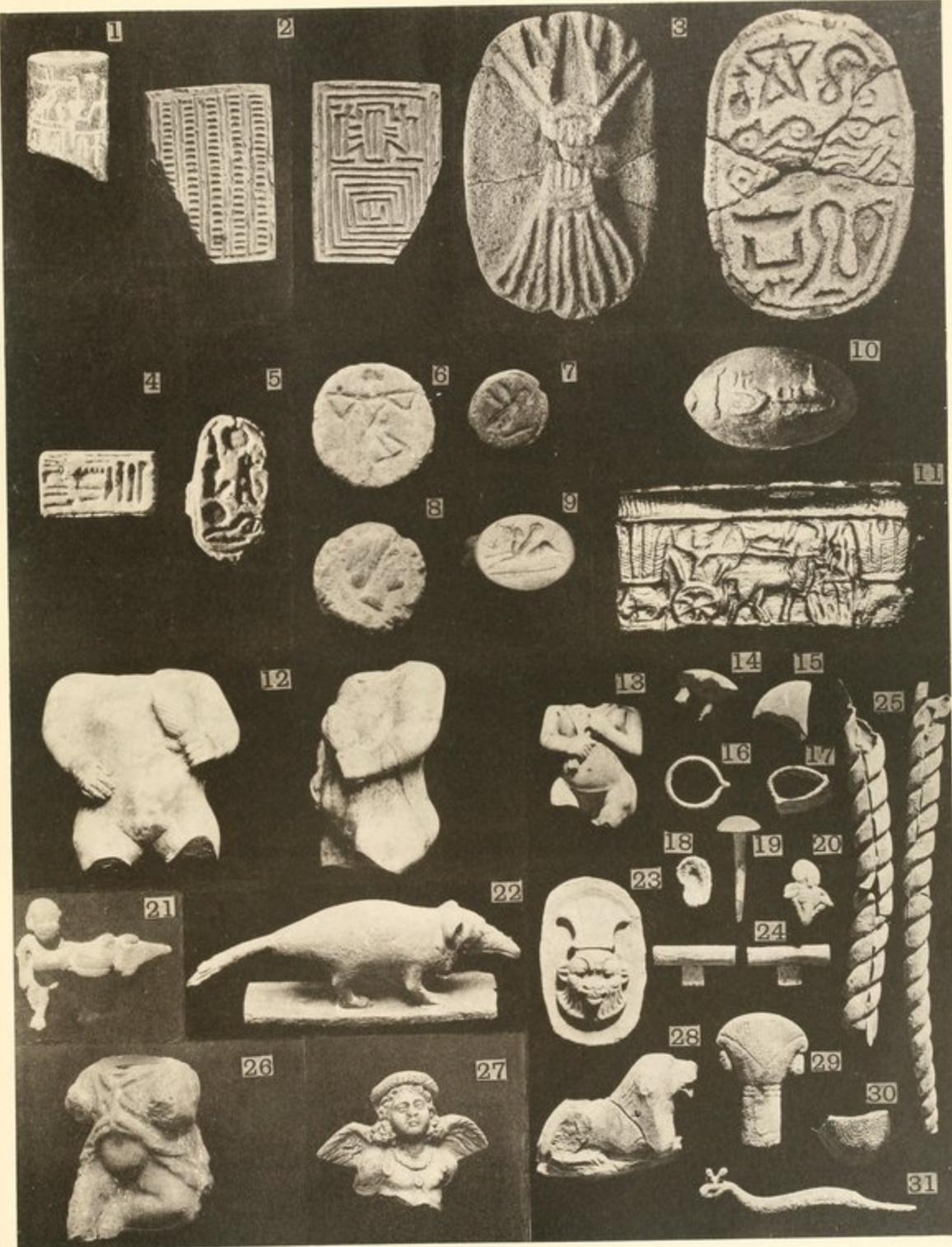
G.W.

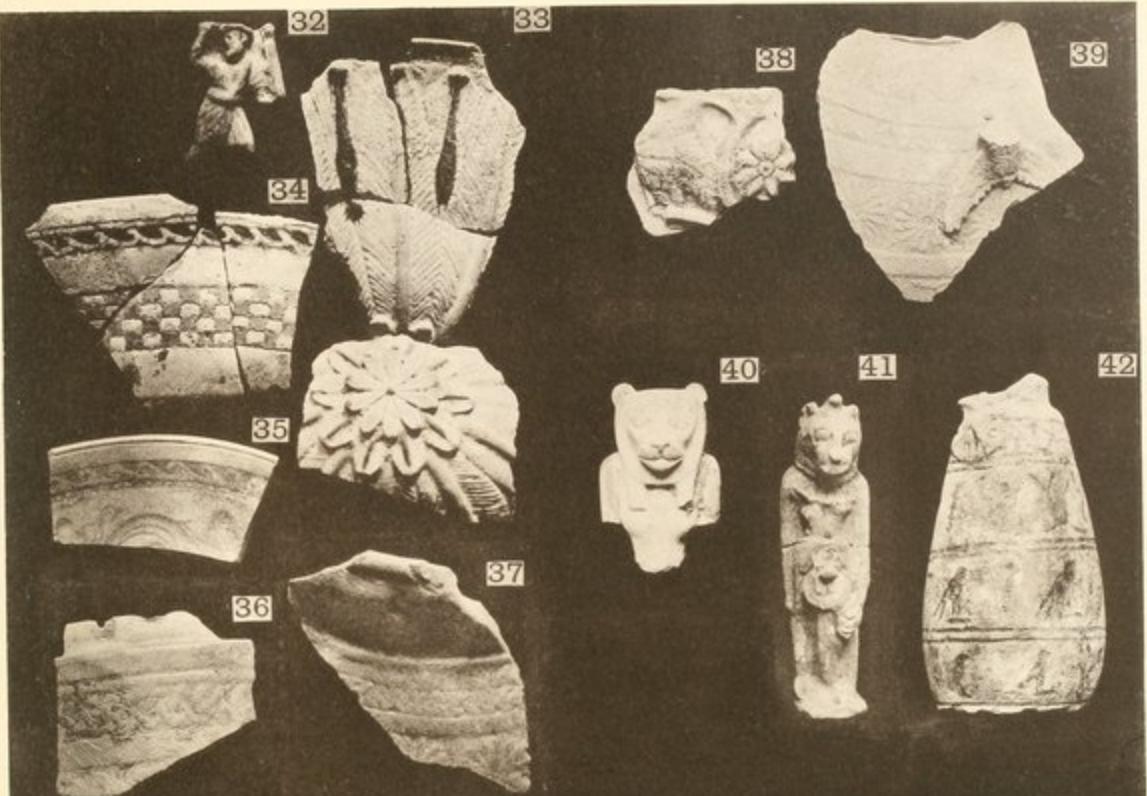


G.W.









70



71



IBERIAN.

72



73



HEBREW.

KURD.

74



75



76



77



78



79



80



81



82



83



85



86



87



98



99



100



101



102



103



105



106



107



108



109



110



111



112



113



114





125



126



127



128



129



130



131



132



WORKS BY W. M. FLINDERS PETRIE

THE PYRAMIDS AND TEMPLES OF GIZEH. (Out of print.)

TANIS I. 19 pl., 25s. *Quaritch.*

TANIS II. Nebesheh and Defenneh. 64 pl., 25s. *Quaritch.*

NAUKRATIS I. 45 pl., 25s. *Quaritch.*

HIEROGLYPHIC PAPYRUS FROM TANIS. (Out of print.)

A SEASON IN EGYPT, 1887. 32 pl. (Out of print.)

RACIAL PORTRAITS. 190 photographs from Egyptian Monuments, 63s. *Murray, 37, Dartmouth Park Hill, N.W.*

HISTORICAL SCARABS. (Out of print.)

HAWARA, BIAHMU, AND ARSINOE. (Out of print.)

KAHUN, GUROB, AND HAWARA. (Out of print.)*

ILLAHUN, KAHUN, AND GUROB. 33 pl., 16s. (Out of print.)*

TELL EL HESY (LACHISH). 10 pl., 10s. 6d. *Alexander Watt.*

MEDIUM. 36 pl. (Out of print.)

TEN YEARS' DIGGING IN EGYPT, 1881-1891. 6s. *R.T.S.*

TELL EL AMARNA. (Out of print.)*

KOPTOS. 28 pl., 10s. *Quaritch.*

A STUDENT'S HISTORY OF EGYPT. Part I., down to the XVIth Dynasty. 5th ed. 1903. Part II., XVIIth and XVIIIth Dynasties. Part III., XIXth to XXXth Dynasties. 6s. each. *Methuen.*

TRANSLATIONS OF EGYPTIAN TALES. With illustrations by Tristram Ellis. 2 vols., 3s. 6d. *Methuen.*

DECORATIVE ART IN EGYPT. 3s. 6d. *Methuen.*

NAQADA AND BALLAS. 86 pl., 25s. *Quaritch.*

SIX TEMPLES AT THEBES. 26 pl., 10s. *Quaritch.*

DESHASHEH. 37 pl., 25s. *Quaritch.*

RELIGION AND CONSCIENCE IN EGYPT. 2s. 6d. *Methuen.*

SYRIA AND EGYPT. 2s. 6d. *Methuen.*

DENDEREH. 38 pl., 25s.; 40 additional plates, 10s. *Quaritch.*

ROYAL TOMBS OF FIRST DYNASTY. 68 pl., 25s. *Quaritch.*

DIOSPOLIS PARVA. 48 pl. (Out of print.)

ROYAL TOMBS OF EARLIEST DYNASTIES. 63 pl., 25s.; 35 additional plates, 10s. *Quaritch.*

ABYDOS. Part I. 81 pl., 25s. *Quaritch.*

ABYDOS. Part II. 64 pl., 25s. *Quaritch.*

METHODS AND AIMS IN ARCHAEOLOGY. 66 blocks, 6s. *Macmillan.*

EHNASYA. 25s. *Quaritch.*

ROMAN EHNASYA. 10s. *Quaritch.*

RESEARCHES IN SINAI. 186 illustrations and 4 plans, 21s. *John Murray.*

HYKSOS AND ISRAELITE CITIES. 40 pl., 25s. *Quaritch.* (With 48 extra plates, 45s., out of print.)

RELIGION OF ANCIENT EGYPT. 1s. *Constable.*

GIZEH AND RIFEH. 40 pl., 25s.; with 69 extra plates, 50s. *Quaritch.*

ATHRIBIS. 43 pl., 25s. *Quaritch.* (Out of print.)

PERSONAL RELIGION IN EGYPT BEFORE CHRISTIANITY. 2s. 6d.; in leather, 3s. 6d. *Harper.*

MEMPHIS. Part I. 54 pl., 25s. *Quaritch.*

QURNEH. 56 pl., 25s. *Quaritch.* (Out of print.)

THE PALACE OF APIES (MEMPHIS II). 35 pl., 25s. *Quaritch.*

ARTS AND CRAFTS IN ANCIENT EGYPT. 45 pl., 5s. *Foulis.*

Of works marked * a few copies can be had on application to the Author, University College, London.



C.

Fig.

44°.

PUBLICATIONS
OF THE
EGYPTIAN RESEARCH ACCOUNT

- I. **BALLAS**, 1895; by J. E. QUIBELL. (Out of print; obtainable in joint volume **NAQADA AND BALLAS**, by W. M. F. PETRIE.)
- II. **THE RAMESSEUM**, 1896; by J. E. QUIBELL. (Out of print.)
- III. **EL KAB**, 1897; by J. E. QUIBELL.
- IV. **HIERAKONPOLIS I**, 1898; text by W. M. F. P. 43 plates. 20s. net.
- V. **HIERAKONPOLIS II**, 1899; by F. W. GREEN and J. E. QUIBELL. 39 plates (4 coloured and 20 photographic). 35s. net.
- VI. **EL ARABAH**, 1900; by J. GARSTANG. 40 plates. 16s. net. (Out of print.)
- VII. **MAHASNA**, 1901; by J. GARSTANG and KURT SETHE. 43 plates. 20s. net. (Out of print.)
- VIII. **TEMPLE OF THE KINGS**, 1902; by A. ST. G. CAULFEILD. 24 plates. 16s. net. (Out of print.)
- IX. **THE OSIREION**, 1903; by MARGARET A. MURRAY. 37 plates. 21s. net. (Out of print.)
- X. **SAQQARA MASTABAS I**, 1904; by M. A. MURRAY; AND GUROB, by L. LOAT. 64 plates. 30s. net.
- XI. **SAQQARA MASTABAS II**, 1904; by HILDA PETRIE. (*In preparation.*)
- XII. **HYKSOS AND ISRAELITE CITIES**, 1906; by W. M. FLINDERS PETRIE and J. GARROW DUNCAN. 40 plates. 25s. net. In double volume with 94 plates. 45s. net. (This latter out of print.)
- XIII. **GIZEH AND RIFEH**, 1907; by W. M. FLINDERS PETRIE. 40 plates. 25s. net. In double volume with 109 plates. 50s. net.
- XIV. **ATHRIBIS**, 1908; by W. M. FLINDERS PETRIE, J. H. WALKER and E. B. KNOBEL. 43 plates. 25s. net. (Out of print.)
- XV. **MEMPHIS I**, 1908; by W. M. FLINDERS PETRIE and J. H. WALKER. 54 plates. 25s. net.
- XVI. **QURNEH**, 1909; by W. M. FLINDERS PETRIE and J. H. WALKER. 56 plates. 25s. net. (Out of print.)
- XVII. **THE PALACE OF APRIES (MEMPHIS II)**, 1909; by W. M. FLINDERS PETRIE and J. H. WALKER. 35 plates. 25s. net.

Subscriptions of One Guinea for the Annual Single Volumes, or Two Guineas for the Two Annual Volumes, are received by the Hon. Secretary, at the Edwards Library, University College, Gower Street, London, W.C., where also copies of the above works can be obtained.









