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AN ALABASTER SISTRUM DEDICATED BY KING TETA

BY N. DE GARIS DAVIES, M.A.

THE interesting piece of temple furniture pictured on Plate VIII has recently been added by purchase to the collection of the Earl of Carnarvon, through whose courtesy and very real interest in our science I am permitted to publish it here.

The main part of the little instrument, the height of which over all is just ten and a half inches, is cut from a single piece of alabaster. The stone is not of the best quality, for a flaw at the junction of the handle with the superstructure has caused it to snap at this point. The merit of the work corresponds, as is often the case, to the value of the material, and is not free from a certain clumsiness.

Instead of the Hathor head, which in sistra of later date than this surmounts the handle, we have here an outspreading head of papyrus set on a stem, or rather on several stems bound into a solid round rod under the head and at the end of the stalks, the whole having the appearance of a single umbel. A slightly drooping curve is given to the edge of the flower and not the exaggerated curl employed on the handles of some mirrors and in the decorative panels of false doors. To suit the superstructure the flower is lenticular, not circular, in shape. Since the head of Hathor is absent, her connection with the sistrum has to be shown in other wise, and this is done by placing on the flower the device which forms a kind of rebus on the name of the goddess. Only here the house is replaced by a shrine and the falcon is set above, not in, it. He tramples on (or is protected by?) a cobra, whose head with swollen hood is erect before him, as is often the case when the bird stands on the framed Horus-name of the King. The plumage of the falcon is indicated in the usual decorative way with overlapping feathering on the shoulders, then the long plumes and finally the wing-tips crossed forkwise over the tail.

The little naos is open from side to side to admit of the two wires carrying jingling discs of metal which to barbaric tastes made the sistrum a pleasing accompaniment of song; these fittings have been lost, but the double pair of holes drilled in the walls and a slight abrasion on the outside indicates that it was once really provided with them. From the marks left, they appear to have ended outside in bent heads simply and were not formed like a as they more generally are. As the little box is barely an inch and a quarter square by half an inch deep, the sound produced can scarcely have been audible, for the discs cannot have been more than three-eighths of an inch in diameter without overlapping, or half an inch if percussion with those of the next rod was the means employed. The sistrum before us is, however, rather a dainty replica than a serious instrument, I should think.

¹ Three separate stems are shown in the wand, Blackman, *Meir*, Vol. I, p. 3; Vol. II, Pl. XI; they are united at the base, where sheathing is shown. This unique wand is therefore a sistrum. The papyrus handle perhaps reappears later, see Lefs., *Denkm.*, Pt. III, Pls. 175, c, 186.

² It appears as if there was more in this serpent-shape than a happy decorative fancy, and that it carried on the tradition of the uraeus seen in front of Horus here; for where the wand is a mere emblem the uraeus, 'the close friend of Horus,' is often seen occupying the interior or flanking its walls (cf. CAULFIELD, Temple of the Kings, Pl. XV).



SISTRUM OF KING TETI (SIXTH DYNASTY)

IN THE COLLECTION OF THE EARL OF CARNARVON

In its present state only one side of the box—that to the left of the falcon—is closed, but the thin sheet of alabaster which forms this wall is a separate piece; for it would have been difficult to hollow the block out accurately, even apart from flaws. The tiny slab is the full breadth of the naos, and is stuck on to the sides under the roll of the cornice, its lower edge being let into a slight groove cut in the top of the flower. The attachment with cement is apparently modern and the slab might conceivably belong to the other face. A similar groove is cut on that side also, but I am not quite satisfied that this is original. One would have expected at least one side to be open, if the jingling of the metal was to be heard. The genuineness of the extant slab seems certified by the inscription it carries, since it provides us for the first time with the full titulary of King Teta: "Horus 'He-whobrings-peace-to-the-two-lands'; the tutelary divinity of both Egypts 'He-who-brings-peace'; Horus, conqueror of Nubt, 'He-who-unites' (sim); the King of Upper and of Lower Egypt 'The son of the Sun, Teta,' to whom life and happiness are given eternally." This corresponds perfectly to the peculiarities of the age by combining prenomen and cognomen in one and by closely assimilating the Nebti and Horus names. The front of the handle, i.e. the side to which the falcon faces, also bears a vertical inscription, incised and picked out in blue, which suggests that this sistrum was presented by the King to Hathor of Dendereh: "The King of Upper and Lower Egypt, beloved of Hathor, lady of Dendereh, to whom life is given eternally." The inscription is bordered on both sides by the \(\) sceptre. This dedication at Dendereh is quite in keeping with the special prosperity of the town under the kings of the Sixth Dynasty.

The sistrum was almost exclusively carried by women (except when kings make presentation to Hathor), often in pairs. In form it was a reminder of the name and nature of the goddess and so gained its cult efficacy. Touched by the devout or received into their hands, the temple instrument brought heightened life. Its use as a musical instrument followed the natural association of the goddess of joy with the dance and merrymaking, and the sistrum is a clever adaptation of the wand to this employment, not an adornment of a musical instrument with reminiscences of the goddess. Here we find that this stage was already reached before the Sixth Dynasty. The ancient device of the head of the ox-god or cow-goddess which is incorporated in the Middle-Kingdom sistrum, is seen in the Cairo palette of Narmer; Griffith, Beni Hasan, Vol. III, No. 81; LACAU, Sarcophages, Pl. XXXIV, Nos. 84, 85; LEGRAIN, Statues, Vol. II, p. 31; DAVIES, Deir el Gebrâwi, Vol. I, Pl. III. It looks as if the stout horns had been combined with the cord by which the symbol was hung round the neck of devotees to form the slender antennae between which the later naos is set, and which may also have given the impulse to the looped form of the sistrum. The neck-tie of the symbol may be taken from the ribbon which was often put round the neck of cattle specially selected for exhibition or sacrifice.

Dr Gardiner (Notes on Sinuhe, pp. 101—3) has given strong reasons for assigning the name sekhem to the looped sistrum, the term seshesht (also šš, and even ššš, a plainly onomatopoeic word) to the naos-sistrum. Yet this, though strongly evidenced for Ramesside and later dates, and having textual support in earlier times, is directly contradicted by the

¹ In Blackman's Meir, Vol. I, Pl. II, the arm of the man is seen through the naos, i.e. it is openwork. No rattle is there shown. It is strange that irt sss "playing the sistrum" is used of sistra without any apparent metal fittings (Wilkinson, Manners and Customs (ed. Birch), Vol. III, p. 422; Leps., Denkm., Pt. III, Pl. 189).

tomb-scenes at Thebes in the Eighteenth Dynasty. The texts indeed seem to point to three objects sacred to Hathor and thence transferred to the cult of Amūn, the *menat*, the sekhem(?) wand $\stackrel{\uparrow}{\bigvee}$ and the seshesht or seshesh, but the pictures connected with these legends rarely show more than one object besides the menat, and that is always the looped sistrum, never the other form. The looped and the naos sistrum cannot indeed well occur together, as the former seems to be the substitute for the latter.

So far as we can see, the earlier form is that with the naos. We still have this in the Eleventh Dynasty (word-sign for shm in Petrie, Coptos, Pl. VIII, l. 8) and in the Twelfth (Griffith, Beni Hasan, Vol. IV, Pl. XXV, and Lacau, Sarcophages, Pl. XXXIV, No. 89) where it is still fitted with tinkling discs. The first appearance of the looped sistrum known to me is, strangely enough, as held by one of a crowd of worshippers on a well-known Cretan vase, assigned, roughly, to the Seventeenth Dynasty³. Throughout the succeeding Dynasty this new form replaces the naos-sistrum as a wand and musical instrument. With the full advent of the Ramesside Dynasties the naos-sistrum reappears, but does not replace the looped form. The employment of the two is probably differentiated, and this may be true of the period of disappearance, some change of customary use or representation being involved. The green glaze naos-sistrum in Petrie, Palace of Apries, Pl. XIV, is pierced for wires, but the Ramesside and later pictures do not at all support this use⁴. The later naos-wand seems to be merely a device representative of the goddess and confined to use in temple services.

The reason for the resuscitation of the naos-symbol was perhaps that the use of the looped tinkling sistrum had not only spread to other cults beside that of Hathor, but, with the wholesale entrance of women into nominal service in the temple of Amūn, had become very general indeed. Like many another ancient custom it was readily tolerated in the worship of the Aton, and the tendency to secularize it and make it an accompaniment of festive occasions was probably strengthened during that period.

It may well have been that the naos device was given the general term sekhem 'wand' when used as such and seshesht when the tinkling discs were added to it. There must have been a time when the new and the old forms existed side by side, and we may have a trace of this in the story of Sinuhe where the terms are held apart, "their menats, their wands and their sistra" (or, since the hieratic sign is the same, or almost the same, for , and , "their menats, their naos-wands and their looped wands"). In the Theban tombs of the early New Kingdom, as has been said, there is several times an apparent mention of the three objects, though only the menat and looped sistrum are pictured (the picture and the legend have rarely both been preserved intact). Unless we have to do with a slavish repetition of a formula from the transition period or a childish desire to enumerate all the best-known cult-objects or the names used for such, we must be dealing with two words in

¹ Shown only in Leps., *Denkm.*, Pt. III, Pl. 110, b, but I am sure that the form could no longer be recognised on that monument, and in Pt. III, Pl. 72 (Amenophis III). The latter I cannot control.

² Seen together in Ramesside times in Leps., *Denkm.*, Vol. III, Pl. 175, h, and Wilkinson, *Popular Account*, fig. 282.

³ Hall, Aegean Archaeology, Pl. XVII.

⁴ Of course if the bars were enclosed in a box, as with the subject of this article, their presence might not be indicated.

apposition "the wands—the rattles (or whatever the seshesht may mean¹)." Hence a passage in the tomb of Kenamūn could be translated "I offer to thee the menat ornament, and the jingling (?) sistra" (the picture is lost). It may be that the extra-temple use of the sistrum may have only been adopted by the Amūn priesthood, and was limited to the Eighteenth Dynasty at Thebes. The decisive feature is that at this place and period the naos-sistrum never appears in the tombs and that the name of the looped sistrum, wherever we can control it, is seshesht². If the records in Brugsch, Thesaurus, p. 1191, can be trusted, the inscriptions assert that the princesses carry naos-sistra, while the sketch shows that, conformably with custom in the period of Akhenaten, they are looped. The anomaly, if it exists, must be due to misinterpretation of the one hieratic sign. In Tomb 90, where the hieratic memoranda for the legends are still visible, the text gives as pictograph the naos-sistrum, though the scene showed the looped instrument.

The change in nomenclature from the Eighteenth Dynasty, or perhaps more properly Theban, usage to the practice of Ramesside and later times, for which Dr Gardiner has given proofs, must be connected with the new preponderance of the priesthood and a regained importance for the cult of Hathor³. The use of the sistrum came under more strictly religious prescriptions, and the names adopted in priestly circles perhaps gained weight, or at least prevail in the religious texts which are henceforth our main source of information. The more distinctive name seshesht which in popular speech was applied to the familiar looped sistrum very likely still had wide currency; for the Greeks, who took over that instrument, perhaps echoed the root-meaning of the word in their own sibilant word with similar sense, $\sigma \epsilon \hat{i} \sigma \tau \rho o \nu$; the populace seem to have had right on their side and there is no reason why we should not adhere to the usage.

I have not referred to the cloth flags which in tombs 39, 109 and 82 at Thebes are carried with the other emblems, as the name sekhem is scarcely applicable to them (though primâ facie it seems so in Davies-Gardiner, Tomb of Amenemhēt, Pls. XIX, XX), and their appellation appears to be kk in Mariette, Abydos, Vol. II, Pl. 55. The statement in the latter text that the menat necklace is carried on the neck, the seshesht emblem in the hand, the sekhem (?) sistrum behind, is explicable by the fact that in pictures the menat is extended in one hand, while the sistrum is held by the loop in the near hand, and therefore is drawn behind the figure though really hanging at the side. The interesting point is that the writer has described the familiar scene as we should, being deceived by his own convention.

Regarding the substance of which the Carnarvon wand is made, this may well have been often employed for ceremonial emblems. The wand shown at Beni Hasan is of ebony with copper (?) fittings. Later the material is green or blue glaze. One would have expected the looped sistrum to have been of metal, but I think this is only guaranteed for quite late examples. But the pictures hint at silver and gold instruments. The majority that have come down to us would be burial models probably.

In conclusion it seems not impossible that the looped sistrum may be the lineal ancestor of our baby's rattle of the same shape; cf. Davies, El Amarna, Vol. I, Pl. XXVII.

- ¹ The root sš seems to mean 'to tremble,' 'quiver,' or the like (SETHE, *Pyramidentexte*, § 1080, d), suggesting that the sistrum was already a shaken rattle at the opening of written history.
- ² Davies, Tomb of Puyemré (forthcoming), Pls. 38, 53; Sethe, Urkunden, iv, 917. The former tomb contains interesting scenes of the presentation of the various cult-objects of Hathor.
- ³ Compare the revival of the emblems of Hathor worn by officials (Legrain, Statues, Vol. II, Pls. XXVIII, XXXI and Vol. III, Pls. XVIII, XIX, XX, XXIII, XL, XLVIII; Petrie, Palace of Apries, Pl. XIV; Mariette, Mastabas, pp. 465—7).

THE VICEROYS OF ETHIOPIA

By Professor GEORGE A. REISNER

(continued from p. 55)

As an appendix to the above list, the following officials must be mentioned whose position in Ethiopia is uncertain¹:

i. Tuwtuw.

a. Tomb no. IV at Dêr-Rîfeh. GRIFFITH, Siut and Rifeh, Pls. 16 and 17. "New Empire." The inscriptions are badly preserved and difficult of access owing to native occupation of the tomb. The tomb was a large one. The owner is the "head bowman, Tuwtuw, son of the head bowman, Rachotpe and the mistress of the house, Senrēc." The references which might indicate that he was a viceroy of Ethiopia are as follows:

Pl. 16, line 19: "king's son, Tuwtuw."

Pl. 17, line 48: "hereditary prince, toparch, royal seal-bearer, sole companion, head bowman, Tuwtuw."

Pl. 17, lines 30-33: "hereditary prince, toparch, royal seal-bearer, sole companion, great of nobility, precious of.....of great love, chief of the two lands to its limit, called" etc.

Pl. 17, lines 43—46: "hereditary prince, toparch, beloved great (?) companion,....in Ta-Khent (Ta-Set?), director of the foreign lands, in Khenthennüfer,.....true....., lord of troops, commander of soldiers,.....(limi-r3 <?), favourite of the Lord in his house, who enters unto the king,heart (?) great in the house of the king, chief bowman, Tuwtuw."

Pl. 17, lines 27-29: "commander of the army, Tuwtuw"; ".....overseer of the Southern Lands, Tuwtuw."

Tuwtuw was clearly a man of importance, but his chief service-title was merely head bowman, a post which was one of considerable dignity under the XIXth and XXth Dynasties. To this title that of "overseer of the Southern Lands" was often joined (see below). Only once does Tuwtuw appear to call himself king's son (Pl. 16, line 19); in the nine other cases he is head bowman. In all other inscriptions of viceroys which I have traced, the king's son title was the very one which was never omitted. It is possible, of course, that so nsw "king's son" in the passage quoted is a misreading for smsw "follower." There is no ground for connecting Tuwtuw with the owner of Tomb no. 8 at El-Amarna.

ii. Sennūfer.

a. Hatshepsût and "Overseer of the Gold Lands of Amūn," Tomb at Sheikh A Tuthmosis III. "Overseer of the Gold Lands of Amūn," Tomb at Sheikh A DINER-WEIGAL

Tomb at Sheikh Abd el-Kurneh: Gar-DINER-WEIGALL, *Cat.*, no. 99; *Urk.*, IV, pp. 536, 540, 541.

a. Before Amenophis "Head bowman, overseer of the Southern Lands, head of the stable."

Statue from Sakkâreh, in Cairo: Le-GRAIN, *Répertoire*, no. 281. Name of Amun erased.

¹ I have not included the Nakhtmin of the Cairo statue (see Spiegelberg, *Rec. de Trav.*, Vol. xxvIII, p. 177) in either the main or the supplementary list, since I hold that he was not a king's son of Kush, if indeed he was even a king's son.

HEKAEMSASEN.

a. Undated.

"Hereditary prince, toparch, great favourite of the Lord of the Two Lands, great in favour because of his excellence, fan-bearer, overseer of the storehouse (?judgment hall?), over-seer of the Southern Lands."

"Hereditary prince, toparch, alone in excellence for the heart of his Lord, eyes of the King in the Southern (plu.) City (sing.), fan-bearer, overseer of the Southern Lands."

Gebel Barkal, fragment of a statuette, found in the débris in front of the temple of Atlanersa (B. 700): Reg. no. 16-3-26.

ANHERNAKHT.

a. Ramesses II?

"Head of the stable, Amenemopet, son of the High-Priest of Amūn, Amenhotpe, of the-great-stable-of-Ramesses-II of the Court. He comes on a commission of the Pharaoh to [inspect?] in Kush, with the head bowman of Kush, Anhernakht."

b. Undated.

"Fan-bearer on the king's right, head bowman of Kush."

Undated.

"Fan-bearer on the king's right, head bowman, overseer of the Southern Lands."

d. Undated.

"Fan-bearer on the king's right, head bowman, overseer of the Gold Lands of Amūn."

Sehêl: DE MORGAN, Cat. des Mon., I, p. 88, no. 63; BRUGSCH, Thesaurus, p. 1215, q.

Sehêl: op. cit., p. 102, no. 228 bis.

Sehêl: op. cit., p. 88, no. 61.

Sehêl: op. cit., p. 89, no. 74.

PENNESUTTAUWI. vi.

a. Ramesses II.

"Head bowman of Kush." No room for full titles.

b. XIXth Dyn.

"Head bowman, overseer of the Southern

Monument of Amenemyenet at Naples: Brugsch, Thesaurus, 953, no. 6.

Tomb at Drah Abu-l-Naga: GARDINER-Weigall, Cat., no. 156.

Not to be identified, I think, with "the scribe of the table of Kush, Pennesettauwi," son of Haremhab, of the time of the viceroy Sethauw (LIEBLEIN, 2052).

vii. AMENEMHAB, son of the viceroy Sety.

a. Undated.

"Head bowman, [charioteer?] of His Majesty, overseer of the Southern Lands.

b. Undated.

Very bad text: I would read, "Head bowman, overseer of the Southern Lands, Amen[emhab, son] of the fan-bearer on the king's right, [king's scribe of the letters?] of the Pharaoh, living-well-healthy, of the Court, Sety, born of Amenemta(?)iauw(?) (det. woman)." These correspond to the titles of Sety before he became viceroy.

c. Ramesses-Siptah.

"King's scribe, steward in the-palace-of-Ramesses(?)-mery-Amūn(?), of the Court (or in Per-Rēc), son of the viceroy, Sety."

d. Undated.

Mutilated text: I read, "[king's scribe, steward] in the palace of Ramesses-mery-Amūn, in Per-Rē (or, of the Court), [overseer of the granary] of the king's son, Amenemhab, son of Set(y)." Cf. the horizontal line of inscription for restoration of titles.

Sehêl: DE MORGAN, op. cit., p. 103, no. 60 (Mariette).

Near Wâdy es-S'aba Rigâleh: Petrie, Season, Pl. XVI, no. 507 (P).

Abu Simbel, north wall, stela of Sety: MASPERO, Annales, Vol. x, p. 132.

Derr, rock stela north of temple: LEPS., Denkm., Pt. III, Pl. 184 c. Under, but not related to, a cartouche of Ramesses II.

It will be noted that the material is very bad. Even Maspero's copy of the Abu Simbel inscription apparently contains errors of the copyist, while the other three texts are in a very dilapidated condition. Nevertheless, a and b are the records of the same head bowman, while c and d are of the same steward. Both appear to refer to the son of a Sety and belong, I believe, to the same man, who was head bowman before his father became viceroy and steward of the palace. It is possible that the "king's son" of c is not Sety but his predecessor, Messuwy(?). In any case, the Amenemhab of c was not a viceroy, as has been sometimes assumed.

viii. Osorkon (ankh.

a. Dynasty XXII or "Hereditary prince, toparch";
XXIII. "True vizier";
"King's son, overseer of the Southern
Lands, steward of the estate(?)."

Basis of a standing statue, from Akhmim, now in French Arch. Inst., Cairo: Gauthier, Bull. Inst. Français, Vol. XII, p. 138.

I owe the knowledge of this official to M. Henri Gauthier, who has kindly given me permission to use his communication in this article. Gauthier points out to me that it may be doubted whether Osorkon ankh was really a viceroy of Ethiopia, and I agree with that doubt. The long disuse of the title "king's son, overseer of the Southern Lands" and the fact that the last form of the viceroy's title was "king's son of Kush," itself long in disuse, makes it practically certain that the titles given to Osorkon ankh represent a revival of older titles, conferred as an honour or assumed by Osorkon ankh on his funerary monument. Compare the case of Queen Nesikhonsu (no. 24). It may be noted that the title of Osorkon ankh is written "king's daughter" (st), a not unusual scribal error.

The above list exhausts the material at my disposal. There are overseers of lands or mountains not connected with Kush, such as "the overseer of the Northern Lands, Dhūti" (Urk, 1v, 999); "the overseer of the mountains on the west of Thebes, Diduw" (Urk, 1v, 995); "the chief of the Mazauw, overseer of the mountains, Neferkhauwet" (Urk., IV, 990, 7); "the head bowman, overseer of the mountains, Huwy" (LIEBLEIN, Dict., 690;; "the overseer of the Gold Lands of Coptos" (no name, tomb of Menkheperre sonb, Urk., IV, 931, 5—14); "the scribe of the treasury of the Lord of the Two Lands in Ta-Set, the overseer of the lands of Wawat, Katha" (LEPS., Denkm., Text, Vol. v, p. 180); and "the overseer of the cities of Kush, the scribe of the table of the Lord of the Two Lands, Iuwnamun" (MARIETTE, Cat. d'Abydos, no. 1169). These examples show that imy-r3 is by no means to be translated "governor," but only "overseer" or "head of the department." In other words, the title describes the department in which the functions of the other titles are performed. Hekaemsasen was chief of the ^crryt(?) in the Southern Lands; Katha was chief of the treasury in Wawat; Iuwnamun was chief of the department of household supplies in Kush; and the various head bowmen were the commanders of the forces in the Southern Lands or in Kush. It is clear that the title "overseer of the Southern Lands" does not in itself imply that the holder was a viceroy or even a governor of the Southern Lands. Nor indeed are the known viceroys ever so designated except in combination with the title "king's son," or "king's son of Kush."

The overseers of the Southern Lands, nos. i, iii, v, vi and vii, given above, are head bowmen. In the cases of v and vi, the title "head bowman, overseer of the Southern Lands," alternates with the title "head bowman of Kush," and in the case of v, also with "head bowman, overseer of the Gold Lands of Amūn." The conclusion can hardly be resisted that

these three titles mean the same thing, that administratively "Kush," "the Southern Lands" and "the Gold Lands of Amūn" are all one. The title "head bowman" does not occur among the subsidiary titles of any of the viceroys, possibly because no head bowman ever rose to be viceroy, possibly because the office of head bowman of Kush was so directly subordinate to the office of viceroy. For it is clear that the head bowman was commander of the military forces placed at the disposal of the viceroy for the maintenance of order in Ethiopia. The larger punitive expeditions appear to have been under royal command or under more important officers of the army despatched with special forces.

This appended list contains then for the greater part the names of the head bowmen of Kush, and for the sake of completeness, I continue with the following names of head bowmen of Kush, or of head bowmen who left graffiti in Kush and may have served as head bowmen in Kush:

ix. MIN.

a. Ramesses II.

"Fan-bearer on the king's right, king's messenger to every [land], head bowman of Kush." Assuan-Philæ road: Petrie, Season, Pl. VI, no. 146; DE Morgan, op. cit., p. 14, no. 65.

х. Онитемнав.

a. Undated.

"....., head bowman."

Sehêl: DE MORGAN, op. cit., p. 94, no. 135.

xi. PIYAY.

 a. Siptah, year 3. "Fan-bearer on the king's right, king's scribe, overseer of the treasury, king's scribe of the office of the letters of the Pharaoh, steward of the palace in Per-Amūn, Piyay. He comes to receive the tribute of the land (t) of Kush."

Buhen: RANDALL-MACIVER, Buhen, p. 26.

b. Siptah, year 3.

"Fan-bearer on the king's right, overseer of the treasury of the Lord of the Two Lands."

Buhen: op. cit., p. 39.

c. Siptah. Probably before α .

"King's messenger [to every land]...
[who establishes the officials of] the
king's son in their places, first
charioteer of His Majesty,,
Piyay of the Court."

Buhen: op. cit., p. 43.

d. Siptah.
Probably before a and c.

"Fan-bearer on the king's right, head bowman of Kush."

Amada temple: GAUTHIER, Amada, p. 108.

xii. Beknamūn.

a. Under Ramesses III or after.

"Fan-bearer on the king's right, head bowman of Kush, king's scribe, great steward, overseer of the, Beknamün, son of Penwep." Blackman translates the part left blank: "overseer of the harim of Amūn, chief priest of Amen-Rēc." I question the accuracy of the copy of the text; a High-Priest of Amūn would hardly appear thus acting as bowman in Kush.

Buhen temple: RANDALL-MACIVER, op. cit., p. 33.

xiii. "BINEMWĒSE."

a. Ramesses III. "Head bowman of Kush."

Turin papyrus: LIEBLEIN, Dict., no. 986; and elsewhere.

"Binemwēse" was, of course, as often pointed out, an inconceivable name, and probably only a perversion of the real name of this conspirator. He may possibly be identical with Beknamūn, above.

All these men appear to have held considerable, though not the highest, places of honour. The title of fan-bearer on the king's right was one of the most coveted civil honours, although practically never given to priests of high rank. Two of the head bowmen of Kush were also king's messengers (ix, xi). The function of the king's messenger is revealed by a number of inscriptions, such as nos. 17, a; xi, c, the graffito of Neferher at Buhen (RANDALL-MACIVER, Buhen, p. 25), and that of Rekhpehtuf at Abu Simbel (Breasted, Anc. Rec., Vol. III, § 642), and still more clearly by the El-Amarna letters. The king's messenger was a direct agent of the king, responsible to some royal office in Thebes, not to the local Egyptian authorities in Palestine or Kush. On the other hand, the local authorities were bound to support and assist the messenger, and in Kush it seems to have been the head bowman whose services were most usually needed by the messenger. From the nature of the functions of the two offices, that of king's messenger must have been in fact a higher and more important office than that of head bowman. Two of the viceroys—Huwy and Hekanakht—claim the title of messenger among their subsidiary titles, but none claims the title of head bowman. In addition to these two viceroys, the viceroy Hori I, and the head bowmen Min and Piyay, I have noted the names of five other king's messengers who acted in Kush, all dating from the Nineteenth Dynasty.

The sum of the matter is, then, that the officials who bear the title "overseer of the Southern Lands" are not governors of Ethiopia but really subordinates of the viceroy. They were almost without exception head bowmen of Kush, and were only overseers of the military forces of the Southern Lands.

II. THE TITLES OF THE VICEROYS OF ETHIOPIA.

The general character of the titles of the viceroy of Ethiopia has long been a matter of common knowledge. The essential title was "king's son," which conferred a rank as well as an office. For many purposes, especially in his own territory, this was a sufficient designation; and in Ethiopia the viceroy was probably mentioned simply as "the king's son" just as a modern governor is called simply "the Pasha" in his own province. Parallel to "king's son" occurs the more definite title of rank and office, "king's son of Kush." Both of these essential titles are often accompanied by the secondary titles "overseer of the Southern Lands" or "overseer of the Gold Lands of Amūn" or "overseer of the Gold Lands of the Lord of the Two Lands." Just as in the case of some other titles to which they are attached, the secondary titles define the geographical limits of the administration indicated by the chief title. They are, therefore, not essential and are, in fact, often omitted. They occur most commonly in the personal monuments, the prayer-stelae cut on the rocks of Nubia and the inscriptions of the funerary monuments, both of them places where an effort is made to accentuate the honourable position of the man in question.

Taking only the titles mentioned above, the following development may be noted:

- (1) Amenophis I
- (a) "King's son."
- (b) The office is not defined in fixed terms but always with a reference to the Southern Lands.

- (2) Tuthmosis I Tuthmosis II | Tuthmosis III | Amenophis II
- (a) "King's son" with or without (b).
- (b) "Overseer of the Southern Lands," used only with (a).
- (3) Tuthmosis IV (?)

 Amenophis III

 Amenophis IV

 Tutankhamūn

 Aye

 Haremhab

 Sethos I
- (a) "King's son of Kush," or less frequently, "king's son." Both occur with and without title (b).
- (b) "Overseer of the Southern Lands" is used only with (a).
- (c) "Overseer of the Gold Lands of Amūn" occurs with (a), or with (a) and (b). See next paragraph below.
- (4) Meneptah Sethos II Siptah Ramesses III—XI)

Ramesses II

- (a) "King's son of Kush," usually alone, but also with (b) or (c), not both.
- (b) "Overseer of the Southern Lands" occurs only occasionally with (a).
- (c) "Overseer of the Gold Lands of Amūn" occurs once under Ḥori II and once under Wentawuat, but the material is meagre.

Thus the title "king's son of Kush" would appear to date a viceroy to a period subsequent to Amenophis II, perhaps even after Tuthmosis IV. The titles of "king's son" alone or with "overseer of the Southern Lands" probably mark a viceroy as earlier than Meneptah, and he might be as early as Amenophis I. The title "overseer of the Gold Lands" and its modifications have not been found in connection with a viceroy previous to Amenophis III.

The meaning of the title "overseer of the Southern Lands" is fairly clear, though there might be some difference of opinion as to the exact geographical limits of the term "Southern Lands." The territory of the viceroy was Kush in its broadest sense; this included Kush and Wawat with such contiguous hinterlands as were in occupation or constant use by the Egyptians. Its extent, northwards and southwards, is clearly defined by inscriptions no. 3, h and no. 8, a to have been from Nekheb or Nekhen (El-Kâb) to Karay; these inscriptions belong to the time of Tuthmosis III and Tutankhamūn. A number of references, beginning in the reign of Tuthmosis I (Tombos inscription), show that Karay or Napata was the southern borderland of Kush. The northern part, or the administrative district of Wawat, seems to have included nominally the two southern nomes of Egypt, as appears to have been the case in the time of Hormeni (Amosis I); but the inscriptions of Rekhmerē^c show the officials of these nomes making payments of some sort to the vizier in Thebes. Thus apart from certain details, the territory designated under the title "overseer of the Southern Lands" is clear.

The analogous title "overseer of the Gold Lands of Amūn" has been so variously interpreted as to require a detailed consideration. The following cases may be set forth:

- (a) Mermõse, viceroy no. 6, j, sarcophagus, but not in thirteen other inscriptions :
 - "King's son, overseer of the Southern Lands, overseer of the Gold Lands of Amūn."
- (b) Dhutmose, viceroy no. 7, d, but not in four other inscriptions:
 - "King's son of Kush, [overseer of the Gold Lands] of Amun."
- (c) PASER I, viceroy no. 9, b, but not in three other inscriptions:
 - "Overseer of the Gold Lands of Amun, king's son of Kush, overseer of the Southern Lands."
 - "Overseer of the Lands of Amūn in Ta-Set."
 - "Overseer of the Gold Lands."

- (d) Sethauw, viceroy no. 14, d, j, m, n, o, and p, but not in a large number of other inscriptions:
 - d, m. "King's son of Kush, overseer of the Gold Lands of Amun."
 - j, p. "Overseer of the Gold Lands of the Lord of the Two Lands," secondary to "king's son of Kush, overseer of the Southern Lands," and other titles.
 - n. "King's son of Kush, overseer of the Gold Lands" (sic).
 - o. Mutilated text.
- (e) Sety, viceroy no. 16, b, e, but not in three other inscriptions:

 "King's son of Kush, overseer of the Gold Lands of Amūn."
- (f) Hori II, viceroy no. 18, c, but not in two other inscriptions:
 - "King's son of Kush, overseer of the Gold Lands of Amen-Rec King of the Gods."
- (g) Wentawuat, viceroy no. 19, d, on the statue but not on the stela:
 - "King's son of Kush, overseer of the Gold Lands of Amen-Rēc King of the Gods," and other titles.

It is to be noted that:

- (1) The title "overseer of the Gold Lands" occurs with only 7 of the 17 viceroys from Mermöse to Pai ankh.
- (2) It occurs in only 13 of the 75 inscriptions in which the names of these 17 viceroys are found.
- (3) It occurs either as an appendage to "king's son, overseer of the Southern Lands," or with "king's son of Kush," omitting "overseer of the Southern Lands."
- (4) In the inscriptions of Sethauw, the "Gold Lands of Amūn" are parallel to "Gold Lands of the Lord of the Two Lands," or simply to "the Gold Lands."
- (5) The form of the title used by the last two viceroys, Hori II and Wentawuat, is "overseer of the Gold Lands of Amen-Rēc, King of the Gods," not simply "of Amūn" as in the previous inscriptions.

To this material may be added the references to the "overseer of the Gold Lands of Amūn" under ii and v, above. Taking these facts altogether, I conclude that the title of "overseer of the Gold Lands" in its various modifications is not a service-title but a poetical or boastful version of the ordinary title "overseer of the Southern Lands." This is especially clear in the titles of Sennūfer (*Urk.*, IV, pp. 536, 11 foll.; 540, 8 foll.; 541, 8 foll.) where the service-titles are expanded to a great glorification of the man.

In this connection, attention must be called to the title of "overseer of the Gold Lands of Coptos," which occurs in a scene in the tomb of Menkheperrēcsonb (Urk., IV, p. 931, 5—14). Here, at "the receipt of the gold of Coptos together with the gold of wretched Kush as annual dues," three officials appear—"the chief of the Mazay of Coptos," the "overseer of the Gold Lands of Coptos," and the "overseer of the nww." They come as bearers of that part of the tribute which was assigned to Amūn, and are not subordinates of the High-Priest. The overseer of the Gold Lands of Coptos is of less importance than the "chief of the Mazay." The gold lands in question must have been connected geographically with Coptos, probably having been reached by a desert road from Coptos. The connection of this minor official, the overseer of the Gold Lands of Coptos, with the viceroy (Neḥi?) is doubtful. The Coptos gold would appear not to have been included in the Ethiopian gold.

The area of the land containing gold mines is fairly well known and extends southwards through the eastern desert from the latitude of Esneh (or perhaps a little north of that) into Abyssinia. The Egyptians appear to have worked all these mines as far south as the Um Nabardi mines, south of Halfa, and most of them by means of the roads debouching in the valley in Wawat. The proceeds of the mines which lay south of Um Nabardi and those of the placer-mines on the borders of Abyssinia were probably

obtained by the Egyptians in trade, by taxes on trade, and perhaps to some extent by military extortion. The lists of the tribute recorded in the Annals of Tuthmosis III show that the most important part of the tribute of Kush and Wawat was in gold and that the gold-income from Wawat for the years 38-42 was largely in excess of that from Kush. Thus, the whole of Ethiopia might have been called "the Gold Lands," but if only a part was so called (i.e. "the Gold Lands in Ta-Set"), then that part was Wawat, or rather the eastern hinterland of Wawat. It is possible that this region of gold mines may have received a poetic name like "Gold Lands of Amūn," just as Punt was called "the god's land." The name first appears in the time of Tuthmosis III (tomb of Sennūfer), and it is quite possible that Tuthmosis may have dedicated the yield of certain mines to Amūn just as Sethos I dedicated the yield of the gold mines beyond Wâdy Abbâd to the temple of Abydos. But it is not to be concluded that any king made a grant of Ethiopia, or even of the gold mines, to Amun in a political or administrative sense. The officials of Ethiopia from the viceroy down were the king's men, and I can find no trace of any legal or administrative power exercised by any official except by royal appointment (see especially the evidence afforded by the tombs of Huwy and Pennut). The sum of the matter appears to be that the title "overseer of the Gold Lands of Amun," with its modifications, was an ostentatious or poetic paraphrase for "overseer of the Southern Lands" and had no legal signification.

The title of "king's son" with its defining modifications and additions constitutes the service-title of the viceroy. Among his other titles, prominence is given to his formal titles of honour similar in character to the orders and decorations of modern life. The earliest of these are the three honorary titles derived from certain service-titles of the Middle Empire:

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(1) "hereditary prince, toparch":

(2) "royal seal-bearer":

(3) "Solution of the companion":

(4) "sole companion":

(5) Viceroys Nos. 1, 3, 4, 7 (?), 8 (?), 12, 14, 16.

(6) "sole companion":

(7) Viceroys Nos. 1, 3, 4, 7 (?), 8, 14.
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Perhaps fuller inscriptional material would show that other viceroys also held these honours, or at any rate the first of them.

Another important honour conferred upon the viceroys almost without exception from the time of Mermose, the viceroy of Amenophis III, was that of "fan-bearer on the king's right hand." None of the viceroys before that time bear this title or are represented as fan-bearers in the scenes accompanying the inscriptions. Therefore this title, like "king's son of Kush," indicates that the viceroy bearing it is to be dated to Amenophis III or thereafter. The converse, however, is not to be premised; Yuni, no. 11, is not called a fan-bearer, but he is represented with fan and crook at Abu Simbel and undoubtedly held the title. So also Hori II, no. 18, at Buhen, and on the stela from Semneh, is represented as a fan-bearer, although the title does not appear in the inscription in either case. Paser II, on the other hand, appears to be represented only with the crook. But the scene is in a bad condition and the copy may be defective. Both Herihor and Paicankh bore the title, and I venture the conclusion that all the viceroys after the induction of Mermose were without exception "fan-bearers on the king's right."

Twenty-seven representations of the various viceroys and fan-bearers have been collected on Pls. IX, X. Hence it will be seen that the insignia of the fan-bearer on the



king's right consist of a long feather-fan (or fly-whisk), a bandelette, and usually a crook-staff, or an axe, or both crook and axe. The insignia are held in one hand, or distributed between the two hands, or slung by a cord or thong over the shoulder (especially when the hands are uplifted). All these variations except the axe date from the time of Amenophis III, and are of no value for dating. It is probable that the crook and axe are really insignia of service-titles and the long fan with the bandelette is alone the mark of the "fan-bearer on the king's right."

This title appears to have been originally a service-title as in the first-known case, that of Maiherperi, dating from the time of Tuthmosis III (?) (LEGRAIN, Répertoire, No. 108). But later it was merely an honour and indeed one of high distinction, although the recipient may have had the duty and privilege of carrying the fan at some time at a public ceremony. A creation of the New Empire, the title was held, as far as I can find, by only eight men before the reign of Amenophis III, three under Tuthmosis III, three under Amenophis II, and two under Tuthmosis IV. Altogether, excluding the royal princes and including the viceroys, I have been able to note only about 65 fan-bearers on the king's right for the 400 years from Tuthmosis III to Herihor. In making the list I have, of course, left out the bearer of the broad fan (sun-shade) and the bearers of standards. This list shows that the title of fan-bearer, or fan-bearer on the king's right, came into use in the reign of Tuthmosis III, probably as a service-title, of value because of the intimate association with the king's person. Its use was extended to serve as an honour for household officials in the time of Amenophis II, when the form became fixed as "the fan-bearer on the king's right." In the reign of Amenophis III, the honour was granted to the viceroy of Ethiopia and became a traditional honour of that official. The royal children of Akhenaten were the first to be represented with the long fan (or whisk), but only in an intimate family scene and without the title (DAVIES, El Amarna, Vol. III, Pl. XVIII). Akhenaten was the first to give the title to the head of a great priestly organization, the High-Priest of Aton, Meryre (op. cit., Vol. I, Pls. XXXV, XXXVIII, XLI, see here Pl. X), but that was clearly regarded as unfitting and the act was not repeated. The next step in the development of the title was its grant to princes of the blood royal beginning with the crown-prince in the reign of Sethos I (GAUTHIER, Livre des rois, Vol. III, p. 30). Perhaps the accession of Aye, Haremhab and Ramesses II (if he was the same as Paracmessuw, Legrain, Annales, Vol. XIV, pp. 29—32) to the throne after having held the title under their predecessors may have had an influence on this extension of the use of the title. Paracmessum (later Ramesses II?) was the first vizier to hold the title, but his offices were so many and so high that the honour may have come to him from an office other than vizier. Thus the first vizier who appears to have become fan-bearer on the king's right solely in virtue of his office of vizier was Paser, son of Nebnetēruw (Leps., Denkm., Text, Vol. III, p. 254), of the time of Sethos I; and four other viziers after him held this honour. The viceroys and other officials continued, however, to receive the title as before. In spite of the exception in the reign of Akhenaten, "fan-bearer on the king's right" seems not to have been regarded as a fitting honour for members of the priestly hierarchy, probably because of the element of personal service implied in the title. The few fan-bearers who exercised any priestly function at all held important offices of a civil character and came, no doubt, to the honour as civil or household officials. It is to be noted that the royal prince, the sempriest, Khaemwese, the fifth son of Ramesses II, was not a fan-bearer, although his four elder brothers and one other held the title, and none of the High-Priests of the Nineteenth and Twentieth Dynasties bore the title. It was only in the cases of Herihor and Paicankh that the title of fan-bearer on the king's right was borne by the High-Priest of Amen-Rēc. At that time, as the result of the political development of the period, the priesthood, the viceroyalty of Ethiopia, and the command of the army were taken into the hands of the royal family in order to secure the monarchy of Thebes, and it is practically certain that both Herihor and Paicankh took the title of "fan-bearer on the king's right" as an honour properly belonging to the viceroyalty or the army command. After Paicankh, the title of fan-bearer, like that of king's son of Kush, seems to have fallen into abeyance. Its revival for three men in the Libyan period was probably due to special circumstances to which there is now no clue.

The rest of the titles claimed by the viceroys of Ethiopia are well-known service-titles which they had acquired during their preceding careers. It is not to be presumed that a man always mentions all his former titles, although cases are known where a High-Priest of Amūn, for example, names the titles of third, second, and first priest in the same inscription; but when the titles are full, they probably give a fair picture of his career. Thus the following list of the previous careers of the viceroys, made up mostly from their later inscriptions, is probably full but not complete:

Thuwre. Commandant of Buhen.
 Seni. Toparch of the Southern City.
 Director of works at Karnak.
 Overseer of the granary of Amūn.

 Neḥi. First royal herald.
 Wesersatet. No titles given.

5. Amenhotpe. Overseer of the cattle of Amūn.
Director of works in South and North.

Head of the stable of His Majesty.

6. Mermõse. King's scribe.

Overseer of king's scribes (DE Morgan, Cat., p. 39).

Overseer of the treasury (loc. cit.). Steward of the peasantry (?) (loc. cit.).

7. Dhutmose. Overseer of masons (?).

8. Ḥuwy. Scribe of the letters of the viceroy, Mermöse.

King's scribe.

Mery-neter priest.

King's messenger to every land.

Paser I. King's scribe.

10. Amenemopet. Son of the viceroy Paser I.

First charioteer of His Majesty.

11. Yuni. Head of the stable of Sethos I.

Charioteer of His Majesty. Chief of the Mazay.

12. Hekanakht. King's messenger to every land.

[Scribe?]..... of the-palace-of-Ramesses-II.

13. Paser II. King's scribe.14. Sethauw. King's scribe.

Governor of the City.
Overseer of the treasury.
Great steward of Amūn.
Leader of the festival of Amūn.
Chief of the priests of

Vin ale annih

15. Messuwy. King's scribe.



MERYRE' I. High-Priest of the Aten (DAVIES, El Amarna, vol. I. Pl. XXXV)



MERYRE[†] I. High-Priest of the Aten (DAVIES, *El Amarna*, vol. I, Pl. XXXV)



MERYRE' 1. High-Priest of the Aten (DAVIES, El Amarna, vol. III, Pl. XLI)



AHMOSE, Scribe, Steward, etc. (DAVIES, El Amarna, vol. 111, Pl. XXVII)



AYE, Scribe, Overseer of horses, etc. (DAVIES, El Amarna, vol. Vl, Pl. XXXI)



ḤAREMḤAB, General (Zeitschr. f. äg. Sprache, vol. XXXVIII, p.47)

16. Sety. King's scribe of the letters of the Pharaoh.

First chief in the stable. Overseer of the treasury,

Overseer of the letter-scribes in the Court of the-palace-of-Ramesses-II (?, according to the titles of his son Amenemhab at Derr, who succeeded him in this office),

in Per-Rē.
+Great steward of the king.

High-Priest of the Moon-God, Thoth.

All but † are dated to year 1 of Siptah, the year of his appointment as viceroy.

17. Hori I. First charioteer of His Majesty.

King's messenger to every land.

Son of Kama (?) of the stable of Sethos I.

18. Hori II. King's scribe.

Son of the viceroy Hori I.

19. Wentawuat. Head of the stable of the Court.

First of His Majesty (i.e. charioteer ?). Son of an unnamed viceroy (Hori II ?).

Later titles, also as viceroy:

Door-opener.

Steward of Amun at Khnum-Weset.

High-Priest of Amun of Khnum-Weset, or of Ramesses.

20. Ramessenakht. King's scribe.

21. Panehsi. King's scribe.

Commander of the army.

Overseer of the granary.

Steward of Amen-Rec.

Great chief of the treasury.

Apparently held these offices in conjunction with that of viceroy.

22. Herihor. Overseer of the granary (of Amūn?).

Commander-in-chief of the army.

High-Priest of Amun.

In conjunction with office of viceroy.

Later, king.

23. Paicankh. King's scribe.

Commander of the army.

Commander of the guards of the Pharaoh. Overseer of the granary of the Pharaoh.

High-Priest of Amen-Rec.

Son of Herihor.

It is remarkable how many of the viceroys seem to have been in the personal service of the king—as king's scribe, nos. 6, 8, 9, 12(?), 13, 14, 15, 16, 18, 20, 21, 23; as king's herald, no. 3; as king's messenger, nos. 8, 12, 17; as head of the stable, nos. 5, 11, 19; or as king's charioteer, nos. 10, 11, 17, 19(?). Indeed, nos. 9, 13, 15, 18, and 20 appear to have had no previous experience except as king's scribes. Not one of them, between Thuwre and Herihor, seems to have had any sort of military career. The exercise of the military power in Ethiopia was entrusted, of course, to the head bowmen of Kush. In the viceroy administrative abilities were needed, a familiarity with the names and the personalities of the Ethiopian chiefs, a knowledge of the red tape of the Theban bureaus, an astuteness in the devious ways of oriental diplomacy, and above all a zealous devotion to the king's interests. I imagine that the king was concerned most of all in the financial side of the matter and esteemed his viceroy according to the amount of the Ethiopian revenue. He

certainly wanted a strong and intelligent man who could keep the country in tranquillity, and one attached to his own person whom he could trust not to engage in intrigues against the throne nor yet to absorb too much of the revenues. It was only natural that he turned to the men of his immediate entourage whose characters he thought he could judge for himself. That is the custom of monarchy and above all of oriental holders of authority, from the king down to the most petty official or landowner.

The early careers of the viceroys show that each was the personal appointee of the king and in every sense the king's man. He held his office at the king's pleasure, and that seems to have amounted in practice to an appointment for life or until the accession of the next king. We may be sure that some fell into disfavour and were dismissed. Possible examples are some of the viceroys of Ramesses II and the viceroy Sety. Others continued in office under the next king, and Paser I perhaps through two whole reigns. In two and perhaps three cases, Paser I, Hori I, and Hori II (?), the viceroy secured the succession in office to his son.

I can discover no evidence that any viceroy of Ethiopia was ever a prince of the blood royal until the time of Herihor. The political development resulted during his reign in the reservation of the High-Priesthood of Amūn for the heir apparent of the king. Herihor extended this scheme for securing the position of the monarchy so that the viceroyalty of Kush and the command of the army, both held by himself before he became king, were also held by the crown-prince. Thus all the important sources of revenue—the royal estates, the national taxation, the income of the temple properties, and the tribute of Ethiopia—were brought under the direct control of the king and his son. We know that this plan was carried out by his successors at Thebes and their successors, the Libyan kings, in all points except that relating to Ethiopia. As for Ethiopia, the title of viceroy went out of use, but the functions of the viceroy must have been performed somehow, either by one of the royal princes or by the central bureaus of the administration at Thebes.

III. THE STAFF OF OFFICIALS ATTACHED TO THE VICEROY.

The first point of importance in considering the composition of the staff of the viceroy is the division of the administration into Kush and Wawat. The records of the tribute of Ethiopia contained in the Annals of Tuthmosis III (Urk., IV, pp. 695—734) show that the tribute was registered under the headings of Kush and Wawat, and this fact clearly indicates a corresponding subdivision of the administration. There is not, however, as has been suggested by Prof. Breasted, any indication that the viceroyalty itself was subdivided. There is no trace of a viceroy of Wawat, and only one case has been cited in which two viceroys seemed to be in office at the same time, a case which is only apparent and was easily explained in the contrary sense (see no. 11, Yuni). On the other hand a certain number of officials are to be traced who bore the titles of idnw n Wiwit "deputy of Wawat" and idnw n Kš "deputy of Kush," and in these titles a subdivision is clearly indicated agreeing with that proved by the records of the tribute. To quote modern analogies, the king's son of Kush corresponds to the Governor-General of the Sudan and the deputies of Wawat and Kush to the Provincial Governors of Halfa and Dongola Provinces.

The material for recovering the names of the deputies of Kush and Wawat is at present incomplete. There are probably still dozens of unrecorded inscriptions on the rocks

both above and below the Second Cataract. With the material at hand, I have been able to collect the following examples:

WAWAT.

(1)	Name lost. Date unknown.	"The deputy of the king's son in the division (?) of Wawat, scribe of the divine offerings."	Sehêl: DE MORGAN, Cat. des mon., Vol. I, p. 99, no. 194.
(2)	Name lost. Date unknown.	"The deputy of Wawat,"	Ellesiyeh, rock chapel of Tuthmosis III, façade: Lefs., Denkm., Text, Vol. v, p. 115; Weigall, Lower Nubia, p. 114.
(3)	MERY. Sethos II.	"The deputy." "The scribe of the treasury, the commander of the army of the Lord of the Two Lands in Ta-Set, the deputy, Mery, of Wawat."	Abu Simbel, south of the larger temple: Champollion, Notices, p. 78; Weigall, op. cit., p. 138. See also No. 4.
(4)	PENNUT. Ramesses VI.	"Deputy of Wawat" and "chief of the quarry-service, steward of Horus lord of Mi'am" (Breasted). "Deputy of Wawat, Mery," is probably (3), above.	Anîbeh, tomb: Breasted, Anc. Rec., Vol. IV, §§ 474, 477, 481; Leps., Denkm., Pt. III, Pls. 229 foll. Breasted, Anc. Rec., Vol. IV, § 481.
(5)	Ӊок. Haremhab ?	"The deputy of Wawat."	Gebel Addeh (Gebel esh-Shems), between the stela of Paser and the grotto of Paser: Weigall, op. cit., p. 141.
		Kush.	
(6)	Amenemopet. Tutankhamūn.	"The deputy of Kush of the king's son Huwy." See No. 7.	Ellesiyeh, rock chapel of Tuthmosis III, façade: Leps., Denkm., Text, Vol. v, p. 115; Weigall, op. cit., p. 114.
(7)	Name lost. Tutankhamūn.	"The deputy of Kush," among the officials of the viceroy Huwy. See No. 6, above.	Kurnet Murrai (Gardiner-Weigall, no. 40), tomb of Huwy: Brugsch, Thesaurus, p. 1137; Breasted, Anc. Rec., § 1041.
(8)	Name lost. Date unknown.	"Overseer of the priests of all the gods, deputy of Kush."	Fragment of sandstone on the Island of Sai: BREASTED, Am. Journ. Sem.

The following less definite references may be added:

(9)	SENNÜFER?	"The deputy of, Sennūfer," facing another man, labelled "[king's] son, overseer of the Southern Lands."	Sehêl: DE MORGAN, Cat. des mon., Vol. 1, p. 91, no. 106.
(10)	Nеня (?).	"The deputy"	Sehêl: op. cit., no. 105.
(11)	NEBNAKHT (?).	"Follower in all his journeys, bearer of, deputy (?) of the king's son, Nebnakht (?), called"	Sehêl: op. cit., p. 92, no. 111.

It is to be noted that one deputy of Wawat is dated to the time of Sethos II, one to that of Ramesses VI, and one probably to the reign of Aye or Haremhab, while the only deputy of Kush whose name is known is to be dated to the time of Tutankhamun. The evidence is scanty, but I think the conclusion is justified that the administration of Ethiopia was divided into Kush and Wawat from the time of Tuthmosis III (or before), and that the governors of these subdivisions were called "deputies of the viceroy" in Kush or Wawat at least from the time of Tutankhamun.

The incompleteness of the material, mentioned above, affects also the investigation of the minor officials of the viceroy. Many of them no doubt never left any permanent record, and lists of successive holders of the individual offices are at present out of the question. But a number of offices subordinate to that of viceroy can be gathered from the records.

Lang., 1908, p. 100.

- (12) "Head bowman of Kush," see above, pp. 73-6, nos. i-xiii.
- (13) "Servant (sdm \(\delta\)s) of the king's son":
 - a. NAKHTUW, under Mermöse.
 - b. Name unknown, a "servant of the Lord of the Two Lands" but attached to Huwy.
- (14) "Charioteer of the king's son":
 - a. Name unknown, undated.
- (15) "Captain of the rowers of the king's son":
 - a. Name unknown, under Huwy.
- (16) "Scribe of the king's son":
 - a. HARNAKHT, under Sethauw.
 - b. HAREMHABWIYA, under Sethauw.
 - c. Paser, under Sethauw.
 - d. Knac, under Ḥuwy.
- (17) "Scribe of the gold-accounts of the king's son":
 - a. HARNÜFER, under Huwy.
- (18) "Scribe of the soldiery of the king's son":
 - a. Amenemopet, under Sethauw.
- (19) "Scribe of the granary of the king's son":
 - a. Hor (?), under Sethauw.
 - b. AMENEMHAB, Hnder Sety.
- (20) "Scribe of the letters of the king's son":
 - a. Amenemopet, under Mermöse.
 - b. Huwy, under Mermöse.
- (21) "Rwd of the king's son": or "rwd of Kush":
 - a. HAREMHAB, under Sethauw.
 - b. The title rwdw of Kush stands over the red men of Ethiopia.
- (22) "Overseer of the works of the king's son":
 - a. AMENEMOPET.
- (23) "Overseer of the cattle":
 - a. Name unknown, under Huwy.
- (24) "Scribe of the table of Kush":
 - a. Pennesettauwi, under Sethauw.
 - b. See (25), below.
- (25) "Overseer of the cities of Kush":
 - a. Iuwnamūn, also "scribe of the table of the Lord of the Two Lands." Dyn. XIX?
- (26) "Overseer of the priests of all the gods":
 - а. Таңем (?), under Sethauw.
 - b. Name unknown, also "deputy of Kush." Undated.
- (27) "Scribe of the offerings of all the gods of Wawat":

 a. Meryopet, undated.
- (28) "Scribe of the treasury for Wawat":
 - a. Katha, "scribe of the treasury of the Lord of the Two Lands in Ta-Set, overseer of the lands of Wawat."

- Stela from Binban (near Darâw): WEIGALL, Annales, Vol. IX, p. 112.
- Tomb of Huwy: Brugsch, Thesaurus, p. 1140.
- Sehêl: DE MORGAN, Cat. des mon., Vol. 1, p 103, no. 45.
- Tomb of Huwy: Leps., Denkm., Text, Vol. III, p. 305.
- Stela of Sethauw at Ibrîm: Champollion, Notices, p. 82; Leps., Denkm., Pt. III, Pl. 184, d, and Text, Vol. v, p. 127.
- Tomb of Huwy: Leps., *Denkm.*, Text, Vol. III, p. 305.

Tomb of Huwy: loc. cit.

Same as (16), α .

Same as (16), a. See vii, d, above.

Ellesîyeh: LEPS., Denkm., Text, Vol. v, p. 115. See viceroy no. 6, n.

Same as (16), a, above.

Tomb of Huwy: Leps., Denkm., Text, Vol. III, p. 305.

Same as (20), a, above.

Tomb of Huwy: BRUGSCH, Thesaurus, p. 1140.

LIEBLEIN, Dict., no. 2052.

MARIETTE, Cat. d'Abydos, no. 1169.

Stela from Wâdy es-Sebûca: GAUTHIER, Annales, Vol. XI, p. 82.

BREASTED, Am. Journ. Sem. Lang. 1906, p. 100.

WEIGALL, Lower Nubia, p. 139.

Gebel esh-Shems: Leps., *Denkm.*, Text, Vol. v, p. 180.

It seems probable that the priests and the scribes of the temples, as well as the treasury officials permanently stationed in Ethiopia, were under the supervision of the viceroy. This view seems to be confirmed by (26), b, above, which shows that the deputy of the viceroy was overseer of the priests. The toparchs, the commanders of fortresses, and the chiefs of the various districts were, of course, under the viceroy and his deputies in Kush and Wawat.

- (29) "Toparch" of various places:
 - a. name lost, of Khaemmacet.
 - b. " " of Shetepnetēruw.
 - c. Mose, of Micam.
- (30) "Chief" of districts:
 - a. RACHOTPE, of Micam.
 - b. Ḥeṣanūfer, of Mi^cam. Under the viceroy Ḥuwy.
- (31) "Commandant of the mountain":
 - a. A badly preserved graffito: "Commandant of the mountain, overseer of the Gold,, son of the king's son, the overseer of the Southern Lands, N(ehi?)."

Tomb of Ḥuwy: Brugsch, Thesaurus, p. 1140.

WEIGALL, Lower Nubia, p. 114, 9; see also tomb of Pennut: Breasted, Anc. Rec., Vol. IV, § 474.

Weigall, op. cit., p. 126.

Ibid.: and in the tomb of Huwy: BREASTED, op. cit., Vol. II, § 1037, where the name is translated "good ruler."

Toshkeh: WEIGALL, op. cit., Pl. LXVI; SAYCE, Rec. de Trav., Vol. xvi, p. 173.

I have omitted the general references to the chiefs of Kush and Wawat, and to the graffiti of many officials travelling in Nubia who may or may not have been attached to the service of the viceroy. The records at present reported can only be a pitiable fragment of all those left by four centuries of travelling in Ethiopia on the part of Egyptian officials. Yet even so, it is clear that the staff of the king's son of Kush consisted of nearly the same set of officials as were necessary for the government of Egypt, or in other words that the governor of Ethiopia was a viceroy in the true sense of the term.

INDEX OF OFFICIALS SUBORDINATE TO VICEROYS.

Arranged as here numbered.

Overseers of the Southern Lands, see pp. 73-5.

- i. Tuwtuw.
- ii. Sennūfer.
- iii. Nehemay.
- iv. Hekaemsasen.
- v. Anhernakht.
- vi. Pennesuttauwi.
- vii. Amenemhab (=19, b).
- viii. Osorkon ankh.

HEAD BOWMEN OF KUSH, see pp. 73-6.

- ix. Min (or Nakhtmin).
- x. Dhutemhab.
- xi. Piyay.
- xii. Beknamün.
- xiii. "Binemwēse."

DEPUTIES OF THE VICEROY, see p. 85.

- (1) Name lost
- (2) ", ",

- (3) Mery.
 - (4) Pennut.
- (5) Hor.
- (6) Amenemopet (= 20, α and 22).
- (7) No name given (=6).
- (8) Name lost.
- (9) Sennüfer (?).
- (10) Nehsi (?).
- (11) Nebnakht (?).

MINOR OFFICIALS, see pp. 86-7.

- (13) Nakhtuw.
- (16), a. Harnakht.
 - b. Haremhabwiya.
 - c. Paser.
 - d. Khac.
- (17) Ḥarnūfer.
- (18) Amenemopet.
- (19), a. Hor (?).
 - b. Amenemhab (=vii).

(20), a.	Amenemopet (=6 and 22).	(26)	Taḥem (?).
<i>b</i> .	Ḥuwy.	(27)	Meryopet.
(21)	Ḥaremḥab.	(28)	Katha.
(22)	Amenemopet (=6 and 20, a).	(29)	Mōse (of Mi ^c am).
(24)	Pennesettauwi.	(30), a.	Rachotpe (chief of Micam).
(25)	Iuwnamūn.	b.	Ḥekanūfer (chief of Micam).

$Arranged\ alphabetically.$

			(30) 7	3.6			(O=)
Amenemḥab	• • •	•••	vii, (19), b.	Meryopet	•••	•••	(27).
${f Amenemopet}$	•••	• • •	(6), (20), a , (22).	Min	•••	•••	ix.
Amenemopet	•••		(18).	Mōse	•••		(29).
Anķernakht	•••	•••	v.	Nakhtuw		•••	(13).
$\operatorname{Beknam\bar{u}n}$	•••	•••	xii.	Nebnakht (?)	•••	•••	(11).
"Binemwēse"		•••	xiii.	Neḥemay	•••		iii.
\mathbf{D} hutemha \mathbf{b}	•••		x.	Neḥsi (?)	•••		(10).
Ḥaremḥab	•••	•••	(21).	Nekhtmin	•••	•••	ix.
Ḥaremḥabwiya			(16), b.	Osorkon ^c ankh	•••	• • •	viii.
Ḥarnūfer			(17).	Paser	•••	•••	(16), c.
Ḥekaemsasen			iv.	Pennesettauwi	•••	• • •	(24).
Hekanüfer			(30), b.	Pennesuttauwi	•••		vi.
Hor			(5).	Pennut		•••	(4).
Ḥor (?)		• • •	(19), a.	Piyay			xi.
Hornekht			(16), α .	Rachotpe	•••		(30), a .
Ḥuwy	•••	• • •	(20), b.	Sennüfer	•••		ii.
Iuwnamūn	•••		(25).	Sennüfer (?)	•••	•••	(9).
Katha			(28).	Tahem (?)			(26)
Kha ^e	•••	•••	(16), d.	Tuwtuw	•••		i.
Mery	•••		(3).				

MENES AND NARÂM-SIN

By DR W. F. ALBRIGHT

Before proposing a synchronism between the first dynastic king of Egypt and the greatest of early Babylonian kings, one cannot but hesitate, fearful of seeming reckless. It may possibly be that we are dealing with a mere coincidence, extraordinary perhaps, but fallacious, and that the supporting indications will reveal themselves as conspirators against the truth. Yet the lines of evidence, geographical, historical, chronological and archaeological, converge so remarkably in the direction of our thesis that we ought not to shrink from the test—o bere o affogare!

Narâm-Sin, fifth monarch of the Dynasty of Akkad, says in a triumphal inscription on a statue found at Susa by the $D\acute{e}l\acute{e}gation~en~Perse$, that he defeated Mani of Magan: $Magan~in\^{a}r~u~Maniu[m]~b\acute{e}l~Magan~[~~]^1$, 'Magan he smote and Mani lord of Magan [~~].' In a Babylonian chronicle we read (II, 10, 4): ana Magána illik-ma Mannu dannu šar Magan [qâtsu ikśud] = (II, 38, 17 f.) [ana Ma]gána illiku-ma Magána içbatu-ma [~~] šar Magána qâtsu ikšud[u], '(Narâm-Sin) who went to Magan, and vanquished (not 'captured') [Mannu, the mighty], king of Magan.' The fact that king Mannu is here called dannu, 'mighty,' is very important, as no other of the princes conquered by Narâm-Sin has this honorific title in his inscriptions except the latter himself, who, in common with the others of his dynasty, affixes $dan(n)u^m$ to his name: Narâm-Sin $dan(n)u^m$ šar $kibrâti^m$ $arbai^m$, 'Narâm-Sin, the mighty, king of the four quarters.' The lord of Magan must have been a powerful ruler to receive so illustrious an appellative.

The forms $Maniu^m$ and Mannu indicate a basic *Manni; u^m is the nominative ending, affixed regularly, like Lat. us, to stems ending in i (cf. Guti, $Gutiu^m$; Suti, $Sutiu^m$) in Old Akkadian. The name *Manni is, I believe, as exact an equivalent as attainable in cuneiform of the early pronunciation of $Mni = M\eta\nu\eta s$. The late translation of the name as $di\delta\iota s$, if approximately correct, shows that Mni is a qualitative from mn, 'be stable, remain',' with the pronunciation $Mannei^4$, and the meaning 'steadfast' (Ar. Uatiq), or the like.

Magan may now be identified beyond reasonable doubt with Egypt, despite the general

- ¹ Thureau-Dangin, Die sumerischen und akkadischen Königsinschriften, p. 166, h, Col. 2.
- ² Published by King, Chronicles Concerning Early Babylonian Kings.
- 3 Eg. mn corresponds to Ar. banna, 'remain,' by dissimilation for *manna; cf. the many exact parallels given by Ružička, Konsonantische Dissimilation in den semitischen Sprachen, pp. 92—95. Ember now adopts this etymology in preference to Heb., 'και, 'be firm, secure,' which is probably Eg. imn, 'conceal,' as pointed out by Steinbach.
- ⁴ It is impossible in a note to give a clear idea of my work in the field of Egyptian vocalization, which has placed the phenomena of vocalic development from Proto-Semitic to Coptic on the same secure basis that the consonantal development now is (pace critics of some injudicious paragraphs in my "Notes on Egypto-Semitic Etymology"). I will only remark here that the two qualitative types χοῆc and μηπ are to be derived from *habśeū < *habseī and *mêneū < *māneū < *manneī (like phc < *rāśei < ra's = Ar. ra's, Assyr. rêšu), respectively. Doubling was given up in Old Egyptian, as in modern English; Coptic doubling is secondary, as shown by Sethe, Steindorff, Spiegelberg, and Lacau.

impression to the contrary, shared by no less an authority than Eduard Meyer. This consensus of opinion is based partly upon erroneous data, and partly upon the sheer inertia of old preconceptions. In the Assyrian inscriptions of the seventh century, as is well known—Winckler's unfortunate theories are now forgotten, and his fame rests secure on Boghaz-keui, so no disrespect to his genius is intended—Magan and Meluha are employed as archaic terms for Mucr and Kus (pronounced Kos), Egypt and Ethiopia, respectively, just as Esarhaddon calls Melid (Melitene) Hanigalbat, and Nabopolassar gives the name Subartu to Assyria. That this is not a mere display of inventive erudition on the part of Assyrian historiographers is certain from the Amarna letters, where Meluha appears repeatedly as a synonym of Kasi = later Eg. Kos, Nubia¹. It is, therefore, only rational to suppose that Magan and Meluha refer to Egypt and Ethiopia, or contiguous lands, in the inscriptions of the preceding (third) millennium as well.

The first scholar in recent times to advocate the identification of Magan and Meluha with Egypt and Ethiopia is Haupt, whose article on the subject appeared six years ago? While it is now, perhaps, necessary to modify a few of the contentions, in the light of available evidence, it is also possible to add a number of arguments to Haupt's list. In the vocabularies, compiled in the last part of the third millennium, Magan and Meluha, and their products appear quite frequently. The 'tree of Magan,' Old Sumerian muš-magána = Assyr. musukkanu, Heb. mesukkan, has been identified convincingly by Haupt³ with the Acacia Nilotica or Acacia seyâl, the shittim-wood of the Old Testament. Haupt has also pointed out that the usû-stone (NÀ-KALAG), which Gudea brought from Magan, is black diorite, presumably from the quarries in Wâdî Ḥammâmât. Gudea, Cyl. A, 23, 1, states that it required a year to bring the stone from Magan to Babylonia. Similarly, the GI-ZI (= Assyr. $k\hat{s}su = qan \; Makkan$, 'reed of Magan,' is, we may suppose, papyrus (Eg. $\check{c}af > \text{Heb. } saf)^{5}$. The 'pig of Magan' (ŠAG-MÀ-GAN = šaḥû makkanû; II R, 6 cd, 28), mentioned along with $\delta ah \hat{a}$ and $tab \hat{a}$, 'pig,' and kurkizannu (perhaps = Ar. karkadann, 'rhinoceros'; the ideogram may not have been $\S A \overline{G}$ -TUR = $sahturr \hat{u}$, 'shoat,' but $\S A \overline{G}$ -BANDA, lit. 'very large hog'), is probably the hippopotamus (Haupt), called by the Egyptians rri, 'pig,' and by the Arabs hinzîru-'l-mâ'i 'water-hog.'

Being unquestionably more remote from Babylonia, the products of Meluha are rarely mentioned. The *sâmtu*-stone, which is said to come from Meluha, is certainly not porphyry, or cornelian, but malachite⁷; the Egyptians drew most of their malachite from the mines of Sinai, probably included by the Babylonians under the term Meluha, referring, it would seem (see below), to the shores of the Red Sea, south of Palestine and Egypt; it is hardly a reasonable supposition that the Sumerians were acquainted with Nubia. Ships of Magan

- ¹ Cf. Knudtzon-Weber, Die El-Amarna-Tafeln, pp. 1154 foll., 1578.
- ² Orient. Literaturzeitung (OLZ), Vol. xvi, cols. 488—492.
- ³ See OLZ, Vol. xvi, col. 489; Journ. Bib. Lit., Vol. xxxvi, pp. 145 foll.
- 4 OLZ, Vol. xvi, cols. 488 foll.
- ⁵ The ideogram means 'upright reed,' or the like. Papyrus may have grown sporadically in Babylonia, as in Palestine. From the report of Uen-Amôn we know that it was exported into Asia in the eleventh century; there is no reason to doubt that it was occasionally seen in Babylonia a thousand years before, as a curiosity of Egyptian origin.
 - ⁶ This disposes of the objections of MEYER, Geschichte des Altertums, third ed., § 401.
- ⁷ Cf. Am. Journ. of Sem. Lang. (AJSL), Vol. xxxiv, p. 230. The evidence might be considerably increased. I regret to have given to Kugler credit which really belonged to Jensen, Zeit. für Assyr., Vol. x, pp. 368 ff. Cf. also Encyclopaedia Biblica, col. 4808.

and Meluha are often mentioned along with ships of Tilmun = Bahrein, in the southern part of the Persian Gulf, not only in the vocabularies, but also in the religious texts, as in the incantation IV R, 25, Col. 1. Most interesting is the early text published by Langdon, Sumerian Liturgical Texts, No. 1, where (obv. Col. 2) Magan, Meluha, and Tilmun are mentioned together; cf. line $5 \text{ f.: } [M\grave{a}]\text{-}gan^{ki}\text{-}na$ an-zaga $\bar{g}\acute{e}\text{-}en\text{-}lal$ [--m\hat{a}]-gi-lum Me-lu\bar{g}\bar{g}a^{ki}\displangerangle = 'May he reach [Ma]gan, on the horizon of heaven; [] the bamboo (?)¹ barks of Meluha.' A sufficient commentary is provided by line 8: [] $k\acute{u}r\text{-}k\acute{u}r\text{-}ra$ Nibruki-s\hat{u}\bar{g}\acute{e}\text{-}na-ab\text{-}tum = '[The products] of foreign lands may he bring to Nippur.' Such passages make it clear that there was a more or less flourishing sea-traffic between Babylonia and the coasts of Arabia and Africa in the third millennium: the first important station was Tylos² in the Persian Gulf, the second Meluha; last came Magan, 'on the horizon of heaven,' a year's journey away. In actual distance by land route Magan was evidently nearer, as no king of Meluha is included among the conquests of the kings of Akkad. Ships bound for Magan presumably stopped at Kosêr, opposite Koptos, which, as is well known, was an important port in the earliest times.

In the so-called Epic of Paradise, published by Langdon, the god Nin-dúl-la is appointed lord of Magan (rev. 3, 44); he is otherwise unknown³, but his name means 'Lord of wells,' associated paronomastically in our text with utul, 'flock.' Nindulla is apparently brought into connection with Egypt because of that country's wide reputation for fertility and abundance of potable water. It is even possible that the cult of Osiris as lord of water spread into Syria and Mesopotamia in the third millennium, just as Bacalat of Byblos was worshipped in Egypt about the same period as Hthr of Kpn.

There can be little doubt that Hommel was correct in combining Magan with Macan, though this need not imply a connection with the Minaeans, who first come into the light of history more than two thousand years after Narâm-Sin. The place-name Macan (> Heb. Macan) or Macan is very common, being derived from cain, spring, and meaning, accordingly, well-watered region, oasis; cf. Eth. tecient, encampment, properly (camp) by a spring. Macan has the same basic meaning as the name Damascus, which means, as Haupt has made probable, settlement in a well-watered region Danascus. Since the name Danascus, which means, as Houpt has made probable, settlement in a well-watered region Danascus, which means as Haupt has made probable, settlement in a well-watered region Danascus, which means as Haupt has made probable, settlement in a well-watered region Danascus, which means as Haupt has made probable, settlement in a well-watered region for Danascus, so since the name Danascus, which means, as Haupt has made probable, settlement in a well-watered region for Danascus, which means, as Haupt has made probable, settlement in a well-watered region for Danascus, which means, as Haupt has made probable, settlement in a well-watered region for Danascus, which means, as Haupt has made probable, settlement in a well-watered region for Danascus, which means, as Haupt has made probable, settlement in a well-watered region for Danascus, which means, as Haupt has made probable, settlement in a well-watered region for Danascus, which means for Danascus in Danascus is Danascus.

- ¹ Sum. *gi-lum* means lit. 'flourishing' or 'flowering reed.' Bamboo is the most natural rendering, as it is the only suitable reed for making barks.
- ² For the identification of Tilmun with Tylos and Bahrein, already proposed by other scholars, cf. my article "The Mouth of the Rivers" in Am. Journ. Sem. Lang., Vol. xxxv, p. 183.
 - ³ Contrast Langdon, Sum. Epic of Paradise, p. 83, n. 3.
- 4 Cf. his Geographie und Geschichte des alten Orients, p. 132. The g represents the f, which did not exist in Sumerian. While the Sum. \overline{g} appears to have been pronounced like Ar. f, it is curious that, if Hommel's combination of ganam, 'ewe,' with Ar. \overline{g} anam, 'sheep,' is not a mere coincidence, g, not \overline{g} , should be employed to reproduce the Arabic sound. However, linguistic science abounds with such apparent anomalies, due often in reality to slight phonetic differences, which make a strange impression upon a foreigner, not used to quite the same nuances of pronunciation. Another case of Sum. g for f may be the Gubi or Gubin of Gudea, situated in the west, which I would identify with the Ubi of the Amarna letters, representing probably the plain of Damascus (see Knudtzon-Weber, op. cit., pp. 1110 f.). Haupt, OLZ, Vol. xix, pp. 45 foll., suggests that Ubi may be etymologically identical with Heb. f ab, 'thicket.' Possibly Ubi is the same word as Heb. *f thickness,' which may have meant also 'luxuriance,' as the same stem still does in Arabic.

⁵ OLZ, Vol. XII, col. 69, n. 14.

⁶ Zeit. der Deutsch. Morg. Ges., Vol. LXIX, pp. 168 foll.

therefore been referred with great reason to the Wall of the Princes (Heb. Šûr), Macân may very plausibly be explained as the West-Semitic name of Egypt before the construction of this wall; Lower Egypt seemed like a terrestrial paradise to the tribes of the desert (Gen. xiii, 10).

The name Meluha is more elusive; the combinations made hitherto with Meroë, Amalek, etc., are quite impossible. $Melu\bar{g}a$ may represent the oldest form of $Ma\lambda a\omega$ (Periplus of the Erythraean, 8), modern Berbera on the Somali coast, opposite Aden, still the principal seaport of the country (FABRICIUS, Periplus, p. 124). At all events, the term Meluha probably included Eg. Punt, the Somaliland. It is interesting to note that malachite, one of the products of Meluha, appears among the precious freight brought to Hatsepsouet by the expedition to Punt.

Historically, an invasion of Egypt by Narâm-Sin is very probable. Sargon I, founder of the Dynasty (ca. 3000; see below), extended his conquests on the north-west to the Mediterranean, including in their scope the Silver Mountains (Taurus¹) and the Cedar Forest (Lebanon). An inscription of his enumerates three western lands subdued by his arms, Mari, Iarmûti, and Ibla. Mari is the country on the Middle Euphrates, about the mouth of the Hâbûr². Poebel's effort to identify Iarmûti, the Iarimûta of the Amarna texts, with the plain of Antioch (op. cit., pp. 225 ff.) is untenable in the light of the Amarna correspondence; see the discussion of the problem by Niebuhr³, who identified it with the Delta, and especially by Weber⁴. It is certain that Iarimûta was a district on the sea-coast between Egypt and Byblos, and that it was a great grain-producing land, devoid of timber, under the watchful eye of the Pharaoh, who rules it through his viceroy or râbic, a man with the Semitic name Janhamu (i.e. Ian am = ניגעם), whose authority extended from Simyra in Phoenicia to the extreme south of Palestine. The only available identification is with the Plain of Sharon, described in the inscription of Ešmûn azar of Sidon as a 'splendid grain land (ארצת דגן האדרת),' with the principal towns of Dor and Joppa, forty-five kilometres apart. Iarimûta seems, therefore, to correspond to the Palestinian Šefēlā, stretching from Carmel to Gaza, a distance of a hundred kilometres. The name has survived in the Biblical $\underline{I}arm\hat{u}\underline{t}$ (LXX, $I_{\epsilon\rho\iota\mu\sigma\nu\theta}$), expressly located in the $\underline{\check{S}ef\bar{e}l\bar{a}}$ (Jos. xv, 33, 35), probably modern Hirbet Iarmûk (or *Iarmût*), some thirty kilometres south-east of Joppa; *Iarmût* means 'fertility,' precisely like Śarôn⁵.

Ibla has not yet been identified; I would consider it as a Sumerian corruption of Gibla, the proper pronunciation (cf. Heb. gent. Gibli, and Gr. $\beta i\beta\lambda os$, 'papyrus') of the name Byblos, which appears in the Amarna letters as Gubla, the u being due to the labial, as often, especially in Assyrian. Byblos was the most important city in Phoenicia in early times, and the only one mentioned in hieroglyphic texts of the Old and Middle Kingdoms, where it appears as Kpn, Kbn^7 . Gudea brought from Ursu in the mountains of Ibla (i.e. the

- ¹ See Poebel, Historical Texts, p. 224.
 ² Cf. Clay, Empire of the Amorites, pp. 103 foll.
- ³ Mitt. der Vord. Ges., Vol. 1, pp. 32—36. ⁴ Knudtzon-Weber, op. cit., pp. 1153, 1169—1172.

⁶ Jensen's combination with Pieria (ZA 111, Vol. x, pp. 360 f.) is out of the question.

⁷ See Gardiner, Recueil, Vol. XXXII, pp. 21 foll., and Sethe, Zeitschr. f. üg. Sprache, Vol. XLV, pp. 10 foll.

Lebanon) beams of various woods, $zabalu^m$ (note the Semitic names), $tulubu^m$, 'sycamore, and $a\check{s}\hat{u}hu^m$, 'fir'.'

The conquests of Sargon were exceeded in all directions by Narâm-Sin, who, after a prosperous reign of half a century, was deified in memory of his extraordinary achievements. In his inscriptions Narâm-Sin claims to have visited lands never before reached by his predecessors². In the north he subdued Armanu^m, presumably the Armina of the Achaemenian inscriptions two thousand years later, and in Mount Tibar in Armanu^m set up his royal stele. Tibar cannot be separated from the $T\iota\beta\alpha\rho\eta\nuoi^3$ of Strabo, XII, 28 foll., later occupying the hinterland of Pharnakia and Trapezos, east of the Iris and north of the Antitaurus, the region called Kizuadna in the second millennium. As Strabo also places the Chaldaeans (Chaldians) in the same part of the country, there had evidently been a displacement from the south-east; Mount Tibar refers perhaps to part of the Antitaurus, about a hundred miles north of Pir-Ḥussein near Diarbekr, where a relief of Narâm-Sin has been found in situ.

The chef-d'œuvre⁴ of Narâm-Sin's reign, however, was the invasion of Magan, to the south-west. As Magan was accessible both by land and sea, and lay beyond Palestine, Egypt is the only available identification. Moreover, Egypt was the only country at that time which was the peer of Babylonia in civilization, and whose king, therefore, might reasonably be considered by the haughty Narâm-Sin as his equal (dannu^m). The cuneiform records do not necessarily imply a conquest of Egypt; Mesopotamian rulers were not always more veracious than their Pharaonic contemporaries.

Thanks to the discovery of the Cairo fragment of the Palermo-stone (see below), it is reasonably certain that Menes is to be combined with Horus Na^crmer, who completed the conquest of Lower Egypt begun by his predecessors, especially the so-called 'Scorpion.' Na^crmer also fought with the Libyans, while his successor, 'Aḥa, had conflicts also with the Libyans and Nubians. It is likely enough that both monarchs extended their sphere of influence into Palestine, a fact in itself calculated to incur the hostility of the warlike Akkadian. There is no more difficulty in assuming a conflict between Menes and Narâm-Sin than in the case of Sennacherib and Tirhakah. At all events the two former were certainly more energetic than the two latter. In this connection it may be added that we need not assume so much exaggeration in the numbers of persons and animals which Na^crmer claims to have captured as Meyer supposes. Na^crmer boasts of capturing 120,000 prisoners; we must remember that this refers to men, women, and children, and that Tiglathpileser IV, for example, carried away 135,000 from Chaldaea, and 60,000 from the north-east, while Sennacherib removed 208,000 persons from Chaldaea. The number of 400,000 oxen and

י For ašūhu, see Meissner, Mitt. der Vord. Ges., Vols. xvIII, 6, p. 35, and for its Aramaic derivative אחשותא, Löw, Pflanzennamen, p. 60. According to Rashi, the אחשותא is the female cedar, which the ideogram shows to be impossible. The Sidra Rabba says that the אחשותא grows in Lebanon. From these statements and the ideogram at the ideogram at the ideogram at the ideogram at the object. (cf. Assyr. ašūhu šihūti, 'lofty ašūhē'), it is evident that the ašūhu was a very lofty conifer, perhaps the Cilician fir (Eg. 'š, Loret [cf. Journ. of Eg. Arch., Vol. Iv, p. 272], also procured from Lebanon). It is hardly probable that Eg. 'š is a corruption of a West-Semitic 'ašūh.

² Cf. Poebel, op. cit., p. 212.

³ In this case Tabal-Tubal is a foreign corruption of the name Tibar which remained the native pronunciation for three thousand years. It is certain that Tabal is the same as Tibar; Her. VII, 78, joins the Moschi and Tibareni, just as the O.T. and the Assyrian monuments associate Mušk(i) and Tabal-Tubal.

⁴ Cf. MEYER, op. cit., § 401.

⁵ *Ibid.*, § 208.

1,422,000 goats (and sheep) is evidently overestimated, but cf. the 80,000 cattle and 800,000 sheep which Sennacherib carried away as booty from Chaldaea.

It may not be irrelevant to note that native Egyptian traditions ascribe a catastrophe to the close of Menes' reign. The folkloristic legend that Menes was slain by a hippopotamus may even be the garbled reminiscence of his death in battle with a foreign army; Nacrmer's tomb has yet to be found. Similarly, Egyptian legend transformed the pestilence which attacked the army of Sennacherib into an army of mice.

The foregoing combinations are, of course, misleading if the chronology proves recalcitrant. In the last edition of his *Geschichte des Altertums* (1914) Meyer places Menes at 3315, Narâm-Sin at 2700, a divergence of over six centuries. Archaeology, however, has not been stationary, and the material published since 1914 completely alters the situation. In fact, the argument from chronology is no less favourable than that from geography and history.

Thanks to the recent discovery of the annals of Larsa, we know that the Dynasty of Isin terminated in the thirty-first year of Rîm-Sin of Larsa, which corresponds to the first of Ammu-rauih, who reigned, as we are assured by astronomical testimony, 2123—2080. It is therefore possible to fix the beginning of the Dynasty of Ur at 2465 (Meyer, 2469), a date whose substantial exactness is shown by a mass of collateral evidence. The king-lists published by Père Scheil and Arno Poebel give 348 years from the accession of Sargon I to the expulsion of the Guti by Utu-gegal of Erech. From the latter to Ur-Engur, head of the Dynasty of Ur, there is a lacuna of uncertain length, occupied by a Dynasty of Erech, in the period of whose decline falls Gudea I of Lagaš, subject apparently of Lugal-kisalsi II, and a Dynasty of Adab, represented by at least one great conqueror, Lugal-anna-mundu. To the same period belong at least ten other patesis of Lagaš beside Gudea, including Ur-Bau, the predecessor of the latter. All these were autonomous princes, employing their own dating, contrary to the custom during the Dynasties of Akkad and Ur, and handing down the rule by inheritance, like the Egyptian monarchs of the last part of the third millennium. The length of the lacuna cannot well be less than a century, and may easily have been two or three; 150-200 years is a moderate estimate. We may thus tentatively assign Sargon I to 3000 B.C., and Narâm-Sin to 2920, as he ascended the throne 80 or 90 years later; the absolute minimum date for the latter is cir. 2800.

The Egyptological situation may seem hopeless at first thought; the chronology of Meyer and Breasted places Menes in the 34th century B.C., but this figure must be reduced considerably, in the light of the most recent discoveries. The discovery of the Cairo fragment of the Palermo-stone puts the chronology of this document on a much firmer basis. By far the most probable reconstruction which I have seen is that offered in the Comptes Rendus de l'Académie des Inscriptions, 1917, pp. 107—115, by Seymour de Ricci, as it agrees with the length of reign assigned in the Turin Papyrus to Šepseskaf, Ueserkaf, and Saḥurē. On the basis of the reverse, this scholar would then allow about 362 years for the first four registers of dynastic kings on the obverse, a number which can hardly be far from correct. The interval from Menes to the accession of Snefru can thus be hardly over 400 years, and may even be half a century less. A few corrections in the scheme should be made: the king whose name appears in the third register of the obverse of the Cairo piece is not Qebḥu (Qacsen), but Semerhêt (Petree, Anc. Eg., 1916, p. 183), while the Nečeren (Ntr-n) who appears on the Palermo fragment in the fourth register is the third rather than

¹ See Poebel, *Historical and Geographical Texts*, No. 75, a copy of an important inscription of this king.

the fifth king of the Second Dynasty; the length of the remaining reigns in the Dynasty must be reduced. As, according to this scheme, the first two Dynasties, from Menes to Nebkarê^c, ruled about three centuries, the First Dynasty, covering the second and third register, may be given approximately 160 years, the Second about 140. The following interval, from the Third to the Fifth Dynasties inclusive, may be fixed at about 350 years, as shown by Meyer, following the data furnished by the Turin Papyrus, confirmed by the Palermo-stone and the monuments.

It is very instructive to observe how the figures of Manetho crumple up under the test. Dynasties III-V lasted 716 years, according to Africanus, or 739 if we add up the regnal years actually given, but the Turin Papyrus allows only half as great a duration. The last three kings preceding Nebkarë receive 47 years on the Papyrus, but 103 in Manetho, more than twice as much. Semerhêt gets 9 years on the Palermo-stone, but 18 in Manetho, just double. In the light of these reductions, 300 years for the Thinite period, instead of Manetho's 565, must be considered a liberal allotment. Naturally the assignment of three reigns to a century, frequently advocated, following the example of Herodotos, is extravagantly high. Let us compare the contemporaneous situation in Babylonia, where we have accurate data. Fourteen kings of the dynasties of Upi and Kiš receive 205 years (3200-3000), an average of 15 years to a reign; the following 18 kings of Erech and Agade reign 248 years (3000—2750), an average of 14 years; the sixteen kings of Guti and Ur rule 242 years, or 15 years apiece; sixteen kings of Isin rule 225½ years, 14 years each. Fourteen rulers of Larsa reign 265 years, or 19 years each. It is hardly accidental that the Babylonian average we have found, 15 years, if multiplied by 43, the number of kings in the first five dynasties, according to Manetho, will give 645 years, in perfect accord with the available data from the monuments.

On the basis of the 955 years apparently counted in the Turin Papyrus for the period from Menes to the end of the Eighth Dynasty, Meyer has assigned 420 years to the first two. Even if the number 955 does refer to this interval, which is not certain, though probable, we can hardly take it too seriously, being the computation of a Nineteenth Dynasty scribe. In view of the tendency of Egyptian chronologers to exaggerate the antiquity of their country, we may safely discount it; the reduction by fourteen per cent. which would be required if our results are correct is, a priori, very reasonable. Even Babylonian scribes, despite their praiseworthy respect for accuracy, seldom found in Egypt, show a marked tendency to swell their numbers in the process of time: e.g. Berossos ascribes a duration of over 34,000 years to the period from the flood to the First Dynasty of Babylon, 2000 more than is allowed by the lists from the latter Dynasty; Nabonidos places Narâm-Sin 3200 years before his time, an excess of 800 years²; king-list A gives Ḥammurabi ('Ammu-rauiḥ) 55 years, a number presumably secured by the mechanical addition of the 12 years assigned

¹ Even if all the kings stood in a lineal genealogical relation to one another, which is far from being the case, three reigns to a century is too high. In ancient Babylonia we have two genealogical series, without interruption, five kings of Ûr, who ruled 117 years, or 23 each, and five kings of Isin, who reigned 94 years, an average of 19 years. In late Assyrian times we have two series of five, reigning 99 and 100 years respectively, or 20 years to each king, probably a good average for all such computations. There is one exception, in early Babylonia, where ten monarchs of the First Dynasty of Babylon, each son of the preceding, rule 285 years, or 28 apiece. The reigns in this Dynasty are extraordinarily high, and are, moreover, absolutely certain.

² Elsewhere I shall prove that this is not a mere guess of the great archaeologist king, but was a *bona fide* computation, on the basis of the available lists.

him as king of Larsa in the Larsa list to the 43 years given him correctly by the Babylonian annals.

Meyer allows 400 years for the dark period between the close of the Sixth Dynasty and the rise of the Twelfth, a duration agreeing closely with Eusebius' figures, and more than half as large as the extravagant allotment of Africanus, who assigns six centuries to the Herakleopolitan kings alone. Since some dynastic contemporaneity at this time is certain, it is impossible to escape the conviction that the Manethonian numbers are grossly excessive, just as in the next dark period, from the Thirteenth to the Seventeenth inclusive, where the most cogent astronomical and monumental evidence requires the reduction of the length of 1590 years given by Africanus to little over two centuries2. Accordingly, I shall propose the reduction of the interval in question from 783 years (Africanus) to about 160 (see below), fixing the rise of the Sixth Dynasty at cir. 2300 B.C. The material curtailment of the duration of the period is also required by the succession of nomarchs, as well as by the intimate relationship of the cultures of the Sixth and Twelfth Dynasties. Moreover, the quarry dates (cf. MEYER, Chronologie, pp. 178 ff.) point to the same conclusion. Nebtauire Mentuhotep IV worked at Hammâmât two to three calendar months after Pepi I, which would place the latter 240-360 years earlier; our estimate from other considerations is 250. Una relates that in the reign of Merenre I he had great difficulty, owing to the low Nile, in bringing a stone table of offerings to Sakkareh in a ship which had been built during seventeen days of Epiphi. For a heavy-laden vessel navigation would be very hard after the first of March; if we allow several weeks for loading and transportation, Epiphi will coincide with January, in accord with our chronology.

There is every reason to suppose that the Egyptian Empire became greatly weakened during the long inactivity of Pepi II's ninety-year reign; it is certain that the following nine rulers, assigned by the Turin Papyrus to the Sixth and Eighth Dynasties, were ephemeral, as the five lengths of reigns preserved total ten years, two years each, an average no higher than in the Thirteenth Dynasty. The Tablet of Abydos gives 17 kings after Merenrec II, a fuller list than that of the Papyrus, which omitted a few names. The penultimate king, Neferkeuhôr, who apparently reigned two years, was still able to publish his decrees at Koptos, so it is evident that the Herakleopolitans had not yet declared their independence. The Turin Papyrus shows that the Memphite kingdom did not last more than forty years after the demise of the aged Pepi II.

The two Herakleopolitan Dynasties (Nine and Ten) fall between the close of the Eighth and the triumph of Mentuhotep III, the exact date of which is not known, but lies between 2050 and 2020. After the clarification by Weill, op. cit., of the processes involved in the swelling of the length of the Hyksos period, involving especially the reduplication of dynasties and numbers, we can hardly doubt that the Ninth Dynasty, with 19 kings and 409 (100) years, and the Tenth, with 19 kings and 185 years, are simple doublets, an impression confirmed by the Turin Papyrus, which gives here 18 kings for the whole

¹ This may afford a hint as to one of the causes of the exaggeration of Egyptian dates; the scribes and historiographers were not liars, though they must have been very careless. When divergent numbers came into their hands, they showed due respect for the sacredness of the records by adopting both! It can easily be imagined how rapidly the chronology would swell, under such treatment.

² The best study of the chronological situation, with a serious attempt to explain the origin of the Manethonian numbers, is found in Weill's monograph, La période comprise entre la XIIe et la XVIIIe dynastie, in Journ. As., onzième série, Tome vi (1915), pp. 1—150.

³ Cf. Lieblein, Récherches, pp. 68-71.

Herakleopolitan rule. The Hyksos parallel, and the situation in the Eighth and Thirteenth Dynasties suggest that we may safely adopt the least number given, a century, and regard that as probably too large!

The only approximately correct number for the whole period is the duration of 160 years for the Eleventh Dynasty, which we owe to the Turin Papyrus. The rulers of this Dynasty fall into three sections (cf. WINLOCK, Am. Journ. of Sem. Lan., Vol. XXXII, pp. 1 ff.): nomarchs of Thebes, rulers of Upper Egypt only, and kings of all Egypt. The rulers of the second series were engaged in conflict with the Herakleopolitans for the hegemony; after a long war Nebhepetre Mentuhotep III (II) won the victory, and reunited the land under one sceptre. About a generation later, the Eleventh Dynasty was replaced by the Twelfth (B.C. 2000). While it is difficult to say just when the Theban rulers became autonomous, this may well have occurred immediately after the death of Pepi II, when the decay of Memphite power was evident to all. This assumption leaves ample space for the Herakleopolitans: 160 - (40 [Memphite] + 30 [Theban]) gives 90 years for the Ninth—Tenth Dynasty, which, as has been pointed out above, is a very reasonable estimate. In Babylonia there is an interesting parallel to this situation. The decline of the empire of Ur set in with the end of Dungi's reign of 58 years; thirty-two years later Larsa declared its independence, followed by Isin, whose first king, Išbi-Urra of Mari (see above), finally conquered Ur nine years after the beginning of the Larsa Dynasty. While the latter began first, the Dynasty of Isin was considered legitimate.

Adding the data thus obtained, the accession of Menes will fall about 2950; the absolute minimum is 2850. Menes seems to have ruled about forty years, to infer from the Palermo-stone; as Narâm-Sin reigned 44 (or 54) years, there is some scope for overlapping.

If Menes flourished in the thirtieth century, instead of the thirty-fourth, or thirty-ninth, it is difficult, though not impossible, to place the date of the introduction of the calendar so early as 4240; one would hardly feel justified in assuming so great a degree of civilization at so remote a predynastic period. On the other hand, it is quite reasonable to suppose that the definite fixing of the calendar took place at the commencement of the next Sothic cycle, in 2780, shortly after the beginning of the Second Dynasty, according to our chronology. It is interesting to note that Kechoos, second king of this Dynasty, is said to have introduced the cult of Apis, an event which the Sothis Book refers to Aseth, last of the Hyksos kings, connecting it with his introduction of the five epagomenae and establishment of the vague year (cf. Meyer, Chronologie, p. 39). As the worship of Apis is much older than the Hyksos period, it is not impossible that both acts were transferred erroneously from Kechoos to Aseth, and that the Egyptians had a tradition that the calendar was fixed during the reign of the former, whose accession would fall about 2780, according to our dates. However, this suggestion is as precarious as the sources upon which it is based.

Following is a synchronistic table of the early chronology of Egypt and Babylonia, to illustrate our conclusions:

EGYPT	Babylonia
3000 The 'Scorpion'	3000 Dynasty of Akkad, Sargon I
2950 First Dynasty, Menes	
	2925 Narâm-Sin
	
2780? Introduction of Calendar	2775 Irruption of the Guti
	

	Есурт		Babylonia
2650	Third Dynasty, Nebkarê	2650	Utu-gegal expels the Guti
	•		
2550	Fourth Dynasty, Hufu		
	<i>v v</i> , s	2500	Gudea I
2450	Fifth Dynasty, Ueserkaf	2465	Dynasty of Ur, Ur-Engur

		2348	Dynasty of Isin, Išbi-Urra
2300	Sixth Dynasty, Teti		
-			
		2225	Dynasty of Babylon, Sumuabum
2160	Eleventh Dynasty, Theban	2153	Elamite conquest of Larsa
2120	Dynasty of Herakleopolis (NinthTenth)	2123	Fall of Isin; accession of Hammurabi
			•
2030	Fall of Herakleopolis		
2000	Twelfth Dynasty		
	•		
		1925	Fall of First Dynasty of Babylon

In conclusion, it must be emphasized that our results, if correct, will not depress the antiquity of Egyptian civilization unduly in favour of Mesopotamia. So far as appears on the surface, the age of Menes in Egypt was no less cultured than the epoch of Narâm-Sin in Babylonia. The Egyptians wrote on perishable papyrus¹, the Babylonians on indestructible clay; it is the misfortune of the former to have employed the more perfect, but more fragile writing material. If a papyrus cache from the Thinite period ever comes to light, we shall get a different impression of the civilization of the age in Egypt. During the long centuries of the kingdoms of Upper and Lower Egypt before Menes, writing must have been cultivated to an extent not varying much from the scope of cuneiform in the centuries before Sargon the Elder. Both Egypt and Babylonia began to date by annual events at about the same time; the earliest known Babylonian dates of this type come from the reign of Šargališarri, Narâm-Sin's successor. Architecturally, the Egyptians of the Thinite period were probably not behind the contemporaneous Babylonians; in the Memphite age they completely outdistanced the latter, whose ziqqurâti never reached the perfection of the pyramids. In sculpture the two peoples kept pace more closely, if we may judge from the statues of Gudea and Hafre, whose similarity in technique has often been noticed, though the latter is superior in execution; according to our chronology, the two works are coëval. The same parallelism may be observed in the external civilization. In the 26th century Snefru controlled the lands adjacent to Egypt on all sides, sending his fleets on the Mediterranean and the Red Sea; a few decades later Gudea was able to send his peaceful missions to Syria and Egypt, by land and by sea. The last great period of the Old Empire, from Sahurē^c to Pepi II (2450—2200), is parallel in civilization and achievements to the Babylonian Empire, from Dungi to the decline of the Dynasty of Isin with Bûr-Sin (2247—2206). Very many additional comparisons might be adduced, but the foregoing is surely enough to show the reasonableness of the reconstruction of ancient chronology defended in this paper.

¹ Papyrus must have been used for writing purposes in pre-dynastic times, as follows from the use of ink to write hieroglyphs on clay.

THE ANCIENT MILITARY ROAD BETWEEN EGYPT AND PALESTINE

By ALAN H. GARDINER, D.LITT.

It is not without good reason that the desert road from El-Kantareh to Rafa, painfully familiar to many a campaigner in Egypt and Palestine, is described in a recent popular book as "the oldest road in the world." To anyone sufficiently acquainted with the history of the Eastern Delta in classical, medieval and modern times it might appear unthinkable that any other road should have been assumed for the early inruptions of the Semites into Egypt or for the punitive expeditions which the Pharaohs despatched to Asia by way of retaliation; and it is strange, therefore, that the historians should have shown the diffidence they have shown in defining the precise route followed by the ancient armies. To-day, at all events, the question is finally settled; for in 1911 Dr C. Küthmann produced convincing evidence that Thel, known from the hieroglyphs to have been the starting-point on the Egyptian frontier, was situated at Tell Abu Sêfeh, a couple of miles eastward of the present great military centre of El-Kantareh; and the identity of the end-point Rafa has never been seriously in doubt. Thus, no new geographical facts have to be demonstrated in the paper here to be printed; the task before us is merely to set forth, in more complete and accurate form than hitherto, such relevant facts as may be gleaned from the monuments and from papyri.

The main source is a fine series of sculptured scenes that occupies the exterior north wall of the great Hypostyle Hall in the temple of Karnak. Here king Sethos I of the Nineteenth Dynasty (about 1300 B.C.) caused to be depicted various memorable incidents of the wars waged by him in the early part of his rather short reign. The sculptures are divided into two series by a door that is nearly in their centre and leads into the Hypostyle Hall. As has often been pointed out, it was the regular practice of the Egyptian artists so to dispose the scenes chosen by them for the adornment of the walls of temples and tombs that the subjects figured might have a direct symbolic reference to the positions that they severally occupy. Professor Breasted has shown that this is conspicuously true in the present case¹. On each side of the door and close beside it the Pharaoh is shown slaying prisoners before Amen-Rec, the god to whom the temple belonged; whereas it is at the remote ends of each of the two half-walls to right and left of the door that the geographically most remote events are being enacted. At the end of the left or eastern half-wall farthest from the door² a scene in the top register is wholly lost, but below it we see the submission of the chiefs of the Lebanon, and below that again the capture of a fortress of Canaan; at the corresponding extremity of the right or western half-wall the events selected for depiction are, from the top downwards, the taking of Kadesh, a battle

¹ Ancient Records, Vol. III, §§ 80 foll.

² As a matter of fact the terminal scenes of this half-wall extend round the corner on to the short eastern face; there can be no doubt as to their continuity with the scenes on the northern face.

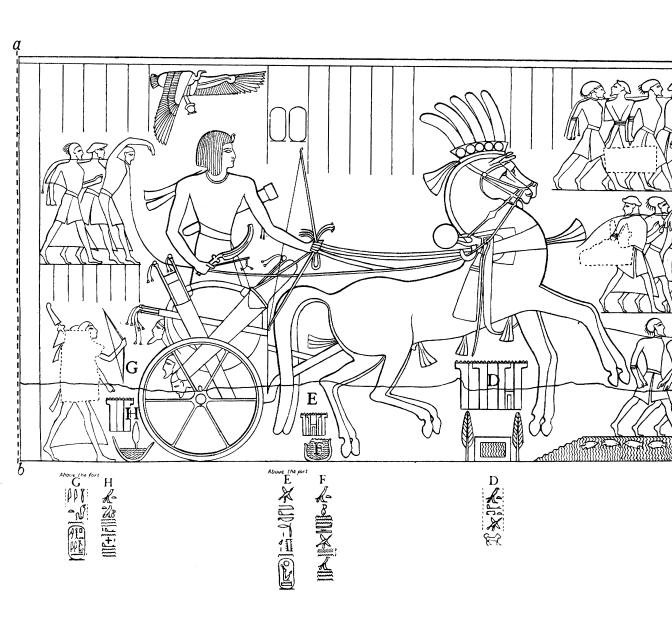
with the Libyans, and a battle with the Hittites. There is every reason to think, with Professor Breasted, that a number of different campaigns are here represented, possibly even one for each register; and that, at all events, the wars referred to on the western half are subsequent to those on the eastern half. The probable reconstruction of the historical sequence is as follows. At the beginning of his reign Sethos I found his eastern frontier threatened by marauding Semites whose name is given as Shōsu¹. The campaign of the first year, or part of it, was concentrated upon their defeat and upon the securing of the coast of Philistia; this is illustrated by the lowest register of the eastern half-wall, the only section of the sculptures where any date (in this case 'year 1') is indicated. Whether the capture of the unidentified town of Yenoam and the conquest of the Lebanon, as shown in the upper register, were effected this year is doubtful; Professor Breasted² thinks not, since in that case Sethos I would probably have returned to Egypt by sea from one of the Phoenician ports, whereas the sculptures referring to the first year depict him returning, with countless prisoners at his chariot-wheels, by land. At all events the reduction of the Lebanon, as in the campaigns of Tuthmosis III, was a necessary prelude to exploits further afield; the capture of Kadesh and the defeat of the Hittites, as figured on the western half-wall, must indubitably be attributed to a later date; and to a later date also we must probably assign the campaign against the Libyans, scenes descriptive of which occupy the middle register on the same wall.

The scenes which concern us here (Plates XI—XII) are from the series occupying the lowest register of the eastern half-wall. To right of them, not reproduced in our Plates, are a picture of Sethos presenting his prisoners to Amūn and another of their immolation (as previously mentioned) before him. These events were intended to be construed as occurring in Egypt, indeed at Karnak itself. The picture to the left of the subject of our Plates, on the other hand, represents the storming of a town somewhere in the maritime plain where the Philistines later settled; whether the words written across a fortress here figured mean 'a town of (the) Canaan' or, as is perhaps more plausible in view of parallel locutions, 'the town of (the) Canaan'—in either case there is sufficient evidence to show that the region designated by the Egyptians as 'Canaan,' 'the Canaan' was the maritime plain just mentioned'. There is thus great probability, from the outset, that the intermediate scenes will represent the road between Egypt and Philistia, i.e. the road between El-Kantareh and Rafa, known to the Elohistic author of Exodus xiii, 17 as 'the way of the land of the Philistines.' This is confirmed by a hieroglyphic legend accompanying the last scene of the series, where the whole campaign is thus described: 'Year 1 of King Menma're', the spoiling made by the strong arm of Pharaoh

¹ For the latest discussion of the historical import of these movements, see Burney, Israel's Settlement in Canaan, pp. 75 foll., 81 foll., where all necessary bibliographical references will be found. While most recent writers connect the name of the Shōsu with the West-Semitic root τους, Sethe has recently returned to the old etymology from Egyptian ¾s 'to wander' (Nachrichten v. d. kön. Ges. d. Wissensch., phil.-hist. Klasse, 1916, p. 130); he also interestingly shows how both the name Shōsu and the still older name ch'amu given to the Semites came to mean 'herdsman' in Coptic times (μως, εμε) because in contrast with the settled agricultural Egyptians the Semites could be regarded as nomads and a pastoral people.

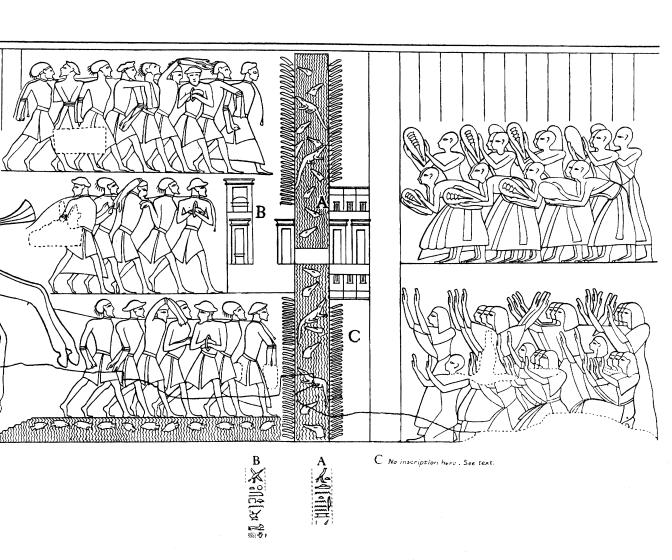
² Op. cit., p. 40, note c.

³ For a most business-like and informative discussion of the term Canaan as used in the Egyptian and other sources see Fr. Böhl, Kanaanäer und Hebrüer, pp. 1—11.



THE MILITARY ROAD FROM EGYI WESTERN PORTIO

N.B.— The hieroglyphs still preserved are marked



ROAD FROM EGYPT TO PALESTINE WESTERN PORTION

l preserved are marked on either side with dotted lines

Turning to our Plates, we find that the artist, making full use of that imaginative and untrammelled freedom of composition which goes far towards mitigating the stiff conventionalities of Egyptian Art, has here combined in a single pictorial sequence two distinct and heterogeneous sets of facts, 1, some lively scenes of warfare, and 2, some extremely valuable topographical data. A difference of scale makes it easy to disentangle the materials here interwoven: the water beneath the feet of the prisoners in Plate XI was clearly intended to be miles rather than yards in extent, and we were certainly not meant to conclude from the representations further to the left that the distance between three fortified wells was spanned by the length of the Pharaoh's horses and chariot. The relation of the human details to the topographical is of the most approximate character; it is true that the return to Egypt is shown to the right near the fortress of Thel, and that the homage done to Sethos by the conquered Shōsu is depicted towards the left, i.e. in the direction of Canaan; but we must not infer from the battle-scene separating these two subjects that the main struggle took place in the precise region indicated by the pools and fortresses immediately below it. Indeed, of so slight an importance to our present quest are these picturesque but hackneyed representations that we are justified in ignoring them altogether; this may the more readily be done, since they explain their own meaning without further commentary.

Blotting out from our vision, therefore, the figures of the subservient Egyptians welcoming home the victorious Pharaoh thronged by hosts of prisoners, the battle-scene where the routed enemy is being trampled beneath the hooves of Pharaoh's horses, and the picture of Sethos receiving the spoils of gold and silver amid a crowd of cringing Semites, we are left with a long line of forts and sheets of water which constitute the earliest equivalent of a map that has come down to us from the ancient world. Before we examine this residue more closely, some account must be given of the sources upon which the Plates have been based. It is a tragic fact and one calculated, it might be supposed, to disturb the peace of mind of every stay-at-home scholar, that this precious historical material is now to a large extent destroyed or so weathered as to be scarcely recognizable. A considerable part of the topographical data—everything below a line marked across the length of both Plates—has now completely perished, and here, as in many of the hieroglyphic superscriptions, we are dependent wholly on a number of old publications no single one of which proves to be reliable. How fervently must we still reiterate the plea for accurate

¹ The scenes depicted in Plate XI are known from the following copies: Burton, Excerpta Hieroglyphica, Pl. 36 (henceforth quoted as B); original drawings in the British Museum, Add. MSS, 25, 645, folios 93 and 101-3, which are considerably better than the published lithograph; the topographical inscriptions (B¹), op. cit., Pl. 17, the materials for which are contained in the aforesaid MSS, folios 153-5; Champollion, Monuments, Pl. 292 (C M); Id., Notices Descriptives, Vol. II, pp. 92-4 (C ND); Rosellini, Monumenti Storici, Pl. 50 (R); Lepsius, Denkmäler, Pt. II, Pl. 128, b+a (L); the copy in Brugsch, Geographische Inschriften, Vol. I, Pl. 48 (Br.), is probably not independent and is, in any case, without much value. For Plate XII the sources are much the same, but B and C M here fail us; C ND, pp. 90-1 has, however, a full description and the Burton MSS, folio 152, give a few names (B²); for the scenes themselves the sole authorities are R, Pl. 49 and L, Pls. 127a+126b. Guieysse, Recueil de Travaux, Vol. XI, pp. 57—61, gives an edition of the texts, based on the publications and on photographs; but this is hardly accurate enough to be of use to us here. Discussions and translations: Brugsch, Geographische Inschriften, Vol. I, pp. 261-5; Id., Dictionnaire Géographique, pp. 590-7; Max Müller, Asien und Europa, p. 134; Breasted, Ancient Records, Vol. III, §§ 83-6; Gardiner, Hieratic Texts, Vol. I, p. 29*.

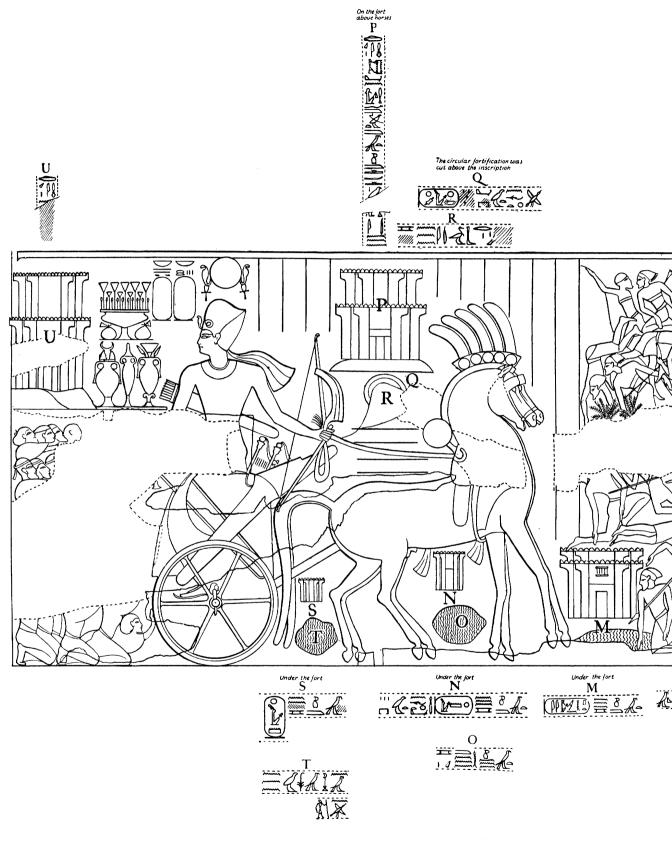
copying of the monuments above ground which Mr Griffith, in 1889, placed at the head of his book on the inscriptions of Assiût! But to return to our Plates—so much of the scenes as is still preserved has been skilfully redrawn by Mr Kitton¹ from the great work of Lepsius, corrections being made from photographs in so far as the scale permitted and in so far as seemed desirable for the present purpose. Students who may compare our Plates with the publication of Lepsius will notice many details where the latter has been bettered, e.g. the crocodiles in the canal, the shape of the fortress of Thel, the trappings of the horses. A further comparison with the earliest copy, namely that by Burton, shows that Burton is often markedly more accurate than Lepsius, despite the more finished appearance of the drawings in the Prussian work. Burton's lithograph is unfortunately confined to the portions contained in our Plate XI; had the scenes further to the left been included, they would doubtless have avoided the enormity there perpetrated by Lepsius, whose draughtsman has omitted the fortress S and the pool T altogether and has displaced the hindlegs of the horses in the most flagrant fashion.

In the topographical data at the bottom of the scenes Lepsius is even a less sure guide than elsewhere, for there is good reason to think that at the time of his expedition much that Burton and Champollion had seen was already destroyed. The hill which Lepsius indicates as extending from a little to the left of our fortress M as far as the neighbourhood of J is probably a simple misinterpretation of the break as it then existed. Rosellini's copy proves that, even in the early days when this was made, much of the lowest region of the sculptures was already unintelligible. The curve under fortress M is really the outline of a sheet of water; this is revealed to us only by Champollion's Notes Descriptives, Vol. II, p. 41, where the pool in question is figured and marked with the ordinary zig-zag lines indicative of water. For the lower part of Plate XI we have relied as much as possible upon Burton, but the accuracy of our details must not be assumed in every point; in the water running below the prisoners the fishes are rendered as in Burton's drawing, whereas Champollion, Rosellini and Lepsius show most of them swimming in just the opposite direction! Elsewhere it has seemed better to follow Champollion and Lepsius, as in the reservoir below D, which in all the publications is central between the trees, but is not so in Burton's original drawing. That the copies in the works of Champollion and Rosellini are interdependent is well-known, but it will come as a shock to many that Lepsius drew largely on his predecessors, though this has already been pointed out by Professor Breasted². An example from the inscriptions will demonstrate the fact beyond possibility of doubt. Champollion marks, in his Monuments, Pl. CCXCII, an inscription at the point C in our Plate XI, omitting it in the well F, where it properly belongs. There is in reality no inscription at C, but LEPSIUS, Denkmüler, Pt. III, Pl. CXXVIII, b places there the inscription found by him in CHAMPOLLION, repeating it, in a form slightly different from that given by Burton, in its proper place.

It has seemed irrelevant to cumber our Plates with the bombastic hieroglyphic legends that fill the blank spaces at the top of the register; the reader curious on this subject may be referred to Breasted's Ancient Records. All the more attention has been given, on the other hand, to the legends containing topographical information. For these the publications have been exhaustively collated with one another and with photographs, and much use has been made, above all, of some careful notes taken by Mr N. de G. Davies in front of the

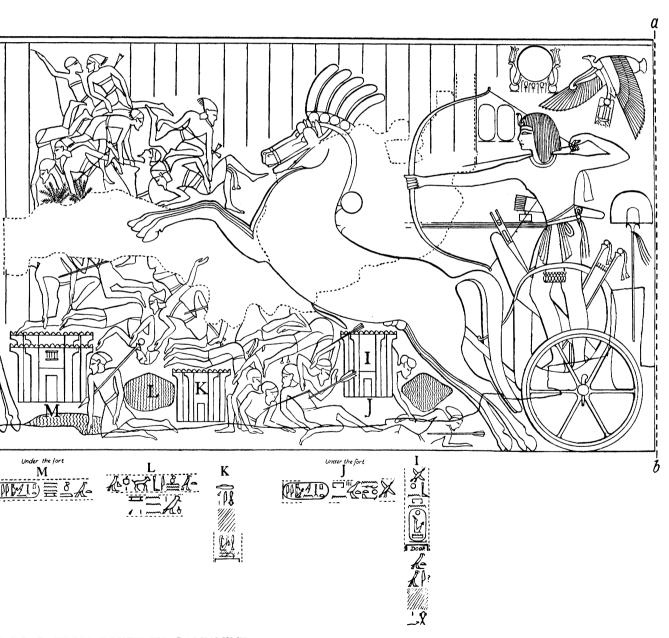
Of the firm of Messrs Emery Walker, Ltd.

² Zeitschrift für ägypt. Sprache, Vol. xxxvII (1899), p. 139, note 5.



THE MILITARY ROAD FROM EGY EASTERN PORTIC

N.B. The hieroglyphs still preserved are marked



Y ROAD FROM EGYPT TO PALESTINE EASTERN PORTION

ll preserved are marked on either side with dotted lines

original monument. What seemed to be the best text obtainable is given on the Plates themselves, the signs still preserved being enclosed within dotted lines. Doubtful readings will be found discussed in the notes below.

Before proceeding to the enumeration of the topographical names, reference must be made to an important passage in Pap. Anastasi I (27, 2-28, 1) where many of these names recur. This well-known papyrus contains a satirical letter from one scribe to another, in which the latter is taunted with complete ignorance of all the knowledge requisite for his profession. The composition ends with a section where the writer shows how incompetent his friend would prove if called upon to serve as a foreign envoy, and in this connection he chances to speak of that road across the north of the Peninsula of Sinai which is here engaging our attention. "Come," he writes1, "I will tell thee of many things. face toward the fortress of \mathbb{R}^{2} [\mathbb{R}^{2}] 'Ways-of-Horus.' I will begin for thee with The-Dwelling-of-Sese. (Sese was a familiar abbreviation by which his subjects were wont to refer to Ramesses II, in whose reign the original of Pap. Anastasi I was probably composed.) Thou hast never trodden it in sooth; thou hast never eaten the fishes of (the waters).....; thou hast never bathed in them. Prithee come, I will remind thee of H-t-y-n; in what direction is its fortress? Come along to Tract-of-Buto-of-Sese (and?) Tract-of-Buto-of-Sese (and?) In-his-Stronghold?-(is)-Usima rec (prenomen H-b-r-t (the r preceding the name seems to be superfluous), thou hast never beheld them since thou wast born. O Maher (a name apparently given to foreign envoys), where is Rafa? What is its wall like? How many leagues march is it to $\left\{ \left| \bigcup_{i=1}^{n} \bigcap_{j=1}^{n} Gaza \right| Answer quickly! Render me a report, so that I may call$ thee a Maher and boast to others of thy name of Mariannu (term for a Syrian lord)."

As we shall see below, out of the twelve place-names here mentioned five can with certainty be identified in the Sethos reliefs, three more find equivalents there which are reasonably probable; two names in *Pap. Anastasi I* are undoubtedly absent from the Karnak wall, where, on the other hand, there are eight or nine names that do not occur in the papyrus. Ten of the twelve names in the latter are thus accounted for; about the last two there might be some hesitation, and as the matter is of considerable importance, we may as well discuss it here. The city, the spoils of which Sethos I is examining in the sculptures, (Plate XII, U) is described in the hieroglyphs as 'the city of.....,' the name being lost.

¹ I have omitted here the notes of interrogation and brackets which are strictly necessitated by this corrupt and defective text, reserving them for the names alone, these being our principal concern in the present context. For fuller details see Gardiner, *Hieratic Texts*, Vol. 1, p. 29*.

² For this rendering see below p. 111, n. 4.

Assuredly this must be either Rafa or Gaza, the only two towns that can come into the question as termini of the military road. Which identification is the more probable? In our opinion Rafa is to be preferred. The omission of so important a place in a list which must necessarily have contained some names of quite slight significance would be very strange, and it is noticeable that the two names immediately preceding Rafa in the papyrus are in the sculptures quite close to the town whose identity we have to determine. As a last argument we may refer to the hill on which the fortress stands; it is true that one of the four quarters of modern Gaza is built on a low hill¹; but it is also true that some of the mud huts which, together with the two frontier police or customs houses, constitute the whole of present-day Rafa are likewise situated upon a hill². Thus Gaza in the papyrus probably stands altogether outside the range of the Karnak sculptures reproduced in our Plates. Is it too rash to conjecture that the 'town of the Canaan,' of which the storming, depicted further to the left, as we have seen, marked the culmination of the expedition of year 1, might be Gaza itself? The occupation of Gaza, at that time no less than in the recent campaign, must have been a vital stage in the successful invasion of Palestine.

Beginning at the right end of Plate XI, the first place to be encountered (B) is the fortress of Thel³.' Since it is there that the Egyptians greeted

the returning Pharaoh, this fortress must obviously have been situated on the frontier of Egypt; and indeed it is now fully established, as stated at the beginning of this article, that the site of the ancient Thel is Tell Abu Sêfeh, two miles eastward of El Kantareh, the starting-point of the modern caravan route to Syria⁴. The ancient name Thel corresponds to that of the Graeco-Roman military post and seat of a bishopric called Sella or Selē, a fact indicating that the transcription Thel is superior to the transcription Zaru which was favoured by most Egyptologists before the identification was established. The fortress lay, as the sculptures show, partly on one side and partly on the other of a canal full of crocodiles, the reedy banks of which suggest that it did not contain flowing water. The name of the canal (A) was a first 'Ta-dēnit,' clearly meaning 'the dividing-waters' and so-called because they sundered Egypt from the desert. The fortress is depicted as a rectangular space contained on each flank by three buildings with doors. The entrance was through a large portal on the Egyptian side, and on reaching the canal one passed through a second portal on to a bridge, the desert side of which ends in a third portal. A little farther on is a tower having within it an unusual vaulted structure. If we now turn to the map given in the Description de l'Égypte (Fig. 1), the best source of information

¹ Encyclopaedia Britannica, 11th edit., s.v. Gaza.

² Martin S. Briggs, Through Egypt in Wartime, p. 235.

³ Only the first two signs are now preserved, but down to *B* the reading is beyond dispute. The lion is incomplete in C *ND* and is marked as indistinct by Br. At the end we have felt compelled to retain *B* since C *ND* marks this with a *sic*; but □ □ in B and Br. suggests , which is the determinative in the general summary of the purport of the sculptures quoted above pp. 100−1. The last-named text, of course, puts the identity of the fortress here mentioned beyond all doubt.

⁴ For the evidence identifying Thel with Tell Abu Sêfeh see this *Journal*, Vol. v, pp. 242-4, and especially p. 244, note 6.

⁵ Dni 'to sunder,' 'to divide,' 'to distribute,' also 'to dam off.' In *Eloquent Peasant B* 1, 237, 277 the word clearly means a dam or barrier of earth; there is no reason why the same word should not designate both kinds of dividing-line, cf. the English 'dyke.' The Sacidic equivalent is THRE, see Peyron.

with regard to the conditions prevailing before the Suez Canal was cut, we see that the Syrian road traverses a narrow strip of land between Lake Menzaleh on the north-west and

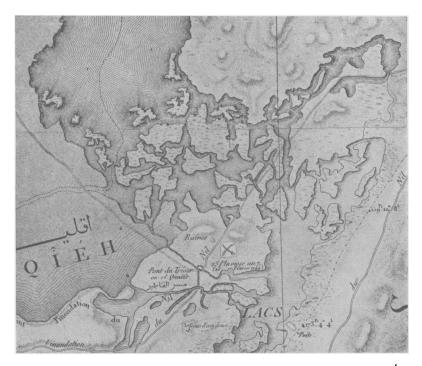


Fig. 1. The neighbourhood of El-Kantareh, as shown in the Description de l'Égypte, Atlas géographique, Pls. 31, 34.

Lake Ballâḥ on the south-east. Two canals run athwart this strip of land, and must evidently have been crossed by bridges, whence the name of the region جسر القناطير Gisr el-Kanâṭir, 'the crossing of the bridges'.' (Kanâṭir 'bridges' was noted by Mr Griffith in 1885 as the invariable name given by the inhabitants to the place now familiar in the singular form El-Kanṭareh, 'the bridge'.') It is not necessary to suppose that the Pharaonic conditions were precisely the same as in the French map, but the latter undoubtedly provides a most striking explanation of the facts indicated by the sculptures'. Just as the

¹ The name *Pont du Trésor*, marked on the French map, seems to be a translation of a local term Kantaret el-Hazneh, see Clédat, in *Recueil de Travaux*, Vol. xxxvIII, pp. 22-3.

² Petrie, Nebesheh and Defenneh (bound up with Tanis, Part II), p. 101.

³ M Clédat (loc. cit.) claims to have actually found the fortress of Thel:—"L'enceinte de la forteresse, je l'ai reconnue au sud-est, sur la face sud et en partie sur la face ouest; la face sud a 195 mètres de longueur, avec quatre tours rondes et une aux angles; les murs construits en briques crues ont 4m. 55 d'épaisseur. Elle forme un quadrilatère aux côtés orientés exactement nord, sud, est et ouest. Je n'ai pas trouvé de portes, mais une des tours avait été sapée en croix." From M. Clédat's description one would imagine that the ancient Thel was nearer to the modern El-Kanṭareh than his previous reports and that of Mr Griffith led one to suppose. M. Clédat has perfectly well understood what water is meant by the canal with the crocodiles, but he offers no explanation of the stream with the fishes. The suggestion made by Dr Küthmann (Die Ostgrenze Ägyptens, p. 47) that the water with the fishes is the Pelusiac Nile-arm ignores the true course of that arm of the Nile, which is many miles to the west and north of Thel.

modern starting-place of the caravan road Gisr el-Kanâţir took its name from bridges crossing the canals connecting Menzaleh and Ballâḥ, so in the time of Sethos I the fortress of Thel commanded a bridge over a canal at right angles to the direction of the road. The water containing fishes below the feet of the prisoners now receives a rational explanation, as Mr Griffith appears to have realized long ago; this stretch of water will be seen to continue for a little distance and then to slope northwards out of the picture. Looking once more at the French map we note that the south-eastern margin of Menzaleh similarly runs parallel to the road for a little way, until at a given point the road definitely bids farewell to the region of water and passes on to a desert tract where wells have to be dug and protected by fortresses.

That desert tract has not yet been reached at the place in the sculptures which we have marked D. This place, called a first 'The-Dwelling-of-the-Lion',' was a fortified outpost, but nevertheless possessed its groves and garden-ponds. In the papyrus 'Ways-of-Horus,' a well-known alternative designation of Thel (see below). The formative expression to 'The-Dwelling' is sufficiently uncommon to render the equation a practical certainty: 'the-Lion' in the Karnak name naturally refers to the reigning Pharaoh Sethos, and there is nothing strange in the substitution of 'Sese' (i.e. Ramesses II) for an epithet of Sethos; other analogous usurpations by successive Pharaohs will be illustrated further on. Now the place called 'The-Dwelling-of-the-Lion' in one context and 'The-Dwelling-of-Sese' in a second is mentioned in a passage (Pap. Anastasi V, 23, 7—25, 2), where the form the name takes is $\bigcap_{\square} \bigcap_{\square} \Big(\bigcirc \bigcap_{\square} \bigcap_{\square} \Big(\bigcirc \bigcap_{\square} \bigcap_{\square} \bigcap_{\square} \bigcap_{\square} \Big) \Big) \bigcap_{\square} \bigcap_{\square}$ of-Amūn.' The passage is a model letter purporting to be addressed to a Royal Butler by two army officers; it has been but seldom translated², and the following rendering will, therefore, perhaps be welcome to our readers. "Ani, lieutenant-commander of the army, and Beknamūn, lieutenant-commander of the army, $\langle to \rangle$ the Royal Butler Ma^cmen. In life, wealth, health! In the favour of Amen-Rec, king of the gods, and of the genius of king $Userma^{\epsilon}r\bar{e}^{\epsilon}$ -setpenr \bar{e}^{ϵ} (Ramesses II), thy good lord. I [speak] to $Pr\bar{e}^{\epsilon}$ -Harakhte: give health to Pharaoh, our lord, may he celebrate millions of Sed-festivals, thou being in his favour every day. Another topic, to wit that we have been sent from the [place where] the King is with three stelae, together with their wooden.....(?) and their base(?)-stones. It was said to us: go after the Butler of Pharaoh very quickly with the stelae; reach him very quickly with them, and hearken to all that he says so that he may place them in their eternal positions. So spoke the King. Behold, we passed the fortress of Ramesses which is in Thel in year 33 (or 13?), second month of summer, day 23, and we shall go to empty the ships at 'The-Dwelling-of-Ramesses-Beloved-of-Am $\bar{u}n$.' (There follow the words: 'and drag the monuments into [the presence of? the Butler of Pharaoh when you come to him'; they are obviously out of place

¹ The lion, now lost, is confirmed by all publications except R, which has a clear horse; the Burton MSS, folio 93, have a lion more distinctly than Burton's published copy. This place-name has been discussed more briefly, *Journal*, Vol. v, p. 132, under H.

² Chabas, Mélanges égyptologiques, Vol. II, pp. 135-9; Maspero, Genre Épistolaire, pp. 18—20; Brugsch, Dictionnaire Géographique, pp. 405-6.

and are probably to be intercalated before 'and hearken' in the foregoing command.) Let the Butler of Pharaoh write to us about all that we are to do." Here it is evident that 'The-Dwelling-of-Ramesses,' like 'The-Dwelling-of-the Lion' in the Karnak sculptures, was the farthest point along the Syrian road that could be reached by water; probably the stelae alluded to were destined for Syria, and bore triumphal inscriptions designed to impress the might and majesty of Pharaoh upon the terrified peoples of Palestine. While we may thus roughly localize 'The-Dwelling-of-the-Lion,' its exact position remains uncertain. We can feel no great assurance in identifying it with the spot marked Ruines in the French map $5\frac{1}{2}$ kilometres along the road from the extreme edge of Menzaleh; for here, as Mr Griffith points out¹—he gives the name as Tell Habwe instead of the Tell Semut spoken of by others—there is no more than a small heap of red brick, about 20 yards square, perhaps the remains of a medieval guardhouse².

The name of the fort E deserves careful consideration, for there is good enough reason for believing, despite the doubts of some scholars, that it corresponds to the Migdol of the Old Testament and to the Magdolo of Graeco-Roman times⁶. The word 'Migdol' is a well-

¹ Petrie, Nebesheh and Defenneh, p. 101.

² M. Clédat's attempt (*Annales du Service*, Vol. xvi, p. 10) to identify '*The-Dwelling-of-the-Lion*' with El-Flusiyeh, the probable site of Ostracine at the eastern end of Lake Serbonis, is obviously very wide of the mark.

 $^{^3}$ C ND and R have the inscription correctly, the other publications having minor variations; L omits the cartouche.

⁴ As already pointed out (p. 102), C M and L wrongly place this legend at C in Plate XI, L repeating it in another form at the point F; R omits it altogether. The variants are: B (and B¹) _______; C ND ______; C M and L (at C) _______; L (at F) ______; L (at F) _______; L (at F) _______; L (at F) ______; L (at F) _______; L (at F) ________; L (at F) ________; L (at F) _________; L (at F) _________; L (at F) __________; L (at F) ______________; L (at F)

⁵ Erman, in Zeitschr. f. äg. Sprache, Vol. xv (1877), p. 37; Max Müller, Asien und Europa, p. 134.

⁶ So rightly Brugsch, Geographische Inschriften, Vol. 1, p. 261, where he combats the views on the subject previously expressed by Lepsius, Chronologie, Vol. 1, p. 340, note 5. Brugsch's later utterances on

known Semitic term for 'tower' (מגרל) and was probably borrowed by the Egyptians as early as the Eighteenth Dynasty; as a common noun it occurs in the Golénischeff Glossary 6, 1 (Dyn. XXI), is found occasionally in the form μαγδωλός in Graeco-Roman documents (e.g. Grenfell and Hunt, Fayûm Towns, p. 154) and survives as μεστολ: μιστολ in Coptic. Hence it may well have been the designation of many different places; there was a village called Magdolo or Magdolos in the Fayûm, and the demotic papyrus Cairo 31169 (recto, col. 3, nos. 20-3) mentions no less than four Migdols in the Eastern Delta. It is significant, however, that only the first and westernmost of the four Migdols in the Cairo papyrus remains without further epithet or qualification, and while the other three are probably forts of less importance further along the road to Palestine, the first is in all likelihood identical with the Magdolo² recorded by the Antonine Itinerary as lying midway between Pelusium and Selē and at a distance of 12 Roman miles from each. That this Migdol was a town of some size seems likely from the Hebrew Prophets: Ezechiel xxix, 10 and xxx, 6 threatens desolation upon Egypt 'from Migdol to Syene'—the marginal rendering in the Authorized Version is undoubtedly right; Jeremiah xliv, 1 and xlvi, 14 names Migdol in the same breath as Tahpanhes (Daphnae) and Noph (Memphis), the three cities being the places where the Jewish refugees from the Babylonians had congregated and where the prophecy of Egypt's downfall is now, accordingly, to be preached. Nor does the obscure narrative of the Exodus afford any real grounds for distinguishing the Migdol therein mentioned (Exodus xiv, 2; Numbers xxxiii, 7) from the Migdol of the Prophets³. Very possibly also the Μαγδωλὸς πόλις Αἰγύπτου mentioned by Stephen of Byzantium, quoting from Hekataeus, as well as by the grammarian Theognostus', may be considered identical with the Biblical Migdol and the Magdolo of the Itinerary. The latter Brugsch sought to equate with Tell es-Semut, the doubtful name of which is replaced by Tell Habwe in all recent accounts. We have tentatively suggested an identification of Tell Habwe or Tell es-Semut with 'The-Dwelling-of-the-Lion' named at D in the Karnak sculptures; the hesitation that we felt upon the point was due to the small extent of the ruins, a fact which a fortiori excludes the possibility that this was the site of a prominent town like Migdol-Magdolo. For that town the only location possible seems to be at Tell el-Hêr (the Description has Hêr with a); the late Mr Greville Chester and Mr Griffith, both of whom have visited the

the subject are complicated by venturesome and impossible conjectures, put forward in the most dogmatic fashion; see *L'Exode et les Monuments Égyptiens*, pp. 20, 27; *Dictionnaire Géographique*, pp. 50–2, 310–1, 648. Further bibliographical references in the footnotes below. See especially Max Müller, art. Migdol in *Encyclopaedia Biblica*.

- ¹ See Spiegelberg, *Die demotischen Papyrus*, pp. 273 (where l. 23 is overlooked in the transcription) and 278. Daressy, *Sphinx*, Vol. xiv, p. 169, has proposed some new readings, which, as I understand, are not to be trusted.
- ² This place is sometimes marked as Magdolon on the maps. Jerome has Magdalum, and this is perhaps the source of the neuter form.
 - ³ This point I hope to deal with in detail on another occasion.
- ⁴ Μαγδωλὸς ὄνομα πόλεως, Theognostus, Canones, apud Cramer, Anecdota Graeca, Vol. 11, p. 62, l. 31. I am indebted for the exact reference to Mr H. I. Bell.
- ⁵ The identification of Migdol with Tell es-Semut started Brugsch on a characteristic chase after further phantastic conjectures; upon this depends his guess that another name of Migdol was (according to him one of several towns so-called), see *Dictionnaire Géographique*, p. 707; hence too, doubtless, the supposed *nome* of Migdol, *op. cit.*, p. 1390.
- ⁶ See his admirable paper entitled A Journey to the Biblical Sites in Lower Egypt, etc. in Quarterly Statement of the Palestine Exploration Fund, July 1880, especially p. 148.
 - ⁷ Petrie, Nebesheh and Defenneh, p. 103, note 1.

site, are agreed upon this point. Tell el-Ḥêr stands on the south side of a spit of sand running westward into the bed of a lake; it is conspicuous for a high medieval fortress of red brick, but besides there are traces of a town of large size, where innumerable sherds of pottery, fragments of ancient glass, and Ptolemaic coins are still found scattered over the surface of the mound. The only objections that could be raised to the identification of Migdol-Magdolo with Tell el-Ḥêr are that this mound is much nearer to Pelusium (about 7 Roman miles) than to Selē (12 Roman miles, as in the Itinerary), and that it is not directly on the caravan-route to Palestine. An objection similar to the first would remain whatever identification might be proposed, the distance between Pelusium and Selē being much exaggerated in the Itinerary. The second objection is scarcely one at all, since the designer of the Karnak sculptures—the only source that seems to indicate that Migdol was actually on the military highroad—may not have intended anything so precise, but may simply have desired to express the fact that the well F was at about the same level as the fort at Tell el-Ḥêr, which in any case will have been easily visible; the absence of Migdol in the Anastasi papyrus might conceivably be quoted in support of the last conjecture.

To turn now to the hieroglyphic texts where a Migdol is mentioned, if there be eliminated a Palestinian place of the name that is to be found in a list of the time of Ramesses III¹ and another occurring among the conquests of Sheshonk I², all the other passages may well be taken as referring to the Migdol at Tell el-Hêr. That 'The-Migdolof-Menma^crē^c' in the Karnak sculptures cannot have been far from Tell el-Ḥêr is at once obvious, so that it is quite unnecessary to seek any other position for that Migdol, at least. Likewise, no very cogent reason has been given for placing elsewhere a Migdol named after the same king that is alluded to in a model letter of the Nineteenth Dynasty. The passage has not been quite correctly translated, so that a new rendering of the crucial sentences (Pap. Anastasi V, 19, 6-20, 2) can hardly be dispensed with. One officer is reporting to another concerning his search for some run-away slaves:—"I was despatched from the Courts of the Royal Palace on the ninth day of the third month of summer, at eventide, in quest of those two servants. I reached the enclosure-wall of Theku (i.e. Tell el-Maskhûţeh in the Wâdy Tûmîlât) on the tenth day of the third month of summer, where they told me that they had said in the south that they (the slaves) had passed on the tenth (sic?) day of the third month of summer. And [when I] reached the fortress (scil. of Theku), they told me that the groom (?) had come from the desert [to say] that they had passed the north wall of

Meneptaḥ-(is)-beloved-like-Seth.' As will be seen, there is no indication whatever as to the

¹ At Medinet Habû, Max Müller, Egyptological Researches, Vol. 1, Pl. 68, no. 82.

 $^{^2}$ At Karnak, op. cit., Pl. 80, no. 58. The Magdolus of Herodotus, II, 159, where Necho defeated Josiah, is clearly a blunder for Megiddo.

³ Quoted and discussed by Chabas, Recherches pour servir à l'histoire de l'Egypte au temps de l'Exode, p. 122. Translations: Brugsch, Dictionnaire Géographique, p. 51; Id., Geschichte Ägyptens, 1st ed., pp. 585-6; Id., Steininschrift und Bibelwort, pp. 227-8; a translation revised by Mr Griffith in the late Professor Driver's contribution to Authority and Archaeology, ed. D. G. Hogarth, p. 60; Driver, Exodus, pp. xxxviii-ix.

⁴ What exactly this means is not clear; but it is surely impossible to render, as has been sometimes done, 'and was told that they spoke of (or purposed) the south—they passed on on the 9th of Epiphi.' The phrase hr rsy can only mean 'in the south' and r dd that follows is clearly to be construed with mdt.

direction in which the slaves were making or as to the distance that they had already covered. But for the desire that has been felt to coordinate this passage with the story of the Exodus, Theku being identified with Succoth, it is hardly likely that this Migdol would have been differentiated from that at Tell el-Hêr¹. Lastly, the place named \(\sum_{\text{NN}} \sum_{\text{NN

'Migdol-of-Ramesses-Prince-of-Heliopolis' in the sculptures of Ramesses III

at Medînet Habû must surely be located at Magdolo or Tell el-Hêr, despite the severity with which Max Müller castigated the folly of those favouring this view². The texts accompanying the sea-fight and the neighbouring scenes distinctly say that 'the peoples who had come from their islands in the midst of the sea were advancing against Egypt' and that they had 'entered the river-mouths,' where a word is employed that is not known to apply to any estuaries except those of the Nile³. There seems good reason for supposing that it was the Pelusiac Nile-arm that was attacked by the islanders, and that in consequence of this attack Ramesses III retired to his town of Migdol a little further inland. Thence he sallied forth, when the victory was won, to congratulate the victors and to receive the cut-off hands which were the visible token of their success.

We now pass on to a number of forts and wells for which no likely identifications with modern sites can be suggested. At G is a fort called \(\) \(\

differently from those at F and H, namely as ponds or pools of irregular shape. The

¹ Professor Naville (*The Store-city of Pithom*, p. 30) follows Ebers in placing the Migdol of Exodus near the modern railway-station of *Scrapeum*. At some other time, according to the article in *Encyclopaedia Biblica*, Ebers identified the Migdol of Exodus with the modern Bîr Makdal or Makhdal (*Description*, Atlas, Pl. 31) 23 miles NE of Ismailîyeh. However, this last Migdol is a doubtful quantity; the most recent War Office map names a Bîr Madkur near the point where the supposed Bîr Makdal ought to stand; have two similar names been confused?

² Asien und Europa, pp. 177-8. Note that here the word Migdol is determined by the sign for 'town' (⊗) and dispenses with the definite article, cf. No, the common appellation of Thebes.

³ For the scenes see Champollion, Monuments, Pls. 222-5; Rosellini, Monumenti Storici, Pls. 131-3. Translations of the texts are to be found in Breasted, Ancient Records, Vol. IV, §§ 74-7.

⁴ A few signs only are left, L gives all correctly; C M and C ND omit n at end of the cartouche. The whole name is omitted by B and R.

⁵ See Zeitschr. f. ägypt. Sprache, Vol. LI (1913), p. 123.

⁶ Now entirely destroyed. L alone gives the <u>h</u>nmt quite complete. For the rest B, C, R and L are in substantial agreement, with minor variations as regards the dubious sign.

⁷ C M and B (B¹) fail here, but the Burton MS (B²) gives a few names.

fortresses similarly vary in size and plan. Whether in both cases the artist was endeavouring to record actual facts or whether he was merely indulging his individual fancy cannot be determined without investigation on the spot. On fort I (Plate XII) are the words

'The-Castle-of-Menma' rē' (called?) The-...-(is)-his-Protection'.' Several 'castles' (bhn) named after kings of the Nineteenth Dynasty are known, but only one of them is at all likely to be identical with the 'castle' of Sethos I here mentioned; this is here mentioned; this is 'The-Castle-of-Meneptah-who-has-pleasure-of-Truth,' whence came a henchman (smsw) Nakhtamūn who was sent to Palestine with despatches? Under the same fort, at J, we read 'The-Stronghold-of-Sety-Meneptah'.' There seems to be no alternative but to regard this as a second name of the fort, seeing that Pap. Anastasi I here gives as its equivalent 'In-his-Stronghold'-(is)-Usima' rē'.' But it is obviously strange that the fort should have two names, while the adjacent pool has apparently none.

The hilly ground marked by Lepsius in this neighbourhood has already been shown to be illusory. At K there is a fort which is described as \(\begin{align*} \leftille{\text{Cown}} & \text{which \leftilde{His}} \right) Majesty [built] \(\leftilde{hewly} \)^5.' The sculptor has not found room for the suffix-pronoun \(f \) his' nor for the adverb \(m\beta w \) 'newly,' and it is not impossible that a place-name that was in the original draft has also been omitted. The papyrus mentions at this point a place called \(\begin{align*} \leftilde{hex} \right) \leftilde{hex} \right) \(\begin{align*} \leftilde{S-b-\bar{e}l}, \text{ coupling it with } \end{align*} \) \(\begin{align*} \leftilde{S-b-\bar{e}l}, \text{ coupling it with } \end{align*} \) \(\begin{align*} \leftilde{S-b-\bar{e}l}, \text{ coupling it with } \end{align*} \) \(\begin{align*} \leftilde{S-b-\bar{e}l}, \text{ coupling it with } \end{align*} \) \(\begin{align*} \leftilde{S-b-\bar{e}l}, \text{ coupling it with } \end{align*} \) \(\begin{align*} \leftilde{S-b-\bar{e}l}, \text{ coupling it with } \end{align*} \) \(\begin{align*} \leftilde{S-b-\bar{e}l}, \text{ coupling it with } \end{align*} \) \(\begin{align*} \leftilde{S-b-\bar{e}l}, \text{ coupling it with } \end{align*} \) \(\begin{align*} \leftilde{S-b-\bar{e}l}, \text{ coupling it with } \end{align*} \) \(\begin{align*} \leftilde{S-b-\bar{e}l}, \text{ coupling it with } \end{align*} \) \(\begin{align*} \leftilde{S-b-\bar{e}l}, \text{ coupling it with } \end{align*} \) \(\begin{align*} \leftilde{S-b-\bar{e}l}, \text{ coupling it with } \end{align*} \) \(\begin{align*} \leftilde{S-b-\bar{e}l}, \text{ coupling it with } \end{align*} \) \(\begin{align*} \leftilde{S-b-\bar{e}l}, \text{ coupling it with } \end{align*} \) \(\begin{align*} \leftilde{S-b-\bar{e}l}, \text{ coupling it with } \end{align*} \) \(\begin{align*} \leftilde{S-b-\bar{e}l}, \text{ coupling it with } \end{align*} \) \(\begin{align*} \leftilde{S-b-\bar{e}l}, \text{ coupling it with } \end{align*} \) \(\begin{align*}

- ² Pap. Anastasi III, verso of p. 6, col. 5, l. 1. On the stele published Mariette, Abydos, Vol. II, Pl. 57, there is named a Mayor (http-') Hori of 'The-Castle-of-Ramesses,' Ramesses I being meant; but this man held another office in Abydos, and is therefore not likely to have had much to do with an outlying provincial fortress. Again in a well-known passage (see this Journal, Vol. v, p. 187, no. 17) the great town of Ramesses II is named a 'castle' (bln). It is, of course, out of the question that the town of Ramesses should be meant in the Karnak reliefs.
- ³ Only fragments are now left; B² is also incomplete. Nevertheless the reading is sufficiently well authenticated; C ND omits the second t of nhtw and the n in the cartouche; L gives these, but marks a lacuna in place of the n before the cartouche.
 - ⁴ For the word nhtw 'stronghold' see Harris 76, 8; 77, 5 and below at Q.
- ⁵ The signs hm m are given as seen by Mr Davies, who is a trifle hesitating, however, about the absence of f; C ND gives m, but L marks a lacuna. For the restoration see below at P.

'Ib-s-k-b'.' At M, between the fortress and the pool which, as we have seen, Champollion alone marks as such, is the legend of Sety-Meneptah2'; a name appears to be missing, and it must be noted that somewhere between L and S must be sought the place \(\frac{1}{\infty} \) \(\frac{\cup -n-n}{\infty} \) \(\frac{\cup -n-n}{\infty} \) mentioned in the Anastasi papyrus³. Surprise will be felt that the names at N and O should both be given as the names of wells; the legend at N one would expect to belong to the fort. Clearly $The \ well \ Menma^{c}rar{e}^{c}$ - (is) - Great - in - Victories 'at Ncan have nothing to do with the Delta Residence of Ramesses II, which also was called At P and R we obtain for the first time names referring to places not immediately on the Syrian road. If any conclusion can be drawn from their position on the wall, they lay to the south of N and S. The double towers perched on a low mound at P bear the words (Q) The Stronghold of Menma rec-Heir-of-Rec; recalling the similar epithet at J, but some circular fortifications added after the legend was cut have obliterated some signs. The fortifications in question seem to be a sort of protecting wall around the blue pond R, across the top of which is written a name partly destroyed by a break, perhaps $(?-b(?)-r-b-t^7)$.

¹ Still intact except for the two lower n of $\underline{h}nmt$ and the top n at the end of the name; these are confirmed by both C ND and L.

² Still intact.

³ From Pap. Harris 77, 6—8 we learn that Ramesses III made a fortified well in a place called ϵ -y-n, which might just possibly be the ϵ -y-n-n of Pap. Anastasi I.

⁴ The publications are dubious as to the sign $n\underline{d}m$, but Mr Davies marks it as quite certain. He also concludes that the only other sign that is doubtful must have been =; there are slight indications of a horizontal sign; CND and L give = as against = in R.

⁵ Mr Davies gives the only signs that are doubtful thus:

the break he suggests $\mathfrak D$ or $\mathfrak J$, but perhaps the hind-legs of the lion is a possible suggestion. The publications have some obvious errors and offer no help. Professor Breasted's proposal (Ancient Records, Vol. III, p. 45, note a) to restore the lacuna from the name at Q

⁶ The extremely doubtful plural strokes, the very questionable $\sqrt{}$ and the <u>unun</u> of the cartouche have thus been destroyed.

⁷ Mr Davies thinks that the bird of which only the tail is left must be the human-headed bs.

'N-h-s of the Prince.' The latter place-name corresponds to N-h-s in the papyrus, the last place to be mentioned before Raphia. It is upon this fact that the conjecture has been based that at T R-ph. The name of the city of Raphia' is to be read. The papyrus gives R-ph. The name of the city of Raphia, the modern Rafa, is mentioned in the two palimpsest lists (temp. Sethos I) of Palestinian places on the same north wall of Karnak upon which our sculptures are found's; elsewhere in hieroglyphs it is found only in the list of Sheshonk's, where it is written is the Assyrian equivalent is Raphia. Raphia was the scene of at least two great battles before the Christian era; the first was in 720 B.C., when Sargon of Assyria defeated Sabacon, the Ethiopian ruler of Egypt; the second was in 217 B.C., when Ptolemy IV gained a decisive victory over Antiochus III of Syria.

It may be convenient now to set forth in tabular form the place-names on the road to Palestine that are mentioned either in the Karnak sculptures or in the papyrus *Anastasi I*, together with such few modern identifications as are certain or plausible.

Karnak	Pap. Anastasi I	Modern Site
1. 'The fortress of Thel,' B	(= 'Ways of Horus'	Ķanţareh
2. 'The dividing-waters' (name of canal), A	J	
$3.$ ' $The ext{-}Dwelling ext{-}of ext{-}the ext{-}Lion,$ ' D	= 'The-Dwelling-of-Sese'	Tell \mathbf{Habwe} ?
4. 'The-Migdol-of-Menma rēc,' Ε) —	Tell el-Ḥêr?
5. 'The well Ḥ-p-n,' F) ?= ' Ḥ-tַ-y-n '	(Magdolo)
6. 'Buto-of-Sety-Meneptah,' G	\ = 'Tract-of-Buto-of-Sese'	Ķaţîyeh??
7. 'The well Tract-of,' H	<u> </u>	
8. 'The-Castle-of-Menma $crec(called?)$ The(is)-)	1	
his-Protection,' I		productive and the second
9. 'The-Stronghold-of-Sety-Meneptah' (alterna-)		
tive name for 8?), J	? = In-his-Stronghold-(is)-Usima rec	
10. 'Town which (His) Majesty [built] (newly),' K		************
11.	$S ext{-}b ext{-}ar{e}l$	
12. 'The well 'Ib-s-k-b,' L	=' Ib - s - kb	
13. 'The well of Sety-Meneptah,' M		-
14.	ϵ_{-y-n-n}	-
15. 'The well Menma erē (-(is)-Great-in-Victories,' N	·	*****
16. 'The well (called) Sweet,' O		
17. 'Town which His Majesty built newly at the well)	? = H - b - r - t (follows 21)	and the same of the same
H- $b(?)$ - $?$ - t , P	•	
18. 'The-Stronghold-of-Menma re-Heir-of-Re')		
(alternative name for 17?), Q		***
19. '?-b(?)-r-b-t,' R		-
20. 'The well of-Menma (rē',' S)	Accordance design
21. 'N-h-s of the Prince,' T	= N - h - s (precedes 17)	***************************************
22. 'The-town-of-[Raphia],' U	=R-ph	Rafa
23.	K-d-t ——	Gaza
au.		5.00.00

¹ The n, omitted by all publications, is clear. For the restoration R-p-h see above p. 104.

² See Max Müller, Egyptological Researches, Vol. I, Pl. 57, no. 16; Pl. 58, no. 17.

³ Op. cit., Vol. 11, pp. 113-4.

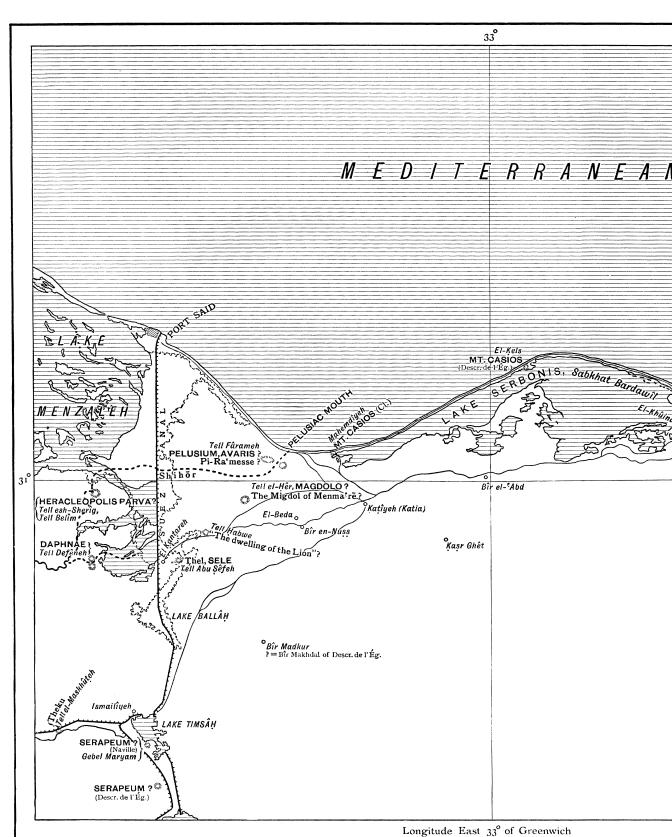
It does not fall within the scope of this article to describe in detail the natural conditions and landmarks of the Kantareh-Gaza road, nor yet to enumerate the historical events of which it has been the constant scene. As regards the first point, it will suffice to mention very briefly the salient features, and for the rest to refer the reader to the works of some recent travellers and investigators; as regards the second, we shall confine our attention to the Pharaonic period.

In the main, the region of northern Sinai between Kantareh and Rafa may be described as an inhospitable, almost waterless desert, inhabited only by a small population of Bedâwîn nomads. Two principal roads lead across it eastwards from Egypt (Plate XIII): the shorter one runs from the neighbourhood of Fârameh (Pelusium) along the narrow ridge of land between Lake Serbonis and the sea; this rejoins the longer, inland route not far from Zaranîk at the south-eastern extremity of Serbonis. The northern road was that supposed by Brugsch to have been taken by the departing Israelites in their Exodus from Egypt, wrongly no doubt; but now and again in the course of history it may have formed the place of transit for expeditionary forces, though its double risk of quicksands and of submergence through a northern wind, as described in the graphic accounts given by the late Mr Greville Chester¹ and by M. Clédat², rendered it far too uncertain and treacherous ever to become the normal or customary route, whether for military or for commercial purposes. The landroute well to the south of Serbonis is obviously that which has been preferred from time immemorial, and is certainly that depicted in the Karnak sculptures.

Concerning this southerly road Kinglake has an entertaining chapter in *Eothen*, but his narrative turns more on the incidental features of the journey—upon the psychology of the Arab guides rather than upon the nature of the country. Other accounts to which one can refer are a paper by Mr A. R. Guest in the *Geographical Journal*³, some notes by Mr Griffith in one of the E. E. F. publications⁴, and a popular recent account in a war-book by Mr Martin S. Briggs⁵. Uninteresting as the road assuredly is from the landscape point of view, nevertheless it has formed the subject of a monograph from which historical memories have been ruthlessly excluded: the little book by the Archduke Ludwig Salvator of Austria contains a considerable number of drawings from which a good idea of the tract of country can be derived⁶. Last of all, the French archaeologist M. Clédat spent a number of years just before the war in investigating the ancient sites near the Suez canal, and many illuminating reports of excavations and other researches here have appeared from his pen in the *Annales du Service* of Cairo⁷.

The distance between Kantareh and El-CArîsh is 91 miles, between El-CArîsh and Rafa 29 miles more, and from Rafa again to Gaza 20 miles, in all a distance of 140 miles. Wells have been sunk at every five or six miles all along the route, and as a rule yield a good supply of clear water, though very brackish. There is plenty of herbage and low scrub in most places, and here and there, as at Katîyeh, there are palm-groves. Sheikhs' tombs and various

- ¹ In Palestine Exploration Fund, Quarterly Statement, July 1880, pp. 144—158.
- ² Annales du Service, Vol. x, pp. 209-237.
- ³ Vol. XIII (1899), pp. 281–5. ⁴ The Mound of the Jew, pp. 35–7.
- ⁵ Through Egypt in War-time, pp. 190-237.
- ⁶ The Caravan Route between Egypt and Syria. London, Chatto and Windus, 1881.
- ⁷ Besides the articles elsewhere quoted in the footnotes see the following: Vol. XII, pp. 145—168, excavations at the Roman site of Kaṣr Ghêt, south-east of Kaṭīyeh; Vol. XV, pp. 13—48, the Roman site of Shêkh Zuwêd, between Rafa and Gaza, where fine mosaics were found; Vol. XVI, pp. 6—32, the Roman site of El-Flûsîyeh, identified by M. Clédat with Ostracine.



ancient remains are found on all hands; indeed there seems no particular reason here why ancient monuments should perish at all, and doubtless excavation would reveal many of the fortresses depicted in the Karnak sculptures. None the less, not a single ruin of Ramesside date appears to have been identified as yet. M. Clédat has just published an account of a Ramesside fortress recently discovered by him between the Bitter Lakes and Suez, and this affords an admirable notion of what the contemporary fortresses on the Kantareh-Rafa road may have been like. The newly discovered building was a square tower about 15 m. on each side, doubtless with crenellated walls; the first storey was probably lighted by one The interior was divided into three portions by long walls parallel to or more windows. the entrance-door; the hindermost of these contained a chapel with sculptured scenes and hieroglyphic texts. But to return to the Kantareh-Gaza road. After leaving Kantareh there is no town or even village worthy of the name until El-'Arîsh is reached. This, which is now a town of some 4000 inhabitants, appears to have been in Graeco-Roman times the frontier-station of Rhinocorūra, a place that owes its name to the fact that prisoners docked of their noses were sent thither for penal servitude, just as they were sent to Thel in the time of Haremhab. Beyond El-CArîsh the desert-character of the landscape begins to disappear, gradually giving place to meadows and arable land. Rafa is the present Syro-Egyptian frontier, but consists now of little more than a few mud-huts. The railway from Kantareh runs at the present time as far as Dêr el-Bela, only a little distance beyond which lies the famous Philistine city of Gaza.

There seem good grounds for believing that the Kantareh-Rafa road was used by the Egyptians approaching Palestine, no less than by the Palestinian Syrians approaching Egypt, from time immemorial. A trace of the earliest Dynastic period has been found in some very ancient pots with incised hieroglyphic Horus-banners which were discovered by M. Clédat at El-Beda, not far from Bîr en-Nuss. But still more significant testimony to the great age of the road is provided by the name Ways-of-Horus,' Sinuhe, B, 242; Pap. Petrograd 1116 A, recto, 89; Ways-of-Horus, IV, 237; MARIETTE, Dendera, Vol. II, Pl. 39d; Bulletin de l'Inst. Franç., Vol. XI, p. 31, that was given to the place later called Thel, i.e. Tell Abu Şêfeh near Kantareh3; this name can only signify that the locality to which it refers was an important station upon the road employed by the living Horus, i.e. the reigning Pharaoh, for his victorious marches abroad. The name 'Ways-of-Horus' is probably far older than the texts in which it is first encountered. By the time of the Herakleopolitan Dynasties 'Ways-of-Horus' was already a garrison-town, if we may trust the 'Instruction of King Akhthoy' contained in the abovequoted Petrograd papyrus: 'I drove in my (?) mooring-post in a region that I made to the east of the boundaries of Hbn (?) at Way(s)-of-Horus, equipped with townsmen, and filled with people of the best of the entire land, in order to repel the arms of......' Again, the exile Sinuhe in the well-known tale returns to Egypt via 'Ways-of-Horus': 'Then came this

¹ Bulletin de l'Institut Français, Vol. xvI, pp. 208—212. Also a brief account by Mr Offord in Palestine Exploration Fund, Quarterly Statement, October 1919, pp. 175-7.

² Annales du Service, Vol. XIII, pp. 115—121.

³ That W?wt-Hr was synonymous with Thel was proved by means of two passages in the temple of Dendereh by Erman, Zeitschr. f. ägypt. Sprache, Vol. XLIII (1906), pp. 72-3.

humble servant southward and halted at Ways-of-Horus. The commander who was there in charge of the frontier-patrol sent a trusty head-fowler of the Palace, having with him ships laden with presents of the Royal bounty for the Asiatics that had come with me to conduct me to Ways-of-Horus.....Then I set out and sailed, until I reached the town of Ithtoue.' From the last passage it emerges, as it does also from a letter in Pap. Anastasi V cited above, that the region of Memphis was accessible by water from Kantareh; perhaps vessels could cross a portion of Menzaleh and join the Bubastite river somewhere near Daphnae.

It is unnecessary to do more, in conclusion, than allude to the fact that not only Sethos I, but also Tuthmosis III and Ramesses II² are known from documentary evidence to have used Thel as the point of departure for their expeditions to Syria. For other Pharaohs than these, both earlier and later, positive evidence is not forthcoming; here, however, the probabilities may serve as sufficient testimony. There can be little or no doubt but that the road from El-Kantareh to Gaza via Rafa has witnessed the marches of nine-tenths of the armies that have sought to invade Palestine from Egypt, or Egypt from Palestine, along the land-route.

¹ See p. 106.

² Tuthmosis III, see Sethe, *Urkunden* iv, 647; Ramesses II, see this *Journal*, Vol. v, p. 179, no. 2. For further information with regard to Thel see *op. cit.*, Vol. v, pp. 242-4. For a scarab of Ramesses II, now at Moscow, recording the 'establishment (*grg*) of Thel,' see Turaeff, *Egyptological Notes*, vi in *Bulletin de l'Académie Impériale des Sciences*, 1915, p. 611.

NOTE ON THE STATUETTE OF A BLIND HARPER IN THE CAIRO MUSEUM

By Professor GEORGE A. REISNER.

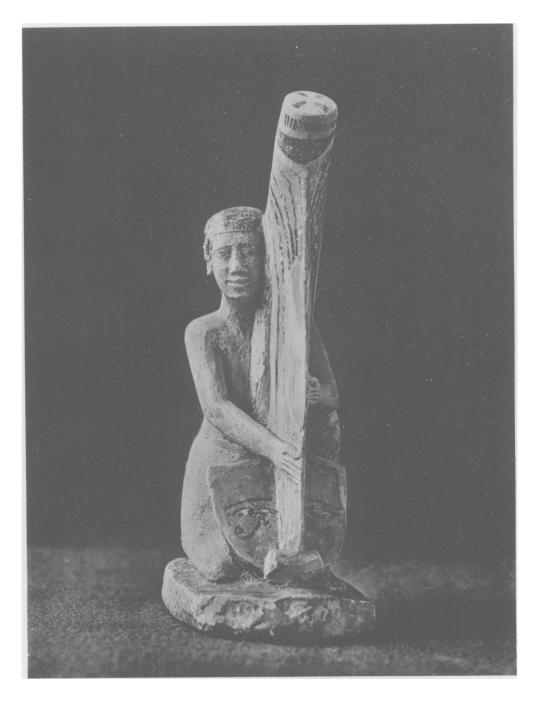
The figure of a blind harper reproduced in Plates XIV-XV is of white limestone painted in the usual conventional colours. It was found by the Harvard-Boston expedition on March 11, 1913, in tomb S.F. 132 at Sheikh Farag, the northernmost of the cemeteries at Naga ed-Dêr. The find was recorded under Reg. No. 13-3-205.

The Sheikh Farag cemetery is on the high bluff marked "Sheikh" to the left of the general map, Reisner, Naga ed-Dér, Vol. 1, Pl. 79. The ground between this site and that of cemeteries N 3500 and N 4000 (see Mace, Naga ed-Dér, Vol. 11, p. 48) was occupied by a continuous series of badly plundered rock-tombs. Thus Sheikh Farag was clearly a part of the Naga ed-Dêr site. The cemetery extends up the slope of the hill east of the Sheikh and over the next bluff to the south, marked "25" on the map. The total number of graves located was two hundred and twenty. Of these, S.F. 5 on bluff "25" was dated to the Twelfth Dynasty by half of a bivalve shell inscribed with a cartouche containing the name "Sesostris" (Senwosret). S.F. 217, on the hill-side to the east, contained a stela dated to year 30 of Amenemmes III. But many of the graves were clearly previous in date to the Twelfth Dynasty, reaching back to the Ninth or Tenth in types of grave, pottery, beads and scarabs. A few graves may have been still earlier. The pottery of the grave S.F. 217, dated to Amenemmes III, was about the latest in type found in the cemetery.

The grave S.F. 132 on the southern bluff ("25") was of a type very common before the Twelfth Dynasty. A sloping descent, 325 cm. long, led to a rock-cut chamber about 300 cm. square, which served as a burial-chamber. The roof was broken down and the interior had been plundered. Among the rubbish near the floor there were a few beads, a small alabaster jar, this statuette of a harper, and several pottery vessels, namely a tall pot-stand, a small globular pot, and a tall hes-vase, all of ordinary red ware. The pottery was earlier in date than that of S.F. 217 (Amenemmes III). In my judgment it is previous in date to the Twelfth Dynasty.

The harper has his eyes closed and is manifestly blind. He is coloured brownish yellow with black hair parts and white skirt. The harp is brownish yellow with red, black and white markings, the strings being red. The base is red. The small vertical red dashes just under the upper edge of the skirt seem to indicate the puckering due to the pull of the drawstring. The shape of the harp, the attitude of the harper sitting on one foot, the position of the hands in playing, and the blindness of the harper, add to the interest of the figure, but the workmanship is only mediocre, as is usual in the servant-figures of the Old Empire as well as those of the Middle. The height of the figure is 18 cm.

It is of considerable interest to note the manner in which the attitude of the blind harper is reproduced in the Old Empire reliefs. In the tomb of Ukh I at Mêr, as shown in Blackman's photographs A 10 and B 50 of the E.E.F. series, a blind harper is shown sitting on one foot in a nearly impossible position. It is clear that his knee was turned outwards



STATUETTE IN THE CAIRO MUSEUM

as in our figure. The harp has the same form and the lower part is represented as turned at right-angles to the true form in order to show the front of the body of the harp. The strings in this relief were probably painted in red on the background and have now disappeared. The fingers are shown in characteristic positions twanging the strings, instead of in the stiff position of the fingers in the figure. In other Old Empire representations, as in the Sakkâreh relief in Grebaut, Musée égyptien, Vol. I, Pl. XXVI, the base of the harp is correctly shown in profile, but the position of the left leg of the harper is shown as in the relief at Mêr. This manner of representing the left leg was used in the reliefs all through the Old and Middle Empires. The representations of harpers given by Davies, Sheikh Said, Pl. X, and Deir el Gebrâwi, Vol. I, Pl. VIII, have the base of the harp turned to the front. At Dêr el-Gebrâwi, the harpers lean forward as if the left arm were thrust through between the strings and the pillar of the harp.

The two harpers in the wooden model found by Quibell in the tomb of Karenen of the Middle Empire at Sakkareh (see Quibell, *Excavations at Saqqarah*, 1906–1907, Pl. XVI) have the same attitude and the same style of harp as our figure. The wall pictures of harpers in the Middle Empire show both female and male players in the traditional attitude (see Newberry, *Beni Hasan*, Vol. I, Pl. XII, and Vol. II, Pl. IV).

In the New Empire, the harper sits with both feet doubled under him, see especially Davies, *El Amarna*, Vol. I, Pls. XXI and XXIII. But he often plays in a standing position. Female players are more frequent, and are shown in the same attitudes as the males and also sitting on pillows; see Davies, *El Amarna*, Vol. VI, Pl. XXVIII, and WILKINSON, *Manners and Customs*, ed. BIRCH, Vol. I, pp. 435 foll.

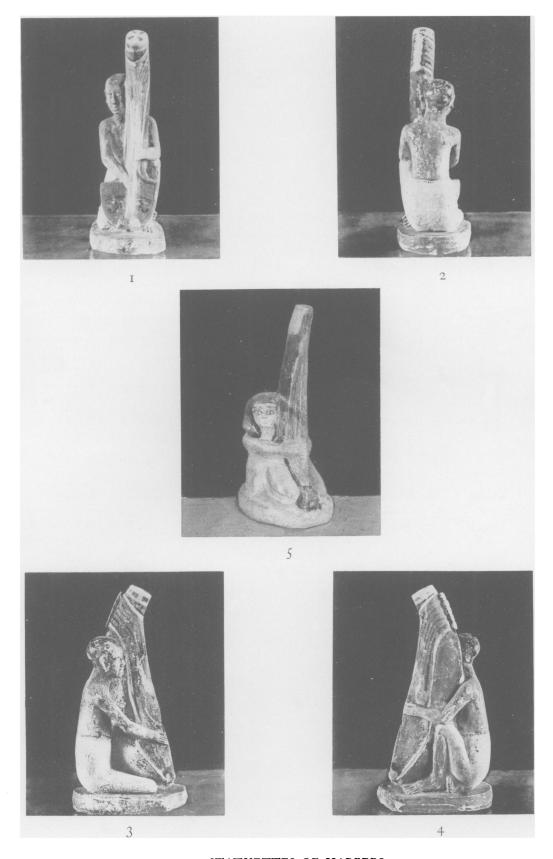
SUPPLEMENTARY NOTE: BY THE EDITOR.

In view of the great rarity of statuettes of harpers, it has been thought desirable to re-publish here one which belonged to the late Mr H. Martyn Kennard and was disposed of at the Sale of his collection in 1912. By the kindness of Messrs Sotheby, Wilkinson and Hodge we are permitted to reproduce this object, which was figured in the illustrated edition of the Sale-catalogue, Pl. II; Mr George Day was good enough to assist us in tracking down the original negative, for the loan of which we are deeply indebted to the courtesy of the London Stereoscopic Company, Ltd.

The Martyn Kennard statuette (Pl. XV, centre) differs from that discussed by Professor Reisner not only in the feminine sex of the harper, but also in the smallness of the size; whereas the Naga ed-Dêr figure is 18 cm. in height, this figure measures only 12 cm. We have nothing to add to the description given in the Sale-catalogue, which reads as follows:—

"51. A small Figure of a Woman seated on the ground and playing a large harp; in sandstone, with colouring in red and black; $4\frac{3}{4}$ in. high; a very interesting and rare piece."

For the remains of actual wooden harps, Professor Reisner sends us the following references: Middle Kingdom, Garstang, *Burial Customs*, p. 154, Figs. 152-3; New Kingdom, Quibell, *Excavations at Saqqarah*, 1906-1907, Pl. XXXIII, with p. 78.



STATUETTES OF HARPERS

1.2.3.4. Statuette in the Cairo Museum. Height $18\,\mathrm{cm}$.

5. Statuette formerly in the Martyn Kennard Collection. Height 12 cm.

BIBLIOGRAPHY: GRAECO-ROMAN EGYPT A. PAPYRI (1915–1919)

By H. IDRIS BELL, M.A.

In concluding the last instalment of this bibliography I expressed the hope that it might be the last to be published under conditions of war. The hope was realized, but in a manner very different from that of which I thought. The war went on; it was the bibliography that ceased. Even yet, when this article goes to the printer (Oct. 1919), communications are slow and difficult; but conditions have so far improved that an effort can be made to resume the Report on the literature of Graeco-Roman Egypt. It is true that even now the task is far from easy. The British Museum's files of foreign periodicals, in particular (curiously enough) of those published in certain allied and neutral countries, are still seriously incomplete, and much of my work has necessarily, owing to limited leisure, had to be done somewhat hurriedly. But the kindness of friends has been such as in large measure to make up for these difficulties. Prof. Grenfell has not only supplied me with many references, but has given me descriptions of some items not accessible to me or has lent me the publications themselves. To Mr M. N. Tod I owe a number of other useful references. Mr N. H. BAYNES and Dr Alan H. Gardiner have lent me books or periodicals; and Prof. Rostovtsev has supplied a few additional references. Lastly, I have derived much assistance from two published bibliographies, that of the Scuola Papirologica of Milan² and that of Wessely in his Studien³, to which reference may conveniently be made here. That of the Scuola Papirologica is particularly wellarranged and handy to use. I must add that the dates 1915—1919 given above are somewhat misleading; I have had the opportunity of examining some publications of 1914 not accessible to me when I compiled my last Report, and on the other hand have been able to see only a few publications of 1919 and those only of the earlier part of the year. But it seemed better to notice all items seen up to the moment of writing than to terminate my review with the end of 1918. Doubtless my list of references even for 1918 is seriously incomplete.

1. New Publications of Literary Texts.

As usual we owe to the Egypt Exploration Society the principal item under this head. Part XIII of the Oxyrhynchus Papyri⁴, like Parts v and XI, consists entirely of literary or theological texts, and while it contains none so lengthy as certain papyri in Part v, it can certainly rank among the most notable volumes of the series. Among the theological texts a third century fragment of a new recension of Tobit, which the editors regard as an earlier form of the BA recension, a third-fourth century fragment of Acts showing (an interesting phenomenon in an Egyptian MS.) affinities with the Old Latin text, and a fourth century leaf of the Shepherd of Hermas are the most notable; to them we may add a homily on the wickedness of women (see below), and one on spiritual warfare, both of some interest. The classical texts are more important. Pride of place is held by the fragments of the dithyrambs of Pindar, which are not only of special value as adding to our scanty knowledge of this side of the poet's work, but make, in the magnificent opening of the second dithyramb, "For the Thebans," a noteworthy addition to the stock of Greek lyrical poetry. The wonderful word-picture of the dithyramb in Olympus there given, the drums of the Great Mother, the torches and the frenzied Naiads, the hissing snakes of Pallas's aegis, and the lions of "lonely Artemis," is worthy to be set beside that of the music of Apollo's lyre in the first Pythian. A small fragment attributed with great probability to the Μισούμενος of Menander is of interest chiefly as helping to identify a fragment published by Wilamowitz (see below). More important than this are the

¹ J. E. A., III (1916), pp. 129-138.

² Bibliografia metodica dei papiri e degli studi egiziani in Studi della sc. pap., R. Accad. scient.-lett. in Milano, 1917, pp. 249—284.

³ Literatur der Papyruskunde 1913—1917 in Stud. z. Pal. und Pap., 17 (1917), pp. 54—68.

⁴ Edited by B. P. Grenfell and A. S. Hunt. Part xiii, 1919. Pp. 235, 6 plates.

fairly extensive fragments of a roll containing some new orations of Lysias. A fair amount of two speeches, $\pi\rho\delta$ s ' $1\pi\pi\sigma\theta\ell\rho\sigma\eta\nu$ and Against Theomnestus, is preserved; from four to six speeches in all are represented. Another papyrus contains portions of ten columns of a speech, perhaps by Hyperides (or assigned to him), on behalf of Lycophron. More interesting than these oratorical fragments, and indeed of considerable importance, are the remains of a Socratic dialogue, Alcibiades, by Aeschines Socraticus, valuable as adding evidence from a new quarter for the character and dialectical method of Socrates. Of the remaining new texts the most noteworthy are some fragments, not large, but valuable for the evidence they bring as to the methods of Diodorus and for their possible bearing on the vexed question of the authorship of the Hellenica Oxyrhynchia, which are almost certainly from the history of Ephorus (they show that Diodorus copied Ephorus slavishly and give some support to the view that Ephorus was the author of the Hell. Oxy.); and an interesting oration on the cult of Caesar, showing an unexpected boldness and independence of view.

Among the fragments of extant works, one of four columns from the Olympian odes of Pindar is a novelty, the extant epinician odes having hitherto been conspicuous by their absence in Egyptian papyri; the text is very close to that of the best MSS. The drama is represented by fragments of the Ajax, the Orestes, and the Plutus; and a welcome item, pending the publication of the fragments found at Antinoopolis by Johnson, is eight columns from a fifth century codex of Theocritus, of some importance for Idyl 15. Some fairly extensive fragments of Herodotus show a good text, and Thucydides is represented by fragments of four different MSS., one of them containing not the work as a whole but a collection of the speeches. The remaining two MSS. are from Plato, Protagoras, and Aeschines, In Ctesiphontem (of some textual importance).

Interesting reviews of this volume have appeared in the (English) Athenaeum¹ by J. T. Sheppard and in the Times Literary Supplement². The only articles I have so far seen on single texts are one by A. Calderini on the new Pindar fragments³, one by A. Castiglioni on the homily against women referred to above (P. Oxy. 1603), which she has succeeded in identifying as from the sermon of Pseudo-Chrysostom, In Decoll. S. Joan. Bapt., Migne, Patr. Gr. 59, 487 ff. 4, and one by Rendel Harris on the same, making the same identification, reprinting the text, and giving some additional notes by Grenfell⁵.

The chief publication of new literary texts after the Oxyrhynchus volume is one by Wilamowitz in the Proceedings of the Prussian Academy⁶. This is a collection of miscellaneous poetical fragments; they are: (1) Tyrtaeus (P. Berol. 11675), some fragments of cartonnage, of the second half of the third century B.C., of some interest. There are three fragments, but only one column can be restored with any great probability. The papyrus was first copied by LOBEL; (2) An elegiac poem of the Hellenistic period ("time of Eratosthenes") from a papyrus in the Hamburg Stadtbibliothek. The sense is not everywhere clear, but there is a question of the despatch of an ambassador to the Galatians, his return and a speech to the king, whom Wilamowitz regards as probably a Seleucid but possibly a Ptolemy or an Antigonid; (3) Homeric glosses from the Berlin Ostr. 12605; third cent. B.C.; (4) A collection of "elegant extracts" from Euripides, Theognis, Homer, Hesiod, and unknown sources, probably a writing exercise, from Ostr. 12319; third cent. [apparently B.C., though this is not definitely stated]; (5) Fragment of a comedy belonging to the Middle Comedy, the authorship being by Wilamowitz conjecturally assigned to Alexis; from P. Berol. 11771 (cartonnage, third cent. [B.C.]); (6) Fragment of a New Comedy play, P. Berol. 13281, of the third cent. of our era. Wilamowitz leaves the authorship uncertain, though he points out a coincidence with the Μισούμενος, and as Grenfell and Hunt remark in their introduction to P. Oxy. XIII 1605, the fragment is probably to be assigned to that play; (7) Some not very important scholia on Pindar, Pyth. 2, from P. Berol. 13419 verso, of the third-fourth cent.; (8) An epigram of Meleager, Anth. Pal. v 152, from P. Berol. 10571. A short article on this collection of texts by J. U. Powell, makes some suggestions for readings or correction.

- ¹ Apr. 18, 1919, pp. 201—202.
- ² 1919, probably March or early in April, but I am unable to give an exact reference.
- ³ Nuovi testi di Pindaro recentemente scoperti, in Nuova Antologia, 16 Apr. 1919, pp. 3-6.
- ⁴ Frammento di un' omelia spuria del Crisostomo riconosciuto nel P. Oxy. 1603 recentemente pubblicato, in Rend. R. Ist. Lomb. di Sc. e Lett. 52, 1919, pp. 292—296.
- ⁵ An Unidentified Papyrus in the New Oxyrhynchus Volume, in Bull. of the John Rylands Library, 5 (1919), pp. 386-7.
- ⁶ Sitzungsber. d. Kön. Preuss. Akad. d. Wiss., 1918, 34—36, pp. 728—751: Dichterfragmente aus der Papyrussammlung der Kgl. Museen.
 - 7 On the New Fragments of Greek Poetry recently published at Berlin, in Class. Review, 34, 1919, pp. 90-91.

In the same publication appear two other new literary texts. The first is an interesting account, in Ionic dialect, of the siege of Rhodes by Demetrius Poliorcetes in B.C. 304, edited by HILLER v. GAERTRINGEN from a papyrus in the Königliche Museen. The editor regards it, apparently with reason, as the author's original draft of the work; the date is the second century. A good photographic facsimile is added. The second is a musical papyrus of a very noteworthy kind, also in the Kön. Museen (Pap. 6870 verso; second-third century), edited by Schubart. Unlike the other extant papyri with musical notes, this one does not consist of a complete poem with music but of extracts, the object being apparently to give specimens of music. Schubart recognizes distinct instrumental parts in many lines, and both as an example of musical notation and for the light which it throws (or may throw) on Greek music the papyrus is of considerable importance. Schubart, recognizing that a complete elucidation of the many problems presented by this papyrus calls for a specialist in musical history, contents himself with publishing the text, with a minimum of commentary, and with a good photograph. A. Thierfelder has published a volume which appears (though I have not seen it) to refer to this papyrus³.

The worthy Dioscorus of Aphrodito, great as is our debt to him for the many interesting documents he left us, can hardly be regarded as a poet; but since his verses belong, in a formal sense, to the genus literature, we have to include them in this section. The third volume of the late Jean Maspero's Cairo catalogue⁴ contains several additions to the specimens we already possess of his peculiar talent. They are chiefly of the same genre as the others (encomia, an epithalamion); but there is one novelty in the shape of a poem on the subject of Achilles (67316 verso, 1—8), headed $\tau(\nu as \ av \ \epsilon' (\pi \eta) \lambda \delta \gamma (ovs) \ A \chi \iota \lambda \lambda \epsilon \dot{\nu} s \ a\pi o \theta a \nu \dot{\omega} \nu \delta \iota \dot{\alpha} \tau \dot{\eta} \nu \ Ho\lambda \nu \xi (\dot{\epsilon} \nu \eta \nu)$; this hero seems to have been a favourite with Dioscorus, for elsewhere (67353 verso) are the headings of two other poems (the poems themselves are illegible) concerned with him; in the second he was represented as calling on Thetis to help him.

VITELLI has lately published⁵ a poetical fragment consisting of parts of eighteen iambic lines, evidently from a dialogue in a tragedy, which Vitelli inclines to date in the earlier period of the Attic drama, before (say) B.C. 420.

Rather more interesting, because of a more novel kind, than the foregoing is a fragment of a metrical work on the miracles of Sarapis, published, from P. Berol. 10525, by A. Abt. The editor regards the poem as belonging to the early Hellenistic period, when the cult of Sarapis was first being propagated, its object being in fact to "boost" the new deity. A facsimile is given. I have a reference to a work by O. Weinbeich which probably refers, *inter alia*, to this papyrus.

In an article dealing with his recent work and future plans⁸ Grenfell publishes, from an ostracon, one of a collection given by SAYCE to the Bodleian, a rather interesting epigram, put into the mouth of a lame Spartan soldier. The ostracon is of the late first cent. B.C.; the text seems to be a writing exercise.

Vol. 4 of PSI.9, which, with this exception, consists entirely of non-literary texts, contains one literary morsel (fourth-fifth cent.), three iambic lines of a sententious character. The editors leave the question of the authorship open.

The following volume ¹⁰ also contains one literary text, a leaf from a late (ninth-tenth cent.) vellum MS. containing a portion of the 32nd discourse of S. Gregory Nazianzen. As the works of the Fathers have hitherto been but poorly represented among Greek papyri this fragment is very welcome, late as it is.

A. Brinkmann has published ¹¹ a fragment of a florilegium of $\gamma \nu \hat{\omega} \mu a i$ from a Berlin papyrus (7426); and Schubart publishes ¹², with a facsimile, a rather interesting mathematical papyrus containing geometrical and stereometrical problems, probably of the school of Heron of Alexandria. The date is the second century.

- ¹ Aus der Belagerung von Rhodos 304 v. Chr., in Stzgsber. d. Kön. Preuss. Akad. d. Wiss., 1918, 34—36, pp. 752—762.
 - ² Ibid., pp. 763—768, Ein griechischer Papyrus mit Noten.
 - ³ Tekmessa Päan: Nach einem Papyrus mit griechischen Noten. Liepzig, Breitkopf u. Hartel, 1919. M. 1.50.
 - 4 Papyrus grecs d'époque byzantine, III, 1916. See below, § 3.
 - ⁵ Trimetri Tragici, in Revue Égyptologique, N. S., 1 (1919), pp. 47-49.
 - ⁶ Ein Bruchstück einer Sarapis-Aretalogie, in Archiv f. Religionswiss., 18 (1915), pp. 257-268.
 - ⁷ Neue Urkunden zur Sarapisreligion. Tübingen, Mohr, 1919 (?). M. $2+30^{\circ}/_{\circ}$.
 - 8 New Papyri from Oxyrhynchus, in J. E. A., 5 (1918), pp. 16-23. For the epigram see p. 16 f.
 - 9 Soc. Ital. p. l. r. d. Pap., Papiri Greci e Latini IV, 1917. See below, § 3.
 - 10 Do. v, 1917. See below, § 3.
 - ¹¹ Lückenbüsser (25), in Rheinisches Museum f. Phil., N. F., 71 (1916), pp. 581—584.
 - ¹² Mathematische Aufgaben auf Papyrus, in Amtl. Ber. aus d. Kön. Kunstsamml., 37 (1916), pp. 162—170.

In a volume of papyrus texts from the Basel collection published by E. RABEL and consisting mainly of "documents," are included one theological and one astrological fragment.

Finally, reference must be made to two publications of Biblical MSS. from the Freer collection². The first is Part II of the series of Old Testament Manuscripts from that library, containing a MS. of the Psalms, which the editor dates as certainly of the fifth century, more probably of the first half, though a comparison with the Vienna Dioscorides suggests a doubt whether the end of the century or the beginning of the sixth is not more likely; the second is Part II of the series of New Testament MSS. containing a MS. of the Pauline Epistles, which when complete seems to have included also the Acts and Catholic Epistles. This MS. the editor dates in the sixth century. Both MSS. are published in full, with an introduction and some excellent photographic facsimiles. They were both in a deplorable state when found, and the separation of the leaves and their preservation in so comparatively legible a condition is a veritable triumph.

2. REPUBLICATIONS OF LITERARY TEXTS, MONOGRAPHS, ARTICLES, ETC.

It seems best to arrange the references under this head according to subject. I begin with two articles of a general character and proceed through poetry of various kinds to drama and then to prose works.

V. Martin, whose appointment to the chair vacated by Nicole at Geneva will have been welcomed by all papyrologists as continuing the traditions established by his predecessor, has published his inaugural lecture³, which deals, in a very interesting manner, with the evidence of papyri as to the soundness or otherwise of the present methods of treating the texts of ancient Classics, which he thinks are in the main justified by the new discoveries.

Schubart, in an extremely interesting and (from the point of view of *Kulturgeschichte*) useful article, afterwards, in the main, incorporated in his introduction to papyrology 4, summarizes the evidence furnished by the finds of literary papyri as to the state of culture and the comparative popularity of various authors and styles of composition in those parts of Egypt from which papyri have come down to us 5. He writes with great caution, and strongly emphasizes the danger of building any large or very dogmatic conclusions on such fortuitous evidence. The warning is quite justified; but none the less there is a good deal to be learned along the lines indicated by him, and his article is a valuable guide to a subject which will offer increasing possibilities as the stock of published papyri grows.

In two separate articles dealing respectively with the Iliad and the Odyssey⁶, G. M. Bolling examines the MS. evidence on the question of interpolated lines with a view to fixing the "minuscule vulgate" and the "papyrus vulgate" and the relation between them. This method, he concludes, helps to determine the late origin of a number of interpolations which, occurring in the minuscule but not in the papyrus vulgate, must be later than the papyrus period. The results are not entirely similar for the two poems, but are in general agreement. W. Müller, however, in a review pronounces strongly against Bolling's theory.

P. Collart⁸ points out that the fragments of the Iliad in P. Oxy. xi 1391 identified by the editor as from xi 526-8, 566-9, 597-602, 634-641, which therefore appear to show curious deviations from the Vulgate, are really from 564-570, 597-602, 608-610, 635-8. The variants then disappear.

A. CALDERINI, commenting on the fragment of the Hesiodic Κατάλογος Γυναικῶν contained in P. Oxy. xI 1358, notes an agreement with Fragm. 99 of Aeschylus, and suggests that Hesiod is a source used by Aeschylus in his play?. An article by A. OLIVIERI dealing, in part, with the same papyrus 10 is known to

- ¹ Papyrusurkunden der Öffentl. Bibl. d. Univ. zu Basel. See below, § 3.
- ² The Old Testament Manuscripts in the Freer Collection, Part II: The Washington MS. of the Psalms, by Henry A. Sanders. New York, Macmillan Co. 1917. Six plates. The New Testament Manuscripts in the Freer Collection, Part II: The Washington MS. of the Epistles of Paul, same editor and publisher. 1918. Three plates.
 - ³ Les manuscrits antiques des classiques grecs et la méthode philologique. Genève, Albert Kundig, 1919.
 - 4 See below, § 5.
- ⁵ Papyrusfunde und griechische Literatur, in Internationale Monatsschrift f. Wiss., Kunst u. Technik, 8, 10/11 (1914), pp. 2—63.
- ⁶ The Latest Expansions of the Iliad and The Latest Expansions of the Odyssey, in Am. Journ. of Philol., 37 (1916), pp. 1-30 and 452-458.
 - ⁷ Zu den Homerpapyri, in Berl. Phil. Woch., 36 (1916), cols. 1281—1287.
 - ⁸ Homère et Bacchylide dans les Papyrus d'Oxyrhynchos, in Rev. de Phil., N. S., 42 (1918), pp. 42-46.
 - 9 Di un aspetto poco noto del mito di Europa, in Studi d. sc. pap...in Milano, 2 (1917), pp. 103-106.
- ¹⁰ Di due papiri di Oxyrhynchus, in Mem. R. Accad. di Napoli, 3, pp. 117—136; referred to in Rassegna ital. di lingu. e lett. class., 1 (1918), p. 94.

me only from a reference elsewhere. The following papyrus, 1359, which Grenfell and Hunt identified as also from the Catalogue, is regarded by C. Robert as part of a separate epic, which he calls *Atlantis*¹. He makes various suggestions for new readings.

Another epic fragment which may also be Hesiodic, that in PSI. II 131, is the subject of an article by H. G. EVELYN WHITE, who refers it to the subject of Amphiaraus².

There is not a great deal to chronicle as regards the fragments of Sappho and Alcaeus since my last Report; but J. M. Edmonds has continued to occupy himself with them and has published four articles on the subject, making ample restorations and suggestions for new readings³. O. Engelhardt has published a German verse translation, under the title "Entsagung," of Sappho's beautiful Ode in *Berl. Klassikertexte* v 2, p. 4 ff.⁴

L. BIANCHI⁵ deals in an elaborate article with Corinna, naturally paying special attention to the Berlin fragments. In a short note on the same poetess⁶ G[USTAV] V[OLLGRAFF] explains the word δiav in the Ode op Helicon and Cithaeron, l. 27, as=cacumen, the summit of Cithaeron, quoting in support two Cretan inscriptions; the word is properly $F\omega ia$.

The new Pindar fragment in P. Oxy. XIII noticed above will doubtless evoke much discussion, but in the period dealt with I have noticed but one item (except that already referred to in § 1) dealing with this poet: a rendering of some of the fragments in Italian verse by E. Romagnoli⁷. These translations were prepared as part of Romagnoli's complete translation of Pindar's Odes but were published separately pending the appearance of the volume. They include translations of several recently discovered fragments,

A new Italian edition of Bacchylides by N. Festa, with a translation, is known to me only by a review⁸. According to the reviewer it is not a mere revision of the 1898 edition but substantially a new work. This poet is the subject of an important article by A. Körte⁹, who deals both with his life and with his works as recovered from the papyri, particularly the new fragments in P. Oxy. VIII 1091 and XI 1361. He gives a new reading, from a squeeze, of the Cean List of Victors (IG. XII 5, 608). His article falls into three sections, viz.: 1. Die keische Siegerliste. 2. Die neuen Fragmente. 3. Die Lebenszeit des Dichters (not more than two or three years difference in age between Bacchylides and Pindar).

P. Collart also writes on P. Oxy. 1361¹⁰ in an interesting section of an article divided between this and the Homer papyrus already referred to. He translates both the new scolia of Bacchylides and the extant scolia of Pindar, comparing and contrasting, very happily, the genius of the two poets, and adding some general remarks on the scolion as a literary genre. Bacchylides figures again in an article of R. Jockl¹¹, who, à propos of the reference to Ceos and its legend in Callimachus's story of Acontius and Cydippe in the Aetia (P. Oxy. VII 1011), uses the allusions to it in the first Ode of Bacchylides to elucidate the myth of Minos and Dexithea; and finally, D. Arfelli has published an Italian verse translation of Ode x (or xi)¹², with a brief introduction.

Apart from the article just referred to, Callimachus has received a good deal of attention. The striking Aetia fragment in P. Oxy. XI 1362 is discussed in a long and interesting article by L. Malten 13; K. Kuiper devotes an article of some importance to the story of the Cup of Bathycles 14 as treated in the Iambi in P. Oxy. VII 1011; St. WITKOWSKI in a discussion of the Berlin Callimachus fragments published by Wilamowitz in the Sitzungsberichte of the Berlin Academy (1912, p. 524 ff., P. Berol. 13417, and 1914,

- ¹ Eine epische Atlantis, in Hermes, 52 (1917), pp. 477-9.
- ² Note on Papiri Greci e Latini No. 131, in Class. Quarterly, 1917, pp. 50—51.
- ³ The New Lyric Fragments, in Class. Review, 1916, pp. 97—107; The Berlin Sappho Again, ibid. pp. 129—133; The Berlin-Aberdeen Alcaeus Again, ibid. 1917, pp. 33—36; The Berlin Alcaeus Again, ibid. pp. 9—11.
 - 4 Woch. f. klass. Philol., 33 (1916), col. 838.
 - ⁵ Corinna, in Studî Ital. di Fil. Class., 21 (1915), pp. 223—279.
 - ⁶ Ad Corinnam, in Mnemosyne, N. S., 43 (1915), p. 318.
 - ⁷ I Frammenti di Pindaro tradotti, in Athenaeum (Pavia), 5 (1917), pp. 263-284.
- 8 Bacchilide, Odi e Frammenti, Firenze, Sansoni Editore, 1916–17. Reviewed by F. R. in Atene e Roma, 21 (1918), pp. 53-55.
 9 Bacchylidea, in Hermes, 53 (1918), pp. 113-147.
 - 10 Homère et Bacchylide, in Rev. de Phil., 42 (1918), pp. 46-51.
- ¹¹ Zu den "Aitia" des Kallimachos und dem ersten Gedicht des Bacchylides, in Wiener Studien, 37 (1915), pp. 142-156.
 - ¹² Bacchilide x (x1), in Atene e Roma, 19 (1916), pp. 133—136.
 - ¹³ Ein neues Bruchstück aus den Aitia des Kallimachos, in Hermes, 53 (1918), pp. 148-179.
 - 14 Le Récit de la Coupe de Bathyclès dans les Iambes de Callimaque, in Rev. d. ét. gr., 29 (1916), pp. 404-429.

p. 223 ff., P. Berol. 11629) suggests some new readings¹; and Ida Kapp has published a Berlin dissertation² on the *Hecale*. In this she collects and republishes, with notes, all the fragments (not only those derived from papyri) of the poem, as well as the references to it in Greek, Latin and Byzantine literature. An index verborum is added, and there is a brief introduction of a general character.

Cercidas is the subject of an article (or rather perhaps a series of notes) by G. A. Gerhard³. Of the four passages discussed only the last comes from the papyrus fragments (P. Oxy. VIII 1082).

- J. U. Powell calls attention to the recent additions to the Greek Anthology⁴, and H. Draheim has published a note⁵ on the interesting sailor's song in P. Oxy. XI 1383. He deals mainly with metrical questions, but communicates two suggestions for readings by K. Fr. W. Schmidt.
- B. A. MÜLLER discusses⁶ the interesting, if poetically negligible, poem of Pancrates of Alexandria contained in P. Oxy. VIII 1085, making some suggestions for the filling-in of lacunae.

Under the heading Drama the first item to be mentioned is the *Ichneutae* of Sophocles, on which several notes or suggestions have been published: by G. V[ollgraff] (readings for ll. 33⁷, 154 f. and 209⁸), by J. M. Stahl (note on βάσις, ll. 59, 168⁹), and by P. Groeneboom (note on ll. 145-6¹⁰). R. J. Walker has published a very elaborate edition, with translation, of the play ¹¹, which I have up to the present been unable to see. To judge from reviews ¹² it is by no means a satisfactory piece of work. M. Croiset has published an article on the *Cretans* of Euripides, with special reference to the Berlin fragment ¹³.

The *Demes* of Eupolis is the subject of an article by Chr. Jensen¹⁴, who publishes a new and revised text of the fragments, with a commentary, largely in justification of his readings.

Menander has, as usual, come in for a good deal of attention. The Samia is the theme of an important article by Wilamowitz¹⁵, who studies the play somewhat minutely, sketches the plot, and assesses the merits of the piece; he regards it as a "Jugenddrama" of the author's, but nevertheless holds that the dialogue shows complete mastery, and the character-drawing not less. The plot, rather obscure owing to the very imperfect state in which the play has come down to us, is also discussed by A. Kolař¹⁶, with reference to the question whether the hetaera Chrysis was or was not really a mother. He concludes that she was not, and that Demeas's conclusion that she was is to be regarded merely as an instance of that gentleman's tendency to be too "knowing" and regularly to infer the opposite of the truth. J. J. Hartman, who is one of the scholars to whom the discoveries of Menander's plays have brought disillusionment, and who continues stoutly to "put his money on" Terence, compares Menander (with reference to the Samia) with his favourite, much to the former's disadvantage¹⁷.

The *Epitrepontes*, the least incomplete of the plays, has been much discussed. A Leyden doctoral dissertation, which I know only from a brief review by K. Fr. W. Schmidt¹⁸, has been devoted by B. Keulen to the arbitration scene in that play ¹⁹; and a lengthy article, also inaccessible to me at present, on the same scene has been published by J. W. Cohoon ²⁰. I have seen several reviews of this, mostly short; reference need only be made to two, by C. Sourdille ²¹ and G. Ammon ²² respectively. P. Fossalaro

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<sup>1</sup> Zu den neuen Berliner Kallimachosfragmenten, in Berl. Phil. Wochenschr., 36 (1916), cols. 1190—1191.
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- ² Callimachi Hecalae Fragmenta. Berlin, Mayer und Müller, 1915. Pp. 93.
- ³ Cercidaea, in Wiener Studien, 37 (1915), pp. 1-26.
- ⁴ Additions to the Greek Anthology, in Class. Review, 34 (1919), pp. 55-56.
- ⁵ Poδίοις ἀνέμοις, in Woch. f. klass. Philol., 35 (1918), cols. 310-311.
- ⁶ Zum Gedicht des Pankrates von Alexandria, in Berl. Phil. Woch., 36 (1916), cols. 671-672.
- ⁷ Mnemosyne, 43 (1915), p. 72.

⁸ *Ibid.* 46 (1918), p. 37.

⁹ Rhein. Museum, 1915, p. 145.

- ¹⁰ Mnemosyne, 44 (1916), p. 316.
- 11 The Ichneutae of Sophocles. Burns and Oates, 1919. Pp. xix+664. £3.3s. net.
- ¹² E.g. in The Times Literary Supplement, Dec. 11, 1919, p. 728.
- 13 Les Crétois d'Euripide, in Rev. d. ét. gr., 28 (1915), pp. 217—233.
- ¹⁴ Zu den Demen des Eupolis, in Hermes, 51 (1916), pp. 321—354.
- 15 Die Samia des Menandros, in Stzgsber. d. Kön. Pr. Akad. d. Wiss., 1916, 3, pp. 66-86.
- 16 Einige Bemerkungen zur Samia des Menandros, in Wiener Studien, 39 (1917), pp. 18—25.
- ¹⁷ De Menandro et Terentio Disputatiuncula, in Mnemosyne, 46 (1918), pp. 127-134.
- ¹⁸ In Woch. f. klass. Philol., 35 (1918), cols. 79-80.
- 19 Studia ad arbitrium in Menandri Epitrepontibus. Harlem, 1916. Pp. 96.
- ²⁰ Rhetorical Studies in the Arbitration Scene of Menander's Epitrepontes, in Trans. Am. Phil. Assoc., 45, pp. 141-230.
 - ²¹ In Journal des Savants, N. S., 14 (1916), pp. 280—282.
 - ²² In Berl. Phil. Woch., 36 (1916), cols. 1129—1131.

compares the play with the *Hecyra* of Terence¹, developing the view of Stavenhagen that Menander was treating a problem which specially interested him, the "feminist thesis" that a woman's conduct ought not to be subjected to a different standard from a man's; and he points out various analogies and dissimilarities between the Greek and the Latin play. Finally, in an article of a general character, the first of a series, G. Pasquali discusses the art of Menander as exemplified in this play². The second article of the series referred to³ brings together Menander and Euripides to illustrate the rise of the New Comedy. Another general article on Menander by A. Todesco⁴, discussing in a judicial tone the merits of his drama, finds in him two voices: "una vena idillica, sentimentale e arguta, e insieme uno sforzo di rappresentazione realistica."

The *Heros* is the subject of a not very friendly note by J. J. Hartman⁵, who discusses the conversation between Davus and Geta; and the fragment in PSI. II 126 is dealt with by R. Herzog⁶, who suggests that it may be from the *Epikleros*.

Prof. Grenfell gives me a reference to an article on P. Oxy. x 1235 by A. Körte, which, however, is inaccessible to me^7 .

Sudhaus's *Menandri Reliquiae* and *Menanderstudien* have been reviewed by F. G. Allinson⁸, K. Fr. W. Schmidt⁹, C. O. Zuretti¹⁰, and B. Lavagnini¹¹.

The fragment PSI. 126 just referred to is the subject of a note by C. H. Moore¹², who calls attention to it, without adding anything to its elucidation or identification.

The comic fragments, other than Menander's, recovered from papyri have been collected into a volume, in Lietzmann's series of *Kleine Texte*, by O. Schröder¹³. I know the volume only from reviews of it by C. Robert¹⁴ (who reviews with it J. Demiańczuk's *Supplementum Comicum*, Cracau, 1912) and K. Preisendanz¹⁵. Apparently Schröder makes some new contributions of value to the subject. P. Oxy. III 413, the well-known papyrus which contains a farce and mime, is studied by E. Rostrup in an article¹⁶ which appears to be of considerable importance but which is also, at present, inaccessible to me. The mime as a literary form is dealt with by F. Bernini in another inaccessible article¹⁷, which the compilers of the Milan bibliography had likewise been unable to see. Lastly, F. Nencini, in a note on l. 75 of the fourth mime of Herondas¹⁸, explains the text by a reference to a passage of Synesius, "che sembra una reminiscenza del luogo in questione." I may add that O. Crusius has published a new (the fifth) and enlarged edition of his Herondas, which I have been unable to see¹⁹.

Turning now to prose literature, we may take first the historians. Among those to be noticed in this Report, Thucydides claims first place. K. Hude, in an article I have been unable to see²⁰, discusses the

- 1 Gli Epitrepontes di Menandro e l'Hecyra Terenziana, in Athenaeum (Pavia), 3 (1915), pp. 305-318.
- ² Studi sul dramma attico. I. Perchè s' intende l' arte di Menandro, in Atene e Roma, 20 (1917), pp. 177—189, 21 (1918), pp. 11—24.
 - ³ H. Menandro ed Euripide, ibid., 21 (1918), pp. 57-77.
 - ⁴ Da Menandro alla commedia classica italiana, ibid., 19 (1916), pp. 56—59.
 - ⁵ Ad Menandri Heroëm, in Mnemosyne, 46 (1918), pp. 101-104.
 - 6 Menanders Epikleros, in Hermes, 51 (1916), pp. 315-316.
 - ⁷ In Berl. Phil. Woch., 1918, cols. 787—791.
- 8 In Class. Philol., 12 (1917), pp. 110—113.
- ⁹ In Woch. f. klass. Phil., 33 (1916), cols. 313-322.
- ¹⁰ In Riv. di Fil. e d' Istr. Class., 43 (1915), pp. 365—369.
 ¹¹ In Atene e Roma, 21 (1918), pp. 50—53.
- 12 Some New Comic Fragments, in Class. Philology, 11 (1916), pp. 95-96.
- ¹³ Novae Comoediae fragmenta in papyris reperta exceptis Menandreis (Kleine Texte, No. 135). Bonn, Marcus und Weber, 1915.
 - 14 In Gött. gel. Anzeigen, 180 (1918), pp. 161—197.
 15 In Berl. Phil. Woch., 36 (1916), cols. 1292—1295.
- ¹⁶ Oxyrhynchos Papyri III 413 in Oversigt over det kgl. Danske Videnskabernes Selskabs Forhandlinger, 1915, pp. 63—107; see Stud. sc. Pap., 2 (1917), p. 267, no. 242. Reviewed e.g. by K. Preisendanz in Berl. Phil. Woch., 36 (1916), cols. 651—656.
 - 17 Studi sul mimo, in Ann. R. Scuola Normale di Pisa, 27 (1915); see Stud. sc. Pap., 2 (1917), p. 267, no. 241.
 - 18 Ad Eronda IV 75, in Riv. di Fil. e d' Istr. Class., 44 (1916), pp. 406—408.
- 19 Herondae mimiambi: Novis fragmentis adiectis ed. O. Crusius. Leipzig, 1914, Teubner. Pp. 156, M. 8. Reviewed by Preisendanz, in Berl. Phil. Woch., 36 (1916), cols. 651—656.
- ²⁰ Les papyrus et le texte de Thucydide, in Oversigt over det kgl. Danske Videnskab. Selsk. Forhandl., 1915, no. 6, pp. 579—585; see Stud. sc. Pap., 2 (1917), p. 270, no. 275. Reviewed by S. P. Widman, Berl. Phil. Woch., 37 (1917), cols. 494-5.

papyrus fragments of this author, dealing especially with the most important of them, P. Oxy. XI 1376. Aristotle's Athenaion Politeia is the subject of two articles. G. Colin discusses the organization of the tribunals, as described in the last seven chapters¹, and P. Foucart makes a very plausible suggestion² for the emendation of the obscure passage cap. 62, 2, viz., that before the (at present) meaningless $\delta \epsilon \kappa a \pi \rho \sigma \sigma \tau i \theta \epsilon \nu \tau a$ the words $\tau \hat{\phi} \delta i \epsilon \pi \iota \sigma \tau a \tau b$ have dropped out.

The Hellenica Oxyrhynchia, particularly the question of its authorship, continues to attract much attention. J. H. Lipsius, in an article on the work³, rejects both Theopompus (the ruling favourite in Germany, though not elsewhere) and Ephorus, and decides for Cratippus; and it is under the name of the latter that he has edited it in Lietzmann's series of Kleine Texte⁴. His edition, and Walker's Hellenica Oxyrhynchia are reviewed by E. Kalinka⁵, who also rejects Ephorus, and inclines, though with some hesitation, to Cratippus, and by M. Gelzer⁶, who rejects Cratippus and supports Walker's candidate, Ephorus. Lipsius, in a note, which he describes as a sort of appendix to his edition, replies to criticisms by Keil (see below) and Kalinka⁷. The new Oxyrhynchus fragment of Ephorus, which, as has been said above, tends to strengthen the case for Ephorus, will make it necessary to consider the whole question de novo; but Lipsius defends Cratippus against the evidence of the new fragment in a recent article⁸.

In addition to the above publications, mention must be made of an article by B. Keil⁹ on certain questions of textual criticism and another by R. J. Bonner on the four senates of the Boeotians¹⁰. Bonner rejects the view of Grenfell and Hunt in the *editio princeps* of the *Hell. Oxy*, that the local senates controlled foreign relations, and upholds the account given by Thucydides.

The fragment of a history of Sicyon (P. Oxy. XI 1365) has been discussed by M. Lenchantin de Gubernatis, who reproduces the text with some new readings¹¹, and by V. Costanzi, who differs from the former in several respects¹²; also by M. Denicolai¹³, in an article I have not seen.

To the sphere of biography belongs Satyrus's life of Euripides (P. Oxy. IX 1176). H. Gerstinger has published a careful study of this 14; and M. L. DE COURTEN briefly discusses it in an article 15 largely consisting of a translation of the greater part of it.

Turning next to philosophy, the important fragment of Antiphon Sophistes, $\Pi \epsilon \rho \lambda' \Lambda \lambda \eta \theta \epsilon i as$ (P. Oxy. XI 1364), has attracted much attention and evoked several articles of considerable interest. H. DIELS republishes the text ¹⁶, embodying supplements by Wilamowitz, which the latter was prevented by the war from sending to the editors, and adding critical notes. This article has been reviewed by R. Philippson ¹⁷. Articles on the fragment have been published by A. Croiset ¹⁸ and B. Brugi ¹⁹, the latter of whom calls special attention to its importance for the study of the development of the philosophy of law. Two other

- ¹ Les sept dernières chapitres de l'AθΗΝΑΙΩΝ ΠΟΛΙΤΕΙΑ (Organisation des tribunaux, à Athènes, dans la seconde moitié du IVe siècle), in Rev. d. ét. gr., 30 (1917), pp. 20—87.
 - ² Aristote, ΠΟΛΙΤΕΙΑ ΑΘΗΝΑΙΩΝ, 62, 2, in Rev. de Phil., 42 (1918), pp. 55-59.
- ³ Der Historiker von Oxyrhynchos, in Ber. Verh. d. Kön. Sächs. Ges. d. Wiss., Phil.-hist. Kl., 67, 1 (1915), pp. 1—26.
- ⁴ Cratippi Hellenicorum fragmenta Oxyrhynchia (Kl. Texte, no. 138). Bonn, Marcus und Weber [1915?]. I have been unable to see this work.
 - ⁵ In Gött. gel. Anzeigen, 179 (1917), pp. 409—429.
 ⁶ In Berl. Phil. Woch., 37 (1917), cols. 801—805.
 - ⁷ Zu Kratippos, ibid., cols. 1573—1576.

 8 In Berl. Phil. Woch., Oct. 4, 1919 (Prof. Grenfell's reference).
 - ⁹ Textkritisches zu den Hellenica Oxyrhynchica, in Hermes, 51 (1916), pp. 459-464.
 - ¹⁰ The Four Senates of the Boeotians, in Class. Philol., 10 (1915), pp. 381-385.
- ¹¹ Il nuovo storico di Sicione e la dinastia degli Ortagoridi, in Atti d. Reale Accad. di Sc. di Torino, 51 (1915/16), pp. 290—305.
- ¹² La Tirannide degli Ortagoridi alla luce di un nuovo documento, in Riv. di Fil. e d' Istr. Class., 44 (1916), pp. 369—378.
- ¹³ La genealogia dei Tiranni di Sicione secondo un nuovo frammento storico in Atti R. Acc. Torino, 1916, p. 487 ff.; see Studi sc. Pap., 2 (1917), p. 265, no. 217.
 - 14 Satyros' ΒΙΟΣ ΕΥΡΙΠΙΔΟΥ, in Wiener Studien, 38 (1916), pp. 54-71.
 - ¹⁵ Satiro, Il Biografo di Euripide, in Atene e Roma, 18 (1915), pp. 127-137.
- ¹⁶ Ein neues Fragment aus Antiphons Buch Über die Wahrheit, in Stzgsber. d. Kön. Preuss. Ak. d. Wiss., 1916, xxxv1—xxxv11, pp. 931—936.
 ¹⁷ In Berl. Phil. Woch., 1918, Feb. 9.
 - 18 Les Nouveaux Fragments d'Antiphon, in Rev. d. ét. gr., 30 (1917), pp. 1-19.
- ¹⁹ Natura e legge in un frammento del sofista Antifonte, in Rend. d. R. Accad. d. Lincei, Ser. v, 25 (1916), pp. 243-252.

articles, by E. Bignone¹ and Fraccaroli² respectively, are not accessible to me. The latter, it appears, translates a great part of the text.

The Epicurean philosophical fragment in P. Oxy. II 215 has been made the subject of a new discussion by H. Diels, who, against Crönert's denial, defends the earlier view that Epicurus himself was the author³. He bases this theory on grounds of the date of the MS., of style, vocabulary, and tone. Epicurus, he holds, had a twofold public, and the treatise to which the fragment belongs was of a more popular appeal. He gives the text, with a translation, and an index of words. His article is reviewed, along with that on Antiphon, by R. Philippson⁴. Diels has also published, from P. Herc. 152, 157, the treatise of the Epicurean Philodemus on the gods⁵; this edition also is reviewed by Philippson along with the articles just referred to; and Philippson himself devotes an article to Philodemus's treatise on anger⁶; this article he describes as part of a longer work on the psychology of anger in ancient philosophy.

Of the orators, Hyperides is the only one who claims attention. A new edition of the orations and fragments by Chr. Jensen appeared in 1917. The editor describes the papyri, their orthography, etc., and adds to his edition the life of Hyperides attributed to Plutarch and some other extracts relating to the orator. His volume is reviewed by Th. Thalheim⁸.

A fragment of an unknown romance is recognized by B. A. MÜLLER in PSI. II 151°. He prefaces his remarks on this fragment with a list of previously discovered romance fragments on papyrus, making suggestions for new readings in the Ninus romance and in P. Oxy. 417. The Ninus romance is also dealt with by him in a separate article 1°, in which he publishes notes on various passages and makes some suggestions for readings. The points dealt with are all concerned with military matters.

The portion of the interesting chrestomathy in P. Oxy. x 1241 which deals with the library of Alexandria is, naturally, used by A. Rostagni in an article on the librarians 11. The same writer has also published an article on the literary aspects of Philopator's court, which will be of use to students of the Ptolemaic period 12.

The very interesting invocation of Isis in P. Oxy. XI 1380 is the subject of articles by G. LAFAYE¹³, who republishes the text with a translation, commentary, critical study and indices, by P. COLLART¹⁴, and by F. Cumont¹⁵, who suggests that the curious title $\Lambda ar \epsilon i \nu \eta \nu$ attributed to Isis in Persia (l. 104) is a corruption of $\Lambda \nu a \epsilon i \tau \iota \nu$).

An article by I. Hammer-Jensen on the two chemical papyri P. Leid. x and P. Holmiensis which I have been unable to see ¹⁶ is reviewed by H. Diels ¹⁷, who endeavours to prove that the ruling theory of the ancient origin of alchemy is incorrect and that these two papyri have no connexion with Alexandrian chemical literature.

- ¹ Antifonte sofista ed il problema della sofistica nella storia del pensiero greco, in Nuova Rivista Storica, 1917. See Rassegna ital. di ling. e lett. class. (Napoli), 1 (1918), p. 25.
 - ² In Riv. di Fil. (Torino), 1915, p. 173; see Stud. sc. Pap., 2 (1917), p. 260, no. 149.
 - ³ Ein epikureisches Fragment über Götterverehrung, in Stzgsber. d. Pr. Akad., 1916, xxxv1—xxxv111, pp. 886—909.
 - ⁴ In Berl. Phil. Woch., 1918, Feb. 9.
- ⁵ Philodemos über die Götter Drittes Buch, in Abh. d. K. Preuss. Ak. d. Wiss., 1916, 4 (text) and 6 (commentary); both published in 1917.
- ⁶ Philodems Buch über den Zorn: ein Beitrag zu seiner Wiederherstellung und Auslegung, in Rhein. Museum, N. F., 71 (1916), pp. 425-460.
- ⁷ Hyperidis Orationes Sex cum ceterarum fragmentis post Frid. Blass Papyris denuo collatis ed. Chr. Jensen. Pp. xlviii + 192. Lipsiae, B. G. Teubner, 1917.
 - 8 In Berl. Phil. Woch., 1918, March 30.
 - ⁹ Ein neuer griechischer Roman, in Rhein. Museum, N. F., 71 (1916), pp. 358-363.
 - ¹⁰ Zum Ninosroman, ibid., 72 (1918), pp. 198-216.
- ¹¹ I bibliotecarii alessandrini nella cronologia della letteratura ellenistica, in Atti d. R. Acc. d. Sc. di Torino, 50 (1914-15), pp. 241-265.
 - ¹² Neos Dionysos; Poeti e letterati alla corte di Tolemeo IV Filopatore, ibid., pp. 989-1013.
 - 13 Litanie grecque d'Isis, in Rev. de Phil., 40 (1916), pp. 55-108.
 - 14 L'Invocation d'Isis d'après un papyrus d'Oxyrhynchos, in Rev. Égypt., N. S., 1 (1919), pp. 93-100.
 - ¹⁵ Isis Latina, in Rev. de Phil., 40 (1916), pp. 133—134.
- ¹⁶ Deux Papyrus à contenu d'ordre chimique, in Oversigt over det kgl. Danske Videnskab. Selsk. Forhandlinger, 1916, no. 4, pp. 279—302.
 - ¹⁷ Deutsche Literaturzeitung, 38 (1917), cols. 591-592.

Chemistry, at least of this kind, naturally suggests magic, and there are a number of items relating to the magical papyri. The great Paris magical papyrus is the subject of notes by L. RADERMACHER¹, who offers some philological observations on three passages, and by K. Preisendanz², who for tinoc τὸ ὅνομα in l. 1850 suggests πνος = πνεύματος. Preisendanz also suggests, in a different note³, that in P. Leid. V, col. 7, l. 14, the words κατά τινα καιρόν do not belong to the invocation but are an addition of the magician and should be bracketed. Elsewhere the same scholar acutely (and no doubt correctly) explains as a misunderstanding by the scribe of his model an apparent mention of Moses in a Berlin magical papyrus first edited by Parthey and now to be re-edited in the Corpus of magical papyri⁴. Finally, reference must be made to two articles neither of which I have been able to see and for a knowledge of which I am indebted to Mr Tod; one by Preisendanz of a miscellaneous character⁵, and one by N. Terzaghif, suggesting a reading for P. Lond. I 46, 414.

P. Oxy. x 1242, a further specimen of the "anti-Semitic" literature of Alexandria, describing an audience by Trajan of rival Greek and Jewish emissaries, is the subject of a study by W. Weber, who concludes his article by some interesting remarks on the "process" of S. Paul. A monograph on the Acta in their relation to martyrdom literature, whether Pagan or Christian, has been published by H. Niedermayer.

In the sphere of Christian literature the principal item is perhaps an article of a general character by V. Martin on the character of New Testament paperi and their significance for the study of the history of the text. He does not make any original contributions of importance to the subject, but his general survey of it is of both interest and utility, and he writes, as always, with freshness and lucidity.

An important publication in this sphere is the edition, by Th. Scherman, as no. 3 of the Munich *Beiträge*, of a Berlin papyrus (P. Berol. 13415) previously published by C. Schmidt, which contains two Christian prayers (of the first only the conclusion)¹⁰. He explains them as part of the preparation of candidates for baptism and thinks that they date from the early Christian period in Alexandria. His volume is reviewed by C. Schmidt¹¹, who does not accept his theory, and by L. Wohleb¹².

The uncanonical Gospel in P. Oxy. XI 1384 is noticed by J. MOFFAT¹³ and (in an article not accessible to me) A. OLIVIERI¹⁴.

Lastly, reference must be made here to the appearance of Part III of Moulton and Milligan's Vocabulary of the Greek Testament 15 ($\dot{\epsilon}\dot{a}\nu$ to $\dot{\theta}\dot{\omega}\rho a\dot{\xi}$), and of Part 1 of Vol. II of Moulton's Grammar of New Testament Greek 16, edited, after the author's lamented death, by W. F. Howard. It is a relief to hear that these valuable works will not be left unfinished owing to Moulton's death, though it appears that while he had completed Parts 1 and 2 of Vol. II, Part 3 remains imperfect.

Since P. Oxy. XI consisted entirely of literary texts, reviews of it may appropriately be noticed at the end of this section. A long and important review has been published by K. Fr. W. Schmidt¹⁷, who makes many conjectures for readings, particularly in the case of the Isis text. Other reviews noticed include those by Th. Reinach¹⁸, P. Collart¹⁹, R. Pfeiffer ²⁰, M. Croiset²¹, and G. Fraccaroli²².

- ¹ Kritische Beiträge xv, in Wiener Studien, 39 (1917), pp. 73-75.
- ² TINOC TO ONOMA, *ibid.*, pp. 291—292.
- ³ Κατά τινα καιρόν, in Rhein. Museum, N. F., 72 (1917), pp. 159-160.
- ⁴ Ein Pseudo-Moses, in Arch. f. Religionswiss., 19 (1918), pp. 195-196.
- ⁵ Miszellen zu den Zauberpapyri, II, in Wiener Studien, 40, p. 1 ff.
- ⁶ Sul Pap. Lond. 46, in Rivista indo-greco-italica, 2 (1918), p. 24.
- ⁷ Eine Gerichtsverhandlung vor Kaiser Trajan, in Hermes, 50 (1915), pp. 47-92.
- 8 Über antike Protokoll-Literatur. Diss. Göttingen, 1918.
- 9 Les papyrus du nouveau testament et l'histoire du texte, in Rev. de Théol. et de Phil., N. S., 7 (1919), pp. 43—72.
- Münchener Beiträge zur Papyrusforschung, III Heft. Frühchristliche Vorbereitungsgebete zur Taufe. Pp. 32.
 München, 1917; Oskar Beck.
 In Deutsche Literaturzeitung, 39 (1918), cols. 44—45.
- ¹² In Berl. Phil. Woch., 1918, cols. 610—611. I have not been able to see this, and owe the reference to Prof. Grenfell.
 - 13 Uncanonical Gospel-fragments, in Expository Times, 27 (1915-16), p. 424.
- 14 Di due papiri di Oxyrhynchus, in Mem. R. Accad. di Napoli, 3, pp. 117—136. See Rassegna ital. di lingu. e lett. class. (Napoli), 1 (1918), p. 94.
 15 London, Hodder and Stoughton, 1919.
- 16 A Grammar of New Testament Greek, vol. II. Accidence and Word-Formation, Part i. General Introduction: Sounds and Writing. T. and T. Clark, Edinburgh (1919).
 - ¹⁷ In Gött. gel. Anzeigen, 180 (1918), pp. 81-126.

 ¹⁸ In Rev. d. ét. gr., 29 (1916), pp. 119-124.
 - ¹⁹ In Rev. Égypt., N. S., 1 (1919), pp. 115—118.
 - ²¹ In Journ. des Sav., N. S., 14 (1916), pp. 32-35. ²² In Riv. di Fil. e d' Istr. Class., 44 (1916), pp. 171-176.

3. Collections of Non-Literary Texts.

The most important single volume to be noticed under this head is Part XII of the Oxyrhynchus Papyri1, which, unlike any of its predecessors, consists entirely of non-literary texts. Many of these are of exceptional interest and value, chief among them in general appeal being perhaps the series of documents relating to proceedings in the Senate of Oxyrhynchus. None of these papyri is complete, and numerous points have therefore to be left unsettled or to be settled only by inference; but enough remains to make a very substantial addition to our knowledge of the procedure in the senates of the metropoleis, and it goes without saying that the editors succeed in extracting from the mutilated documents all the information that, on a first study of them, they can be made to yield. Two important texts (1451 and 1452) relate to epicrisis and contain some new evidence on this vexed subject. They are furnished by the editors with valuable introductions and commentaries, and have been used to good effect by Lesquier in his book on the Roman army (see below, § 5). Some horoscopes (1476 and 1563-4) provide valuable evidence on the obscure chronology of the Emperors from Decius to Diocletian. No. 1453, a declaration of temple lamplighters, dated 30-29 B.C., is the earliest extant papyrus of the Roman period, and offers several points of interest. Of value for the study of Egyptian cult and ritual is 1449, a return of temple property; 1405 seems (though the uncertainty of reading in the critical passage makes its evidence doubtful) to throw new light on the cessio bonorum; and there are many other documents adding to our knowledge on various matters of detail.

This volume has been reviewed by K. Fr. W. Schmidt², Th. Reinach³, and R. Pfeiffer⁴ (along with P. Oxy. XI). In addition to these reviews it has been the occasion of articles by C. H. Dodd, who draws from it some illustrations of Pauline usages⁵, and by P. Jouguet, who utilizes the texts relating to the Senate for an article on the Egyptian Senates in the third century⁶.

Next after or along with the Oxyrhynchus volume rank PSI. IV and V7. Both these volumes consist (with two exceptions, noted above, in § 1) entirely of documents as opposed to literary texts; but in interest, at least to the papyrologist pure and simple, they surpass all their predecessors. Each is divided into two parts, the first consisting, like vols. I and III, of miscellaneous papyri, from various sites and of various dates. In vol. IV these include two or three from the sixth century Kôm Ishgau find, e.g. 283, a rather interesting lease of land. Among other documents in this section reference may be made to 297, a request to a doctor to visit the writer, who is concerned about his health, 298, which shows that service on the public galleys was not necessarily a liturgy but might be undertaken by contract for a fixed salary, 299, a letter, described as of the late third century, which may well be from a Christian, and which also refers to the health of the writer and his family, and 311, another interesting letter alluding to Theodotus, Bishop of Laodicea, in Syria. But the real importance of this volume, as of its successor, lies in the second part, the Zeno papyri, of the third century B.C. These are, as it is now hardly necessary to say, of quite exceptional interest, not only for the administrative and economic history and the chronology of early Ptolemaic Egypt, but even more for the light they throw on social conditions. They are full of intimate touches and of little details illustrating the everyday life of the period. Thus, in 333 we have a reference to garlands of pomegranate blossom; 340 (a rather obscure letter, it is true) gives us a glimpse into the intrigues of the court; in 341 two weavers tout for custom; in 354 we hear of hay concealed lest the king's escort should requisition it; in 356 (a very interesting economic sidelight) the peasants are not willing to sell their produce for payment in kind but only for cash; 382 concerns the repair of a boat, rendered difficult by shortage of wood; 383 illustrates the process of presenting an έντευξις (the έντευξις itself is of interest for questions of taxation); in 388 several payments are made to

¹ The Oxyrhynchus Papyri, Part xII. Edited by B. P. Grenfell and A. S. Hunt. Pp. xvi+352. 2 Plates. London, Egypt Exploration Fund (1916).

² In Gött. gel. Anzeigen, 180 (1918), pp. 126—136.

³ In Journ. des Sav., N. S., 15 (1917), pp. 193—205.

⁴ In Berl. Phil. Woch., 37 (1917), cols. 1161—1165.

⁵ Pauline Illustrations from Recently Published Papyri, in Expositor, 8 Ser., 15 (1918), pp. 291—296.

⁶ Les βoulai égyptiennes à la fin du IIIe siècle après J.-C. d'après le tome xII des Oxyrhynchus Papyri, in Rev. Égypt., N. S., 1 (1919), pp. 50—80.

⁷ Papiri greci e latini ıv and v. Pubbl. della Soc. Ital. per la Ric. dei Papiri gr. e lat. in Egitto. Firenze (1917). Pp. xiv+238 and Pp. xi+191.

ποιηταῖs, who may perhaps be poets; 392 is a begging letter from one who must have been an expert in the art; the writer of 400 is apparently trying to persuade Zeno to do a rather shady trick; 402 throws an interesting sidelight on the gastronomic fashions of the day; the writer of 403 was unable to read the last letter of his correspondent, a difficulty in which he will have the lively sympathy of all papyrologists; 406 is an interesting though rather obscure letter concerning the sale of female slaves; 407 is a letter from a painter (ζωγράφοs), who has been doing some work for Zeno; 423 throws light on the quarrying industry, 425 on the financial administration; in 429 we find Zeno making memoranda of duties to be discharged; 433 and 434 are of interest for agriculture, 435 for the Sarapis cult, as also for affairs at court; from 440 we learn that the feeders of the sacred cats were freed from liturgies; in 441 we see potters at work; and these are but a selection even of the more interesting documents in the volume.

Vol. v is not quite so rich in interest as IV but nevertheless contains several important or noteworthy texts, which are not confined to the Zeno papyri. In 450, a collection of miscellaneous documents, are several matters of interest. 452 is a petition concerning an attempt of certain slaves to win their liberty fraudulently $(\dot{\epsilon}\kappa\kappa\lambda\dot{\epsilon}i\nu\epsilon\iota\nu \left[\tau\dot{\rho}\nu\ \delta\epsilon\sigma\mu\dot{\rho}\nu\right]\tau\hat{\eta}s\ \delta\sigma\nu\lambda\dot{\epsilon}as)$; it is asked that the defensor shall be required to investigate the case. 453 is yet another libellus of the Decian persecution. In 457 we have an interesting application for epicrisis. Among the Zeno papyri may be mentioned 488, interesting for the subject of the rise of the Nile, 500, which throws light on the $\delta\omega\rho\epsilon\dot{a}$ of Apollonius, 513, a document of some importance for the methods of assigning $\kappa\lambda\hat{\eta}\rho\sigma\iota$, 514, relating to the $\sigma\tau\epsilon\phi\alpha\nu\eta\phi\dot{\rho}\rho\iota a$, and containing the interesting phrase $\nu\dot{\nu}\kappa\tau a\ \dot{\eta}\mu\dot{\epsilon}\rho\alpha\nu\ \tau\sigma\iota\sigma\dot{\nu}\mu\dot{\epsilon}\nu\sigma s$, 531, illustrating the worship of Astarte at Memphis, 543, a text important geographically, as it specifies the stages of a journey from Pelusium to Canopus, and 546, containing an estimate of the cost of builders' work.

The earlier of these two volumes has been reviewed by Jouguet1.

Another important publication is vol. III of J. MASPERO'S great catalogue of Byzantine papyri at Cairo². Owing to the death of its brilliant editor in the French attack on Vauquois, the volume was seen through the press by Sir Gaston Maspero, who has prefixed to it a memoir of his son, with a bibliography of his publications. Memoir and catalogue combine to impress upon the reader the sense of the irreparable loss which Byzantine studies have suffered in Jean Maspero's early death.

It is a proof of the extraordinary richness of the "archives" of Dioscorus of Aphrodito that the papyri published in this volume, like those in the two previous ones, come entirely, with one exception (also a Kôm Ishgau document but one from the earlier find, of the Arab period), from his papers—this in addition to the numerous other documents of the same provenance in other collections. The volume, though it has naturally not quite the freshness of the first, does not yield in real value and interest to either of its predecessors. Most of the texts it contains appeal, of course, rather to the specialist than to the general reader, but no. 67295, the $\partial \nu \tau \rho \rho \eta \tau \kappa \delta \lambda i \beta \epsilon \lambda \lambda a i$ of the philosopher and (if one may commit a verbal anachronism) Egyptologist Horapollon, is of general interest. Among the other documents of special importance are the appeal of the inhabitants of Aphrodito to the Empress Theodora (67283), several good official letters, two contracts of emphyteusis, a lease of a wagon (67303), with many interesting points of detail, a remarkable marriage contract (67310), with novel features, a will (67312) containing a bequest "for the redemption of captives," two orders by the praeses, a number of documents of surety, and the report of legal proceedings before a defensor, of some importance for the land and taxation system of Graeco-Roman Egypt. The volume has been reviewed by G. ROUILLARD³ (along with vol. II) and H. I. Bell⁴.

Vol. v of the British Museum catalogue ⁵, which also consists entirely of Byzantine texts, may naturally follow on the Cairo volume, since it consists partly of documents from Dioscorus's archives. It contains, in addition to these, some well preserved papyri from Syene, part of the same find as *P. Mon.* 1, and, further, a small number of fourth- (or late third-) century documents and a larger number of miscellaneous documents of the Late Byzantine period, mostly, but not entirely, from Hermopolis. The most interesting documents are those from Aphrodito and Syene; and though in neither case do these include

¹ In Rev. Égypt., N. S., 1 (1919), pp. 122—124.

² Catalogue Général des Ant. Égypt. du Musée du Caire. Nos. 67279—67359. Papyrus grecs d'époque byzantine. Par M. Jean Maspero. Tome III°. Le Caire, Impr. de l'Inst. Fr. d'Arch. Or., 1916. Pp. xxxvi + 260. Portrait and 8 other plates.

³ In Rev. Égypt., N. S., 1 (1919), pp. 119—121.

⁴ In J. E. A., 3 (1916), pp. 288—292.

⁵ Greek Papyri in the British Museum, vol. v. Edited by H. I. Bell. London (1917). Pp. xvi + 376.

anything so novel and important as the best of those in Maspero's volumes and in *P. Mon.* I respectively, yet they do serve very usefully to complete the material there published, and several of them are of considerable interest. The best is probably the arbitration (1708), which is not only unusually long but contains evidence of real value on various points; and to this may be added a very notable metrological text (1718). There are some good petitions, two marriage contracts (one of them a copy of the completed document of which P. Cair. Masp. III 67310 noticed above is a draft), and a useful series of leases. A Coptic deed of arbitration is unfortunately too imperfect to yield very definite results.

P. M. Meyer has published a volume of non-literary texts drawn partly from the papyri of the New Testament Seminar at Berlin and partly from the ostraca of Deissmann's private collection. Though the volume contains no text of the first importance there are several which possess considerable interest. Such are the petition of catoeci in 1, referring to the (irregular) assignment to military settlers in the second century B.C. of fertile land, the not wholly clear $\epsilon \pi i \sigma \tau \alpha \lambda \mu a$ of a strategus in 2, the papyri (5—10) referring to a family of the "6475 Fayum Greeks," several of which are intrinsically valuable apart from their connexion with that body, the soldier's letter in 20, and several of the ostraca. The texts are edited with the care and elaborateness of commentary characteristic of Meyer's publications. The volume has been reviewed by K. Fr. W. Schmidt, L. Wenger, M. Gelzer, F. Zucker, H. Brinkmann, and an anonymous reviewer.

The University of Basel now possesses a small collection of Greek papyri, and these have been edited by E. Rabel⁸. Of the texts dealt with, twenty-three are published in full, and of three only descriptions or excerpts are given. An interesting Coptic contract concerning a water-wheel is edited in a separate section by Spiegelberg. Of the Greek texts one is theological and one astrological; these two have already been referred to in § 1 above. The remainder are non-literary. None of them is of the first importance, but several show features of interest, especially 2, a contract concerning requisitioned (?) camels, 5, a sale of standing grass of an unusual kind, 7, the loan with hypothecation of house property previously edited by Rabel in his Verfügungsbeschrünkungen, and 16, one of the earliest—if not the earliest—Christian letters yet discovered. Rabel's very full and careful juristic commentary gives an added value to the collection. The only reviews I have seen which seem to demand notice are two by J. Kohler⁹ and K. Fr. W. Schmidt¹⁰.

The publication of the Freiburg papyri, begun by Gelzer, is continued by Partsch in a small volume of juristic texts, four in number¹¹. Though none of them is of outstanding merit, they all have points of interest and are accompanied by a valuable juristic commentary. They are: a συγχώρησις concerning a sale of a share in slaves; a συστατικόν to a procurator bonorum; an agreement for the public proclamation of the emancipation of a slave; and a petition to a defensor¹². There are no facsimiles.

I noticed in my last Report the publication of parts 4 and 5 of Preisigke's Sammelbuch 13, concluding

- ¹ Griechische Texte aus Ägypten. Paul M. Meyer. 1. Papyri des Neutestamentlichen Seminars der Universität Berlin. 11. Ostraka der Sammlung Deissmann. 4 Plates. Berlin, Weidmann, 1916.
 - ² In Woch. f. klass. Phil., 33 (1916), cols. 937—946.
 - ³ In Deutsche Literaturzeitung, 1917, cols. 1275—1304.
 - ⁴ In Berl. Phil. Woch., 36 (1916), cols. 1513—1516.
- ⁵ Ibid., 37 (1917), cols. 1225—1233.
- ⁶ In Vierteljahrschr. f. Sozial- u. Wirtschaftsgesch., 14 (1918), pp. 581-582.
- ⁷ In Journ. of Hell. Stud., 37 (1917), pp. 126—127.
- 8 Papyrusurkunden der Öffentlichen Bibliothek der Universität zu Basel. 1. Urkunden in griechischer Sprache. E. Rabel. 11. Ein koptischer Vertrag. W. Spiegelberg. 2 Plates. Berlin, Weidmann (1917). (Abhandl. d. Kön. Ges. d. Wiss. zu Göttingen, N. F., 16, 3.)
 - ⁹ In Zeitschr. f. vergl. Rechtswiss., 35 (1918), pp. 468-470.
 - ¹⁰ In Berl. Phil. Woch., 1918, June 8.
- 11 Mitteilungen aus der Freiburger Papyrussammlung. 2. Juristische Texte der römischen Zeit. Herausg. von Josef Partsch. Stzgsber. d. Heidelberg. Akad. d. Wiss. Phil.-Hist. Kl., 1916, 10 Abh. Heidelberg, 1916, Carl Winter.
- ¹² In l. 11 of the last I venture to suggest $[\kappa]$ αὶ τῶν $\dot{\rho}[\iota \pi]$ αρ $[\dot{\iota}\omega\nu$; see P. Lond. v 1650, 4. In l. 10 is προσφωνήσι τοῦ γρ. possible?
- 13 I may note here that the date "fifth century" assigned to no. 5681, one of the new texts, is quite impossible, for the document begins with the Christian invocation (see my review of Schubart's Einführung, J. E. A., 5, 1918, p. 308). It is to be noted that the date is by the indiction only, which, in a document of this kind (a compromissum), is inexplicable (except perhaps by inadvertence) if it was drawn up while the Imperial authority

vol. I. Part 1 of the second volume 1, containing the indices of sources, of materials, of classes of documents, of provenance, of editors, of collections in which the documents are kept, and of personal names, has now appeared, and is to be followed, probably next year (1920), by part 2.

4. Lesser Publications of Non-Literary Texts.

The most noteworthy publication under this head is perhaps that of the Cairo papyri from the Zeno collection, for which see above, § 3. The Gizeh Museum now possesses a considerable number of these very interesting and important documents, and C. C. Edgar has begun to edit, in a provisional form, pending the appearance of a definitive edition, the more complete and striking texts. I believe that more than one part of the series has appeared, but I have been able to see only the first, which contains nos. 1--102. He begins his article with a brief account of Zeno. The documents published in this first instalment are: 1. A contract of loan, a duplicate of PSI. IV 321; 2. A letter of Apollonius to Zeno, then probably out of Egypt and on the sea-coast: 26th year (of Philadelphus); 3. A sale of a slave girl, interesting because written in Palestine, at Birta in Ammon: 27th year; 4. A letter concerning an unsuccessful attempt to recover money from a Jew at Jeddu: 27th year; 5. An extremely interesting but rather difficult letter from Demetrius, an official of the mint, to Apollonius on the minting of gold: 28th year; 6. Posidonius to Apollonius on the seizure of ship iron by agents of the τελώνης: 28th year; 7. Zoilus to Apollonius on Sarapis (= PSI. IV 435): 28th year; 8. Amyntas to Zeno, then at Mendes but on the point of departing on a mission: 28th year; 9. List of articles for a voyage; 10. Aristeus to Zeno on household payments: 28th year. While on the subject of the Zeno papyri I may mention that the British Museum has recently acquired a small collection of documents from this find and the Rylands Library some more.

P. M. MEYER has published several interesting papyri; and though one cannot but wish that he would devote himself first to the completion of his Hamburg catalogue one must recognize the utility and excellence of these preliminary publications. The largest is one of three papyri, very imperfect but of unusual legal interest, from the Hamburg collection³. The first is a formula (in Latin) for a will, which Meyer regards as part of a formulary, either of wills or of various legal transactions. The second is a small strip from a Greek translation of a "Manzipationstestament," which Meyer in part conjecturally restores, and the third an equally imperfect sale of slaves, which, though in Greek, is between Roman citizens and shows Roman formulae with Greek influence. Of this too Meyer essays a restoration.

Another interesting legal document, also from the Hamburg collection (P. Hamb. Stadtbibl. Inv. 356), was published later by itself⁴. It is a draft, written probably soon after a.d. 144–5, of an agreement by which a guardian, holding for his own use three arourae of land and paying taxes on them in the name of the estate for which he is trustee, guarantees his co-trustee that he will bear the sole responsibility and the expense of any legal proceedings.

Finally, Meyer publishes, again from the Hamburg collection (Inv. No. 333), a papyrus containing an oath by four *nesiotae* employed on a Nile patrol ship respecting the disposal of their prospective bag on a hunting (and probably fishing) expedition ⁵. He adds a useful commentary.

Schubart has published from time to time some very noteworthy texts from the recent accessions to the Berlin collection. One of these 6, a document of the second century B.C., is a letter from the strategus

- continued. I suggest therefore A.D. 623 as a likely date. In l. 20 f. perhaps $\dot{\epsilon}\nu | \tau\alpha\hat{\nu}\theta\alpha| [\dot{\epsilon}]\nu \tau\alpha[\dot{\nu}\tau]\eta \tau\hat{\eta}$? It is to be noted that some corrections to the volume were suggested in Grenfell's report on paper in The Year's Work, 1919, p. 30.
- ¹ Sammelbuch griechischer Urkunden aus Ägypten. Herausg....von Fr. Preisigke. 11. Band, 1 Hälfte. Strassburg, Karl J. Trübner (1918). Pp. 320.
- ² Selected Papyri from the Archives of Zenon (Nos. 1—10), in Annales du Service, 18 (1918), pp. 159—182. [Since this Report went to press I have been enabled by the kindness of Prof. Grenfell to see the second part (Nos. 11—21), *ibid.*, 18, pp. 225—244.]
- ³ Römischrechtliche Papyrusurkunden der Hamburger Stadtbibliothek, in Zeitschr. f. vergl. Rechtswiss., 35 (1918), pp. 81—104. It is worth while to quote the following note by Kohler: "Die Papyrologie soll künftig in der Zeitschrift mehr als bisher berücksichtigt werden."
 - 4 Indemnitätsversprechen eines Altersvormundes an seinen Mitvormund, ibid., 37 (1919), pp. 409-416.
- ⁵ Königseid von vier Flottensoldaten der Nesioten-Landsmannschaft aus dem Jahre 159 vor Chr., in Klio, 15 (1918), pp. 376—381.
- ⁶ Ägyptische Urkundenschreiber in der Ptolemäerzeit, in Amtl. Berichte aus den Kön. Kunstsammlungen, 36 (1915), cols. 94—98.

Ptolemaeus to the headmen of the villages in the $\mu\epsilon\rho$'s of Heraclides, sending a list of $\gamma\rho a\mu\mu a\tau o \delta\iota \delta a\sigma \kappa a\lambda o \iota$ (which appears to be equivalent to $\mu o\nu o\gamma\rho a\phi o \iota$, i.e. native notaries) selected and sworn as suitable persons to write Egyptian contracts. The tariff fixed is 20 drachmas for a sale and release, 10 for other contracts.

Another document, of exceptional interest for the subject of the pagan cults, is a decree of Ptolemy Philopator concerning the mysteries of Dionysus¹. Celebrants of the mysteries are hereby required to proceed to Alexandria and notify themselves, specifying, to the extent of three generations, from whom they have received the cult (a sort of "apostolical succession" in fact). Such at least is Schubart's explanation of the document, and he gives good grounds for it. R. Reitzenstein, in an interesting article² on the document, though he takes a slightly different view as regards details, agrees with Schubart on the main point, that the decree refers to mysteries. He cites the measures of the Roman Senate in a similar connexion shortly afterwards (Livy 39, 8, 3), and takes the king's intention to be that of registering all intending celebrants of the mysteries.

In another article Schubart publishes two noteworthy texts from the Berlin collection³. The second is a well-preserved Latin letter of introduction. It possesses no features of special interest, but is valuable owing to the comparative rarity of Latin letters on papyrus. The first is more novel. It is an ostracon containing a list of names, largely military—not, it will be seen, a very remarkable document in itself; but it derives a very special interest from the name in 1. 8, $Ba\lambda o\nu\beta o\nu\rho\gamma \sum \dot{\gamma}\nu o\nu\iota \sigma\iota \beta\dot{\nu}\dot{\nu}\lambda\dot{\rho}a$. In the first word Schubart recognizes the German name Walburg; and he regards the person in question as a German prophetess, perhaps the captive of some Roman soldier; $\Sigma\dot{\gamma}\nu o\nu\iota$, he thinks, is miswritten for "Semnonian." On this last point some difference of opinion is no doubt possible; but his identification of the name Walburg seems clearly right, and is accepted by E. Schröder, who, in a valuable discussion of the name 4, explains it as Waluburg, the first part being Goth. Walus, a pilgrim's staff or magician's wand. He translates the whole entry not "Waluburg, the Semnonian, seeress," but "W., the Semnonian seeress," $\Sigma\dot{\gamma}\nu\omega\nu$ being an adjective.

The remaining two publications of Schubart are of letters. In the first 5 he publishes a very interesting private letter, a translation of which (without the Greek text) had already appeared in his Jahrtausend am Nil. It is from a certain Dios to his "sister" (i.e., possibly, his wife) and describes his doings at Alexandria and in particular his experiences in some athletic contests instituted by the Emperor, in which he took part. Schubart identifies the Emperor with Caracalla, and appends to the text and translation an interesting discussion of various questions suggested. In the second 6 he edits, firstly, a letter of the time of Trajan addressed to a certain Ptolemy ϵis $\tau \delta$ $M \epsilon \lambda a \nu \kappa \delta \mu o \nu \gamma \rho a \mu \mu a \tau \delta \delta \delta a \sigma \kappa a \lambda (\epsilon i o \nu)$, in which the writer informs his correspondent that he is "bothered" $(\chi \epsilon \iota \mu a \zeta \rho \mu a)$ by some geometrical problems and asks for help, adding a request for a certain $\chi a \rho \tau \eta s$ of which Ptolemy had told him; and, secondly, two Christian letters of introduction, of the fourth-fifth century.

An exceedingly useful piece of work is Martin's edition, with an elaborate commentary, of a fragmentary Geneva papyrus from the Mendes find. These fragments are portions of a long roll containing a register of lands on which a remission or abatement of tax was claimed, of a character very similar to P. Brux. 1 (=Wilcken, Chrest. 236). The register is in itself of considerable importance, and under the able editorship of Martin it is made to yield material of the highest value for the study both of the method of registering such land and of the system of land tenures in Roman Egypt generally. Martin certainly clears up some points and suggests lines of research towards the elucidation of others; of particular value is his treatment of the various classes of $\gamma \hat{\eta} \hat{\epsilon} \nu a \phi \epsilon \sigma i \omega \nu$. As an appendix he adds a much improved text of the important papyrus P. Lond. 193 recto.

S. EITREM has published, with a facsimile, a document of the sale of a slave, which is of a somewhat interesting character⁸. Wilcken explains it as "eine Bankurkunde in Brouillon," Mitteis as a hitherto

- ¹ Ptolemaios Philopator und Dionysos, ibid., 38 (1917), cols. 189—198.
- ² Zur Religionspolitik der Ptolemäer, in Arch. f. Religionswiss., 19 (1918), pp. 191—194.
- 3 1. Walburg, die Sibylle. 2. Ein lateinischer Empfehlungsbrief, ibid., 38 (1917), cols. 328-338.
- ⁴ Walburg, die Sibylle, in Arch. f. Religionswiss., 19 (1918), pp. 196-200.
- ⁵ Ein Privatbrief aus Alexandreia, in Amtl. Ber. Kön. Kunsts., 39 (1918), cols. 141—153.
- ⁶ Ibid., 36 (1915), cols. 205-208, Ein Privatbrief; cols. 209-210, Ein Christlicher Brief.
- ⁷ Un document administratif du nome de Mendès, in Studien zur Pal. u. Pap., 17 (1917), pp. 9-52.
- ⁸ Ein Sklavenkauf aus der Zeit des Antoninus Pius, in Videnskapsselsk. Forhandlinger for 1916, no. 2. Kristiania, J. Dybwad, 1916. 1 plate.

unknown and probably primitive type of $\delta\iota a\gamma\rho a\phi\dot{\eta}$. At the end Eitrem appends an interesting excursus on the custom of whitening the feet of slaves before exposing them for sale.

PREISIGKE differs from Mitteis's view as to the nature of this document, which he republishes in full¹. He takes it as an "unselbständige Girobankbescheinigung" of an unusual form, the variation being presumably local; for the document appears, as he points out, to be from Alexandria, which fact gives it a special interest. He corrects Eitrem's readings in several places. The original publication by Eitrem is reviewed by M. Gelzer² and by P. Viereck³, who makes some suggestions for new readings.

H. G. EVELYN WHITE publishes 23 ostraca from Dakka, in Nubia, all but two of them receipts for wine, or its equivalent in money, issued to soldiers by the *cibariator*, an official hitherto known only in two of Wilcken's ostraca. No. 1 mentions a σιτολόγος. The ostraca come from the same place and probably are of the same period (Severus and Caracalla) as Wilcken's ostraca 1128—1146; cf. too 1220, 1223.

Calderini has published three previously inedited letters from the British Museum collection⁵. His transcripts were made from photographs, always a rather unsatisfactory authority for badly preserved papyri, however good the photographs may be, and it is not to be wondered at therefore that Calderini's texts require a good deal of correction, which they have received at the hands of Grenfell in a review of the first two volumes of the *Studi*⁶.

E. Schönbauer, to illustrate the development of the "double deed" of the Ptolemaic period, has published, from a piece of papyrus cartonnage in the Berlin collection (P. Berol. 11773, acquired in 1910), a document of this type, written at Tholthis in the Oxyrhynchite nome in B.C. 215-4. It is distinctly interesting as an example of the class at one stage in its development. It is a loan, very similar to Mitteis, Chrest. 131, and, according to the editor, is probably in the same hand as P. Hamb. 26. The "inner script" has not yet degenerated into the mere summary which it became later, but already the "outer script" is the more important, as the inner is written more hastily and, if the editor's view is correct, after the other. Curiously enough, the names of the witnesses are not inserted in either copy. Schönbauer accompanies the document with a somewhat elaborate commentary.

It may be mentioned here that Jörs, in his article on the *chrematistae* mentioned below, in § 6, publishes part of a legal text in the Berlin collection; and for another new text see Preisigke's article mentioned in the same section.

GRENFELL has published an unusually well-preserved, indeed practically perfect, Latin diptych⁸, containing the official authorization in A.D. 198 by the prefect Q. Aemilius Saturninus for the appointment of a tutor for a woman named Mevia Dionysarion. Its interest lies perhaps rather in its excellent preservation, in its format, and in its palaeographical importance than in its legal aspect, since it adds little to our knowledge of the process of appointment, but it contains an abbreviated formula (d. e. r. e. e. b. t. s. s.) which appears to be new and for which no convincing explanation has so far been found.

In an article on an old collection of Egyptian antiquities F. Ll. Griffith publishes a private letter of the first century B.c. referring to the transport of bodies for embalming.

In the course of a report on excavations Ahmed Bey Kamal publishes six mummy-labels 10.

Since it is impossible for the student of Graeco-Roman Egypt to neglect altogether the texts in the native tongue, reference must be made, in concluding this section, to some publications of Demotic and Coptic texts which throw light on questions affecting papyrology proper. Spiegelberg has published several such texts. One 11 is a Demotic marriage contract of a distinctly interesting character, the trans-

- ¹ Zum Papyrus Eitrem Nr. 5 (eine Bankurkunde aus römischer Zeit), in Stzgsber. d. Heidelb. Akad., 1916, 3 Abt
 - ² In Berl. Phil. Woch., 36 (1916), cols. 1594—1595.
 - ³ In Woch. f. klass. Phil., 33 (1916), cols. 917—918; see also cols. 1179—1181.
 - 4 Graeco-Roman Ostraca from Dakka, Nubia, in Class. Rev., 34 (1919), pp. 49-53.
 - ⁵ Papiri inediti, in Studî d. sc. papirol., 2 (1917), pp. 3—5.
 - 6 In Class. Rev., 32 (1918), pp. 112-114.
 - ⁷ Zur Entwicklung der Doppel-Urkunde in ptolemäischer Zeit, in Zeitschr. Sav.-St., 39 (1918), pp. 224-247.
 - 8 A Latin-Greek Diptych of A.D. 198, in Bodl. Quart. Record, 2 (1919), pp. 258-262.
 - ⁹ A Tourist's Collection of Fifty Years ago, in J. E. A., 3 (1916), p. 197.
- ¹⁰ Rapport sur les fouilles exécutées dans la zone comprise entre Déirout au Nord et Déir-el-Ganadlah au Sud, in Ann. du Service, 14 (1914), pp. 63—67.
- ¹¹ Der demotische Papyrus der Stadtbibliothek Frankfurt a. M., in Zeitschr. f. äg. Spr. u. Alt., 54 (1918), pp. 93—98.

formation of an ἄγραφος into an ἔγγραφος γάμος, from a Frankfurt papyrus. Partsch appends a juristic commentary. Another of his publications is that of four Demotic ostraca from the British Museum containing receipts for the burial tax $(\tau \epsilon \lambda os \tau άφων)^1$. A third is a collection of miscellaneous Demotic texts or notes on texts 2, of which the following interest the Greek papyrologist: (1) Ein Bestattungsvertrag aus der Zeit des Ptolemaios Philadelphos, pp. 111—114. (2) Ein Schuldschein aus der Zeit des Gegenkönigs Harmachis in doppelter Ausfertigung. With hypothecation of a house. Pp. 114—116. (3) Demotische Urkunden zu der λογεία Ἰσιδος. Four Berlin ostraca (receipts), A.D. 55/6, 58/9, 50/1, 59/60. Pp. 116—120. (6) Der Name Θουτορχῆς. A mummy label gives this as the equivalent of Thutj-rh-s="Thoth knows him (or it)." Pp. 124—126. (7) Ein demotisch-griechisches Mumienschild aus dem Jahre 256 n. Ch. With a curious abbreviation (Πουπλίων) of the names of Valerianus and Gallienus. Pp. 126—127.

A publication by G. MÖLLER of two Demotic marriage contracts³ I know only from a review by K. Sethe⁴, who suggests in the course of it that an $\tilde{\epsilon}\gamma\gamma\rho\alpha\phi$ os $\gamma\dot{\alpha}\mu$ os was really a marriage entered in the notarial marriage register, while an $\tilde{\epsilon}\gamma\rho\alpha\phi$ os was one not so entered. (For this subject see also below, in § 6.) Möller has also published another marriage contract, but this time a Coptic one, with a not very clear date, which Möller after some discussion identifies as A.D. 1208⁵.

Lastly, a brief reference should perhaps be made to two documents published by E. Meyers, viz. (1) an eschatological prophecy on the history of Egypt in the Persian and Greek period, (2) laws of Darius and decree of Cambyses on temple revenues.

5. Volumes on Papyrological and Allied Questions.

Several volumes of a general character, giving a more or less complete survey of the science of papyrology, have appeared during the period covered by this Report. Of these the most important is undoubtedly Schubart's masterly introduction to the whole subject. This work, which might at first sight be held hardly necessary after Mitteis and Wilcken's monumental Chrestomathie, is in reality constructed on an entirely different plan from theirs and will be quite invaluable to all students of papyri, in particular to those training themselves or others with a view to the editing of texts. Unlike its predecessor, it covers both literary and non-literary papyri, and it deals at far greater length than Mitteis and Wilcken with the diplomatic of the study; while in the portions of the volume which cover the same ground as the earlier work Schubart is not only able to add from the results of recent researches a good deal of useful material but has planned his survey on different lines. The general arrangement, sections of continuous (and always very clear and concise) narrative, followed by bibliographical notes and references (many of which are perfect examples of multum in parvo), is excellent for a work of this kind; and that the standard maintained is high those acquainted with Schubart's previous publications will not need to be told. The volume has been reviewed by P. Viereck⁸, J. I.⁹, and H. I. Bell¹⁰.

I noticed in my last Report a work by M. Modica on the legal side of papyrology. This volume has now been followed up by one on the political and administrative aspects of the study¹¹. Like the previous one the new volume aims less at advancing our actual knowledge than at collecting and setting forth in a handy and compendious form the results and conclusions so far arrived at; but the utility of such a work needs no emphasizing. There are good indices, including a specially useful one of Greek equivalents for Latin words.

Preisigke has published a very handy little volume¹², giving, in a summary and popular form, a general sketch of the life of Graeco-Roman Egypt as revealed by the papyri. It is well reviewed by

- ¹ Zur Begräbnissteuer, ibid., 53 (1917), pp. 120—122.
- ² Demotische Kleinigkeiten, ibid., 54 (1918), p. 111 ff.
- ³ Zwei ägyptische Eheverträge aus vorsaitischer Zeit, in the Berlin Abhandlungen (1918), no. 3.
- ⁴ In Gött. gel. Anzeigen, 180 (1918), pp. 362-378.
- ⁵ Ein koptischer Ehevertrag, in Zeitschr. f. äg. Spr., 55 (1918), pp. 67-74.
- 6 Ägyptische Dokumente aus der Perserzeit, in Stzgsber. d. K. Pr. Ak. d. Wiss., 1915, pp. 287-311.
- ⁷ Einführung in die Papyruskunde, von W. Schubart. Berlin, Weidmann, 1918. Pp. vii + 508. 7 plates.
- 8 In Socrates, N. F., 7 (1919), pp. 109-111.
- ⁹ In Neue Jahrb. f. d. kl. Alt., 41/42 (1918), pp. 353—355.
 ¹⁰ In J. E. A., 5 (1918), pp. 305—308.
- ¹¹ Contributi papirologici alla ricostruzione dell' ordinamento dell' Egitto sotto il dominio greco-romano. Roma, Athenaeum, 1916.
- ¹² Antikes Leben nach den ägyptischen Papyri (Aus Natur und Geisteswelt, 565. Bdch.), Leipzig u. Berlin, B. G. Teubner, 1916. Pp. 127. 1 plate. 8°. M. 1. 20, geb. 1. 50.

P. VIERECK¹ and M. GELZER², but not so favourably by SCHUBART³, who says that while it is accurate and good in detail, there is no working out of a whole, no historical development; "es ist ein kulturgeschichtliches Bilderbuch, aber keine geschichtliche Darstellung."

An earlier work by O. Fredershausen, apparently a general review of papyrology for school use, is also inaccessible to me⁴.

Reference must be made to Cobern's work on recent discoveries, which deals with papyri as well as with other classes of "documents⁵." It is a useful survey of the whole field, but it cannot be said that the author has fully risen to the occasion. The work, written in a rather "spread-eagle" style, is not as critical as it should be, and the author's acquaintance with papyrology is somewhat superficial, so that there are many small inaccuracies and inexactitudes. An example of a more serious error is seen on p. 328, where PSI. III 179, a receipt of a fairly common type for some part of a water-wheel, preceded by the usual Christian invocation, is taken as a Christian letter and, in addition, mistranslated.

The late J. H. Moulton published not very long before his death, in book form, five popular lectures, with a sermon, delivered in America in August, 1914, in which he dealt in a general way with the discoveries of Greek papyri⁶.

Among monographs on single subjects, the largest in scale is Lesquier's monumental work on the Roman army in Egypt. Lesquier several years ago published an excellent and now well-known volume on the military institutions of the Lagids, and the present one is by way of a continuation of that; but it is on an even more elaborate scale. The subject is treated in the most thorough manner possible, all aspects being dealt with, rarely without new light being thrown on the matters discussed or some new point being brought into focus. On the epicrisis, in particular, Lesquier's treatment is likely to be epochmaking; and his untiring zeal in the collection of material, his abundant references, and the lists he gives of officers and soldiers met with in inscriptions and papyri, as well as the documents, Latin and Greek, printed in the appendix, and the elaborate indices, will make the volume an indispensable work of reference for many years to come. He is, as always, critical and cautious in his discussion of debated points. The volume is produced in a style which may justly be called sumptuous, and that it should have appeared at the end of the greatest war in history reflects the utmost credit alike on the author and on the Institut Français, which publishes it.

OERTEL has published his long expected book⁸ on the liturgical system. Some of the principal conclusions arrived at by him as to the history of this system have already become matters of common knowledge, but this fact does not diminish the value of his volume, which is a mine of information on all matters affecting the liturgies. Much of it is in the form rather of a collection of material than of a continuous narrative, and it is therefore hardly a book to be read currently with ease; but the author's method of summing up at the end of each section the results arrived at enables a reader to obtain rapidly a general view of his conception of the liturgical system, and to fill in the details by intensive study of the single sections. Oertel's examination of the system serves to confirm the impression of its disastrous effect on the economic condition of Egypt. The volume is reviewed at some length by M. Gellzer⁹.

A. STEIN has published a volume which deals with questions, of a rather miscellaneous character, concerning the Roman government of Egypt ¹⁰. The earlier portion, devoted mainly to Octavian's conquest of the country and to its position and status in the general fabric of the Empire, affects papyrology only in part, and does not add very much that is novel to our knowledge of the subject. The most useful part of

- ¹ In Socrates, N. F., 7 (1919), pp. 104—106.

 ² In Berl. Phil. Woch., 37 (1917), cols. 815—817.
- ³ In Deutsche Literatur-Zeitung, 38 (1917), cols. 709—711.
- ⁴ Ergebnisse der Papyrusforschung für den Gymnasialunterricht. Leipzig, Quelle u. Meyer, 1914. M. 1. Review in Zeitschr. österr. Gymn., 68, 465 ff. (Mr Tod's reference.)
- ⁵ The New Archaeological Discoveries and their Bearing upon the New Testament, etc. By Camden M. Cobern. Funk and Wagnalls Co., New York and London, 1917. 2nd edition, revised, same year. Reviewed in J. E. A., 4 (1917), p. 283 f.
 - ⁶ From Egyptian Rubbish-Heaps. London, Charles H. Kelly, 1916.
- ⁷ L'Armée romaine d'Égypte d'Auguste à Dioclétien. Par Jean Lesquier. (Mém...de l'inst. fr. d'arch. or. du Caire, tome 41.) Le Caire, Imprimerie de l'Institut français, 1918. Pp. xxxi+586. 1 map.
 - 8 Die Liturgie. Von Fr. Oertel. Leipzig, B. G. Teubner, 1917. Pp. viii + 452.
 - ⁹ In Berl. Phil. Woch., 1918, June 15.
- ¹⁰ Untersuchungen zur Geschichte und Verwaltung Aegyptens unter römischer Herrschaft. Von A. Stein. Stuttgart, 1915, J. B. Metzler. Pp. xi+260. M. 9.

the work is the third, in which the author deals with the language question in the Roman administration, and the first appendix, on the Prefect's chancery. In a second appendix he gives a list of Latin papyri found in Egypt. This volume has been reviewed by W. Schubart¹, M. Gelzer², and P. Viereck³.

PLAUMANN, whose death at the front in the very last days of the war was so grievous a loss to papyrology, had written an elaborate monograph on the Idioslogos, which since his death has been published with a brief memoir by Schubart and a bibliography of his publications⁴. Though the study appeared as one of the Abhandlungen of the Prussian Academy it may more appropriately be dealt with here than in the following section. It is, as those who know Plaumann's work might expect, a very solid and excellent piece of research and very substantially adds to our knowledge of that, in many ways, perplexing department, the Idioslogos. Plaumann has used the already famous, if still unpublished, "Gnomon" at Berlin (which, by the way, will probably have appeared before these lines are in print⁵), and of course obtains much new information from it. He concludes that the Idioslogos was not the "Hausgut" but an "Einnahmetitel der regelrechten Staatskassen"; it was in fact merely a department of the general financial administration. His discussion of the problems involved is by no means easy to read, being largely in the form of notes, but it is a very important addition to papyrological literature.

- O. VIEDEBANTT, whose *Quaestiones Epiphanianae* appeared a few years ago, has published a further work on ancient metrology ⁶, which I know only from reviews by F. H. WEISSBACH⁷ and W. DÖRPFELD⁸.
- B. KÜBLER has published a small monograph on Antinoopolis⁹. It is only a brief popular sketch of the city's history, originally given as an address but a little altered for purposes of publication, and does not make any original contributions to the subject.

A work of considerable importance, not for papyrology only but for Byzantine history generally, is a volume by A. Piganiol on the vexed question of the Byzantine capitatio 10. The author's thesis is that the iugatio and the capitatio were not two distinct taxes but simply alternative aspects of one and the same tax, which was in its essence a land-tax, or rather perhaps a tax on the caput as representing the land necessary to maintain the caput ("que le iugum pouvait se définir comme la portion de terre qui suffit à l'entretien d'un caput,—et, en dernière analyse, que le caput est le iugum incorporé"). He discusses the various ways in which the system worked, its implications and effects, and he explains the capitatio humana et animalium as "une forme aberrante de la capitation normale," namely, first, a tax on the barbarians settled in the Empire (tributarii), second, in the fifth century, one on slaves not attached to the soil (not treated as coloni); it was in fact un impôt mobilier. Certain of Piganiol's arguments are not altogether cogent, but his case as a whole is very strong, and accords well with certain recent papyrological evidence not known to him, into which it is impossible to enter here. If, however, his thesis be accepted, we must suppose a radical change of system later; for he is quite wrong in saying (p. 77) that the ανδρισμός of the Arabs was both a capitatio and a land-tax. It is perfectly clear from the texts in P. Lond. IV that the ἀνδρισμός and the δημόσια γης were quite distinct taxes, most often both paid by the same taxpayer and reckoned, the one by capita or fractions of a caput, the other by the size of the holding; and it is unlikely, to say the least, that the Arabs were themselves responsible for this far-reaching change of system.

A monograph which, though not papyrological, it may be worth while to refer to in passing is a volume by J. Zeiller on the history of the word *paganus*¹¹. It is reviewed by L. A. Constans ¹². Reference should also be made to Charles's translation of John of Nikiu¹³.

- ¹ In Gött. gel. Anzeigen, 1916, pp. 355-362.
 ² In Berl. Phil. Woch., 36 (1916), cols. 939-942.
- ³ In Socrates, N. F., 7 (1919), pp. 106-108.
- ⁴ Der Idioslogos: Untersuchung zur Finanzverwaltung Ägyptens in hellenistischer und römischer Zeit. Von G. Plaumann. Abh. d. Pr. Ak. d. Wiss., 1918, no. 17. Publ. 1919.
- ⁵ It has actually appeared since this Report went to Press: Der Gnomon des Idios Logos. Von E. Seckel u. W. Schubart. 1ter Teil: Der Text, von W. Schubart. Weidmann, Berlin, 1919. I will deal with it more at length in my next Report.
 - ⁶ Forschungen zur Metrologie des Altertums. Abh. d. Kön. Sächs. Ges. d. Wiss., 34, 3 (1917).
 - 7 In Berl. Phil. Woch., 1918, Aug. 17.
 8 In Woch. f. Klass. Phil., 35 (1918), cols. 385—389.
 - ⁹ Antinoupolis. Leipzig, A. Deichert'sche Verlagsbuchh. Werner Scholl, 1914.
- 10 L'Impôt de Capitation sous le Bas-Empire Romain. Chambéry, Libr. Perrin—M. Dardel Successeur, 1916.
 Pp. 99.
 11 Paganus, étude de terminologie historique. Fribourg, Paris, 1917. Pp. 110.
 - ¹² In Journ. des Savants, N. S., 16 (1918), pp. 213—214.
- ¹³ The Chronicle of John, Bishop of Nikiu; Translated from Zotenberg's Ethiopic Text by R. H. Charles. London, Williams and Norgate, 1916. Pp. xii+216.

There is in papyri so much useful material throwing light on the structure and appurtenances of the private house in Graeco-Roman Egypt, material supplemented moreover by excavations, that it is somewhat surprising that comparatively little attention has hitherto been given to this subject. A monograph on it has at length been produced, in the form of a doctoral dissertation by Luckhard. It is a useful collection of the evidence to be found both in papyri and in archaeological sources, though Luckhard does not, perhaps, give as clear a general picture as might have been desired of the typical house, and he apparently lacks a first-hand acquaintance with the archaeological side of his subject. The volume will nevertheless prove very useful as a work of reference.

Among works on legal matters a volume by Taubenschlag on criminal law², dealing in turn with the Ptolemaic, Roman and Byzantine periods, claims first place. It has been reviewed by Th. Thalheim³ and L. Wenger⁴.

A work which deals only in part with papyri is one by Pringsheim⁵ on the payment of the price in cases of purchase with borrowed money (papyrological sections, pp. 40—49, 164—168), reviewed by L. Mittels⁶ and Th. Thalheim⁷; and another is a useful work on Greek wills, by Fr. Kraus⁸, beginning with those of classical Greece, passing on to the Graeco-Egyptian wills up to the Constitutio Antonina and concluding with an account of the Egyptian and extra-Egyptian wills after that date. This volume has been reviewed by Wessely⁹. Another work, which seems to be of some importance, on the same subject has been published by Kreller¹⁰; but I know it only from a casual reference, and am not even sure as to its exact title.

PREISIGKE has published a useful monograph on a subject not immediately connected with papyri, but one on which the papyri throw light¹¹. This is the inscription of Scaptoparene, found in 1868 in Bulgaria, which contains, inter alia, the reply of the Emperor Gordian to a petition of the villagers. This text Preisigke makes the occasion for an interesting discussion of Roman chancery practice in general and of the meaning of the words Recognovi (in Greek documents ἀνέγνων) and Rescripsi in particular. His first-hand knowledge of the German Civil Service enables him to illustrate his points very effectively; and he further supports his explanation by the analogy of Greek papyri. His theory as to Rescripsi and Recognovi seems likely to be the true one; on some other points it is not possible to follow him with so much confidence. He may be right; but he shows, here as elsewhere, a tendency to overdo his modern parallels and in particular to attribute to ancient officials a degree of system and exactitude which they probably did not possess.

6. ARTICLES, REVIEWS 12, MISCELLANEOUS.

Under this head I may notice first two articles of a general character. The first is one by G. Milligan, giving a popular account of Greek papyri ¹³, the other one by G. Iardikas on inscriptions and papyri together, which I have been unable to see ¹⁴. According to the compilers of the bibliography in the Milan *Studî* (p. 251, no. 3) it contains general remarks on the importance of papyrology and epigraphy and some observations on the Bacchylides papyri in particular.

A few articles deal with the general history of Egypt. The late E. AMÉLINEAU published in 1915 a somewhat lengthy one on the Arab conquest 15. It is an interesting and useful review of the very obscure and

- ¹ Das Privathaus in ptolemäischen und römischen Ägypten. Von Fr. Luckhard. Giessen, Otto Kindt, 1914. Pp. 114.
 - ² Das Strafrecht im Rechte der Papyri. Von R. Taubenschlag. B. G. Teubner, Leipzig u. Berlin, 1916.
 - ³ In Berl. Phil. Woch., 37 (1917), cols. 625—626. ⁴ In Zeitschr. d. Sav.-St., 37 (1916), pp. 337—342.
- ⁵ Der Kauf mit fremdem Geld (Romanistische Beiträge zur Rechtsgeschichte, 1 Heft). Von Fr. Pringsheim. Leipzig, Veit and Co., 1916.
 - ⁶ In Zeitschr. d. Sav.-St., 37 (1916), pp. 369-373.

 ⁷ In Berl. Phil. Woch., 37 (1917), cols. 375-376.
 - ⁸ Die Formeln des griechischen Testaments. Diss. Giessen, R. Noske, Borna-Leipzig, 1915. Pp. 113.
 - ⁹ In Woch. f. klass. Phil., 33 (1916), cols. 778—783.
 - 10 Erbschaftsrechtliche Studien. Date and publisher unknown to me.
- ¹¹ Die Inschrift von Skaptoparene in ihrer Beziehung zur Kaiserlichen Kanzlei in Rom. Von Fr. Preisigke. (Schriften der Wiss. Ges. in Strassburg, 30 Heft.) Strassburg, Karl J. Trübner, 1917.
- 12 Reviews of publications noticed in the present Report are mentioned along with the publications to which they refer. Throughout, I have in general noted only the longer reviews or such as make some positive contribution to the subject dealt with.

 13 Greek Papyri, in Expositor, 8 Ser., 15 (1918), pp. 221—233.
 - 14 'Επιγραφαί και πάπυροι, in 'Αθηνα, 27 (1915), pp. 65—118.
 - ¹⁵ La Conquéte de l'Égypte par les Arabes, in Revue historique, 119 (1915), pp. 273—310; 120 (1915), pp. 1—25.

difficult problems which centre round that event, but Amélineau's treatment, at least of the Greek sources, which alone I am competent to estimate, is a little superficial and not sufficiently critical. He identifies the Mukaukas, like Butler, with Cyrus, but regards him as, though a Bishop, not Patriarch but Governor.

- H. I. Bell, in an article of a popular kind, though utilizing some new material, sketches the economic and social history of Byzantine Egypt¹. The account given of Diocletian's financial reforms requires some modification in view of Piganiol's work noticed in the preceding section.
- M. Holleaux discusses anew the problem of the authorship of the report on Euergetes I's Syrian expedition in Wilcken, *Chrest.* 1². He returns to Mahaffy's view (which by the way is also upheld by Schubart) that the narrator is the king himself, and he both answers the arguments against this view and adduces new ones for it. Not all his arguments are cogent but their total effect is undoubtedly strong.

WILCKEN corrects a reading in BGU. 889, 21 ff.³ The date is not ἀπὸ καὶ τοῦ καδ but ἀπὸ κS του* αS, i.e. the year 116/7. Thus the evidence for a revolt of the Jews in 136/7 vanishes, and that revolt is to be deleted from historical literature.

A reference must be made to an article by E. Breccia on the village of Theadelphia⁴, though it deals mainly with epigraphical evidence.

The complicated questions of Early Ptolemaic chronology have called forth several articles. M. BADOLLE devotes a short discussion to the date of Philopator's accession⁵. After considering both literary and papyrus evidence (in connexion with the latter he has of course to discuss the various years used in calculations), he concludes that the reign began between the beginning of September, B.C. 221, and February 26, 220. "Nous voyons qu'il y a concordance parfaite entre cette donnée et le texte de Polybe: l'avènement a bien eu lieu en septembre 221."

- A. Ferrabino discusses the chronology of the first three Ptolemies⁶. He does not believe in a "financial" year nor in the official use of the Egyptian year. One year was official (Ptolemaic), the other non-official (Egyptian). Financial and royal year were the same: Egyptians, using their own year, referred to the official one as ως αὶ πρόσοδοι because they conceived of the state par excellence as the taxing authority. The non-official year began on Thoth 1 and ended Epagom. 5. The official year did not begin on Thoth 1 but was not the Macedonian year; it was the regnal year, from the accession of the reigning king. The non-official year was reckoned only from the accession to Epag. 5 next following. The Canon followed the later usage, from Thoth 1, and therefore, for the first Ptolemies, is post-dated. After developing these views Ferrabino deals with the dates of the first three Ptolemies. He gives chronological tables.
- C. C. Edgar has discussed the same subject in two successive articles, utilizing the important (though far from unambiguous) new evidence of the Zeno papyri at Cairo. Further evidence is afforded by the Florentine papyri of the same find, and at the end of his second article Edgar makes use of this.
- A. W. DE GROOT deals with the mysterious "Ptolemy the Son," who during part of the reign of Philadelphus appears in association with that king⁸. He identifies him with the prince who later became king as Euergetes.

Various single officials have been made the subject of special articles. Thus, M. Engers devotes the first of a series of articles to the $\epsilon \pi \iota \sigma \tau \acute{a} \tau \eta s \tau \acute{a} \nu \phi \nu \lambda a \kappa \iota \tau \acute{a} \nu^{9}$. This falls into three parts: (1) Engers holds the *epistates* was a magistrate of the *nome*, (2) he rejects Zucker's view that he had judicial functions, (3) he deals with his fiscal functions.

In the second article of the series Engers deals with the nomarch, mainly with the third century B.C.¹⁰. He concludes that originally the nomarch "iuxta strategum...res civiles egisse et 3° adhuc saeculo terram Aegypti et vectigalia administravisse, postea vero eius potestatem valde deminutam esse."

- ¹ The Byzantine Servile State in Egypt, in J. E. A., 4 (1917), pp. 86-106.
- ² L'Anonyme du Papyrus de Gourob, in Rev. d. ét. anc., 18 (1916), pp. 153-165.
- ³ Zu den jüdischen Aufständen in Aegypten, in Hermes, 54 (1919), pp. 111—112.
- ⁴ Theadelfia, in Bull. d. l. Soc. Arch. d'Alex., N. S., 4, fasc. 2 (1918), pp. 91—118 (to be continued).
- ⁵ La Date d'Avènement de Ptolémée IV Philopator, in Rev. de Phil., 42 (1918), pp. 109-121.
- 6 La Cronologia dei primi Tolemei, in Atti d. R. Accad. d. Sc. di Torino, 51 (1915-16), pp. 343-367.
- ⁷ On the Dating of Early Ptolemaic Papyri, in Ann. du Service, 17, 209—223; A Further Note on Early Ptolemaic Chronology, ibid., 18 (1918), pp. 58—64.
 - 8 Ptolemaios der Sohn, in Rhein. Museum, N. F., 72 (1918), pp. 446-463.
- ⁹ Observationes ad Aegypti pertinentes administrationem qualis aetate Lagidarum fuit, 1, in Mnemosyne, N. S., 45 (1917), pp. 257—271.
 - 10 Observationes, etc. II. De Nomarcha, ibid., 47, pp. 146-157.

An article on the toparch by Piotrovitch is inaccessible to me, as also to Prof. Grenfell, to whom I owe the reference; and one on the Arabarch by J. Lesquier is dealt with in Mr Tod's forthcoming bibliography, to which reference may be made.

- J. Offord collects, from *P. Oxy.* XII, the new particulars there to be found on the prefects of Egypt³; and A. Stein, in an article on Ser. Sulpicius Similis⁴, shows (1) that he was prefect, (2) that his name was as above given. Thus, C. Sulpicius Simius, C. Sulpicius Similis, and Fl. Sulpicius Similis (the last under Commodus) are all to be deleted.
- J. C. Naber, in one of his series of articles on Roman law, deals with the registration of contracts, of property, etc. with census lists, and so forth⁵.

In a note in *Philologus*⁶ F. Zucker, accepting an argument of Mahaffy's, withdraws his previous interpretation of a passage in Strabo, and adds further observations on the question as to the existence of a papyrus monopoly at various periods.

W. L. Westermann devotes three articles to the subject of irrigation and land reclamation in Egypt. In the first he discusses the part played by Aelius Gallus in the reorganization of the irrigation system. He holds that Gallus was chiefly responsible for the reorganization and that from him Strabo got his clear knowledge of irrigation; also that Gallus preceded Gaius Petronius as prefect. In the second he sketches the chronology of the reclamations in the Fayum under Philadelphus and Euergetes I. He thinks that they began not later than 270 B.c. The third is a brief historical sketch of the Egyptian irrigation system in Pharaonic, Greek and Roman times (to Probus).

Among legal articles the most important is perhaps one by P. Jörs on the process of execution in cases of debt¹⁰. This is a detailed and systematic treatment of the whole subject, and is especially noteworthy because Jörs is able to show from an unedited Berlin papyrus (P. Berol. 11664), of which he publishes part, that the chrematistae, hitherto regarded as a purely Ptolemaic institution, continued to exercise their functions at Alexandria in the Roman period (A.D. 133). Two parts of this very important article have so far appeared, and a third is to be expected next year (1920):

The same periodical which publishes Jörs's article contains also some other important legal items. R. Taubenschlag, in an article on the patria potestas¹¹, deals with the rights of parents over children and, more broadly, with the whole legal relationship of parents to children both before and after the Constitutio Antonina. He shows how after that enactment the native law (Volksrecht) continued to hold its own in many details against the Imperial law, while in others it was modified by it.

E. Weiss, in another article, which deals with the Dacian wax-tablets ¹², refers constantly to Greek and Latin papyri for illustrations, parallels or contrasts; and E. Rabel, in a lengthy discussion of the δίκη εξούλης ¹³, touches at times on our study. J. H. Lipsius replies to some of Rabel's points in a later number ¹⁴.

A. Beltrami studies the text of the *Constitutio Antonina* (P. Giss. 40, col. 1)¹⁵. He gives first Meyer's text as in Mitteis, *Chrest.*, then a new text suggested by G. Segré for a new juristic monograph on the edict, and finally suggests further supplements for such lacunae as still remain.

New light is thrown on Graeco-Egyptian marriage law by certain of the newly published texts referred

- ¹ In Eos (Lemberg), 19, p. 134.
 ² L'Arabarchès d'Égypte, in Rev. Archéol., 6 (1917), pp. 95—103.
- ³ New Particulars concerning the Praefecti Aegypti, in Ancient Egypt, 1917, pp. 122-123.
- ⁴ Ser. Sulpicius Similis, in Hermes, 53 (1918), pp. 422-433.
- ⁵ Observatiunculae de Iure Romano, cvii. De Nilo Censitore, in Mnemosyne, N. S., 44 (1916), pp. 72—87 (a continuation; the article began in vol. 43, p. 432), 239—254, 45 (1917), pp. 5—20.
- ⁶ Zur Frage des Papyrusmonopols, in Philologus, 74 (1917), pp. 184—186. See also Berl. Phil. Woch., 1918, p. 91 (Prof. Grenfell's reference).
- ⁷ Aelius Gallus and the Reorganization of the Irrigation System of Egypt under Augustus, in Class. Phil., 12 (1917), pp. 237—243.
 - 8 Land Reclamation in the Fayum under Ptolemies Philadelphus and Euergetes I, ibid., pp. 426—430.
 - ⁹ The Irrigation System of Egypt, ibid., 14 (1919), pp. 158—164.
- ¹⁰ Erzrichter und Chrematisten; Untersuchungen zum Mahn- und Vollstreckungsverfahren im griechisch-römischen Ägypten, in Z. Sav.-St., 36 (1915), pp. 230-339, 39 (1918), pp. 52-118.
 - 11 Die Patria Potestas im Recht der Papyri, ibid., 37 (1916), pp. 177-230.
 - ¹² Peregrinische Manzipationsakte, ibid., pp. 136-176.
 - 13 Δίκη ἐξούλης und Verwandtes, ibid., 36 (1915), pp. 340-390.
 - 14 Nochmals zur δίκη έξούλης, ibid., 39 (1918), pp. 36-51.
 - 15 Per il testo di Pap. Giessen 40, Col. 1, in Riv. di Fil. e d'Istr. Cl., 45 (1917), pp. 16-23.

to above, in §§ 3 and 4. This subject is also the theme of two articles which belong to the present section. F. Maroi studies PSI. I 64¹, and comes to the conclusion that it is a document of ἔγγραφος γάμος, not ἄγραφος, as the editors were inclined to believe. He holds that ἄγραφος and ἔγγραφος γάμος were not two alternative kinds of marriage, but distinct stages in one and the same marriage ("l' ἄγρ. γ. è un matrimonio di prova che normalmente precede l' ἐγγρ. γ."). On this subject see Sethe's review of Möller referred to above, in § 4. Sethe has occasion to deal with the supposed "marriage on trial" (Probeche, marriage &essai) in an article on the Demotic contract published by Spiegelberg in 1909 (Zeitschr. f. äg. Spr., 46, p. 112 ff.), hitherto regarded as an example of such a marriage. This explanation Sethe now decisively rejects on the ground both of the text as originally published and in particular of some new readings he has arrived at. The wife refers to another man (husband or lover) from whom the bridegroom has separated her and to an oath she has taken about him. Sethe, hitting upon a new reading of the date and thus extending the period of probation to nine months, holds that her oath is to the effect that she is not pregnant by this other man, and that if at the end of nine months pregnancy is not established the marriage now contracted shall become absolute. The importance of his conclusion, if it is upheld, for the history of Egyptian marriage-law need not be stressed.

Besides the article just referred to Maroi has published another on some new Italian contributions to the juristic side of papyrology³, which I have been unable to see.

An article by G. M. Calhoun on ἐπίσκηψις and the δίκη ψευδομαρτυριῶν⁴ deals mainly with Attic law but has some references to P. Hal. 1.

E. Cuq, who some years ago wrote an extremely interesting article on a document of $d\pi o \kappa \eta \rho \nu \xi \iota s$ published by J. Maspero, returns to the subject, a propos of the publication of a second document of this class in Maspero's third volume (see above, § 3)⁵. In this he draws from the clearly documentary character of the new papyrus the obvious conclusions as to the old, and subjects the new one to a close examination from the juristic point of view. He adds a curious parallel from contemporary Greece (the year 1911). H. I. Bell follows up this article by a note on the style of the earlier document⁶, directed to showing, from affinities of diction, its notarial character. An article on the same subject by Fr. Buonamioi⁷ is not accessible to me.

L. Wenger calls attention⁸ to a passage in Theophilus's paraphrase of the Institutes which uses $\delta\iota\dot{a}\delta\sigma_{\alpha}$ as synonymous with $\kappa\lambda\eta\rho\sigma\nu\dot{a}\rho\sigma$ and seems therefore to settle the question as to the character of the phrase $\kappa\lambda\eta\rho$. $\delta\iota a\delta$. $\delta\iota a\kappa\dot{a}\tau\sigma_{\alpha}$.

I referred in my last Report (J.E.A., 3 (1916), p. 136) to Castelli's legal studies in the second volume of the Milan Studi, which I have since had the opportunity of examining more at leisure.

PREISIGKE deals with a problem connected with the Graeco-Egyptian house⁹, viz. what was the nature of the $\pi i \rho \gamma \sigma$ often mentioned in descriptions of house property. He decides, partly on the evidence of a Strassburg papyrus which he publishes at the beginning of his article, that it was not a "tower" in the proper sense but a sort of wing or annex, or, at times, a separate building, used as a storehouse. $\sigma \tau i \gamma \eta$ he regards as a storey, i.e. $\pi \rho i \gamma \tau i \gamma \eta$ is the first floor above the ground-floor.

Papyri are of course of immense value for the study of social life and commercial activity in Graeco-Roman Egypt; but though some general studies of this side of papyrology have been made in manuals like Wilcken's *Grundzüge* or Schubart's *Einführung*, or in such works as Deissmann's *Licht vom Osten*, curiously little has hitherto been done (except in one or two directions) in the way of an intensive study of such questions. The Italians have lately devoted themselves with great enthusiasm to this work; and in Italy have appeared a number of articles, not often adding much that is new to our knowledge, but

- 1 Un caratteristico documento di ξγγραφος γάμος per la storia del matrimonio nell' Egitto greco-romano, in Bull. d. Ist. di Diritto Romano, 28 (1916), pp. 97—130.
- ² Ein aegyptischer Vertrag über den Abschluss einer Ehe auf Zeit in demotischer Schrift, in Gött. gel. Nachr., 1918, pp. 288—299.
 - ³ Nuovi contributi allo studio della papirologia giuridica, in Riv. ital. di sociologia, 21 (1917).
 - 4 'Επίσκηψις and the δίκη ψευδομαρτυριών, in Class. Phil., 11 (1916), pp. 365-394.
 - ⁵ Un second papyrus byzantin sur l'apokèryxis, in Comptes Rendus de l'Acad. d. Inscr., 1917, pp. 354-369.
 - 6 Documents of Apokeryxis in Byzantine Egypt, in J. E. A., 5 (1918), pp. 70-72.
- ⁷ Di un nuovo documento sull' apokéryxis e dei rapporti di tale istituto col diritto romano, in Ann. d. Univ. Toscane, 33 (1915), parte ii, pp. 1—12; see Stud. d. sc. pap., 2, p. 275, no. 351.
 - 8 Ζυ κληρονόμος, διάδοχος, διακάτοχος, in Z. Sav.-St., 38 (1917), pp. 326—327.
 - ⁹ Die Begriffe Πύργος und Στέγη bei der Hausanlage, in Hermes, 54 (1919), pp. 423—432.

collecting the available evidence and presenting it in a readable and interesting form. It is much to be hoped that more work of this kind will be done, not only in Italy but in other countries. The second volume of the Milan Studî several times referred to above does a good deal in this direction, paying special attention to the private letters, so valuable for the illustration of social life and popular psychology. Calderini opens the ball with an interesting essay on the ideas and the mental outlook of the letter-writers¹; M. Mondini follows with one on the letters of, to, and about women, illustrating feminine characteristics and family life², and G. Ghedini deals with the (pagan) religious ideas which the letters reveal³. It is of course difficult at times, as the writers of these essays realize, to decide how far a given phrase represents anything vital in the writer's mind and how far it is a mere formula; but, all reservations made, the value of such studies as these is great.

These essays do not, however, exhaust the material for the study of private letters which this volume contains. A particularly valuable contribution to the subject is a collection of indices to published letters⁴. These are: i. One arranged according to place of publication. ii. A chronological index. iii and iv. An index of subjects, first by Greek, and secondly by Latin and Italian words. v. An index of place-names.

Elsewhere M. Mondini has published an article on the letters of soldiers⁵, of which she translates specimens, wholly or in part; while A. Calderini does the same service for soldiers' wills⁶. More recently M. C. Mondini has written on some recently discovered private letters in an article not accessible to me⁷.

Turning now from the private letters to subjects illustrated by documents of various classes, I may note an article, originally a discourse to the School of Papyrology at Milan for the session 1917—1918, by Calderini on the subject of slavery, which I have been unable to see⁸; another by the same, also a discourse to the same school, on ideas of death in the Greek civilization of Alexandria⁹, which deals with papyri, literary sources, and inscriptions, but which is also inaccessible to me; another by the same, a lecture to the Milan society "Atene e Roma," on the bread supply of antiquity, drawing, inter alia, on papyrological evidence ¹⁰; another article by the same, also inaccessible to me, on the problem of supply in Egypt¹¹; yet another by the same on the children of antiquity ¹², using the papyri among other evidence, and translating several; and finally another by the same on the public baths of Egypt¹³. The last-named is of special importance; it deals with the baths in all their aspects, the places where their existence can be established, their buildings and fittings, their direction and working, and their finances (bath-tax, etc.). An article by A. Roscio, apparently on weaving, is inaccessible to me¹⁴.

Work on these subjects is, however, not confined to Egypt. L. C. West does a useful service in an article dealing with the cost of living in Roman Egypt¹⁵. The part of his work which will be of most general utility is his tables of values of coinage, wages, and prices; but his introductory remarks are also of great value. In view of the known difficulties of evaluating commodities and money, he takes wheat as the standard of value. A later article he devotes to the commerce of Roman Egypt, for which he uses papyri, inscriptions, and literary sources¹⁶. In this, after a brief introduction, he gives the following tables:

1. The chief Egyptian trade-routes, noting custom-houses on the Nile and in the Fayum. 2. Commercial

- ¹ Pensiero e sentimento nelle lettere private greche dei papiri, in Studi d. sc. pap., 2 (1917), pp. 9-28.
- ² Lettere femminili nei papiri greco-egizî, ibid., pp. 29-50.
- ³ Di alcuni elementi religiosi pagani nelle epistole private greche dei papiri, ibid., pp. 51-76.
- 4 Repertorio per lo studio delle lettere private dell' Egitto greco-romano, ibid., pp. 109-245.
- ⁵ Lettere di soldati, in Atene e Roma, 18 (1915), pp. 241—258.
 ⁶ Testamenti di soldati, ibid., pp. 259—266.
- ⁷ Lettere private dell' Egitto romano recentemente scoperte, ibid., 21 (1918), 238. (Referred to by D. Bassi in Riv. di Fil., 47 (1919), p. 292, note.)
- ⁸ Liberi e schiavi nel mondo dei papiri. Milano, "Figli della Provvidenza," 1918. Pp. 30. Rev. by D. Bassi in Riv. di Fil., 46 (1918), pp. 287—288.
- ⁹ Imagini ed echi della morte nella civiltà greca di Alessandria. Same publishers, 1916. Pp. 26. (See Athenaeum, Pavia, 1917, p. 194.)
- ¹⁰ Panem nostrum quotidianum (La questione del pane nell' antichità). Pubbl. dell' Atene e Roma, G. B. Paravia, Milano, 1917.
- ¹¹ La politica dei consumi secondo i papiri greco-egizi, in Riv. di Ital., 1918, pp. 318—327. (Rev. by Bassı in Riv. di Fil., 47 (1919), pp. 292—293.)
 - ¹² Bambini dell' antichità, in Atene e Roma, 20 (1917), pp. 91-109.
 - ¹³ Bagni pubblici nell' Egitto greco-romano, in Rend. R. Ist. Lomb. d. Sc. e Lett., 52 (1919), pp. 297—331.
- Lana e telai nell' Egitto greco-romano, in Atene e Roma, 21 (1918), 240. See Riv. di Fil., 47 (1919),
 p. 292, note.
 The Cost of Living in Roman Egypt, in Class. Phil., 11 (1916), pp. 291—314.
 - 16 Phases of Commercial Life in Roman Egypt, in Journ. of Rom. Stud., 7 (1917), pp. 45-58.

imports, arranged in classes and by countries. 3. Foreigners living in Egypt (excluding those in military or government service). 4. Egyptians living abroad.

- W. Schubart has published a very interesting review of the papyrological evidence for the life of women in Graeco-Roman Egypt¹; and also an article calling attention to the value of W. Wreszinski's *Atlas zur altäg. Kulturgesch.* for a knowledge of Egyptian life, so useful to a papyrologist².
- P. Jouguet utilizes the new evidence of P. Ryl. II in an article correcting and supplementing his *Vie municipale*³.
- R. Grosse has published a useful article on the military grades in the army of the fourth-sixth centuries, dealing with the various offices more or less in order of rank⁴; and J. Lesquier deals with the question to what extent and from what date marriage was permitted to Roman soldiers⁵. He concludes that from A.D. 197 the full civil marriage was allowed for all citizen soldiers.

In the sphere of religion, the most important single article is an elaborate discussion by Wilcken of the Greek monuments of the Dromos at Memphis⁶. This study, undertaken in connexion with his collection of Ptolemaic papyri, is mainly archaeological, but helps to reinforce the theory that Sarapis was not an importation from abroad but "eine hellenistische Umbildung des Osiris-Apis von Memphis." C. F. Lehmann-Haupt, on the other hand, in an article published before Wilcken's, holds to the theory of Babylonian origin⁷.

Spiegelberg, from a text in Preisigke's S.-B. (5827), which mentions a shrine of $\Psi o \sigma \nu a \hat{\nu} s$ (="the two brothers"), explains the $i\epsilon\rho \delta\nu$ $\Delta \hat{\nu} o$ ' $\Delta \delta \epsilon \lambda \phi \delta \nu$ (sic) in P. Oxy. II 254, 3 as a shrine, not of the Dioscuri, as Grenfell and Hunt suggested, but of this Egyptian $\Psi o \sigma \nu a \hat{\nu} s$. G. Méautis holds that the Graeco-Egyptians identified the Nile with Oceanus, and explains the exclamation ' $\Omega \kappa \epsilon a \nu \epsilon$ as an invocation of the river "en sa qualité de bienfaiteur, de nourricier et de père." In an article mainly archaeological but using the evidence of papyri Th. Schreiber deals with the Egyptian elements in the Alexandrian cult of the dead 10.

G. Pfeilschrifter has published an article on the churches and monasteries of Oxyrhynchus¹¹; and J. Offord has a note on the $libelli^{12}$.

Questions of currency are dealt with in two articles by J. G. MILNE. In one, on the Alexandrian coinage of the eighth year of Gallienus ¹³, he notes types and inscriptions and statistics of coins for various members of the Imperial House in five hoards, and from this evidence deduces the following conclusions: There was a complete break in the scheme of work of the Alexandrian mint in the eighth year. Alexandria was lost by Gallienus by the beginning of October, 260, recovered a few months later, before the ninth year began, i.e. Aug. 29, 261. The Fayum was perhaps held for Macrianus and Quietus till the autumn of 261. The Thebaid was either never conquered by them or reverted to Gallienus earlier. The second article is on the complicated question of the Alexandrian mint in the reign of Diocletian ¹⁴. J. C. Naber, in an article on methods of land measurement ¹⁵, has some allusions to papyri.

- ¹ Die Frau im griechisch-römischen Agypten, in Internat. Monatsschr. f. Wiss., Kunst u. Techn., 10, pp. 1503—1538.
- ² Altägyptisches Anschauungsmaterial für die Urkunden griechisch-römischer Zeit, in Orient. Literaturzeitung, 19 (1916), cols. 1—9.
- 3 Sur les métropoles égyptiennes à la fin du 11º siècle après J.-C. d'après les Papyrus Rylands, in Rev. d. ét. gr., 30 (1917), pp. 294—328.
 - 4 Die Rangordnung der römischen Armee des 4.-6. Jahrhunderts, in Klio, 15 (1917), pp. 122-161.
 - ⁵ Le mariage des soldats romains, in Comptes Rendus de l'Acad. d. Inscr., 1917, pp. 227—236.
- 6 Die griechischen Denkmäler vom Dromos des Serapeums von Memphis, in Jahrb. d. kais. deutsch. Arch. Inst., 32 (1917), pp. 149—203.
 - ⁷ Gesichertes und Strittiges, III. 4. Zum Sarapis-"Problem," in Klio, 14 (1914).
 - 8 Das Heiligtum der zwei Brüder in Oxyrhynchus, in Zeitschr. f. äg. Spr., 1918, p. 140.
 - ⁹ ΩKEANE, in Rev. de Phil., 40 (1916), pp. 51-54.
- ¹⁰ Die ägyptischen Elemente der Alexandrinischen Totenpflege, in Bull. d. l. Soc. Arch. d'Alex., N. S., 4 (1914-5), pp. 3-24.
 - ¹¹ Oxyrhynchos, Seine Kirchen u. Klöster. Auf Grund der Papyrusfunden, in Festgabe A. Knöpfler, pp. 248-264.
- ¹² The Libellus or Certificate of Pagan Sacrifice Demanded by the Edict of Decius, in Ancient Egypt, 1917, pp. 149—151.
 - ¹³ The Alexandrian Coinage of the Eighth Year of Gallienus, in Ancient Egypt, 1917, pp. 152-161.
 - ¹⁴ The Organisation of the Alexandrian Mint in the Reign of Diocletian, in J. E. A., 3 (1916), pp. 207-217.
- ¹⁵ Observationes de Jure Romano, cxi. De mensurae generibus, in Mnemosyne, N. S., 46 (1918), pp. 113—126 (to be continued).

K. Fr. W. Schmidt, in a series of studies on Preisigke's S.-B. 1, deals with the personal names there occurring, making various proposals for revised readings. Calderini discusses again the vexed question of the correct form of the name of the non-commissioned officer Abinnaeus². He concludes that Kenyon was right in holding it to be Abinnaeus, and suggests that some of the deviations from this form may be due to the influence of the name $A\mu\epsilon\nu\nu\epsilon\acute{\nu}s$.

Gradenwitz suggests a new reading for P. Giss. 40, II $3-4^3$; and Radermacher proposes for a letter among the Petrie papyri the supplement $\tau[\eta\mu\epsilon\lambda o i\mu\epsilon\nu\nu\nu]^4$, citing in support of his suggestion a passage in the *Hist. Lausiaca*. He may be right; but it is somewhat dangerous to infer to an early Ptolemaic text from the Greek of the Byzantine period, whose *penchant* for the resuscitation of old or poetic forms is well-known.

Wessely points out⁵ that the view of Anton Chatzis that Ptolemaios Chennos was not a mere swindler finds some support in a point of linguistic detail illustrated by papyrus usage. He also explains the word "Carpathium filum" in Amm. Marcellinus by the $\kappa \dot{\alpha} \lambda \pi a \sigma \sigma s$, $\kappa a \lambda \pi \dot{\alpha} \sigma \iota \nu \sigma s$ of magical papyri. A. Bazzero publishes a note on the word $\mu a \phi \dot{\delta} \rho \tau \eta s^7$, collecting the instances of its occurrence in its various forms both in literary works and in papyri, and seeking to obtain from these far from explicit sources of information some idea as to the shape and character of the article of clothing so designated. P. Fiebig discusses the word $\dot{\alpha} \gamma \gamma a \rho \epsilon \dot{\nu} \omega$ and its derivatives as used in Hebrew and Aramaic sources.

In a study undertake n "chieflywith a view to getting light on the New Testament use of the article," F. Eakin illustrates the usage in the papyri of the first and second century; and in another 10, which was originally intended as a footnote to the preceding but grew into a separate article, C. W. E. Miller, using P. Grenf. I, Amh. II, Oxy. I, II, points out, what Deissmann and Moulton overlooked, that the article (agreeing of course with the name of the son) before the father's name occurs only when the son's name is in the genitive. He gives examples and statistics, including exceptions.

M. Lenchantin de Gubernatis, with reference to P. Oxy. viii 1099 and PSI. i 21, discusses the pronunciation of Latin at Oxyrhynchus in the fifth century, as indicated in those papyri 11.

TH. REINACH calls attention to two documents in P. Oxy. XII illustrating the commonness of illiteracy in Egypt¹².

V. Gardthausen has published two interesting articles on the notaries of Egypt. In the first¹³, on the notarial subscriptions of Byzantine papyri, there is little that is new, but it is a useful conspectus of the subject. Gardthausen, however, seems to have studied the documents rather superficially, and his article is not free from errors and misconceptions; in particular it is misleading to class the subscriptions of public and private officials and collectors on receipts (e.g. p. 6) with the notarial subscriptions to contracts. They were, doubtless, in the matter of form, modelled on the latter; but there is surely a very essential difference between the signature added by the recipient of a payment in money or kind to his receipt and the subscription by which a notary certifies a contract drawn up in his office.

There is greater novelty in his other article 14, in which he collects evidence as to the use by notaries of marks and of shorthand as an additional precaution against forgery, and explains $\sigma\eta\mu\epsilon\iota\iota\hat{\alpha}\hat{\nu}\sigma\theta a\iota$ as usually having reference "auf einen Wechsel der Schrift, auf den Übergang von den $\gamma\rho\dot{\alpha}\mu\mu\alpha\tau a$ zu den $\sigma\eta\mu\epsilon\hat{\alpha}$." This explanation is by no means beyond challenge, but it is at least an interesting one, which calls for

- ¹ Zu griechischen Urkunden aus Ägypten, 1, in Berl. Phil. Woch., 1918, May 18 (cols. 477—480), Sept. 21, Nov. 9.
 - ² Abinnaeus—AMENNEΥΣ, in Athenaeum (Pavia), 5 (1917), pp. 44—50.
 - ³ In Z. Sav.-St., 36 (1915), p. 425.
- ⁴ Zum Brief Flinders Petrie i 30, 1 = Witkowski, Epistulae privatae graecae 1, in Rhein. Museum, N. F., 71 (1916), p. 154.
 - ⁶ Odysseus-Utis, Stud. z. Pal. u. Pap., 17 (1917), p. 8. ⁶ Zu Ammianus Marcellinus 29, 1, ibid., p. 53.
 - ⁷ ΜΑΦΟΡΤΗΣ, in Studi d. sc. pap., 2 (1917), pp. 95—102.
 - 8 'Αγγαρεύω, in Zeitschr. f. d. neutest. Wiss., 18 (1917), pp. 64-72.
 - 9 The Greek Article in First and Second Century Papyri, in Am. Journ. of Phil., 37 (1916), pp. 333-340.
 - Note on the Use of the Article before the Genitive of the Father's Name in Greek Papyri, ibid., pp. 341—348.
 - ¹¹ La Pronuncia del Latino ad Ossirinco nel Secolo V, in Riv. di Fil., 43 (1915), pp. 448-453.
 - 12 À propos de la question de l'Enseignement Primaire dans l'Empire Romain, in Rev. d. ét. anc., 19 (1917), p. 32.
 - 13 Di emu der ägyptischen Notare: Ein Beitrag zur Urkundenlehre, in Stud. z. Pal. u. Pap., 17 (1917), pp. 1-8.
 - ¹⁴ Die griechischen Handzeichen, ibid., autogr. 1—12.

further investigation; and Gardthausen has done a useful service in pointing out the need for closer attention to such minutiae than has been given by most editors of papyrus texts. These articles are reviewed by W. Weinberger (very brief)¹ and F. Zucker².

H. I. Bell calls attention to the importance, for the difficult problem of the reading of Byzantine protocols, of a comparatively legible specimen contained in the third volume of Jean Maspero's catalogue³, making some suggestions for readings and drawing certain general conclusions.

The New Palaeographical Society has published facsimiles of three Oxyrhynchus papyri⁴, viz.: An unpublished and unnumbered MS. of *Odyssey* xi (second century), P. Oxy. 1408, and P. Oxy. 1414.

GRENFELL contributed to *The Year's Work in Classical Studies* for 1917 the report on papyri for 1916⁵. In the first number of the revived *Revue Égyptologique* reviews of English and of Italian papyrology respectively during the war are given by H. I. Bell⁶ and P. de Francisci. A bibliography of Ancient History for 1918⁸, dealing specially with the Ancient East but with some references useful to the papyrologist is that by N. H. Baynes for the Historical Association's Bulletin.

GRENFELL, in an interesting article, deals with the future prospects of Graeco-Roman work in Egypt⁹; and Calderini, in one which I have not been able to see, discusses the future of papyrology in Italy ¹⁰. Calderini has also published an article of a popular kind ¹¹ pleading the cause of papyrological studies in Italy, with special reference to the Milan school and its publications. Lastly, reference must be made here to the projected publication at Milan, under the direction of Calderini, of a new Egyptological journal to be called *Aegyptus*.

Turning now to those reviews not already referred to above, it will be best to take first those of publications of texts. P. Ryl. II has been reviewed by MITTEIS¹², LESQUIER¹³, and P. COLLART¹⁴; P. Mon. I by MITTEIS¹⁵; P. Hal. I (the Dikaiomata) by G. GLOTZ¹⁶; P. Oxy. x by K. Fr. W. SCHMIDT¹⁷, G. FRACCAROLI¹⁸, and J. SITZLER¹⁹; PSI. III by P. VIERECK²⁰ and WESSELY²¹; P. Lond. IV by K. Fr. W. SCHMIDT²²; P. Gradenwitz (Plaumann) by M. GELZER²³; Preisigke's S.-B. III and IV by P. VIERECK²⁴; and Minns's edition of the two parchment deeds from Avroman referred to in my last Report (J. E. A., 3, 1916, p. 135) by MITTEIS²⁵. Preisigke's Fachwörter is reviewed by M. GELZER²⁶; the volume Aus dem Werkstatt des Hörsaals (see J. E. A., 3, p. 136) by P. VIERECK²⁷ and WESSELY²⁸; San Nicolò's Vereinswesen II 1 by F. POLAND²⁹; Egon Weiss's Studien zu den römischen Rechtsquellen (a work which I have not previously referred to but which, as it uses papyrological evidence, may be noticed here³⁰) by SAN NICOLÒ³¹; Can-

² In Woch. f. kl. Phil., 36 (1919), cols. 101—102.

¹ In Berl. Phil. Woch., 1918, Nov. 9.

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3 The Greek Papyrus Protocol, in Journ. of Hell. Stud., 1917, pp. 56-58.
    <sup>4</sup> New Pal. Soc., Series 11, pls. 76-78.
                                                                                     <sup>5</sup> Year's Work, 1917, pp. 25-33.
    ^6 English Papyrology during the War, R. É., 1 (1919), pp. 103—105.
    7 Les Études papyrologiques en Italie pendant la guerre, ibid., pp. 105-108.
    8 In Annual Bulletin of Historical Literature, 8 (1919), pp. 3-8.
    9 The Future of Graeco-Roman Work in Egypt, in J. E. A., 4 (1917), pp. 4-10.
    10 Per l'avvenire della papirologia in Italia (a discourse to the Scuola Papir. for 1918—1919). Milano, "Figli
della Provvidenza," 1919. Pp. 19. Rev. by D. Bassı in Riv. di Fil., 47 (1919), pp. 292-293.
    <sup>11</sup> Papiri greci e libri italiani, in Nuova Antologia, 53 (1918), pp. 57-63.
                                                                    <sup>13</sup> In Journ. d. Sav., N. S., 14 (1916), pp. 506-513.
   12 In Z. Sav.-St., 37 (1916), pp. 317-324.
    <sup>14</sup> In Rev. Égypt., N. S., 1 (1919), pp. 125—128.
                                                                    <sup>15</sup> In Z. Sav.-St., 35 (1914), pp. 347—349.
   16 Le Droit Alexandrin, in Journ. d. Sav., N. S., 14 (1916), pp. 21-32 (this is rather a study of the document
than a review proper).
                                                                          <sup>18</sup> In Riv. di Fil., 43 (1915), pp. 334-354.
    <sup>17</sup> In Gött. gel. Anzeigen, 178 (1916), pp. 390-411.
                                                                         <sup>20</sup> Ibid., 37 (1917), cols. 591—592.
    <sup>19</sup> In Berl. Phil. Woch., 36 (1916), cols. 65—69.
    <sup>21</sup> In Zeitschr. österr. Gymn., 68, p. 59 ff. (Mr Tod's reference; the review is not accessible to me.)
    <sup>22</sup> In Woch. f. klass. Phil., 33 (1916), cols. 505-512, 579-587.
    <sup>23</sup> In Berl. Phil. Woch., 36 (1916), cols. 9—11.
                                                                         <sup>24</sup> Ibid., cols. 131—132.
                                                                         <sup>26</sup> In Berl. Phil. Woch., 36 (1916), cols. 241-242.
    <sup>25</sup> In Z. Sav.-St., 36 (1915), pp. 425-429.
   <sup>27</sup> Ibid., cols. 1424—1427.
   <sup>28</sup> In Deutsche Literaturzeit., 37 (1916), cols. 1942—1945.
   <sup>29</sup> In Berl. Phil. Woch., 36 (1916), cols. 45-49.
    30 Leipzig, Meiner, 1914. Pp. viii + 155. Mk. 5.
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31 In Krit. Vierteljahrsschr. f. Ges. u. Rechtsw., 18, pp. 313-317.

tarelli's Serie dei prefetti di Egitto III by J. Maspero's Org. militaire by M. Besnier²; Van Hoesen's Roman Cursive Writing by M. Prou³; v. Druffel's Papyr. Studien by Mittels⁴; and Steinwenter's Versäumnisverfahren by P. Koschaker⁵.

Some personal notes have been contributed to this Journal from time to time during the war, but it may now be noted again that Wilcken has left Munich for Berlin, his place at Munich being taken by Otto. Kornemann has gone to Breslau, Zucker to Tübingen, C. H. Becker to Berlin, Preisigke and Spiegelberg to Heidelberg. The death roll, chiefly in direct consequence of the war, is a heavy one. Mahaffy, J. Maspero, Plaumann, Strack, O. Crusius, B. Kiel, A. Bauer, F. Blumenthal, K. Fitzler, G. Fraccaroli, G. Gentilli, A. Cosattini—it is a lamentable list, and papyrology will be the poorer for the loss of so much talent and high promise.

I cannot conclude without expressing a thought which occurs naturally to the compiler or the reader of such a record as this. It is impossible to survey the list of references given above without realizing anew the international character of science, the immense gain that comes from co-operation, the impossibility of a nationalist policy in the region of knowledge. To talk, as some have talked, of boycotts and exclusions is to threaten the very principle of science, and this at a time when, in a world turning feverishly to the task of material reconstruction, the disinterested pursuit of knowledge is likely even more than of old to be suspect and open to challenge. If into the spheres of art and science, those cities of refuge built by the mind of man for comfort and defence in a troubled world, a world now more than ever hopeless and unquiet, we import the feuds and petty animosities of practical life, we shall indeed give proof that we know not the things which belong unto our peace.

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<sup>1</sup> In Rev. d. ét. gr., 28 (1915), pp. 62-65.
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October, 1919.

² In Journ. d. Sav., N. S., 14 (1916), pp. 324-325.

⁴ In Z. Sav.-St., 37 (1916), pp. 375-377.

³ Ibid., pp. 91—93.

⁵ Ibid., 36 (1915), pp. 444—447.

NOTES AND NEWS

The reorganization of our Society, so far as its British Branch is concerned, is now an accomplished fact. The old Egypt Exploration Fund has become the Egypt Exploration Society, and all persons who belong to it now stand on an equal footing as Members. The Extraordinary General Meetings called in December to approve and confirm the necessary alterations in the Articles of Association revealed but little difference of opinion, our supporters being unanimous in their verdict that the proposed changes were rendered necessary by the new conditions arising out of the war. To reiterate once again the main points: membership involves the payment of an annual subscription of two guineas, with an entrance fee of one guinea, in return for which the Journal of Egyptian Archaeology is given gratis, together with full rights of voting, attendance at lectures and use of the Library; and members are also entitled to purchase one copy of every new publication at 33 per cent. discount. The sole objection raised at the Extraordinary Meetings was with reference to the Old Graeco-Roman Branch, certain subscribers to this having intimated that they were mainly interested in the admirable memoirs published by Professors Grenfell and Hunt, and that they would hardly be served by the substitution of the Journal. To meet the very legitimate claims of such persons it was arranged that members who so desired and who should intimate their preference beforehand could receive any Graeco-Roman Memoir issued during the year in question in lieu of the Journal. It need scarcely be said that the Committee of the Society regard its Graeco-Roman work as of equal importance with its other activities, and have every desire to promote the interests of this field. Indeed, it is intended that the Journal should be the organ of our researches in this domain as much as of those whose studies lie in the older periods. No small part of the present issue is devoted to Mr H. I. Bell's admirable Bibliography, and the July number will contain a highly important essay by Professor Rostovtzeff on the Foundations of Social and Economic Life in Egypt in Hellenistic times.

All members of our Society will be pleased to hear of the appointment of our late Honorary Secretary, Mr H. R. Hall, to be Assistant-Keeper of Egyptian and Assyrian Antiquities in the British Museum. Mr Hall had been absent from the Museum for several years engaged in military duties. In January 1916 he was transferred from the Military Information Section of the Press Bureau, where he had worked for a year with Professor Oman, to the Army as a Subaltern in the Intelligence Department. Mr Hall acted as an Intelligence Officer at G.H.Q., Home Forces and at the War Office until November 1918, being mentioned in despatches and promoted to be Captain in that year. He then left for the East on an archaeological mission for the British Museum, being attached as Captain to the Political Service in Mesopotamia. Until May 1919 he acted as adviser to the Mesopotamian administration in archaeological matters, and carried out excavations for the British Museum at Tell el-Mukayyar (Ur "of the Chaldees"), Tell Abu Shahrein (Eridu), and Tell el-Ma'abed or Tell el-'Obeid (as it is vulgarly called), a small site near Ur, previously unknown, which has yielded antiquities of the early Sumerian (Ur-Ninâ) period that are of great archaeological and artistic interest, but unhappily in a very bad state of preservation. These were described by Mr Hall in papers read to the Society of Antiquaries on December 4 last and to the Manchester Egyptian and Oriental Society on January 15. On Mr Hall's return to England in August last, after an archaeological visit to Egypt (Dêr el-Baḥri) and Palestine during the summer, he resumed his duties as an official of the British Museum, and has recently rejoined the Executive Committee of the Egypt Exploration Society.

We have to congratulate Mr T. Eric Peet on his election to the Brunner Professorship of Egyptology in the University of Liverpool. His predecessor, Professor Newberry, on resigning the post, has accepted the title of Reader in Egyptian Art at the same University.

There is but little archaeological news of interest from Egypt. Professor Petrie and his party are excavating at Illahûn, where they are reported to have found cemeteries of the Second and Third Dynasties, as well as valuable antiquities of the later periods. At Thebes, Mr Howard Carter and Lord Carnarvon are continuing their work in the Valley of the Tombs of the Kings, but without much result hitherto. Mr and Mrs N. de G. Davies have resumed their exceedingly valuable copying work in the private tombs, the former on behalf of the Metropolitan Museum of New York, and the latter for the Theban Tombs Series published under the auspices of our Society. Captain Engelbach has been appointed Inspector-General of Antiquities at Luxor.

It is with much pleasure that we welcome the reappearance of the Revue Égyptologique, now edited jointly by MM. Alexandre Moret and Pierre Jouguet. The first part (fascicules 1—2) of the new series contains over 120 pages and a number of good collotype plates; MM. Moret, Sottas, Lefébvre and others contribute articles on the older periods, while the Graeco-Roman branch is represented by important articles due to MM. Jouguet, Vitelli, Roussel and Collart. The next volume of the Recueil de Travaux, henceforth to be edited by M. Chassinat, is being awaited with much interest. It is apparently to be printed in Cairo henceforth, while the Revue Égyptologique remains in the hands of E. Bertrand, at Chalon-sur-Saône.

The lectures of the Society continue to attract large and enthusiastic audiences. On December 12 Professor Newberry discoursed on the Tombs of the Kings at Thebes, while on January 23 Professor Peet treated the subject of El-Amarna, the City of the Heretic King, and on February 20 Mr H. I. Bell read a paper on the Historical Value of Greek Papyri. Our next lecturer will be M. Capart, of the Musée du Cinquantennaire at Brussels, whose address, on March 19, will deal with the Study of Egyptian Art. On April 23 we hope to hear Professor Peet again.

The Asiatic Review, which is the new title of the old Asiatic Quarterly, now devotes considerable space to a section on archaeological work. Our Hon. Treasurer, Mr W. R. Dawson, has printed there a general account of the work of our Society, and has also given admirable résumés of the lectures on the Origin of the Alphabet and on the Tombs of the Kings of Thebes.

NOTICE OF RECENT PUBLICATION

Die Annalen und die zeitliche Festlegung des Alten Reiches der Ägyptischen Geschichte. By Ludwig Borchardt. Berlin: Behrend & Co., 1917. Pp. 64. Eight plates and 10 figures in the text.

This is a publication of the first importance to the Egyptologist, for, if Borchardt's premises and the soundness of his method be granted, the chronology of the Old Kingdom is fixed once and for all. The author believes that the Palermo Stone and the new Cairo fragments of the same or similar annals contain entries which enable us not only to date within very close limits the early Dynasties, but also to reconstruct the form and arrangement of the complete stone or stones.

He begins by showing, so conclusively that it will probably never be questioned, that the year-spaces on the stones represent not regnal but calendar years. His next step is to examine the position of the entries of the height of the Nile in those calendar years in which there was a change of reign. Now in each of such years, of which there are two on the recto and two on the verso, the engraver has recorded for us the number of months and days of that calendar year during which the old king reigned and the number of months and days which his successor reigned. In three cases out of the four, two year-spaces of the ordinary size appear to have been allotted to this divided year and the number of months and days reigned by the two kings respectively recorded in the two spaces. In the fourth case (recto, Register 5) a single year-space has been divided into two by a vertical line and the expected month and day entry in the second half is omitted. Now in each of these four cases the Nile height is given underneath the second of the two spaces into which the one year is divided. Borchardt concludes that in each case the moment of high Nile, at which of course the measurement was taken, fell in the second, i.e. the new king's portion of the year. Taking now the particular case of the change of reign on verso, Register 4, it would follow that in this year the Nile reached its height during the last 2 months and 7 days of the Egyptian calendar year. Now we know by modern observations the limits within which the date of high Nile varies, and, by combining this with our knowledge of the shift of the Egyptian civil calendar as against the Sothic year, Borchardt finds the actual date of the year in question, which is the incomplete first year of the reign of Neferirkere, to lie between the inner limits 3120 and 3460 B.C., or, supposing the high Nile to have been abnormally early or late, between the outer limits 3020 and 3550 B.C. The other three years of regnal change are less suitable for Borchardt's purpose. They give similar but much wider limits for three earlier reigns, the sole value of which is that they do not contradict the dates obtained for the accession of Neferirkerē.

This sort of mathematical reasoning is very attractive, especially perhaps to those who are least mathematical. But there are at least two criticisms to be made. In the first place Borchardt's high Nile dates are based on no more than 32 observations, all lying between 1798 and 1888. In these 32 years the earliest high Nile fell on Aug. 25th (Gregorian) and the latest on Oct. 27th. Is it not a little dangerous to infer from so few data taken from a single century that the high Nile of a particular year five thousand years previously must have fallen within the same limits? The year in question might have been extremely abnormal, or the dates of high Nile may vary in large cycles of which, owing to lack of sufficient observations, we have no idea.

In the second place, is Borchardt justified in assuming that because the Nile entry is placed under the second or later portion of the broken year therefore the day of high Nile actually fell within that second portion? Is it not perhaps more than a coincidence that in each of the four cases before us the entry is placed in the second half of the year? In other words, may there not have been special reasons which led to the recording of the Nile height in the second portion of the year-space irrespective of the date of high Nile? Let us examine the four cases in detail in the light of this possibility. In Register 2 of the recto there is great doubt, as Borchardt himself sees, with regard to the manner in which the broken year is treated. The months and days in the two spaces do not add up to a whole year, and if we suppose a kingless period between, which was not recorded, may we not imagine that if the high Nile fell in this (which doubtless for political reasons was omitted) the entry of its height was pushed on into the new

king's portion of the space? In Register 5 of the recto, where the change of reign is abnormally treated, and where the old king's space is very much restricted, is it not a possibility that mere considerations of space may have dictated the entering of the Nile height under the second part of the year? The case of Register 1 of the verso must again give us pause. The earlier (i.e. the old king's) portion of the divided year is apparently empty except for the entry "[4 months] 24 days." As no events are recorded for this last incomplete year of the old king, would it be strange if, even though the high Nile fell within his reign, the entry of its height were pushed forward into his successor's portion? The fourth case, that of Register 4 of the verso, is also suspect. Here the entry "9 months 28 days" is crowded into the space allotted to the "Year of the sixth (?) time of numbering" in such a way that it overflows into the space usually reserved for Nile heights. It may well be that these 9 months and 28 days are not a part of the year of the sixth time of numbering at all but represent the old king's portion of the following year, which the engraver had omitted in laying out the fields and had to insert in this clumsy way!. If this is the case considerations of space alone would suffice to push on the Nile entry into the following field, the first incomplete year of Neferirkere. I do not insist on this; I am only concerned to show on what an unstable basis Borchardt's assumption rests. What is in any case clear is that great uncertainty exists regarding the annalist's method of arranging these years of regnal change, and that there are certain considerations which may in particular cases have suggested or even compelled the reservation of the Nile height for the second portion of the year, even though the high Nile fell in the first? Note above all that in three cases at least no events whatever are recorded in the first part of the year, even when this is the longer portion. From this we might infer that the broken year was much more closely connected in the Egyptian mind with the new king, and in this case what more natural than that the Nile entry should be made under his portion, even though the high Nile was already over when he ascended the throne? The four changes of reign which seem to be recorded on the large Cairo fragment would probably enable this point to be settled one way or the other, but it is impossible to decide details of this nature until the fragment is adequately published. However this may be, in the light of the very various treatment given to the years of change of rule on both fragments, Borchardt's assumption, on which, be it noted, the whole of his dating is based, is a temerarious one, and must remain no more than an assumption.

Having fixed the date of the accession of Neferirkerer the author proceeds to reckon back to the date of Menes. To do this he must establish the length of the Dynasties preceding the Fifth, and this he does by attempting a reconstruction of the whole stone or stones. His method is as follows. In the five uppermost horizontal registers of the Palermo fragment the vertical year-fields in each register are virtually of constant breadth, so that if we lay an accurate drawing of the fragment in the middle of a long strip of drawing paper we can go on theoretically producing the fields of these five registers in both directions. If each register was, on the stone, evenly divided from end to end there will come a point at each end of our drawing where the vertical lines separating the fields in each register will lie all five in the same vertical straight line. These two vertical lines, one at each end, will mark the limits of the stone, or, to be more exact, of the entries on it. This process Borchardt has, with every conceivable precaution to ensure accuracy of drawing, applied to the Palermo fragment. As his point of departure he takes a zero vertical line roughly down the middle of the fragment and he finds that the desired coincidences occur on the right at a point which is 85 year-fields of Register 1 distant from the zero-line and on the left at a point 61 year-fields distant from the zero-line. This gives for Register 1 a total of 146 year-fields, for Register 2 112 year-fields and so on. In other words it determines the length of the stone and enables far-reaching conclusions to be drawn with regard to lengths of reigns and Dynasties both on the recto and the verso.

In theory this is admirable, and no one who reads Borchardt's volume will doubt that the carrying out of the drawing left nothing to be desired from the point of view of accuracy. But instead of allowing ourselves to be carried away by the ingenuity of the process and the meticulous accuracy of the performance we must ask ourselves seriously whether its basis is sound. In other words, are the assumptions made justifiable and is the necessary accuracy obtainable?

Firstly as regards the assumptions made. They are three, first that the fields remain of constant breadth throughout each horizontal register, secondly that each register ran the whole length of the stone,

¹ I am well aware that on this hypothesis we should expect to find a Nile entry under the year of the sixth numbering. Unfortunately we cannot test the point, for the entry, if it existed, would have lain too far to the right to have been preserved on the fragment. The two vertical strokes shown in Schäfer's copy in the Nile space are accidental.

and thirdly that the first and last fields in each register were complete ones. The first assumption may be considered very reasonable, but at the same time it remains an assumption, and if it be true that the Palermo and Cairo fragments belong to one and the same stone it is obviously incorrect, for the fields in Register 1 on the two fragments differ sensibly.

The second assumption Borchardt attempts to justify in a very ingenious manner. He points out that given five registers, the breadths of their respective fields, and the position of at least one field in each register, the probability of a coincidence of five vertical lines such as that described above is extremely small, and the chance of two such coincidences, one on each side of the original fragment, still smaller. He therefore argues that if our drawing gives a "unique solution" for these points of coincidence it will prove the correctness of the assumption that all the registers were of the same length and ran the whole length of the stone, it being inconceivable that coincidences so improbable should occur otherwise than by design. Now in the realm of pure mathematics this argument would be cogent. It is obvious that if any one of the five fixed field-breadths is incommensurate with any other there is no solution, and the chance of a coincidence is nil. But unfortunately for this reasoning we happen to be here in the very empirical world of drawing based on quite uncertain data. What Borchardt's drawings give us are not exact coincidences but only roughly approximate ones, the chance of which occurring within the very generous limits allowed to himself by Borchardt, so far from being infinitely small, is very considerable.

In any case the drawing does not give a unique solution. Eight fields of Register 1 from the right of the zero line in the reconstruction of the Palermo fragment occurs a coincidence of the five lines which is decidedly closer than either of those at the ends of the registers. A glance at the title-band of Register 3 will show that the stone did not end at the point in question, and Borchardt therefore dismisses the coincidence with the remark that it is an error due to inaccuracy of material. But surely he must either accept the evidence of his drawing in all cases or else in none. He is not at liberty to accept it when it suits his purpose and reject it when it does not. In any case is not an admission of an error of this nature fatal to the whole fabric of his system?

Since then the coincidences, being not exact but merely approximate, are in no way improbable, and since the solution given by the drawing is not unique, we cannot regard as justified the original assumption that the registers were all of the same length. This assumption is particularly dangerous in the case of Register 1, which contains, as far as we know, merely king-names. It is by no means impossible that these did not extend the whole length of the stone, or that some irregularity occurred in this confused catalogue of Kings of Upper Egypt, Kings of Lower Egypt and Kings of United Egypt.

As for the third assumption it seems not impossible that, supposing (as Borchardt does) that the end of each register marked the end of a reign, the incomplete last year was given a narrower space, just as Borchardt himself is compelled to admit for the *verso*. To sum up it may be said that to assume the complete regularity of a monument of which we possess not more than a tenth (on Borchardt's hypothesis), and that tenth showing great diversity in the treatment of critical years, and to base the chronology of long periods on this assumption, is unscientific.

And now to discuss the question of accuracy. Borchardt's drawing has for its basis a photolithographic reproduction of a squeeze of the Palermo fragment made in 1865. Those who are in the habit of using squeezes will have remarked the very objectionable habit which even the best squeeze paper has of shrinking unevenly in the drying. Dr Gardiner and myself met with some astonishing examples of this when dealing with the Sinai squeezes in the British Museum and comparing them with tracings and photographs of the originals. I do not believe that a squeeze can ever be a reliable basis for a piece of delicately accurate mathematical drawing, still less a photographic reproduction of a squeeze, where the slightest error of parallelism in the planes of original and camera would produce faults unnoticeable to the naked eye but considerable enough, when multiplied as in Borchardt's process, to cause disaster. Moreover Borchardt himself admits that the breadth of field adopted in the drawing is only an average given by adding the slightly varying breadths of the surviving fields in any register and dividing by their number. Here there seems to be a possibility of very considerable error. Admitting the skill of the Egyptian in measurement, admitting that he laid out his year-fields by subdividing whole registers at a time, I cannot agree that the average of 14 fields is certain to give a sufficiently accurate figure to work on in a register of 163 fields, as is assumed in the case of Register 4.

The author next proceeds to apply the same method to the largest Cairo fragment, which, he believes, belongs to a different stone from the Palermo fragment. This stone he finds to have contained 184 fields

in Register 1, 112 in Register 2 (the same number as in the Palermo stone) and so on. Here again the same assumptions are made. The materials used are perhaps less open to criticism, Gauthier's plates, which are photographic reproductions from the original, having been employed. The possibility of lack of parallelism between surface and camera might again be a source of error, though Borchardt claims that he can see no sign of this. As in the previous case the field breadths taken in the drawing are averages from the surviving fields as measured on the reproduction. But our belief in these receives a rude shock when we test with the dividers the fields of Register 3, and when we examine in the footnote to page 24 the measurements of Register 4 given by Daressy and seen by Borchardt after his work was completed; in this register there are 12 fields of breadth 14.7 mm, and 2 of 14.9 mm. If variations such as these are possible then almost anything is possible except the attainment of accurate results.

It has already been noted that Borchardt denies that the Palermo and the largest Cairo fragments belong to the same stone. It is obviously vital to him to do so in view of the facts that the field-breadths in the topmost register are different and that his drawing process gives different results in every register of the two stones except the second. In view of the fact that several writers who admit the existence of more than one table of annals consider the Palermo and the largest of the Cairo fragments to be part of a single tablet (see especially Gauthier in his publication of the new fragment, Gardiner in this Journal, III, pp. 143 ff., and Petrie in Ancient Egypt, 1916, pp. 114 ff.) it is interesting to see what reasons Borchardt adduces for his belief, apart from the results of his calculations. In the first place the thickness of the largest Cairo fragment is given by Gauthier as 60-62 mm., while that of the Palermo fragment is quoted by Pellegrini as 65 mm. As the two pieces on Gauthier's own admission lay no further than 240 mm. apart Borchardt finds it hard to believe that such a variation could occur in a single stone. Surely this is indecisive. The variation of Gauthier's figure, whatever it may mean, shows that the Cairo fragment is in itself of considerable irregularity, and it is obvious that a stone which can vary in thickness 2 mm. in a maximum length of 260 might vary another 3 mm. in the next 240. In any case more numerous and very accurate measurements will have to be taken on both stones before the argument from their thickness can be used one way or the other. The same applies to Borchardt's comparisons of the distances apart of the horizontal divisions on the two stones. These distances we do indeed expect to find fairly constant throughout the tablet, but I confess that the small differences shown by Borchardt's table seem to me by no means incompatible with the theory that the two fragments belong to a single tablet 1. The breadths of the fields in corresponding registers of the two fragments coincide very closely in three registers, but differ slightly in Register 4 (where we have already seen traces of irregularity) and considerably in Register 1. These differences in field-breadth seem to me to prove nothing for him who approaches the question with an open mind, but naturally for the author whose whole theory is based on the existence of scrupulous regularity in the vertical spacing they can only indicate the existence of two separate stones. With regard to the differences of drawing indicated by Borchardt between the two fragments I can only say that any attempt to reproduce the exact forms of signs from the plates of Gauthier's publication seems to me waste of time.

But we must now follow Borchardt in his attempt to fix the date of Menes from his reconstruction of the Annals. Assuming that on both stones the first two Dynasties occupied the whole of Registers 2-5, he obtains a length of 544 years on both stones for the two Dynasties combined. Here we are still in the realm of mathematics. But now we are suddenly transported to the region of the wildest guesswork. For the lengths of the Third and Fourth Dynasties Manetho's figures of 214 and 274 (variant 277) years respectively are first taken. It is then suggested that the length of the Fourth Dynasty can be roughly gauged by comparing the amount of masonry contained in its pyramids with that known to have been laid by Sahurē' in his pyramid at Abusir in between 10 and 15 years, and the result obtained is that the Dynasty can hardly have lasted much less than 300 years. Readers must form their own conclusions as

the value of this kind of reasoning. It leads Borchardt to declare Manetho's figures for the Third and Fourth Dynasties not improbable, but before accepting them he reduces them in the same proportion in which Manetho's figures for the first two Dynasties must be reduced in order to agree with the 544 years of the reconstructed annals, the result for the two later Dynasties combined being 478 years. We now have a total of 1022 years for the first four Dynasties, and, adding on 25 years for the reign of Userkaf, we reach the grand total of roughly 1050 years from Menes to the accession of Neferirkerec, a date already

¹ In the case of the Cairo fragment these vary quite considerably within the limits of the fragment itself, as can be demonstrated by the use of the dividers on Gauthier's plates.

found by Borchardt to lie between 3020 and 3550 B.C. or, adopting the inner limits, between 3120 and 3460 B.C. This gives for Menes the outer limits 4070 to 4600 with inner limits 4170 to 4510.

Here the author finds himself confronted with a serious difficulty. He requires over 1000 years for his first five Dynasties. Yet a well-known passage in the Turin Papyrus of Kings (Fragments 43-47 and 61-63) has been interpreted by Eduard Meyer (and his interpretation has been accepted by many) to mean that from Menes to the end of the VIIIth Dynasty represents a period of only 955 years. In order to escape from this difficulty Borchardt attempts to show that Meyer has misinterpreted the passage, and that in effect the 955 years do not refer to this period at all. Both Borchardt's transcription of the hieratic (p. 43) and his rendering of the passage as transcribed seem to me to be open to serious criticism. In line 2 of his text the sign before the numeral 181 does not in his tracing of the hieratic look like And despite his footnote "Sicher nicht Rest von rnp-t" one is inclined to suspect that what was meant was, after all, \bigcap_{\bigcirc} . This seems to me clear from the beginning of the next line, where there is no room for the years which on Borchardt's supposition must have stood there. Note moreover that the sign 🔊 is generally (not invariably) rubricised in this papyrus, while the sign before 181 is black. In line 5 there is still more certainly an error, with the correction of which Borchardt's whole theory of the passage falls to the ground. At the beginning of the line, as Gardiner points out to me in a letter, the sign transcribed by Borchardt as evidence of with a footnote "Nicht Rest von dmd" can on the evidence of Borchardt's own tracing hardly be anything but dmd; there seems no objection on the grounds of form, for since the hieratic form of \bigwedge in this papyrus is identical with that of \bigcirc except for the addition of a dot which the tearing of the papyrus has here removed we are just as much entitled to read As as Borchardt is to read, as he actually does, , and the fact that the sign is rubricised is quite sufficient to turn the balance in our favour.

His translation of the passage presents difficulties. Thus the "x years, 6 months and 3 days" of line 3 are by him cut off from what precedes and refer to nothing, though the sense is restored at once by the substitution of \bigcirc for his \bigcirc . Furthermore to take line 5 as a separate sentence introduced by the preposition \bigcirc (bis zu) is to postulate a crudity of expression impossible even in so terse a document as the Turin Papyrus. Surely a much simpler solution is to admit the obvious parallel between lines 2-3 middle, and lines 3 middle to 5 end. The first lines give the totals of years etc. for the particular group of kings just detailed, which we may paraphrase as follows: "[Summing up]; kings (of such and such a house)................[total] 181 years 6 months 3 days; kingless years 6; total [187 years 6 months 3 days]." The second passage combines these figures with previous totals and runs: "Kings [since] Menes, their kingdoms and years and the kingless years [94]9 years 15 days; kingless years 6; total............955 years 15(?) days." This view of the passage may be wrong; it is not my business here to attempt to translate the papyrus, but it will at least be agreed that this gives a more natural and satisfactory rendering than that of Borchardt. It does at least show that there is no compulsion to suppose the 955 years to refer to anything other than the period from Menes up to the end of the Dynasty last detailed.

Having thus with very doubtful success combated the difficulties to his system raised by the Turin Papyrus, Borchardt returns to the chronology of the first Dynasties. He notes that the Palermo fragment records in the 8th or 9th year of Zer-Ity a "first occasion of the festival of ." The name of this festival he renders first "Ewigkeitsfest" and later, following Sethe, "Zeitordnung." Now a second occasion of this festival occurs in recto, Register 3 of the same fragment in a year which in Borchardt's reconstruction is exactly 120 years later than the first. Further, in verso, Register 4 occurs the entry, in a year which his reconstruction fixes 280 years after the first occasion mentioned above, of a festival called

Borchardt argues that the festival of was celebrated on each occasion when the shift of the Egyptian civil year as against the Sothic year amounted to a month, *i.e.* every 120 years. The first celebration would therefore fall just 120 years after the establishment of the Egyptian calendar, which we know to have fallen in about 4240 B.C. (Borchardt gives reasons for supposing the exact year to have been 4242 B.C.). Thus this 8th or 9th year of Zer was 4236 B.C., and reckoning back in the reconstructed annals to the beginning of the register we get 4186, with a possible error of 2 years, for the

accession of Menes. The festival of $\frac{1}{2}$ of $\frac{1}{2}$, falling 400 years after the establishment of the calendar, would celebrate the fact that the civil year had now shifted 100 days.

It would be ungracious to make here the numerous criticisms which at once suggest themselves in connection with the detail of this argument, for the author himself has stated them most candidly, though he overrides them. His readers must judge for themselves. It is certainly an odd coincidence that in his reconstruction these three festivals fall at intervals which can be so easily connected with the periods of shift in the calendar. The names of the festivals appear to me to form a very weak support to the author's theory. If here has its later sense of "eternity" it is hard to see why such a name should be given to a festival marking a shift of a month in the calendar; on the other hand the rendering "Zeitordnung" is, as Sethe himself would probably admit, quite hypothetical. Still further, to give the name of the fact that the calendar, so far from having become "richtig" had become wrong to the extent of no less than 100 days is nothing but a delightful lucus a non lucendo.

In the above an attempt has been made to limit discussion to the main lines of Borchardt's treatment of his subject and to show how weak some of these are and how unstable are the foundations on which he rests the whole of early Egyptian chronology. At the same time there are many other points in the detail of the work which invite criticism. For instance Plate 3 is a production which must be repugnant to any scientific mind. It combines in a single reconstruction two fragments which the author himself insists belong to separate stones with registers slightly differently arranged. The result is that the Palermo fragment is here shown with its year-fields incorrectly placed. In the same Plate a single title-band is in several cases drawn in over the centre of the total space occupied in the reconstruction by pairs of kings whose reigns the author is unable to separate. This gives a very incorrect idea of the arrangement of the stone and would have been better omitted. In the third Register of the Cairo fragment in this Plate the complete reign of between 8 and 9 years is given without query to Semerkhet. This is based merely on Maspero's statement that the damaged Horus-name consisted of three vertical signs which Borchardt would read $\bigvee_{i=1}^{\Omega} \bigvee_{j=1}^{\infty}$. Gardiner has already disproved this reading by pointing out that at this date the sign accannot be written vertically. It is difficult to trace any vestige of the sign which both Borchardt and Petrie claim to see in the cartouche2. This error alone would throw out the reconstruction of Register 3. Is it, moreover, certain that the First Dynasty ended at the end of Register 3? Is it not overbold to suppose that Zer had only one predecessor in the Dynasty? And in any case does a detailed year-by-year reconstruction such as that of Plate 3, which in the present state of our knowledge must be almost pure guesswork, serve any useful purpose? Similarly in Plates 1 and 2 is there any value in a reconstruction of the verso based on the assumption of constant year-fields within each register, in view of the fact that widely variable fields are already found in the Fourth Dynasty records of the recto?

It is too early as yet to say what verdict scholars in general are likely to pass on Borchardt's ingenious and admirably handled study. Regarding it from the purely mathematical point of view one can only regret that the author should have erected so immense an edifice without waiting at least until measurements of the necessary accuracy could be taken on both fragments of the stone or stones, their material compared, and an adequate philological study of the Cairo fragment made.

T. ERIC PEET.

¹ On p. 52, if I understand him rightly, Borchardt wishes to take as a determinative of time (cf. his translation "Zeitordnung"). If this is so the has no festival determinative (we expect the boat) and may be an event and not a festival at all.

² Lacau and Gauthier both failed to find it on the stone itself. See Gauthier, p. 42.

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STATUE OF THE STEWARD ROY SINGING THE PSALM TO RE

By H. E. WINLOCK.

There is, in the Metropolitan Museum of Art, New York, a very attractive little lime-stone statue from Thebes, representing an Eighteenth Dynasty individual named Roy, who was a Clerk and Steward of the Queen (Plate I). Unless some other collection or some future excavation brings to light more information concerning him we may take it from the style of his statue that he lived in Thebes sometime between the reigns of Tuthmosis III and Akhenaton, with a strong probability that he was a contemporary of Amenophis II or Tuthmosis IV. Furthermore, there is every likelihood that the statue was made for his tomb and that there, or near there, the natives of Kurneh found it in some clandestine digging of about ten years ago¹.

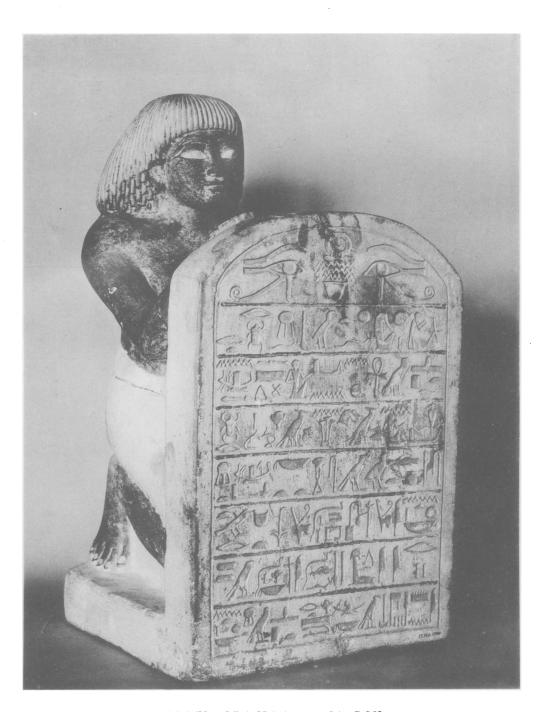
The statue is of a type frequently made for the tombs in the Eighteenth Dynasty², but is of a workmanship and preservation above the ordinary. The figure was painted with red for the flesh tones and the details of the white skirt and waistband; with the eye-balls white and pupils black; and even the nails of the fingers and toes picked out in white. The stela in front had a white ground, a blue border and red lines in the inscription, and the incised signs were filled in with blue.

On the stela are the words of a widely known hymn to the Sun-god, the title of which was the "Adoration of $R\bar{e}^{\zeta}$ at his rising and until his setting in life." It was a hymn, not like ours of set phraseology, but one in which the Egyptian felt free to give his fancy rein in improvisation, and while copy after copy gives us the same underlying theme and even many recurring phrases, each scribe was at liberty to arrange it after his own taste. This is true even of the fuller versions which served as introductions to the Book of the Dead in the Empire³, where the space on the long papyrus roll presented no discouragement to completeness, but it is especially true when it was inscribed on grave stelae and statues where lack of space forced brevity upon the scribe. The texts on these smaller monuments therefore are mere abbreviations, and as their different redactors chose their phrases from the fuller versions at random, no two of them are literally identical.

On the statue of Roy the psalm reads as follows:

"Adoration of Re^{ζ} at his rising and until his setting in life. I have shown myself to the great bark, and have repelled the passion of the serpent Grim-face, so that the sailing of the Mesektet-bark might take place in the course of each day. (Made) by the Clerk and Steward of the Great Queen, Roy. He said: Hail to thee, Harakhte-Amūn, staff of the gods; mayest thou traverse the sky in peace in the course of each day." [Transl. Ed.]

- ¹ It was bought in Luxor in March 1909 by the late J. Pierpont Morgan, Esq., and was presented to the Museum as a part of his father's collections by his son, J. P. Morgan, in 1917.
- ² As examples from the Theban Necropolis may be cited the statue of Mes found in the Dra' Abu'l Naga (Northampton, Spiegelberg and Newberry, *Theban Necropolis*, p. 10, Pls. VII and XVII) and the statue of Nakht found in his tomb, where a niche was provided for it in the second chamber (Davies, *Tomb of Nakht*, p. 38, Pl. XXVIII).
 - ³ Budge's Edition, Text (1910), Vol. I, pp. 1 foll., Transliteration (1909), Vol. I, pp. 1 foll.



STATUE OF THE STEWARD ROY

In the Metropolitan Museum of Art, New York

Merely by way of illustration it may be of interest to cite another little statue, also in the Metropolitan Museum of Art, of about the same date and similar form, but of far cruder workmanship (Plate II, fig. 1). In this case the much abbreviated hymn is in praise of Amūn, Harakhte and Osiris, the few short phrases reading:

"Giving praise to $Am\bar{u}n$, smelling the earth to Harakhte and Osiris, Ruler of the Two Lands. May they give the pleasant breeze.....that is in them, until $R\bar{e}^{\zeta}$ arises over my breast......" [Transl. Ed.]

There is a point in regard to this type of statue with a stela in front which is not without interest for the interpretation of the motives of the Egyptian artist. They have been described frequently, and often, it would seem, with the explanation that they represent a votary presenting or erecting a stela. This interpretation on its face would seem logical enough. We have numerous statues bearing shrines or vessels of offerings in their hands, and the statues with stelae before them would naturally appear to belong to the same category.

But satisfactory as this explanation would seem at first glance, there are objections to it. Were it customary for countless people of all degrees to set up stelae with hymns to Rēc and the other gods of the pantheon, such stelae themselves, since presumably they would have been temple votives, should be more common on temple sites, or statues with the votive stelae should have been found in numbers in Karnak, for instance. As a matter of fact on the temple sites both stelae and statues with stelae are rare, the majority of the latter being purely mortuary and coming from the cemeteries.

Furthermore there is an objection to be raised on the ground of the pose. The naophorous statue, the statue of a votive presenting a figure of a god or king in a temple, or the statue of the bearer of offerings bringing a vessel, always has the hands shown securely grasping the offered object on either side. This was the artist's convention to render the act of presentation and it is interesting to note that in one statue from Karnak the donor of a stela is portrayed grasping it in just such a manner. The statue depicts a certain Neferperet with a stela on which he is shown adoring Tuthmosis III and Hatshepsut, grasping it on either side as he raises it to a vertical position. But the mortuary statues of the class to which this one of Roy belongs, are portrayed with an entirely different action. They do not grasp the stelae as offerings are grasped but at the most merely touch the top with their fingers, as does this statue of Roy. Completely divorced from the action of offering is the statue of Amenemhab from the Osiris Chapel in Karnak, where both hands pass in front of the stela and are shown upraised with palms to the front beyond it, or the statue of another Amenemhab who is shown holding both hands, with palms to the front, above the stela and thus before his face.

If the explanation that these statues represent votaries offering stelae is not wholly satisfactory, there is an alternative that is.

Egyptian monuments yield a multitude of representations of celebrants in the different ritualistic attitudes of the religious ceremonials. The priest is seen with outstretched right hand reciting the offering formula, for instance. The rubrics leave no doubt as to his words

- ¹ At least one exception which must be noted is Legrain's description of the statue 42,120 in *Statues et Statuettes*, Vol. 1, p. 68, where the author gives the interpretation arrived at here.
 - ² Legrain, op. cit., no. 42,121, Pl. LXXI. ³ Op. cit., no. 42,120, Pl. LXX.
- ⁴ Budge, Meux Collection, Pl. XV. Two statues in the British Museum (Nos. 480 and 544) show this same pose with the hands above the stella and before the face.





ANTIQUITIES IN THE METROPOLITAN MUSEUM OF ART, NEW YORK

Fig. 1. Statue of a person whose name is lost.

Fig. 2. Fragmentary Stela of Pai, Superintendent of the Royal Harim.

or his act. Countless other monuments show a celebrant, standing or kneeling, singing a hymn of praise. One chosen at random, merely because it is unpublished and is of a date but little later than the statue of Roy, is a fragment of a stela in the Metropolitan Museum of Art (Plate II, fig. 2). Here the rubric informs us that the action represented is "The making of praises to Rēc, on his Horizon, by the Superintendent of the Harîm of the King, Paï justified" and we see Paï himself standing in the ritualistic position with hands upraised before his face in front of "Harakhte, the Great God." This is invariably the position of one who sings a hymn. Possibly it denotes the act of shielding the eyes from the brilliancy of the divinity, for in many scenes of battle where the king charges the defeated enemy, or in scenes of triumph where the barbarian legates come into the royal presence, the awestruck foreigners are shown with hands upraised as though to protect themselves from the light of the divine countenance, while they break into songs of praise or supplications for mercy.

Whatever the intention, the pose with upraised hands before the face was the proper attitude while singing a psalm of praise, and that is just the attitude of these stela-statues if the stela be omitted. May not this, then, have been the intention of their makers? Roy, for example, is represented praising the Sun-god. Had a stela been ordered by him rather than a statue, the artist would have shown him with the words of the hymn written in columns before his portrait. But as he desired a statue, a ground had to be provided for the hymn. The artisan who made the statue of a certain Scribe and Treasurer Seti in the Abbott Collection of the New York Historical Society, showed his patron with upraised hands and found room enough for his extracts from the "Praise of Rēc" on the skirt of the statue. Other artists made a stela-like slab part of the statue merely to bear the words, showing the deceased kneeling behind it with upraised hands stretched in front of it, or above it, or merely touching the top of it, as in Roy's case. In any event the makers of these statues have only introduced the stelae to give them the ground for their inscriptions, and their makeshift in a way reminds one of those caricatures of a few years ago with balloon-like affairs floating from the mouths of the figures with their words written within.

This being the conception of the statue, it should be termed the statue of one singing a psalm of the Sun-god rather than of a votary offering stela.

¹ An example of such a stela chosen at random from among many is in Northampton, etc., *Theban Necropolis*, Pl. IV.

² From Thebes. It is No. 93 in the old Catalogue, which is to be replaced by a thoroughly scientific work by Mrs Grant Williams (Caroline L. Ransom).

THE SUMERIAN TREASURE OF ASTRABAD¹

By Professor M. ROSTOVTZEFF

In the spring of 1841 the Beglerbeg of Astrabad, one of the large cities of Persia, situated a few miles from the south-eastern angle of the Caspian Sea, sent to the Shah of Persia a number of objects discovered in Astrabad. These objects were examined in Teheran by C. A. de Bode² who made some sketches of them, and became so deeply interested in them, that in the summer of the same year he visited Astrabad to collect information concerning their discovery. Once on the site, he ascertained that the treasure was found in a so-called "tell," a big bank of earth or enormous tumulus of the same type, evidently, as the tumuli which were excavated by Pumpelly at Anau, near Askhabad. Without doubt these tumuli, known in Syria and Mesopotamia under the name of "tell," are not of funerary origin, but are simply the remnants of ancient cities that in former times stood on these sites. In the case of the Astrabad tumulus there can be no doubt whatever, for the simple reason that its dimensions are so great, that the summer residence of the governor of Astrabad was built upon it.

The tumulus is situated some twelve miles to the north-east of Astrabad, and is known among the local population by the name of Tureng-tepe meaning "the mountain of pheasants." The information gathered by Bode concerning the circumstances of the discovery is mainly, as is usual in the Orient, of a half legendary character. It seems that the place where the treasure was found was pointed out to Bode in the lower part of the northern slope of the hill, where a chamber had been discovered. He was told that in this chamber, near to the walls and chained to them, several bronze vases were found standing. The bronze vases may possibly have been there, but the chains, of course, are imaginary. Imagination seems to have played a great part also in the story about the fate of the treasure discovered, of which a part only was supposed to have been sent to the Shah. The remainder, including coins, was said to have been kept by the Beglerbeg, who dealt summarily with the discoverers, cutting out the tongue of one, and murdering the other. The important point is that Bode did not meet the discoverers and did not speak with them, but obtained his information at second hand. The information, therefore, must be treated very cautiously. In no case could any coins have formed part of the treasure.

- ¹ The article by the distinguished Russian archaeologist and historian here published has as its main theme some antiquities from a region very remote from Egypt. The remarkable comparisons made with Egyptian objects, however, amply justify the inclusion of the article in a journal devoted to Egyptology, and the conclusions drawn will be found to be of the deepest importance.—ED.
- ² Clement de Bode, son of Charles de Bode, an emigrant from Alsace, who settled down in Russia after the French Revolution, was a Russian subject and lived in Moscow. In what capacity Clement de Bode came to Persia I do not know and cannot ascertain, having no Russian books of reference to consult. I suppose, however, that he went there as a diplomat. In England, as I have been told by Sir Paul Vinogradoff, he was concerned in a big lawsuit *versus* the Crown, which started in the forties (De Bode's Case, 1845, 8 Q.B. 208). On account of this affair Bode had often to come to London, where he stayed for long periods of time.

It may be supposed that, as in the case of many finds made in Mesopotamia and Elam during the excavations conducted by de Morgan and de Sarzec, this particular treasure was hidden by its owners at the time of one of the frequent military catastrophes suffered by the city on the site of which a tumulus has gradually grown. The fact that the treasure

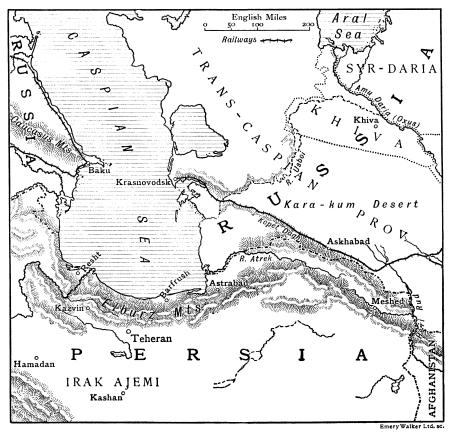


Fig. 1. Map to show the position of Astrabad.

was discovered in the lower part of the hill proves that the objects found belong to the most ancient layers. Unfortunately this hill was not explored afterwards, and we have no data to indicate its composition and the character of its cultural layers. An idea of the objects may be obtained from the sketches made by Bode and his very summary description of them. Both the sketches and the description were handed over by Bode to Roach Smith who published them in 1844 in *Archaeologia*. It is unfortunate that the sketches are superficial and seem to have been made rather hurriedly; they give the barest outline only of the ornaments, and make it impossible to judge of the style and technique. But generally speaking they seem to be exact, as can be proved by comparing them with analogous and contemporary objects. It is much to be regretted that while Bode indicates

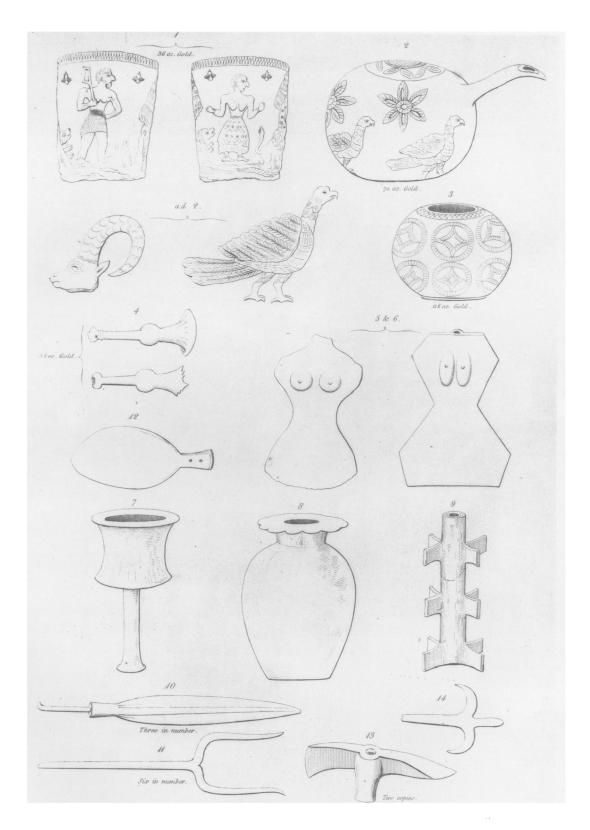
¹ Baron Clement Augustus de Bode, On a recently opened tumulus in the neighbourhood of Asterabad, forming part of ancient Hyrcania, and the country of the Parthians. Communicated by Charles Roach Smith, Esq., F.S.A., Archaeologia, vol. xxx (1844), pp. 248—255, with Pl. XVI.

the weight of the golden objects he does not give their dimensions, and that he contents himself with naming only the general features of the technique of the ornaments. All this makes it very difficult to analyse this particular treasure and to indicate the epoch and cultural region to which it belongs. However, as will be seen below, it is possible to discover both the former and the latter, and their discovery leads to results, the importance of which will no doubt be estimated by specialists at their proper value.

The Astrabad treasure (Pl. III) consists of a number of golden objects, some worked stones and several weapons made of copper (not bronze).

Highly characteristic are two golden vessels:-

- 1. One of them is made of thin gold in the form of a goblet, the sides being very much bent. Around the upper part runs a band ornamented with a zigzag line, probably cut into the metal. The whole body of the vessel is ornamented with figures in relief. Two human figures are well preserved and will be described in detail further on. Between them we find four-leaved rosettes, which Bode supposes to represent bees. Apart from these, Bode found some fragmentary representations of lions and cypresses on the lower part of the vessel between the human figures, although, as he shows by his sketches and states in his description, these representations are very much damaged. The dimensions of the goblet are not indicated, but the weight is given as 36 02 ounces.
- 2. The other vessel, weighing 70 ounces, seems to have been found in a better state of preservation. It has the form of an aryballos with a long spout. The body of the vessel is ornamented with figures of vultures or eagles represented in profile. Under the spout is found the head of an ibex, probably a remnant of the whole figure, which is not preserved. On the upper part of the vessel, between the figures of animals are found six-leafed rosettes with line-ornamentations; of these we will speak in detail further on. It is not clear whether this vessel had a cover, but, according to the drawing, that seems probable. In any case the cover or top of the vessel had its own distinct ornaments, viz. a central circle filled up with ornamental lines and encircled by a band with schematic representations of leaves disposed in pairs at obtuse angles to one another. It is to be regretted that in the case of this vessel also Bode did not show whether the ornaments are of repoussé work or engraved; possibly both methods may have been combined.
- 3. It is especially regrettable that there are no indications whatever concerning the third golden object, weighing $11\frac{1}{2}$ ounces (here also the dimensions are not given). Bode calls this object a "round vessel." I suspect that the round opening at the top and the rim at the bottom indicate that the object is not a vessel at all, but the head of a mace or, more correctly, the golden cover of a mace-head. The light weight of the object speaks in favour of this supposition. The whole body of the object, which has the shape of a ball, is ornamented with a double row of circles, the rims of which consist of short strokes; inside each circle a rhombus is drawn, the outer sides of the rhombus being concave, and the bands forming the rhombus being likewise filled up with short strokes or lines. The upper opening has a rim in the form of a band running round it ornamented with crossed lines. Roach Smith defines the ornamental work of the mace as "carved ornaments"; by this he probably means to imply that the ornaments are engraved.
- 4. The description of two golden objects which together weigh $5\frac{1}{2}$ ounces is extremely sketchy. Bode calls them musical instruments—trumpets; I hardly can believe this to be exact. Unfortunately in the absence of any indication of the dimensions of these objects no conjecture can be drawn as to their purpose.



THE TREASURE OF ASTRABAD as shown in *Archaeologia*, Vol. XXX (1844), Pl. XVI

The objects made of stone form a special series:—

5 and 6. The most interesting are the two female torsos, both headless, legless and armless. Both torsos seem to be cut out of plates. The first figure has a rounded form, whereas the form of the second is angular. The first figure has the stump of a neck, and it may be supposed that the head has been broken off. As to the second figure it may be conjectured that the neck and head were separate parts, which have fallen off and been lost. The sex is indicated by the breasts, which are rounded in the first figure and narrow and oblong in the second, in the shape of a lentil. The centres in both cases are indicated by points. The sexual organs are not indicated. The first figure is made of a reddish stone, the second of yellow-tinted white stone resembling maragui marble from the province of Azerbeidjan.

7 and 8. Two vessels are made of the same yellow-tinted white stone. One is shaped like a goblet on a long stem, the lower part of which is broken off. The second has a very elegant shape, the top part forming a rosette with many leaves.

The copper objects are weapons of warfare with interesting and original shapes:—

- 9. A very original mace-head is ornamented with three rows of projections, four in each row.
 - 10. Three spearheads, leaf-shaped, with ends to be set in the shafts.
 - 11. Six prongs or forks also with ends to be set in the shafts.
- 12. A leaf-shaped dagger with a handle pierced with two holes for the purpose of attaching it to a wooden shaft in which the handle was set.
- 13. Two double-edged battleaxes, one of the edges horizontal and the other vertical, with a central hole for the handle.
 - 14. A combination of two curved knives and a spear with an end for hafting.

Despite the great interest attaching to the treasure here described, it remains still unclassified and has never been properly understood. Bode himself and Roach Smith after him believed the objects to belong to the Scythian period, and supposed them to have been discovered in a funerary tumulus of the type described by Herodotus. This, of course, is quite impossible because the Scythian culture, which is well known to us from the South Russian discoveries, belongs to a much later stage when weapons of iron had completely supplanted weapons of bronze. In this case we have to deal only with weapons made of copper and very primitively shaped; there is no bronze and, of course, no iron. We are, therefore, in this case concerned with a cultural period belonging to the Copper-age, not to the Bronze-age.

Since the description of the treasure was published, the only scholars, so far as I know, who have paid attention to it are the students of prehistoric times and S. Reinach. The interest of the first was excited simply and solely by the copper weapons; they paid no attention whatever to the other objects, and went no further than to make a superficial comparison with other treasures of Western Europe¹. S. Reinach paid more attention to our treasure². He was the first to emphasize the great antiquity of the objects discovered, as indicated by the absence of iron and even bronze, but his comparison of the figures on the golden goblet with the Mycenaean or Aegean figures lacks foundation. The Mycenaean

¹ See Montelius, Archiv für Anthropologie, vol. XXI, p. 14; Id., Die Chronologie der Bronzezeit, p. 138; cf. S. Reinach, Anthropologie, 1892, p. 454.

² See S. Reinach, La représentation du galop, in Revue Archéologique, vol. xxxvII (1900), p. 252, with figs. 72—82.

and Aegean figures have absolutely no resemblance to our figures; the type of the features, the costume and the ornaments differ markedly from those of the Aegean and Mycenaean areas and lead us to other regions and other times. After S. Reinach our treasure was almost entirely forgotten again. In the latest literature I have found references to it only in the last book by W. Leonhardt entitled *Paphlagonia* (Berlin, 1915, p. 322), with a reference to S. Reinach.

It was in the course of my researches upon the most ancient cultural development of Southern Russia, and especially in studying the antiquities discovered in the Kuban province, which are clearly related, as Pharmakovsky has recently shown, to prehistoric Egypt, and even more closely related to the most ancient civilisation of Sumer and Elam, that I became acquainted with the treasure of Astrabad; its relation to the same period was at once obvious to me, as well as its close connection with the Sumerian antiquities, as we now know them after the discoveries of de Sarzec and Cros and the masterly classifications due to Heuzey.

One has merely to glance at our treasure, after having attentively gone through the tables of the splendid French publication entitled *Découvertes en Chaldée*, to become convinced of the fact that the only true parallels for it are to be found in the objects belonging to the time of Ur-Nina, one of the most ancient kings of Lagash, in the contemporary antiquities discovered by de Morgan in Susa, in the asphalt vessels, covered with drawings, contemporary with the second period of the painted pottery of Elam, and in the most ancient Elamitic seals.

Let us now study more closely the objects contained in our treasure. A golden tumbler or goblet held by gods or kings appears frequently on the Sumerian monuments. In the first place, by way of corroboration, I must mention the tablets or pedestals from Nippur and Tello, destined most probably for sacred maces. Everywhere upon these, gods and kings are seen holding goblets while their servants stand near with vessels for libations, tall jugs without handles, but with spouts, through which the liquid contained in the vessel was poured out². The first discovery of a number of such goblets, with ornaments in relief and engraving, some of them made of shells of mother-of-pearl, was made in Tello; the second discovery of the kind, consisting of asphalt supports in the form of goblets, was made in Elam³. But of course the shape alone does not give any definite indication, because vessels of the goblet type were in rather common use in the ancient world⁴. A definite indication

- ¹ B. Pharmakovsky, The Archaic Period in Russia in Materials for Archaeology of Russia, vol. xxxiv, pp. 50 foll.
- ² See HILPRECHT, Explorations in Bible Lands, p. 417, with illustrations; Babylonian Explorations, Old Babylonian Inscr., vol. I, p. 2, with Pl. XVI; E. MEYER, Sumerier und Semiten; KING, History of Sumer and Akkad, p. 49, figs. 14, 15; DE SARZEC and HEUZEY, Découvertes en Chaldée, Pl. II bis; cf. Pl. I, and HEUZEY, Catal. des Antiq. Chald. du Louvre, no. 11.
- ³ See Déc., Pl. XLVI, fig. 3 (see in the present article Pl. V, fig. 2); Catal., p. 189; Déc., ibid., figs. 4, 5, 8; Catal., no. 232 foll.; King, History of Sumer and Akkad, pp. 79 foll., figs. 30 foll. The best preserved is the goblet of Gudea with the figure of a caduceus formed by two serpents and two winged serpent-shaped demons; see Déc., Pl. XLIV, fig. 2, A. B. C., p. 234; and cf. Pl. XLIV bis, fig. 4, p. 381; Revue Assyriologique, vol. v, pp. 129 foll.; vol. vi, pp. 95 foll. The asphalt supports of Elam will be described later on.
- ⁴ I may mention, however, that in none of the series of pottery known to me have I found such a preponderance of the goblet type as in the ceramics of Elam of the first period, with its characteristic paintings; one has only to go through the plates published by Pottier to be convinced of this. See DE MORGAN, Délégation en Perse, Mémoires XIII. The only other shape competing to a certain extent with

can be given only by the character and style. Setting aside for the moment the other representations, which are in a bad state of preservation, let us concentrate our attention on the two principal figures.

One of them (Pl. III, no. 1, right) represents a human being with the head and feet turned to the right while the body is standing straight, facing one. The underlined tips of the breasts alone are evidently not sufficient to serve as a criterion of sex. The head and the face of the figure are clean-shaven. The peculiar characteristic features of this human figure are its unusually long hooked nose and its large ears. The eye is large and has a characteristic shape, which is repeated in the second figure. The clothing also is very typical: the upper part of the body and the feet are bare; from the waist down to the feet the figure is clad in a wide petticoat belted at the waist. The arms and hands are represented en face; the arms are bent at the elbow and stretched out—one to the right, the other to the left; if the drawing and the description by Bode are to be trusted, the figure is represented with bracelets on the arms and ankles. The nature of the material of which the petticoat is made is very typically represented by three or four rows of streaked triangles.

The second figure (Pl. III, no. 1, left) has the same characteristic features. Here also the head and feet are turned to the right, while the body and arms are drawn en face. The face is of the same type, with a large hooked nose and a fleshy ear; the head and face are also clean-shaven. The costume differs slightly, consisting of a short petticoat instead of a long one, which covers the lower part of the body only and stops short at the knees; the garment looks more like a wide belt than a petticoat and is held at the waist by another wide belt, possibly of metal, ornamented with two bands of triangles. The artist has attempted to represent the material of the petticoat by means of four streaked bands. The arms are represented in the same way as in the first figure, but the left arm is bent at the elbow with the hand poised on the hip; the right arm is also bent at the elbow, but the hand holds a sort of instrument or a part of some weapon which Bode has reproduced in his sketch as resembling an oar with a hole in the blade, though in his description he compares it with one of the curved knives used by the natives to clear a path through the woods. (See the drawing on page 249). A parallel to both these figures can be found only on Sumerian monuments. Firstly the technique and the style of the figures, and then the long hooked noses, the fleshy ears, the clean-shaven heads and faces—such precisely are the features that characterize the ancient kings and other inhabitants of Lagash, the typical features of the Sumerian type, reproduced by the Sumerian artists with a rude, primitive realism. One glance at such ancient monuments as the abovementioned pedestals of sacred maces of the king Ur-Nina (see Pl. V, fig. 4) or of the sovereigns of Nippur, or at the famous round pedestal from Tello (see Pl. V, fig. 1), or at the famous Vulture stela, will suffice to remove every doubt in this matter. No less typical and characteristically Sumerian are the postures and costumes of the figures.

The figure with the arms outstretched is clad in the typical Sumerian petticoat, found on nearly all the figures representing ancient Sumerians. These petticoats, as

the goblet is the half-spherical cup. This is not accidental, of course, especially as such a predominance is noticeable only in the first period. Other shapes predominate in the second period, when the goblet appears only sporadically.

¹ The latest comparative study of Sumerian types was published by Th. J. PINCHES, *The Sumerian of Lagaš* in *Proceedings of the Society of Biblical Archaeology*, vol. xxxv (1913), pp. 17 foll. with Pl. I.

Heuzey supposes (Les origines orientales de l'Art, pp. 120 foll.), were made of shaggy woollen stuff, in texture resembling fur, or else of palm-leaves stitched together. To cite examples would be superfluous. The clothing of the second figure, the belt and apron covering the loins, is not so typical. But still it is found rather often in Sumerian statuary. For instance the figure of Ningirsu, supreme god of Lagash¹, as represented on the Vulture stela, is clad in precisely such an apron, covering the loins. A similar costume characterizes the two figures (the god and the worshipper) on the tablet from Nippur (HILPRECHT, Explorations in Bible Lands, p. 417; Bab. Exp., Cun. texts, vol. I, Pt. 2, Pl. XVI, figs. 37 and 38); the demon on the tablet of the Berlin Museum, published by E. Meyer (Sumerier und Semiten, p. 102); the part of the carved figure, published by Heuzey (Déc., Pl. XLVI, fig. 1). Heuzey² is undecided whether it was the fur of an animal or some kind of woollen material that the artist wished to represent.

We get a further development of this primitive costume, changing gradually into a Babylonian plaid, on a later monument (about two centuries after Naramsin), the relief of Anubanini, king of the Lulubeians (see DE Morgan, Mission Scientifique en Perse, vol. IV (1896), pp. 161 foll.; E. Meyer, Sum. u. Sem., p. 25). The king is figured here in the act of conquering his foes, with a "boomerang" (to be mentioned further on) in his right hand, just as in the figure on the Astrabad goblet. He is clad in a sort of waistcoat covering the upper part of the body, and in a plaid covering the loins and fastened by a wide metallic belt around the waist. It is characteristic that bracelets are represented on the arms of this figure, just as on the arms of the first figure on the Astrabad goblet. It is very probable that the typical clothing of the Hittites with their wide metallic waistbelt is connected with this costume. Possibly in this case the waistcoat covering the upper part of the body and the apron have been united to form one coat³.

The object that the figure on the goblet is holding in the right hand is very typical. I have stated already that Bode's drawing and description do not coincide. The description, of course, is the more trustworthy, the drawing serving only as an illustration, and it shows that the instrument or weapon concerned may be identified with the so-called Sumerian "boomerang," a stick or bundle of twigs with a curve or bend at the upper end, wherein was fixed a blade made of stone or metal. Later the whole apparatus, the blade included, was made of copper. These weapons played an important part in the ancient days of Lagash. Eannatun on the Vulture stela, one of the chiefs on the round monument, and many other figures that could be cited are all armed with "boomerangs." Most probably the shape of the curved shafts of the sceptres held by the gods of Sumer and Babylon may be traced back to this most ancient Sumerian weapon.

- ¹ See Heuzey, Découvertes en Chaldée, Pl. XLVIII; E. Meyer, Sumerier und Semiten, p. 95.
- ² Restitution matérielle de la stèle des Vautours (1909), p. 29; a general characterization is given here of the ethnographic type of the Sumerians and of their clothing; very justifiable doubts are expressed concerning the accuracy of the deductions of E. Meyer, who builds his theory of the relationship between Sumerians and Semites in ancient Mesopotamia on the basis of the type of features and costume.
- ³ See Pharmakovsky, The Archaic Period in Russia in Materials for the Archaeology of Russia, vol. xxxiv, Pls. XV, XVI.
- ⁴ See Heuzey, Déc., Pl. I ter, fig. 1a, cf. Pl. XLVII, fig. 1 (see in the present article Pl. V, fig. 1) and Pl. III bis, cf. Pl. XLVIII bis. See also the cylinder with the figure of Ningirsu, Déc., p. 301, fig. 1, cf. ibid., Pl. XXII, fig. 5 (p. 271); Pl. XXX bis, fig. 19. For the "boomerang" see Heuzey, Nouvelles fouilles de Tello, p. 129, fig. 4 and Pl. VIII, fig. 5; cf. ibid., p. 137 and note 1. For a very detailed analysis of the "boomerang" and for suggestions about the origin of this type of weapon see Heuzey, Rest. mat. de la stèle des Vautours, pp. 14 foll.; Orig. orient. de l'Art, pp. 164 foll. Most probably it is the original of the later curved swords of the Hittites and of Asia Minor, the so-called κοπίδες.



If the figure on the goblet really holds a "boomerang" in its hand, this is an indication that finally settles the question of the truly Sumerian character of the figures represented.

The general composition of the scene depicted on the goblet is not really clear. Bode mentions lions and cypresses, but the reproduction of trees in such a connection is hardly probable. The introduction of elements of landscape on Sumerian reliefs belongs to a later time, not earlier than the period of Sargon and Naramsin, when the type of costumes and features had changed to a great extent and there was very little left in common with the type of clothing and features of Lagash in the period of Ur-Nina and Eannatun.

It is permissible, therefore, to doubt the accuracy of Bode's description, and to conjecture that he could not decipher the bent and defaced designs between the figures and was unable to understand their meaning. It is possible that our goblet, in the general composition of its scenes, closely resembled one of the asphalt supports of Elam discovered by de Morgan. In any case the position of the human figure on this support fully coincides with the posture of the first figure of the Astrabad goblet. I am alluding to the two fragments of a support reproduced in Del. en Perse, Mém. XIII, Pl. XXXV, figs. 2 and 5, where their editor has not mentioned the fact that they are parts of one and the same support (see Pl. IV, fig. 2). The figure on the fragments is shown standing straight with head and feet turned leftwards. The right hand of the figure is represented in the act of grasping the wing of the ordinary Sumerian heraldic eagle, the left poised on a lion. The human figure is typically Sumerian; there is the same technique in the reproduction of the body, the same characteristic petticoat (cf. Pottier, ibid., Pl. XXXIII, fig. 5; Pl. XXXV, fig. 4). The same typical Sumerians are represented on a number of other monuments, for instance on the highly interesting relief (see Pl. IV, fig. 1) where two Sumerians are seen standing facing each other, one lifting and stretching out the right arm, and the other the left arm; between them two heraldic serpents are interlaced, reminding one of the serpent caduceus of Gudea and of the same serpents on the handle shields of knives and daggers of predynastic Egypt² (see fig. 3 on p. 15).

Is not the composition of the scene on the Astrabad goblet also typically Sumerian? It is repeated with certain omissions also on the Elam support just alluded to: the two figures, and between them the heraldic eagles holding in their claws two heraldic lions. We must remember that the eagle of Lagash, holding two animals in its claws, was a favourite theme with the artists of that city and of the city of Elam (e.g. Pl. IV, fig. 3), only slightly altered in the latter case. We find it on the famous vase of Entemena (see fig. 2), on the standard carried by Ningirsu, on the Vulture stela, and on a series of ancient reliefs from Lagash³.

¹ See POTTIER, *loc. cit.*, p. 68. Pottier had correctly indicated the close connection and contemporary character of the sculptured pottery of Elam of the second period of painted ceramics with the monuments of the most ancient period of Lagash.

² For this Elamitic relief see *Dél. en Perse*, Mém. XIII, Pl. XXXVII (black asphalt). Of the same type and style are the pedestals for sacred maces from Elam, *ibid.*, Pl. XL, figs. 3 and 9. The goblet of Gudea is reproduced in all the publications concerning the history of Sumer. See Heuzey, *Déc.*, Pl. XLIV, fig. 2, A. B. C., and p. 234. For Egyptian knives see DE Morgan, *Recherches*, vol. I, pp. 112 foll., fig. 136; vol. II, Pl. V; Capart, *Primitive Art in Egypt*, p. 71, fig. 36, p. 72, fig. 37, p. 73, fig. 38. See further Heuzey, *Origines orientales de l'Art*, p. 345, with Pl. XVII.

³ For the vase of Entemena see *Mon. et Mém. Piot*, vol. II (Heuzey), pp. 5 foll. with Pl. I; *Déc.*, Pls. XLIII and XLIII *bis*, and pp. 261 foll. The Vulture stela see *Déc.*, Pl. IV *bis*; reliefs, see *ibid.*, Pl. I, fig. 2, and pp. 87 foll., Pl. V *bis*, fig. 2, and p. 205; Pl. XXXI *bis*, fig. 1. Usually, however, the eagle has a

If my supposition prove exact, the Astrabad goblet, together with some monuments from Susa and Tello, may be considered as one of the most ancient specimens of a continuous composition, symmetrically or heraldically uniting human beings and animals in one concise picture encircling the ornamented object. A similar group of lion-eagles and animals intermixed is found on the Entemena vase, a group of animals alone on the mace-head (see Pl. V, fig. 5), where lions are reproduced in one continuous band devouring other lions (Déc., Pl. I ter, fig. 2, with pp. 223 foll.)¹, and lastly, the tendency to bind together in the same network figures representing vultures and parts of human bodies is clearly indicated in the upper part of the Vulture stela.

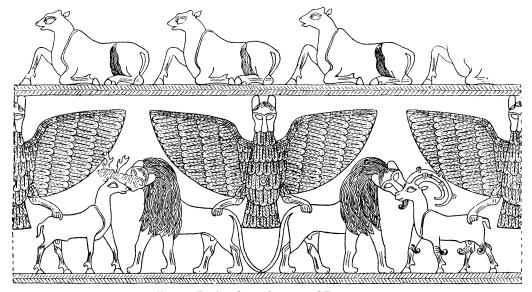


Fig. 2. Design from the vase of Entemena.

We should also note the four-leaved rosette on the Astrabad goblet, filling up the parts of the goblet unoccupied by other figures. The same method of filling up empty spaces is typical of the goblets of Tello covered by engravings of shells (Pl. V, fig. 2)² and of the engraved stones of ancient Elam³. The primitive character of the ornamental band on the upper rim of the goblet also deserves attention.

The Sumerian character seems at first sight less pronounced in the large vessel with a spout. It may be explained by the evident tendency of Bode's drawings to modernize somewhat the figures of eagles ornamenting the vessel. But a closer examination shows the lion's head, which is typical for Lagash, but is not repeated in Elam. Bode may have mistaken for cypresses the ends of the eagle's wings; there is no reason to question the presence of lions on the lower part. The composition on the monument in *Nouvelles fouilles de Tello*, Pl. VIII, fig. 3 is particularly vivid.

- ¹ The mace-head was consecrated to the god Ningirsu by Messilim, king of Kish. Over a continuous series of lions is reproduced the flying eagle of Shirpurla-Lagash. The same composition is found in Egypt, also on a miniature mace-head. This mace-head was discovered at Hierakonpolis and is kept at the present time in the Ashmolean Museum of Oxford (Quibell and Green, *Hierakonpolis*, vol. II, Pl. XXIII; vol. I, Pl. XIX, 6 and vol. II, Pl. LXVI). Comp. L. Curtius, *Studien zur Geschichte der altorientalischen Kunst* in *Sitz. der Bayr. Akad.* (1912), 7, pp. 21 foll.
- ² See the goblet with the reproduction of a lion devouring a bull ($D\acute{e}c$, Pl. XLVI, 3; Cat., p. 189); here a seven-leaved rosette is reproduced between the lion and the bull.
 - ³ See Jéquier, Dél. en Perse, Mém. viii, figs. 13, 17, 20, 22, 31, 32, 40, 42, 44, 47, 51, 52, 53.



ANTIQUITIES FROM BABYLONIA

vessel to be typically Sumerian and as primitive as the goblet. First of all attention must be drawn to the combination in the Astrabad treasure of the goblet or tumbler with the vessel with a spout. This combination is characteristic of Sumerian reliefs. The same combination is found on several monuments of predynastic and protodynastic Egypt, but the shape of the vessel used for libations is somewhat different in Babylon, Elam and Egypt¹. Evidently the vessel with the spout and the goblet belonged to the customary set of sacramental plate used in the temples. To both of these must be added a bomb-shaped round vessel with a short neck, appearing there where life-giving water is figured, running out of this vessel in two streams. This vessel remains typically sacramental in Southern Russia from the most ancient times up to the period of the decline of the great Scythian Empire². It is true that the vessel with a spout from Astrabad is shaped differently from the vessels with spouts from Mesopotamia and Egypt. But I attach no great importance to this, because vessels with spouts are very common in the primitive ceramics of the whole Orient and the Aegean Islands, and take the most varied shapes, sometimes approaching very nearly to the shape of the Astrabad vessel. We find these vessels in Elam, beginning with the Neolithic Period, the first period of the cultural development of Elam which is characterized by painted pottery³; and a great many vessels of this type are found in predynastic and protodynastic Egypt. We get them also in the tells of Turkestan, in Anau, although, it is true, in later layers.

In later times vessels with spouts are typical for the whole of Asia Minor; we find them in the earlier Hittite necropoleis⁵, in the more ancient necropoleis of Phrygia⁶, and in Trans-Caucasia⁷. They are quite common also in the region influenced by the Aegean

- ¹ The vessel used for libations on the palette of Narmer (Pl. VI, fig. 2) has the shape of a small kettle which the servant holds by a handle riveted to the upper part. This shape is very similar to that of the Astrabad vessel. I may say here that many of the Egyptian earthenware vessels with spouts approximate very closely in shape to the Astrabad vessel. See Hall, in this *Journal*, vol. I (1914), pp. 114 foll., with Pl. XVII.
- ² See Pharmakovsky, The Archaic Period in Russia, in Materials for the Archaeology of Russia, vol. xxxiv, pp. 50 foll.; Rostovtzeff, ibid., pp. 79 foll.; cf. Heuzey, Orig. orient. de l'Art, pp. 149 foll., with Pl. V.
- ³ POTTIER, Dél. en Perse, Mém. XIII, Pl. XXII, fig. 6, Pl. XXV, fig. 7, Pl. XXIX, fig. 2. I indicate those vessels only that more or less approximate in shape to the Astrabad vessel.
- ⁴ Very many examples could be quoted, but I will limit myself to a few references only; Petrie, Naqada and Ballas, Pl. XXVI, figs. 58 a—d, Pl. XXXVI, figs. 85; Hierakonpolis, Pl. VI r 131, Pl. XIV, figs. 58a, 58e, 58m; Arch. Survey of Nubia, vol. I, Pl. LX, figs. B12, B13, C9, C10; Reisner, The Early Dyn. Cem. of Naga ed-Dêr, vol. II, p. 47, fig. 109, and cf. Pl. XLVIIa (5175). Apart from this, Reisner indicates a number of bronze vessels of the same type from Garstane, Mahâsna, Pl. XX; Id., Reqaqnah, Pl. VI; Quibell, El Kab, Pl. III. I repeat that I am indicating only those types that more or less approximate to the Astrabad vessel. For Turkestan, see Pumpelly, Explorations in Turkestan, Expedition of 1904, vol. I, Pl. IX, fig. 1 and Pl. XII, fig. 1.
- ⁵ See LEONARD WOOLLEY, *Hittite Burial Customs*, in *Liverpool Annals of Archaeology*, vol. vi (1904), pp. 87 foll. with Pls. XXII, figs. 3 and 4 (the transitional period between the early bronze and the middle Hittite). Compare the vessel from Kuel-Tepe in E. Meyer, *Reich und Kultur der Chetiter*, Pl. V.
- ⁶ Körte in Ath. Mitth., vol. xxIV (1899), p. 33, with Pls. III, XVI, XXV. Körte ascribes these vessels, as well as the above-mentioned Hittite vessels, to about 2000 B.C., placing them close to the Trojan vessels of the Vth city. These vessels developed into the later painted vessels of the same type. See Körte, Gordion, p. 89, Pls. III, IV.
- ⁷ Rösler, Verhandlungen der Berliner Gesellschaft, in Zeitschr. für Ethnol. (1901), pp. 87 foll., and cf. 1902, p. 188 (excavations near Helenendorf). Vessels of the same type are found in other necropoleis of Trans-Caucasia.

culture¹. I may mention also that a vessel with a spout of the typical shape of the Sumerian reliefs was found in one of the tells near Astrabad during de Morgan's excavations, of which I shall have to speak further on. Unfortunately the published drawings of the objects discovered do not allow us to form an opinion concerning the time to which this vessel may belong; the handle differs from those of the vessels on the Sumerian stelae, and this difference may indicate a later period².

A decisive indication of the epoch of the Astrabad vessel is found not in its shape, but in its ornamentation. The ornamentation of vessels, carved stones, cylinders, palettes, etc., with series of similar or different animals is a sign typical of a very ancient stage in the development of art. We find it in the polychrome ceramics of Elam and Egypt³, on seals and cylinders of a most ancient epoch in the same countries⁴, and on monuments of predynastic and protodynastic Egypt⁵. The animal reproductions strike one usually by their primitive naturalism and show a tendency of the artist towards a certain schematization and geometrization, although the same tendencies appear as a product of a later development. Splendid specimens of this method of ornamentation are found among the silver vessels from a Maykop burial (Kuban province, Northern Caucasus) belonging to the same period. I hope to treat separately the subject of this burial and its important bearing on the history of human culture⁶.

Bode's drawing, unfortunately, reproduces only the general scheme of the figures of eagles ornamenting the Astrabad vessel, and gives no clue which would enable us to iudge of the style. But one detail, evidently not invented, is very characteristic. This is the reproduction of the plumage, the elaborate rendering of each feather, the unusually detailed and at the same time schematic work. The manner in which the plumage is

- ¹ For vessels from Mochlos see Pernier and Karo, Ant. Crétoises, vol. II, p. 5; Pseira, ibid., Pl. XIX, and often. It is known that out of this type of vessels has developed the so-called Schnabelkannen. Such vessels are very common on the island of Cyprus, see Körte, Gordion, p. 89 footnote. Cf. P. di Cesnola, Catal. of Cypr. Ant., vol. II, p. 85, nos. 757, 758; p. 96, no. 823; p. 92, no. 788. I take my examples from the Orient only ignoring the Occident.
 - ² J. DE MORGAN, Mission Scientifique en Perse, vol. IV, p. 144, fig. 7.
 - ³ Pottier, Dél. en Perse, Mém. XIII (1912).
 - ⁴ Jéquier, op. cit., Mém. viii (1905); cf. Mecquenem, ibid., Mém. vii, and Pézard, ibid., Mém. xii.
- ⁵ See the recent article by J. Bénédite on this kind of monument, *The Carnarvon Ivory* in this *Journal*, vol. v (1918), pp. 1 foll. *Cf.* also T. E. Peet, *The Art of the Predynastic Period* in this *Journal*, vol. II (1915), pp. 88 foll. I am astonished that no attention is here paid to the close connection between Egyptian palettes and knife-handles and the ancient seals and cylinders from Elam. This connection appears not so much in the similar types of various animals (lions, for instance), as in a general system of their grouping, partly around a certain centre, partly in continuous rows one over the other, the empty spaces sometimes being filled up with animals, sometimes with geometric or vegetative ornaments. See L. Curtius, *Studien zur Geschichte der Altorientalischen Kunst*, in *Sitzungsb. der Bayrischen Akad.* (1912), pp. 11 foll.; Jolles, *Jahrb. d. Deutsch. Arch. Inst.*, vol. xix (1904), pp. 27 foll.
- ⁶ See Pharmakovsky, Archaic Period in Russia, in Mater. for Arch. of Russia, vol. xxxiv, pp. 50 foll. The Maykop vessels are to be included in the same series, as characterized above, of monuments giving the oldest specimens of the animal style, clearly showing a definite tendency to ornament with figures of animals objects destined for religious or domestic purposes.
- ⁷ I do not know if Bode faithfully renders the style of the eagle's head, but what strikes me is the close resemblance in style, even in Bode's rendering, with the splendid eagle's head (Pl. V, fig. 3) on the fragment of the relief from Tello (Déc., Pl. I, fig. 3). The heads of the small vultures on the Vulture stela are less characteristic, but they too have a striking expression of energy and life, differing in this from the more elaborate and elegant heads of the small hawks of protodynastic Egypt. It is to be remembered that the figures of vultures and other birds of prey, so full of life, play the same part on the well-known fragment

represented is very close to the manner characterized by Heuzey¹ as typical of Sumerian monuments of the period of Eannatun and Ur-Nina, only it is simpler and more primitive. The plumage of the wings is not divided into several parts as on the Sumerian monuments, where the lower part of the wing consists of smaller feathers and two or three rows of big feathers form the wing proper, but is reproduced as a row of separate big feathers each of

them covered entirely with short strokes. The same manner is adopted in the most ancient monuments of Egypt (see for instance *Hierakonpolis*, vol. I, Pl. VI, fig. 6, and *cf.* Pl. XVI, fig. 4, Pl. XII, figs. 1, 8, Pl. XVII; also vol. II, Pl. XXXII, reproduced here, Pl. VI, fig. 3), and on the asphalt support of Elam (see POTTIER, *op. cit.*, Mém. XIII, Pl. XXXIV, figs. 2, 3, and Pl. XXXV, figs. 2, 5, = here Pl. IV, fig. 3). On later Egyptian monuments the treatment of bird's plumage alters and follows a line differing from the Sumerian².

The rosettes forming the upper bands of the ornamentation of the Astrabad vessel are still more typical. I have found the same type of rosette only on monuments of predynastic and protodynastic Egypt. Such a rosette composed of six or usually seven leaves is seen on the

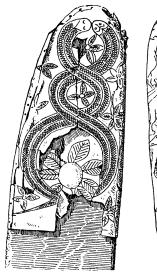




Fig. 3. Gold sheath of a predynastic Egyptian stone knife.

palette of Narmer, both on the obverse and the reverse, between the figure of the Pharaoh and the figure of his cup-bearer (Pl. VI, fig. 2)³; the same rosette is reproduced before the figure of the Pharaoh on the big mace-head N III from Hierakonpolis and a second time on fragment 5 of the same, also on the mace-head N II (Pl. VI, fig. 1)⁴. But still more characteristic is the fact that precisely the same rosette, consisting of four leaves, is found on the gold sheath of a stone knife of predynastic Egypt, playing the same part as on the Astrabad vessel, i.e. filling up the space between the rows of animals (fig. 3). A similar rosette with an equal or greater number of leaves, likewise used for ornamental purposes

at the British Museum as do the vultures on the Eannatun stela. The close stylistic connection between this palette and the Eannatun stela has been pointed out several times already. The powerful expression of the vultures' heads on the palette differs vividly from the elegant treatment of the bird figures on Egyptian monuments, and reminds one very much of Mesopotamia, but the plumage is reproduced according to the Egyptian scheme. See the recent article by Seligman concerning this palette in the Liverpool Ann. of Arch., vol. VII (1914—1916), p. 43.

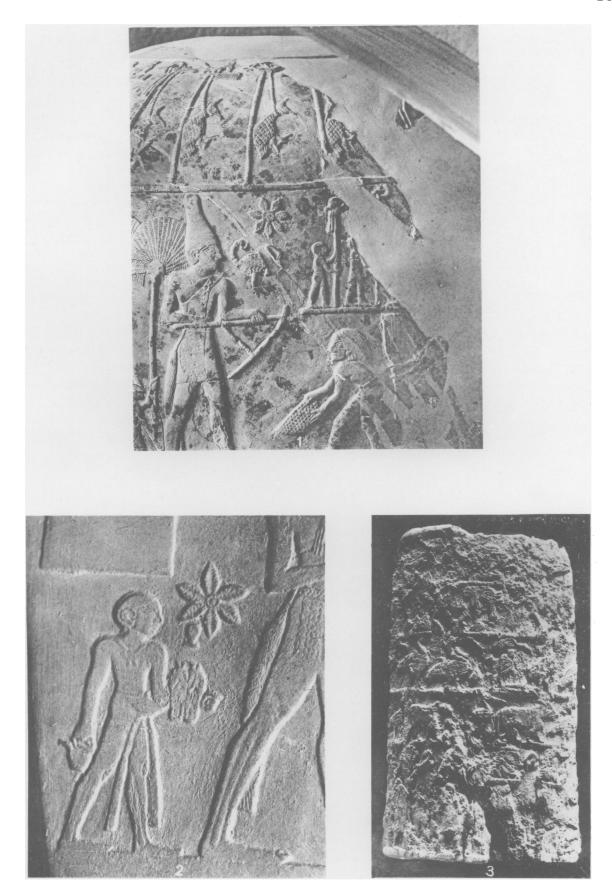
- ¹ In his characterization of the Entemena vase, Déc. en Chaldée, Pl. XLIII and XLIII bis; Mon. et Mém. Piot, vol. II, Pl. I, and p. 5; Catal., pp. 372 foll.
- ² See for instance the charming hawk on the Narmer palette, Quibell, *Hierakonpolis*, vol. 1, Pl. XXIX, or the vultures on the Vulture palette, Seligman, op. cit., Pl. XIV.
- ³ See Quibell, *Hierakonpolis*, Pl. XXIX; and compare for the rosettes especially G. Foucart, *Les deux rois inconnus de Hierakonpolis*, in *Comptes Rendus de l'Acad. des Inscr.* (1901), p. 231, especially p. 233, where an enlarged, but not quite a correct reproduction of a rosette is given. The palette of Narmer has been reproduced several times in different publications.
 - 4 QUIBELL, op. cit., Pl. XXVI B and XXVI C; and cf. Pl. XXV, fig. 1.

and filling up an empty space, is found on the other side of the gold sheath in conjunction with the figures of two symmetrically interlaced serpents. Exactly the same thing is repeated on some similar and similarly ornamented knives belonging to the Berlin Museum and to the Edwards Collection at University College, London. Let us remember also the four-leaved rosettes filling up the empty spaces on the golden goblet from Astrabad, to which we referred above.

The rosette is, of course, a common element of ornamentation. But the characteristic fact is the absolute coincidence in shape, the careful rendering of the centre by two concentric circles, the empty space between them being filled up by lines, the careful working of the leaves, the longitudinal and transverse veins being reproduced schematically. All this, however strange it may seem, is found only in Egypt and Astrabad. On Sumerian monuments I have never remarked such rosettes². It is quite possible, as G. Foucart suggests, that out of this more ancient rosette developed later the Egyptian lotus-rosette, which has spread over the whole world, as was well demonstrated by Goodyear³. But the later rosette differs to a great extent from the more ancient, which I have found only in Egypt and Astrabad. A certain resemblance may be found between the rosette of this type and the golden rosette of Mochlos, but the resemblance is rather remote and the technique is quite different⁴.

The striking coincidence above indicated is important for us both as confirming the extreme antiquity of the Astrabad vessel with a spout and because it shows again the close connection—both chronological and substantial—between the cultures of protodynastic Egypt and the more ancient periods of Sumer, a connection which has of late been often indicated though very variously explained.

- ¹ See J. de Morgan, Recherches, vol. I, pp. 12 foll., fig. 136, and vol. II, Pl. V; Capart, Primitive Art in Egypt, p. 71, fig. 36; cf. Petrie in Man (1902), No. 113, p. 161, Pl. I, figs. 3, III and 4, IV; Capart, op. cit., p. 72, fig. 37 (now at University College, London); T. E. Peet, in this Journal, vol. II, Pl. XIII, fig. 4; Capart, op. cit., p. 73, fig. 38 (the knife in the Berlin Museum). As a filling of empty spaces and at the same time as the central point of a composition, a big six-leaved rosette of a more schematic shape is found on one side of the ivory handle of a stone knife reproduced by Bénédite in this Journal, vol. v (1918), Pl. I. I think that this rosette may serve as a reliable chronological indication of a very close connection between the Carnarvon ivory and the above-mentioned monuments.
- ² The Sumerian rosettes have a somewhat different shape, but their use for ornamental purposes has the same object—to fill up empty spaces, or to serve as the central point in a composition. See the engraved cup, or the outer covering of a cup made of a shell from Tello, Déc., Pl. XLVI, fig. 3, our Pl. V, fig. 2. We find the same rosette on the bottom of an analogous cup from the same place, Déc., p. 267, Pl. XLVI, fig. 7. It is characteristic that also on the alabaster plate from Susa we find a rosette shaped in the same way—with sharp pointed, not rounded, leaves; over it is seen the customary eagle; see Dél. en Perse, Mém. XII, p. 138, fig. 195 bis. With the Sumerian and Elam monuments ought to be connected probably a later cylinder belonging to the de Clercq collection (Coll. de Clercq, Pl. III, fig. 27), supposed by Ménant to be Phoenician, which is hardly correct. Here, in connection with figures of ibexes in the lower part and with ibex heads in the upper part, we find the empty spaces filled up both by typical Elamite and Sumerian ornamental network and by rosettes of two types—the nine-leaved with leaves ending in triangles and the four-leaved, reminding one of the above-mentioned Egyptian monuments. Some signs, possibly hieroglyphs, adjoin the rosettes.
- ³ G. Foucart, loc. cit.; Goodyear, The Grammar of the Lotus, 1891, see especially pp. 106 foll., with Pl. XI.
- ⁴ See Pernier and Karo, Antiquités Crétoises, vol. viii; Seager, Explorations in the Island of Mochlos, p. 22, fig. 6, and fig. 43, nos. xix, 16a, and xix, 16b.
- ⁵ Heuzey, Orig. orient. de l'Art, pp. 345 foll.; Bénédite, Le Couteau de Gebel-el-Araq, in Mon. et Mém. Piot, vol. XXII, pp. 32 foll.; H. Schäfer, Zeitschrift für Ägyptische Sprache, vol. LII (1915); A. L.



ANTIQUITIES FROM HIERAKONPOLIS (EGYPT)

The still closer connection between protodynastic Egypt and the Maykop vessels, which were mentioned above, may be even more striking, but this is not the place to treat of that subject.

The ibex head (Pl. III, ad 2) has been sketched by Bode more carefully than even the eagles or vultures; this head, he says, served to ornament the space under the vessel's spout. As I have stated already, the sketch seems to show that the neck was broken off. It is possible, therefore, that the ornament on the vessel consisted of the whole figure of an ibex, and not only of the head. But this is of no importance, the chief point being the style of the head. The way in which the eye is depicted is characteristic, as well as the schematic ornamentation of the horns, the reproduction of only one ear and only one horn. All this recurs frequently in figures of horned animals on the monuments of Elam and, to some extent, of Sumer¹.

As I have said already, it is impossible to be certain about the purpose of the spherical "golden vessel," ornamented with two rows of geometrical figures on its body, and with circles enclosing rhombuses with concave sides. The space between the circles is filled up with short strokes. I have mentioned that, in my opinion, the spherical object described is not a vessel, but possibly the head of a mace. It is superfluous to remind the reader of the enormous part played by votive maces—the most ancient weapon of man—in the cult of Sumer, Elam and protodynastic Egypt. Whether I am correct in my supposition concerning the golden sphere from Astrabad could be decided only by inspection of the object itself, not by a sketch without any description and without any indication of the dimensions. The most important point for us here is the fact that this third striking component of the treasure is not ornamented with figures of animals and human beings but with geometrical figures that are not very primitive in character. I do not know of any objects that could be compared with our golden sphere, but I think the oldest analogy to its ornamention is to be found in some of the painted vessels, cups and plates of ancient Elam, belonging to the period of the first style. Such ornaments there form the centre, the other geometrical patterns being grouped around them. I am unable to consider such a coincidence as purely accidental.

I fail to discern clearly the purpose of those two golden objects of the Astrabad treasure which Bode supposes to be trumpets or musical instruments. In the absence of any hint as to their dimensions, and the width and shape of the openings in them, it is difficult to form any opinion of their purpose, but a priori Bode's supposition strikes one as hardly probable. I would rather suppose that they may have served as supports for

FROTHINGHAM, Amer. Journ. of Arch. (1916), pp. 175 foll.; FLINDERS PETRIE, Egypt and Mesopotamia, in Ancient Egypt, 1917, pp. 26 foll.; A. Evans, New Archaeological Lights on the Origins of Civilisation in Europe, British Assoc. Newcastle-on-Tyne (1916); L. W. King, Legends of Babylon and Egypt in relation to Hebrew tradition (London, 1918, Schweich Lectures for 1916), pp. 7 foll.; Bénédite, in this Journal, vol. v (1918), pp. 1 foll.

¹ The nearest parallel to the ibex head on the Astrabad vessel is to be found on the asphalt supports from Elam, mentioned already many times. See especially Dél. en Perse, Mém. XIII, Pl. XXXIII, fig. 6, and Pl. XXXV, fig. 7, where the style of the horn, the ear and the eye approaches extraordinarily closely to the Astrabad vessel (Pl. IV, fig. 4). A somewhat different type of the animal is reproduced on another support, ibid., Pl. XXXIV, fig. 3, the upper row. Here the horns are reproduced in the same style as on the Entemena vase. Compare Jéquier, Dél. en Perse, Mém. viii, pp. 15 foll. (ibexes on the cylinders and seals), and especially the Sumerian cylinders, Dellaporte, Catalogue des cylindres orientaux de la Bibliothèque Nationale, Pl. XXX, no. 301, and ibid., no. 297.

² See Pottier, Dél. en Perse, Mém. XIII, Pl. XIV, fig. 3, and Pl. XV, fig. 1.

Journ. of Egypt. Arch. vi.

spherical or egg-shaped objects, recalling the support for the egg-shaped engraved vessel of Entemena. I cannot point to anything analogous to these trumpet-shaped objects.

The whole series of golden objects is undoubtedly of the same style and date. We are not dealing here with an accidentally formed collection of objects belonging to different periods, but with a treasure consisting of objects made simultaneously and at the same place. All the analogies indicate that the treasure belongs to the period when state organizations were beginning to grow and strengthen in Mesopotamia, Elam and Egypt, and when, with the introduction into these countries of metal for domestic use, material culture and art were maturing quickly and luxuriously. The date ascribed to this period is widely contested. I will say nothing on this score. Even the most cautious critics do not get farther than thirty centuries B.C., although they, on principle, prefer to fix their dates later, supposing this for some reason of their own to be more prudent. There is no contradiction between these analogies and the supposed date of the treasure on the one hand, and the character of the objects on the other, viz. the two stone female torsos, the two stone vessels and the rich collection of copper weapons.

Let us begin with the stone vessels. We must remember, first of all, that throughout the whole breadth of the ancient world, awakening at the dawn of culture, the period of the introduction of metals for domestic use—copper coming first—was the period also of the decadence of ceramics and of the great development of stonework, especially of stoneware. We have to be reminded also of the fact that this is especially characteristic both of protodynastic Egypt and the Aegean Islands. Not so many discoveries of the same kind have been made in Mesopotamia and Elam, but that must be considered accidental².

The rarity of discoveries of this kind in Asia itself supplies the reason why it is impossible for us to point out any close analogies to the shape of the two vessels now commanding our attention. One of them has been preserved practically intact. Its general shape, that of a rather tall jug without a handle, is a common one both for stoneware and earthenware. A special elegance is added to the vessel by the opening, shaped like a rosette, which terminates the neck of the vessel; I know no analogies to this rosette.

The second vessel—if vessel it is—has not been preserved intact. The lower part of its stem is broken off. Possibly it was shaped like a goblet on a tall foot. That shape is not uncommon in the ceramics of the earlier Bronze Age. It is typical, for instance, of the earliest burials in the later Hittite settlements³.

Of great interest are the two armless and legless female statues made of stone. The absence of the heads may be accidental, as above indicated, especially in the case of the

- ¹ They might also suggest the notion of covers for the ends of the short staffs on which the mace-heads were fixed. See Cros and Heuzey, *Nouvelles fouilles de Tello*, p. 77 (fig.), "un tube en cuivre cylindroconique qui semble avoir garni le manche d'une massue d'armes."
- ² On alabaster vessels from Susa, see Jéquier, Dél. en Perse, Mém. vii, p. 18, figs. 2—14; on discoveries of the same character in the Tepe Mussian, see op. cit., Mém. viii, p. 143, figs. 288 foll., and cf. Pottier, op. cit., Mém. xiii, Pls. XXXII, XXXVII, and XXXVIII. For the discoveries at Tello see DE SARZEC and Heuzey, Déc., Pl. XLII. Egypt's wealth in stone vessels is generally known, and dispenses me from the duty of quoting examples.
- ³ See Woolley, Liv. Ann. of Arch., vol. vI (1914), pp. 87 foll. In the necropolis of Carchemish and other necropoles related to it, vessels of this type follow immediately the Neolithic Period with its common painted pottery, which unfortunately still remain unpublished; the relation of these vessels to those from Turkestan and Elam is very interesting. Goblets with a foot are characteristic of the necropole of the Copper and early Bronze Ages. In general, therefore, burials with goblets may be recognized as contemporary with the Astrabad treasure.

second statue, the sketch seeming to indicate that the head formed a work apart. These statues belong to the series of primitive figures of the goddess personifying the fecundity of nature, which are found in a great number of places in Asia and Europe. The Astrabad statues have very little in common with the Neolithic steatopygous figures found mostly in the region of the spiral and meander ceramics and sporadically out of it in Egypt, Asia and Europe¹. They belong to another type of flat, board-like, female idol made of stone or clay, which is known as the "island type," a great quantity of statues of this kind having been found on the islands of the Aegean Sea². These statues are especially frequent among the most ancient objects found at Troy, where they belong, as also in other places where they are found, to the Aeneolithic, Copper and Early Bronze Ages3. Nevertheless, their island origin seems to me very dubious. I do not know whether it is possible to affirm, as Dussaud does, that they were brought to Troy from the Aegean islands. Such a suggestion, anyhow, is quite impossible as regards the Astrabad treasure and its nearest analogy the statues made of alabaster and clay discovered in 1909 in a very early burial of the Copper Age in the Kuban province in Northern Caucasus. Some of the objects discovered in this burial, as for instance the bronze or copper pins with hooked ends, and the model of a carriage serving as a nomad's dwelling, show such striking analogies to objects found in Asia Minor, in Hittite and pre-Hittite burials, that there can be no doubt as to the close cultural connection between this and the analogous burials of Asia Minor⁵. The same connection with Asia Minor and especially Troy is evident in another type of Kuban burials, of which I hope to speak in detail elsewhere.

A question very difficult to solve is the degree of relationship existing between these schematic, geometrical reproductions of a female figure and the more perfect figures of the goddess of the productive force of nature, found in Asia Minor as well as on the islands and in Troy⁶. We have there a complete female figure with an emphasized reproduction of the breasts, the navel and the female triangle, with hands holding the breasts, with a rich head-dress and sometimes with ornaments on the neck and body⁷.

- ¹ See Hoernes, Urgeschichte der bildenden Kunst, pp. 196 foll.; Déchelette, Manuel d'Archéologie Préhistorique, vol. 1, pp. 361 foll. and pp. 602 foll. The history of this type and its multiple varieties is still unwritten. The newest discoveries in Southern Russia, Rumania, Bulgaria, and especially in Serbia have rendered extraordinarily rich materials, which have never been investigated. See my "Researches in relation with the history of Scythia and the Bosphorus," vol. 1.
- ² For the latest information concerning them see Perrot and Chipiez, *Histoire de l'Art*, vol. vi, pp. 735 foll.; Dussaud, *Les Civilisations préhelléniques*, 2nd edit. (1914), pp. 359 foll., in which the literature on the question is to be found; see too Déchelette, *Manuel*, vol. II, pp. 1, 45.
- ³ See T. E. Peet, Liv. Ann. of Arch., vol. II (1909), pp. 145 foll., with Pl. XXVI. Cf. Woodward and Ormerod, A Journey in South-Western Asia Minor, Ann. of the Brit. School at Athens, vol. xvi, pp. 89 foll.
- ⁴ Bulletin of the Imperial Archaeological Commission, vol. xxxv, pp. 1 foll. (N. Veselovsky); cf. Reports of the Imperial Archaeological Commission, 1909; Pharmakovsky, in Archäel. Anzeiger, 1910, p. 195, fig. 1. Other discoveries of similar statues in the steppes of Southern Russia and in the Caucasus are indicated by Veselovsky in his above-mentioned article.
- ⁵ See Woolley, in Liv. Annals of Arch., vol. vi (1914), Pl. XXIc and Pl. XXIV. Statuettes of the type interesting us were discovered also in these burials, although, it is true, they belonged not to the earlier but to the Middle Bronze Age (op. cit., Pl. XXIV, top). It is to be regretted that the carriage-dwelling from Asia Minor (I have seen specimens in the Ashmolean Museum) remains still unpublished.
 - ⁶ See Dussaud, Les Civilisations préhelléniques (2nd edit.), pp. 364 foll.
- ⁷ Compare the figure of such a goddess on the Aegean seal, Perrot and Chiplez, *Hist. de l'Art*, vol. vi, p. 751, fig. 346. Concerning their religious signification see W. Müller, *Nacktheit und Entblössung in der altorientalischen und ülteren griechischen Kunst* (Leipzig 1906), pp. 57 foll.

The facts that this figure is reproduced very often on Sumerian and Babylonian cylinders in precisely the same posture as described above¹, and that it is to be found also in some clay statuettes in Elam and Babylon², do not entitle us to affirm that statues of a simpler schematic type have developed out of the more realistic and perfect reproductions and have moved from the East to the West. It has to be remembered that the majority of cylinders belong to a period not earlier than Hammurabi and that nearly all the statues found in Mesopotamia were discovered in the upper layers of the excavated tells. Statues of the same but of a less perfect type found in Anau in Turkestan³ belong to a more ancient time (the IIIrd period) of the Copper Age; a statue of a similar type, found in the deep layers at Susa⁴, probably belongs to the same period. The excavations in Anau show that in that place schematic figures were also made at the same time as the more developed figures.

The set of copper weapons is highly interesting. The fact that they were made a part of the treasure is in itself an indication of the importance and high value that was attached to this metal. It is to be regretted, however, that the materials at our disposal for the dating and the valuation of this part of the treasure are scanty and one-sided. Research work concerning the history of weapons in the most ancient periods of the development of mankind has been conducted mostly by the students of prehistoric times. They have given us excellent accounts of the development of separate weapons, of swords, battleaxes, daggers, and partly of spears, javelins and arrowheads; but they have worked mostly, and work still, on materials furnished by discoveries in European necropoleis, and for the most part those of Western and Northern Europe, with the addition of Italy and Spain. To these materials have lately been added the discoveries in the Aegean and Mycenaean necropoleis of the Greek Islands, and some few objects found in the northern part of the Balkan Further materials have been furnished also of recent years by systematic excavations in Middle and Southern Russia, together with Western Siberia, and some of these last have been studied adequately. But as regards the whole of the enormous area of Oriental culture very little indeed has yet been done⁵.

The excavations there, with the exception of Egypt, have been conducted mostly among the ruins of cities and not in necropoleis. Interest has been concentrated chiefly on monuments of literature and art, weapons have been discovered only in very small quantities, and the materials with which we have there to operate are chiefly the pictures on sculptured reliefs, whence it is very difficult to establish the exact evolution of weapons in the East. For this reason, all I can say concerning the weapons included in the Astrabad treasure will be necessarily incomplete and insufficient. Though it might have been possible with

¹ See W. H. WARD, The Seal-cylinders of Western Asia, ch. xxvi, esp. pp. 161 foll.; ch. l, esp. pp. 296 foll.; and ch. lxviii, § 35, p. 380.

² See, for instance, the excavations in Tepe Mussian, *Dél. en Perse*, Mém. VIII, p. 89, figs. 120 foll.; DE SARZEC and HEUZEY, *Déc.*, Pl. XXXIX, fig. 10.

³ See R. Pumpelly, Explorations in Turkestan, Expedition of 1904, vol. I (Washington 1908), Pl. XLVI.

⁴ See Jéquier, Dél. en Perse, Mém. vii, Pl. XI, fig. 1. To the same type and the same epoch as the statues from Anau belongs also the statue found in Resht on the shore of the Caspian Sea, not far from Astrabad; see Fröhner, Collection Tyszkevicz, Catalogue de vente, Pl. VII, p. 219; S. Reinach, Revue Archéologique, vol. XXXVII (1900), p. 252.

⁵ In this respect the pages devoted to the East by Déchelette are characteristic. See his *Manuel d'Archéologie préhistorique Celtique et Gallo-romaine*, vol. II, Part I, pp. 31 foll.; *L'Age du bronze en Grèce et en Orient*; these show what scanty use has been made of discoveries in the East by West-European students of prehistoric times.

a greater abundance of material and further preliminary researches to have adduced parallels from the East, I shall have to content myself with western analogies—analogies that are to some degree convincing, but still not decisive in questions of absolute chronology.

The first characteristic point in this collection of weapons is its general composition: there are no swords nor, it would seem, any arrows either. These facts seem to speak in favour of a period when the chief weapons of warfare employed were clubs, spears and axes. The Astrabad set adds to them its very remarkable spiked weapon, and also a primitive dagger of archaic shape, evidently connected with the aeneolithic stone dagger-blades, as found in protodynastic Egypt.

In general, therefore, this set of armament, if the "boomerang" depicted on the golden goblet be added to it, reminds one of the weapons employed by the kings and armies of Lagash and Elam of the pre-Semitic period, i.e. the period before bows and arrows came into common use. But the set of weapons from Astrabad is far from coinciding in detail with the sets of weapons of the Sumerians and Elamites: the battleaxes differ in shape, the forked weapon was unknown in Sumer and Elam, and the shape of the copper macehead is very original. Evidently we have to deal with the same period, but with different military customs.

It is of some interest to note that the closest analogy of all to the weapons of the Astrabad treasure is to be found in the above-mentioned burial of Maykop and a very interesting burial in the Tzarskaya Stanitza (Kuban province, Northern Caucasus). This last grave is of great interest in itself; it belongs to the stage of burials marking the transition from burials in dolmens to burials under tumuli. In this case the body was buried in a real dolmen (not in a stone box, as in the Crimea, where, as also in Trans-Caucasia, there are no real dolmens whatever), and a tumulus was raised over it. The burial of the Tzarskaya Stanitza belongs to the same time and to the same group as the above-mentioned burials in Northern Caucasus, *i.e.* to the Aeneolithic and Copper Ages. In all these burials, as we shall see further on, are to be found forked weapons, as well as double-edged battleaxes, in other words, exactly the most typical objects in the Astrabad treasure.

From these general remarks I will pass on to a short analysis of the separate weapons. A characteristic feature of the battleaxe (Pl. III, fig. 13) is its two edges, the one horizontal, the other vertical; in this point it differs from the typical Sumerian, Elamite and Egyptian axes of the same period, which have one edge only. Axes of this kind are depicted, for instance, on the Eannatun stela, and a number have been found in Sumerian cities and Elam².

We have as yet no analogies in Mesopotamia and Egypt for the Astrabad double-edged battleaxe. I suppose, however, that this is purely accidental, since that type of battleaxe has developed everywhere from a type which closely resembles the Eastern battleaxe, i.e. the axe with a butt-end. The double-edged axe of the Astrabad type is found together with the latter type of axe on the Kuban river in the above-mentioned Maykop burial, which, as I have remarked several times already, is closely connected with protodynastic Egypt³. The same holds good also of Hungary, where more double-edged

¹ See Report of the Imperial Archaeological Commission, 1898, pp. 33 foll., with Table I.

² Sumerian and Egyptian axes of this type are widely known; for Elam see especially the discoveries in Tepe Ali-Abad, DE MORGAN, Dél. en Perse, Mém. VIII (JÉQUIER), p. 145, figs. 295 and 308.

³ See Report of the Imperial Archaeological Commission, 1897, p. 9, figs. 34 and 35.

battleaxes of the Copper Age have been found than anywhere else; also of Crete and Serbia, where axes of this type belong to the Bronze Age¹.

Nor is it difficult to find analogies for the spear. Its shape is similar to that of spears found in Sumer, an excellent specimen being a colossal spear of one of the Kings of Kish bearing an inscription and an engraved figure².

The form of the short dagger (Pl. III, fig. 12) is archaic. This is shaped like a long leaf, and has a handle to fix it into a wooden hilt, with two holes in the handle for nails. This pattern is typical of daggers belonging to the Age of Copper, and is found also in Turkestan³, as well as in Elam and Mesopotamia⁴. It is found also on the river Kuban in the above-mentioned burials⁵. Nor is it foreign to the Aegean region, as is well-known.

More original are the six prongs or forks, the chief weapons, evidently, of the owner of the treasure (Pl. III, fig. 11). The only known contemporary parallel is found in two copper prongs from the tomb in Tzarskaya Stanitza⁶. To a later period belong the sacred prongs from tombs in Trans-Caucasia of the Bronze Age and the early part of the Iron Age ⁷. Possibly, also, in Mesopotamia the shape of the prong has influenced the creation of the three-horned sceptre of the gods,—a combination of prong and mace. The copper mace of the Astrabad treasure finds an analogy in the above-mentioned burials in Trans-Caucasia⁸.

The combination of a spearhead with two curved knives (Pl. III, fig. 14) is most original; unfortunately we know nothing about its dimensions; possibly it may be an arrowhead in which case it must be compared with somewhat similar arrowheads from Elam and Lagash.

- ¹ For Hungary see F. von Pulszky, *Die Kupferzeit in Ungarn* (1884), p. 23 with fig. and pp. 65, 67, 69, and *cf.* pp. 63 foll. See further Hampel, *Zeitschrift für Ethnologie*, 1896, pp. 69 foll. with figs. 25 and 28; Montelius, *Die Chronologie der Aelteren Bronzezeit* (1900), p. 100, figs. 262, 263; Déchelette, *Manuel d'Archéologie*, vol. 11, p. 87, fig. 29; Flinders Petrie, *Tools and Weapons*, Pl. XI, fig. 135. In Crete miniature bronze axes of the same type found in 1895 by Sir Arthur Evans in Naxos and Miletos belong to later times (L.M.); I do not know whether they have been published; they are preserved in the Ashmolean Museum at Oxford. To the time of Salmanassar II belong votive axes of the same type found in Assur in the foundations of the walls of the temple consecrated to Adad, see W. Andrae, *Der Anu-Adad Tempel in Assur* (1909), p. 53, figs. 46, 47.
- ² See Déc., Pl. V ter, fig. 1; KING, History of Sumer and Akkad, p. 229, fig. 58. Very similar in shape are the bronze spearheads from the earliest tombs of the Bronze Age in the neighbourhood of Carchemish; see Woolley, Liverp. Ann. of Arch., vol. vi (1914), Pl. XIX, c. 2; these are preserved in the Ashmolean Museum at Oxford.
- ³ See Pumpelly, Explorations in Turkestan, Expedition of 1904, vol. I, Pl. XXXVI, fig. 10; cf. fig. 246, and Pl. XXXVIII, fig. 3; cf. also fig. 280.
- ⁴ For Elam see DE MORGAN, *Del. en Perse*, Mém. VIII, p. 146, figs. 302, 303, 307; and *cf. op. cit.*, Mém. VII.
 - ⁵ Report of the Imperial Archaeological Commission, 1897, p. 9.
 - ⁶ Op. cit., 1898, Table II.
- ⁷ DE Morgan, Mission Scientifique en Caucase, pp. 134 foll., and p. 137, fig. 138; Rösler, Zeitschrift für Ethnologie, 1896, p. 86, fig. 26, and p. 102, fig. 72; Belck, Zeitschr. für Ethnol., 1893, p. 62. To much later times belong similar bronze and iron implements from Assyria, the Kingdom of Van and from Judea, see Layard, Discoveries in Nineveh and Babylon, p. 194; Lehmann-Haupt, Abh. d. Gött. Ges. vol. IX (1907), p. 101, fig. 72; Handcock, The Archaeology of the Holy Land (1916), p. 187, fig. 50, 7.
 - ⁸ See Rösler, op. cit., figs. 74—77.
- ⁹ See DE MORGAN, Dél. en Perse, Mém. VIII, p. 146, fig. 304; Tepe Ali-Abad; cf. Mém. VII, p. 82, figs. 200, 202—205; DE SARZEC and HEUZEY, Déc., Pl. XLIV ter, fig. 6; Nouvelles fouilles de Tello, p. 115.

The detailed analysis we have made of the Astrabad treasure shows, first of all, that the entire treasure belongs to a single period and cannot be imagined to consist of objects brought together by accident and belonging to different periods. The treasure consists of two kinds of objects, viz. (1) consecrated plate such as was used in temples, to which category belong the golden goblet and libation-vessel, the golden mace-head, the two stone vessels and the two statuettes of a goddess, and (2) the rich set of copper weapons.

All these objects, probably, taken together, composed a treasure belonging to some local ruler or "Patesi" of the city on whose site the tell now stands. This "Patesi" evidently ruled simultaneously with the most ancient "Patesis" of Lagash and the earliest Pharaohs of Egypt. In style and ornamentation these objects are so closely akin to objects found in Egypt, Tello and Elam, and especially the two last-named places, that it might possibly be supposed that they had been made in those centres of culture, and were subsequently brought to the Caspian shores. In my opinion, however, such a supposition is quite unacceptable. Despite their resemblance to articles from Tello and Susa, the objects from Astrabad have distinctive features of their own, especially in the case of the stone vessels, the statuettes and the weapons. The analysis of these objects has shown that the analogies lead us not only to Elam, but also to Asia Minor and to Trans-Caucasia. We have to deal, doubtless, not with imported articles, but with an independent local culture, one of the branches of the far-spreading culture that later on developed independently alike in Mesopotamia, in Egypt, and on the shores of the river Kuban. The relation between the Astrabad treasure and the Sumerian culture, which is the best known of all to us, is the same as the relation between Sumer and Elam. No one would think of affirming that the ancient, typically Sumerian objects from Elam were brought to that place from Sumer. The close connection between the objects from Astrabad and those from Egypt raises anew the old question as to the close connection of Egypt at this period with the cultural world of Nearer Asia.

Unfortunately the treasure of Astrabad stands practically alone. It is to be regretted that Russian and Persian Turkestan are almost unexplored, archaeologically speaking. During the conquest of Turkestan by the Russians, General Komaroff, in his time, excavated several tells, but the results of these explorations were never properly studied and published. I do not even know, and owing to my absence from Russia cannot find out, the places where the objects discovered during Komaroff's exploration are preserved, and whether they were published at all. Of later exploration work by Russian archaeologists in Turkestan, that in connection with the ruins near Samarkand is the principal. The excavations in Aphrosiab yielded very interesting results, but the objects discovered there belong to a much later time than the period at present interesting us¹. Persian Turkestan has been even less explored than the Russian part. At the end of the last century de Morgan² published a very interesting archaeological survey of it, but his work there went no farther than this. An attempt made by him to excavate one of the tells near

¹ Kondakoff, Tolstoi and Reinach, Antiquités de la Russe Méridionale, pp. 35 foll.; Strzygovski, Altai und Iran (1918), pp. 262 foll.

² DE Morgan, Mission Scientifique en Perse, vol. IV (1896), pp. 127 foll.; compare the appended geographical maps: Cartes (Paris 1895), Carte des rives méridionales de la Mer Caspienne entre l'Atrek et la frontière Russe de Lenkoran.

Astrabad was unfortunately unproductive of results. It is to be regretted that the Persian authorities did not allow de Morgan to complete his successfully started exploration of the tumulus Khargush-Tepe¹.

The only serious excavation that has been made in Russian Turkestan, near Askhabad, is that undertaken by the expedition of the American geologist, R. Pumpelly, who worked together with Hubert Schmidt, the well-known German student of prehistoric times. Two tumuli near Anau were explored with great care and in much detail. The results of these highly scientific explorations were splendidly published in 1908. The general picture, as painted by Komaroff, Pumpelly and de Morgan, is striking. A glance at the maps in the earlier works of de Morgan and Pumpelly³ is sufficient to win unreserved acceptance for Pumpelly's characterization of the locality. "These (formerly occupied) sites," he says on p. xxvii of his general introduction, "abound to such an extent that we might call Southern Turkestan with the valleys of the Tedjent, Murgab, Oxus, Zeravshan and Fergana, a cemetery whose graves are the wasted and half-buried mounds of vanished cities."

The discoveries made by Pumpelly and the above described treasure from Astrabad show that a considerable part of the Turkestan tells belong to very ancient times, indeed to the same period to which belong also the most ancient objects discovered in Elam and Mesopotamia, *i.e.* to the time when metals were introduced, to the Aeneolithic Age and the Age of Copper⁴. At the same time these discoveries also show that here too, as in Mesopotamia and Elam, there is found at the end of the Neolithic Period a completely developed culture of a high type to the origin and root of which, however, the local discoveries provide no clue. Possibly this culture had been introduced into Turkestan, as well as into Elam and Mesopotamia, from abroad, and there found a fertile soil in which to grow and blossom.

It is a highly interesting fact that Pumpelly's discoveries completely confirm the standpoints suggested by the Astrabad treasure. The painted pottery from the earliest layers of the northern and southern tumuli of Anau shows the closest relation to the painted pottery of the first and second styles at Susa. This was flatly denied at the time by Hubert Schmidt, who dealt with a part only of the materials discovered in Susa by de Morgan, but so careful and conscientious an explorer as E. Pottier could no longer deny it when once he had to deal with the whole of the materials discovered in Elam. It is true that in Anau we no longer find that kind of naturalism turning into geometrization, which is so characteristic a feature in the ornamentation of the most ancient painted pottery of Elam; the shape of the vessels from Anau is much coarser and more primitive than the shape of the Elam vessels; this may be explained, possibly, by the fact that the inhabitants of Anau did not use the potter's wheel. But most significant is the existence of a close relationship between

¹ See DE MORGAN, loc. cit.

² R. Pumpelly, Explorations in Turkestan, Expedition of 1904. Prehistoric Civilisation of Anau. Washington 1908.

³ Compare Pumpelly, Explorations in Turkestan, Expedition of 1903. Washington 1905, p. 155, and p. 217.

⁴ The absolute chronology is questionable. The dates given by H. Schmidt, based on analogies with Western discoveries, are undoubtedly too low. One must start from the dates determined by Elam. The painted pottery of Elam is considerably older than the first Patesis of Lagash, the contemporaries of the second period of the painted pottery of Susa. But if this be so, the Elamitic pottery belongs to a period not later than 4000 B.c. The painted pottery of Anau also is probably simultaneous with the second period of the painted pottery of Susa, *i.e.* it belongs to the period 4000—3000 B.c. Cf. W. King, History of Sumer and Akkad, pp. 350 foll.

the geometrical ornaments of Susa and Tepe-Mussian on the one hand, and of Anau on the other. Some of the most striking features must be indicated. In both cases a strange preference is shown for triangles, partly with concave sides; in both cases there are rows of zigzag lines¹, the chess-board² pattern is found, and the net-work pattern³ is in common use; in both cases rows of triangles are used and combinations of rhombuses and triangles⁴; a love of dented lines⁵ is also traceable, and a tendency to choose cross-like⁶ ornaments, and so forth⁷.

All this shows that we have to deal with a closely-related development, with one common tradition, developing differently in different localities. Anau is more primitive and coarser, and has the appearance of being somewhat more provincial and belated, but I cannot entirely agree with Pottier, when he says that the pottery of Anau produces the impression "d'une industrie parfaitement apparentée à celle de Suze, mais dans un état de décadence et de dégénérescence plus que de formation." "On y sent," he continues, "comme dans le géométrique de Rhagae et de l'Arménie (Perrot and Chipiez, vol. v, pp. 868 foll.), des habitudes plutôt machinales". It is quite probable that painted pottery came to Anau in its simplest and purely geometrical form, but this geometrization is strikingly rich, and I am quite sure that in other tells in Turkestan we shall find its naturalistic prototypes. Clearly, therefore, the potteries of Anau and Elam are contemporary and related, but each followed its own independent line of development, of more elaborate style in Elam, but of a simpler kind in Anau.

At the present time it is impossible to determine the place where this painted pottery actually originated, and indeed the time has not yet arrived even for conjectures on this subject. We shall have to wait, at the very least, for the publication of the data concerning the very interesting neolithic necropolis at Eridu, and near Van, where painted pottery was discovered; the published specimens of this painted pottery show a very close relationship with Elam and Turkestan. Practically nothing is known about the painted pottery found in the neighbourhood of Carchemish by Hogarth's expedition. We do not know, even, whether any parts of it go back so far as the Neolithic Period. On the other side we are awaiting a detailed exact analysis of the neolithic painted pottery from the Danube and the Dnieper regions, many of whose features stand in so strikingly close con-

- ¹ See Pumpelly, op. cit., vol. i, Pl. XXII, fig. 5; de Morgan, Dél. en Perse, Mém. XIII (Pottier), p. 36, fig. 124.
 - ² Pumpelly, op. cit., Pl. XXV, fig. 1; Pottier, op. cit., p. 36, fig. 125.
- ³ Pumpelly, op. cit., p. 133, figs. 106 foll., Pl. XXII; Pottier, op. cit., Pl. II, fig. 2, Pl. III, fig. 5 and often.
 - ⁴ Pumpelly, op. cit., p. 137, figs. 132, 133, 134; Pottier, Pl. VI, figs. 1, 4, 5 and often.
 - ⁵ Pumpelly, op. cit., Pl. XXIV, fig. 5; Pl. XXVII, fig. 2; Pottier, op. cit., Pl. X, figs. 5, 7.
 - ⁶ Pumpelly, op. cit., Pl. XXXII, fig. 1; p. 137, fig. 135; Pottier, ibidem.
- ⁷ Especially instructive is a comparison with the geometrical ornaments of some vessels from Tepe-Mussian, *Del. en Perse*, Mém. vIII, pp. 94 foll., figs. 152 foll.
 - 8 See Pottier, Dél. en Perse, Mém. XIII, p. 71.
- ⁹ The excavations made by Capt. R. Campbell Thompson near the ancient Sumerian city Eridu are known to me only by the report of the meeting of the Society of Antiquaries published in the "Times" of 31st January, 1918. Pottery was found in the explored necropolis of the Neolithic Period "made of buff wheel-turned clay, painted with geometric designs in black," and this is compared by the discoverer with ceramics of the first period of Susa. For excavations near Van, see W. King in the *Proceedings of the Society of Biblical Archaeology* for 1912, pp. 276 foll.
 - ¹⁰ See Woolley in Liverpool Annals of Archaeology, vol. vi (1914).

nection with particular features of the Susan pottery. After that alone may it be possible to say whether the painted pottery was imported into the river-valleys from far-away Central Asia, or whether it was developed by the local population in a number of different centres, the people having gradually descended into the valleys from the mountains and having communicated their cultural achievements to neighbours either by migration or by exchange.

The objects from Astrabad open up to us an aspect of the cultural development of Turkestan quite different from that of Anau. We have to deal here not with a small population of land-toilers of poor culture, as in Anau, where only potsherds and a few metallic objects remain, but with one possessing a culture and a state-organization evidently as richly developed as in Tello and Susa and in protodynastic Egypt; we are without written texts, it is true, but I have no doubt whatsoever that a systematic exploration of the perished cities of Turkestan will render us a rich harvest of written texts, probably in cuneiform characters. People who knew how to manufacture golden vessels with reliefs and engravings as well as their Elamite neighbours, could not possibly remain in ignorance of the art of writing that had already come into popular use in Elam and Mesopotamia about the same time. Unfortunately we have no pottery either, but I have no doubt that excavations in Turkestan will give us a wealth of materials in this direction too, and will show that here also painted pottery died out gradually, ceding its place to vessels with engraved ornaments, as we have seen in Tello.

Anyhow the Astrabad treasure has, I think, opened up to us a new world. It raises anew the question of the roots whence sprung the cultures of Elam and Mesopotamia², and whence many peculiar features of protodynastic Egypt were derived. It shows that this culture covered a much wider region than was supposed before.

If I am right in including the delta of the Kuban river³ in the sphere of the same culture, it will then become apparent that we are concerned with a number of localities analogous in geographical, geological and economic structure—deltas of great rivers that required hard work and constant attention from men, but returned a generous reward for toil from the artificially-watered soil, in fact a land which was always leading on the people towards a settled, hardworking life, and converting cattle-breeders into agriculturists and creating a rich material and spiritual culture, the original basis of the contemporary culture of Asia and Europe.

I am unable positively to state that these conclusions of mine are right, but I think they ought at all events to be examined and either confirmed or refuted. To achieve this purpose, it is indispensable first of all to get good photographs of the objects discovered in Astrabad, if indeed the objects themselves, which probably are still preserved in the treasury

¹ For some very interesting comparisons, which could be greatly added to, see G. WILKE, Kulturbeziehungen zwischen Indien, Orient und Europa, in Mannusbibliothek, No. 10 (Würzburg 1913), pp. 45 foll., figs. 59—79. These comparisons show what a close relationship exists between the pottery of Anau, Elam, and Egypt, as well as the wide area covered by the pottery that makes use of the spiral and meander patterns. The author's conclusions are, however, fantastic and unacceptable.

² See King, loc. cit.

³ I here expressly avoid the very important questions of the relationship between the pottery of Susa on the one side and, on the other, the painted pottery employing the spiral and the meander, *i.e.* the Neolithic and Aeneolithic ceramics of the reservoirs of the Danube, the Bug and the Dnieper; the relationship between both these styles of pottery cannot be done away with by passing over it in silence or by denying it. For this some of the coincidences are far too striking.

of the Shah of Persia¹, are unobtainable. It is impossible for me personally to help in this direction, but France or England might easily arrange something of the kind by the help of their diplomatic representatives. At the same time it is most important in the interest of science that systematic excavations should be made in a number of tells near Astrabad, and above all in the tell where the treasure which I have analysed was discovered. Nor would this be difficult to accomplish—the Allied forces are very near to Astrabad. It must not be forgotten that Napoleon's campaign in Egypt was the starting point of all the great results which have opened our eyes and unveiled the past of Egypt.

¹ The proper place to keep these objects is not the treasury of the Shah, but a great scientifically organized Museum.

THE VICEROYS OF ETHIOPIA¹

By Professor GEORGE A. REISNER

In working over the material bearing on the excavations of the Harvard-Boston Expedition in Dongola Province, I have found it necessary to prepare a list of the Egyptian viceroys of Ethiopia during the New Empire. I submit below the list I have made in the hope that it may be of use to others and may receive additions from material which has not been available to me.

The main list contains only those officials who certainly bore the title of "king's son." Those whose title is open to question and those who are only called "overseer of the Southern Lands" are given at the end of the main list. The references to the inscriptions are not exhaustive, being merely such as are sufficient to establish the evidence. The dates in years are entirely tentative, made in order to show the possible continuity of the terms of office. The sub-titles of the viceroys are given in full, so far as is possible from the publications.

The following is a summary of the list to be discussed below.

Arranged in chronological order	Alphabetical	arrang	gement
1. Thuwre.	${f Amenemopet}$		no. 10.
2. Seni.	Amenhotpe	•••	no. 5(?).
3. Neḥi.	Dḥutmōse		no. 7.
4. Wesersatet.	Ḥeḳanakht	•••	no. 12.
5(?) Amenhotpe.	Herihor	•••	no. 22.
6. Mermõse.	Ḥori I	• • • •	no. 17.
7. Dḥutmōse.	Ḥori II	•••	no. 18.
8. Ḥuwy.	Ḥuwy		no. 8.
9. Paser I.	${f Merm ar ose}$		no. 6.
10. Amenemopet.	Messuwy		no. 15.
11. Yuni.	Neḥi		no. 3.
12. Ḥekanakht.	Nesikhonsu	•••	no. 24.
13. Paser II.	Paicankh	• • • •	no. 23.
14. Sethauw.	Paneḥsi	•••	no. 21.
15. Messuwy.	Paser I		no. 9.
16. Sety.	Paser II	• • • •	no. 13.
17. Ḥori I.	Ramessenakht		no. 20(?).
18. Ḥori II.	Seni	• • •	no. 2.
19(?) Wentawuat.	Sethauw	• • •	no. 14.
20(?) Ramessenakht.	Sety	•••	no. 16.
21. Paneḥsi.	Thuwre		no. 1.
22. Ḥeriḥor.	Wentawuat		no. 19(?).
23. Pai ^c ankh.	Wesersatet \dots		no. 4.
24. Nesikhonsu.	Yuni	•••	no. 11.

¹ Certain modifications in the transliterations of proper names have been made in order to conform to the usage of this *Journal*; but such alterations have been restricted as far as possible.—ED.

which was reinscribed by Tuthmosis

II, Urk., IV, p. 142: "All the Mazay

Kummeh, in the court, three graffiti of two viceroys: names expunged but one legible as Seni: BREASTED, Amer. Journ. Sem. Lang., 1908, p. 105.

are reckoned to him."

I. DETAILED DISCUSSION

1. Thuwre. Ca. 1549—1537. Under Amenophis I and Tuthmosis I.

<i>a</i> .	Amosis I.	"Commandant of Buhen."	Buhen, northern temple, doorway of Amosis I, two inscriptions: RANDALL-MACIVER, Buhen, p. 88.
<i>b</i> .	Amenophis I, year 7.	"King's son of the Southern Region."	Semneh, on rocks: Breasted, in Amer. Journ. Sem. Lang., 1908, p. 108.
c.	Amenophis I, year 8.	"Hereditary prince, toparch, royal seal- bearer, sole companion, favourite of the king in the Southern Lands,, king's son."	Uronarti, below Semneh; copied by Steindorff: <i>Urk.</i> , IV, p. 78.
d.	Tuthmosis I, year 1.	"King's son, overseer of the Southern Lands."	Coronation decree, stelae from Buhen and Halfa: <i>Urk.</i> , IV, pp. 79—81.
e.	Tuthmosis I, year 3.	"King's son."	Sehêl, two inscriptions: <i>Urk.</i> , IV, pp. 89—90.
f.	Hatshepsut?	"King's son, overseer of the Southern Lands." (No longer in service.)	West Silsileh, cenotaph of the vezier, Weser: Griffith, in <i>Proc. Soc. Bibl.</i> Arch., Vol. XII, p. 104 ¹ .
	2. Seni.	Ca. 1537—1501 (?1494?). Under Tuth	mosis I and Tuthmosis II.
a.	Amosis I.	"Overseer of"	Semneh, temple, third period of construction: <i>Urk.</i> , IV, pp. 39—41. The name is lost but is identified as Seni by Sethe.
	Amenophis I.	"Overseer of the granary of Amūn, di- rector of works in Karnak."	Same inscription.
	Tuthmosis I, year 3 or after.	"King's son, overseer of the Southern Lands."	Same inscription.
	Tuthmosis II.	Titles illegible but probably as above.	Same inscription.
b.	Tuthmosis II.	"Toparch of the Southern City, overseer	Kummeh, temple, doorway in the wall

Thus the viceroy Seni is recorded by name in two inscriptions, both found in the temple of Kummeh. Prof. Sethe, in his translation of the Urkunden, as I am informed by Mr Griffith, identifies the viceroy of a above with Seni on the basis of the date and the titles, and that identification is certainly correct. The resulting conclusion is that the viceroy Seni held office from the 3rd year of Tuthmosis I, or soon thereafter, to the time of Tuthmosis II.

overseer of the Southern Lands."

BREASTED: "viceroy of Nubia."

of the granary of Amun, king's son,

c. Undated.

¹ Sethe identifies the vezier Weser (Gardiner-Weigall, Cat., no. 61) with the vezier Amen-weser (loc. cit., no. 131). So also Newberry, Life of Rekhmara, p. 15. In the Silsileh cenotaph Thuwre appears at the head of a row of the daughters of A'amathu (facing a row of his sons) and was certainly a member of the family. He appears to have been still alive, but could not have been in service although he retained his service title as a courtesy title.

Seni's name in the two graffiti in the court of the temple of Kummeh (c, above) has been "expunged by enemies," according to Prof. Breasted. Now, inscription b, in the same temple, is written on the doorway inscribed by Tuthmosis II and set in a wall which appears to have been previously inscribed by Tuthmosis III and Hatshepsut. The name of Hatshepsut has been changed to that of Tuthmosis II (Sethe), apparently at the same time at which the doorway was made and the inscription of Seni written on it. Thus if Prof. Sethe's explanation of the succession of these rulers be correct, the inscription b of Seni was written in the joint reign of Tuthmosis II and Tuthmosis III or about the years 6-8 of Tuthmosis III. See further under Nehi, below.

3. Nehi. Ca. 1500—1453. Under Tuthmosis III and Hatshepsut(?).

- a. Tuthmosis III, year 2.
- "Royal seal-bearer, sole companion, king's son, overseer of the Southern Lands."
- b. Tuthmosis III, year 2(?).
- "Hereditary prince, toparch, [royal sealbearer, favourite of the king] in the Southern Lands, king's son, overseer of the Southern Lands."
- c. Tuthmosis III, year 20.
- "King's son, overseer of the Southern Lands."
- d. Tuthmosis III, year 23.
- "Hereditary prince, toparch......king's son, overseer of the Southern Lands."
- e. Tuthmosis III, year 25.
- Breasted: "viceroy." Cf. i, below.
- f. Tuthmosis III, year 52. (Weigall.)
- "Hereditary prince, toparch, royal sealbearer, sole companion, etc. (phrases), king's son, overseer of the Southern Lands."
- "Royal herald" (Urk.).
- g. Tuthmosis III, ruling alone.
- "Hereditary prince, toparch, royal sealbearer, excellent favourite of the Lord of the Two Lands, king's son, overseer of the Southern Lands."
- Same titles: 22 N adds: "favourite of the king in Ta-Set."
- h. Tuthmosis III, late.
- (1) Appointed "first king's herald";
- (2) Appointed "king's son, overseer of the Southern Lands."
- i. Undated. "Hereditary prince, toparch, royal sealbearer, sole companion, etc., king's son, overseer of the Southern Lands."
- j. Undated. Breasted: "viceroy."

- Semneh, temple, the earliest part: Urk., iv, p. 194. The name is lost but was undoubtedly Nehi.
- Semneh, temple, earliest part: *Urk.*, IV, pp. 985—986.
- Near Tombos quarry, on rocks: Breast-ED, Amer. Journ. Sem. Lang., 1908, p. 47 (reads "Ani").
- Buhen, temple of Hatshepsut, 11th pillar, colophon to inscription of Tuthmosis III: *Urk.*, 1v, p. 806; RANDALL-MACIVER, *Buhen*, p. 27.
- Sai Island, rock inscription: Breasted, Amer. Journ. Sem. Lang., 1908, p. 98.
- Ibrîm¹, grotto of Tuthmosis III: Urk.,
 Iv, p. 983; Breasted, Anc. Rec.,
 Vol. II, 652; Weigall, Lower Nubia,
 p. 121; and probably, Breasted,
 Amer. Journ. Sem. Lang., 1906, p.
- Buhen, temple of Hatshepsut, on the doorway of the part added by Tuthmosis III: *Urk.*, IV, p. 985; RANDALL-MACIVER, *Buhen*, p. 25 (5 S).
- Buhen, 22 N and 23 S: RANDALL-MAC-IVER, Buhen, pp. 42 and 43.
- Semneh, wall of the latest period: Urk., iv, p. 987. His territory was from Nekheb to the frontier (= Karay).
- Sai Island: Urk., 1v, p. 898. See e, above.

Kummeh, sandstone stela, now in Chicago: Breasted, Amer. Journ. Sem. Lang., 1908, p. 105.

¹ Not to be confused with the grotto at Ellesîyeh, which has two inscriptions on the façade dated one to year 51 and the other to an illegible year (26 or 42 or 51).

- k. Undated.
- Nearly illegible inscriptions beginning "lector of Amūn" and ending "king's son."
- Vol. I, p. 89, no. 65. Below is a smaller figure with "Nehi" above it, but I am unable to make out the connection.

Sehêl: DE MORGAN, Cat. des Mon.

- l. Funerary.
- A. "King's son"; "first king's herald"; "king's son, overseer of the Southern Lands."
- B. "King's son, overseer of the Southern Lands, first king's herald"; "king's son, overseer of the Southern Lands, overseer of the administration (?judgment-hall?)."
- C. "King's son"; "king's son, overseer of the Southern Lands."
- A. Sarcophagus, sandstone, in Berlin: Urk., Iv., p. 983.
- B. Pyramidion, sandstone, in Florence: loc. cit.
- C. Wooden shawabti, found by Petrie behind the Ramesseum: loc. cit. and Petrie, Six Temples, Pl. II, no. 1.

The inscription c requires an explanation. The name has been erased but seemed to Prof. Breasted to be "Ani" (Yuni?). The name of the king is reported to be Menkheperrēc (Tuthmosis III) and the date clearly the year 20. Prof. Breasted suggests that the name might possibly have been meant for Menkheperuwrēc (Tuthmosis IV) but notes that the date is incompatible with our present knowledge of the length of the reign of Tuthmosis IV. Thus the conclusion seems to be that the inscription is of the year 20 of Tuthmosis III. In that case, the name of the viceroy is probably Neḥi, and indeed the traces left by an erased Neḥi might easily be held to be the traces of an erased Ani (or Yuni).

The inscriptions thus proposed for Neḥi are dated in the 2nd, the 20th, the 23rd, the 25th, and the 52nd years of Tuthmosis III, and in the later part of his reign (g, h, above). It is clear that Neḥi was the viceroy of Tuthmosis III in the first year or two of his reign and also during the whole of his sole reign after the death of Hatshepsut. If the solution proposed by Sethe for the succession of the kings of Egypt during this period be correct, then Seni (see above), the nominee of Tuthmosis II, was superseded by Neḥi during the first few years of Tuthmosis III, was restored to office during the years 6—8, and was finally dismissed some time between the year 8 and the year 20 of Tuthmosis III. The erasures of the names of Seni and Neḥi are not incompatible with this explanation; but the question arises why, when each of these returned to power, they did not restore their names. And why did Neḥi not expunge the name of Seni on the doorway in Kummeh temple when he finally returned as viceroy? It is clear that the explanation of the erasures of these names must await the definitive solution of the larger question of the royal succession.

The difficulty in the viceroyalty of Neḥi is due to the lack of dated inscriptions from the reign of Hatshepsut, or in other words from the years 3 to 19 of Tuthmosis III. It Neḥi simply succeeded Seni in the 2nd year of Tuthmosis III, then he probably ruled continuously from that year until the time of the next dated inscription (year 20). If Seni returned to the office of viceroy during the years 6—8 of Tuthmosis III, other possibilities suggest themselves. Hatshepsut may have appointed a viceroy of her own, whose name has been lost, and Neḥi may not have returned to Ethiopia until Tuthmosis III became sole ruler. However, it seems to me more probable that Neḥi was the viceroy during the reign of Hatshepsut as well as that of Tuthmosis III, and I have so placed him in the list awaiting further evidence.

4. Wesersatet. Ca. 1453—1420(?). Under Amenophis II.

a. Amenophis II. "Hereditary prince, toparch, [the royal seal-bearer? sole] companion, king's son, overseer of the Southern Lands."

b. Undated. "King's son, overseer of the Southern Lands."

c. Funerary (?). Same titles as a, above.

Ibrîm, fourth shrine, Amenophis II, on the doorway: Champollion, Notices, p. 84; Leps., Denkm., Text, Vol. v, p. 123; Weigall, Lower Nubia, p. 122.
Sehêl: De Morgan, Cat. des Mon., Vol. 1, p. 86. no. 28; Leps., Denkm., Text, Vol. 1v, p. 126.

Stela from Buhen, now in British Museum: Randall-MacIver, Buhen, p. 96; Br. Mus., Guide to Sculptures, p. 145.

5. AMENHOTPE. Ca. 1420—1410(?). Under Tuthmosis IV(?) and Amenophis III(?).

a. Amenophis III (?).

"Overseer of the cattle of Amūn, director of works in the South and the North, head of the stable of his Majesty, king's son of Kush, overseer of the Southern Lands, mighty one of the king, praised one of the Good God, king's scribe."

Sehêl, graffito: DE MORGAN, Cat. des Mon., Vol. I, p. 92, no. 108; LEPS., Denkm., Text, Vol. IV, p. 125, no. 5 a ("unter Amenophis III").

The inscription was copied independently for the two publications and leaves no doubt as to the existence of a viceroy named Amenhotpe. The date, however, is not so certain. De Morgan has noted nothing which might indicate the date. Lepsius clearly connected the inscription with the name of Amenophis III, and if the *Textband* had given us a drawing showing the relation between the inscription and the name of Amenophis III, the question might have been determinable. As the matter stands, all which can be said is that Amenhotpe appears from his single record to have been a viceroy of Amenophis III.

Now, as will be shown below, the titles "king's son of Kush" and "fan-bearer on the king's right" came into use for the viceroy in the time of Amenophis III. None of the viceroys Nos. 1-4 ever bears either of these titles and practically all the viceroys after No. 5 bear both these titles in one or more of their inscriptions, although in some cases the title of fan-bearer is only indicated by the fan shown in the representation. Moreover, the attitudes of the viceroys in the pictures accompanying the inscriptions became more or less stereotyped in the reign of Amenophis III and particularly in the viceroyalty of Mermōse (see Plate in the next no. of this Journal). When the titles and the drawing of Amenḥotpe are examined in comparison with those of the other viceroys, it becomes significant that he is a "king's son of Kush" but not a fan-bearer, that he is shown in an attitude quite different from any of the others, with a sekhem-staff over the left shoulder. As a "king's son of Kush," Amenḥotpe must be after Wesersatet, while his lack of the fan-bearer title and his attitude in the drawing would place him before Mermōse. It must be remembered that the titles in the inscription are very full, a fact that makes the omission of the title of fan-bearer very unlikely.

Thus all the evidence available confirms the significance of Lepsius' note ("unter Amenophis III") and makes it extremely probable that the inscription under discussion was made in the early part of the reign of Amenophis III.

The question remains as to who was the viceroy under Tuthmosis IV. No record is preserved of a viceroy dated to that reign. We have Wesersatet under Amenophis II and Amenhotpe under Amenophis III. As far as the possibilities go, either of these might have had a term of office long enough to cover the reign of Tuthmosis IV. On the rock islet called Konosso, there are two records of Tuthmosis IV, one of which is the stela of the year 7 mentioning a revolt in Wawat (DE MORGAN, Cat. des Mon., Vol. I, p. 66). Near these, there are several records which mention the tutor Hekareshut; the tutor Hekarneheh, the king's messenger (?); the king's herald, Rēc; the Prince Amenhotpe (afterwards Amenophis III); and the prince A'akheperuwrē. The inscriptions in the tomb of Hekarneheh (LEPS., Denkm., Text, Vol. III, p. 360) connect Hekarneheh and Hekareshut with this same prince Amenhotpe and prove that he is a royal prince, not the viceroy Amenhotpe. But the existence of a titulary "king's son" Amenhotpe and a real "king's son" Amenhotpe in the same reign would suggest an explanation of the origin of the title "king's son of Kush." In other words, the title of the viceroy may have been altered in the reign of Tuthmosis IV to "king's son of Kush" in order to make clear the distinction between the two "king's sons" both called Amenhotpe. The lack of definite evidence forces me unwillingly to weigh such imponderabilia. A certain conclusion is out of the question, but the material as it stands shows that Amenhotpe was in office in the early part of the reign of Amenophis III, and that he had probably been appointed by Tuthmosis IV in succession to Wesersatet.

6. Mermose. Ca. 1410—1370. Under Amenophis III.

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a. Amenophis III, year 5(?).	"King's son, watchful for his lord, favourite of the Good God, overseer of the lands of Kush to its length, king's scribe."
b. Amenophis III.	"King's son."
c. Amenophis III.	"King's son of Kush."
d. Amenophis III.	"King's son of Kush."
e. Amenophis III.	"Favourite of the king in the southern (plu.) city (sing.),(3 groups lost ending with mountain-sign) to its length(?), king's scribe,"
f. Amenophis III.	"King's son."
g. Amenophis III.	"King's son of Kush."
h. Undated.	"King's son."
i. Amenophis III.	"King's son"; "king's son of Kush, overseer of the Southern Lands, fan- bearer on the king's right, Meryuws-

 $m\bar{o}se$ " (sic).

Semneh stela, now in British Museum: Gauthier, Livre des rois, Vol. II, p. 336; Breasted, Anc. Rec., Vol. II, §§ 851—855. The revolt in Ibhet.

Wâdy Abbâd (Redesîyeh), graffito near rock temple; Leps., Denkm., Text, Vol. IV, p. 83.

West Silsileh, graffito: Leps., Denkm., Text, Vol. IV, p. 95.

Near Assuan, graffito: Leps., Denkm., Text, Vol. IV, p. 117; DE MORGAN, Cat. des Mon., Vol. I, p. 39, no. 177.

Near Assuan, graffito: Petrie, Season, Pl. X, no. 274; de Morgan, op. cit., p. 27, no. 204: over another graffito and hard to read.

Sehêl: LEPS., Denkm., Text, Vol. IV, p. 125; DE MORGAN, op. cit., p. 91, no. 96.

Bîgeh: Leps., Denkm., Text, Vol. IV, p. 174.

Ellesiyeh, rock temple of Tuthmosis III, façade, graffito of Amenemopet: Leps., Denkm., Text, Vol. v, p. 115. See Viceroys, nos. 7 a and 8 f.

Tombos: Leps., *Denkm.*, Text, Vol. v, p. 244.

j. Funerary.	"King's son"; "king's son of Kush"; "fan-bearer on the king's right, king's son, overseer of the Southern Lands, overseer of the Gold Lands of Amūn."	Granite sarcophagus in the British Museum(Kurnet Murrai): Gauthier, Livre des rois, Vol. 11, p. 338.			
k. Undated.	"King's son, overseer of the Southern Lands, fan-bearer"; "king's son."	Stela in Cairo, from Assuan, dedicated by the divine scribe (?), Ḥunasha: LACAU, Cat. gen., Stèles, no. 34, 140; DARESSY, in Rec. trav., Vol. XIV, p. 27.			
l. Funerary.	"King's son of Kush."	Stela in Cairo: LACAU, op. cit., no. 34, 139. Canopic jar in Cairo: MASPERO, Momies			
		royales, p. 583. Cones: Gauthier, <i>Livre des rois</i> , Vol. 11,			
		р. 337.			
m. Undated.	"King's son, fan-bearer on the king's right."	Statuette in Vienna: BERGMANN, in Rec. trav., Vol. XII, p. 1.			
n. Funerary.	"King's son."	Stela of his letter scribe, Ḥuwy, found in the tomb of Mermōse: Gauthier, op. cit., p. 338.			
7. DḤUTMŌSE.	MŌSE. Ca. 1370—1358. Under Amenophis IV Akhenaten.				
a. Amenophis IV.By inference.	"King's son."	Ellesiyeh, grotto of Tuthmosis III, façade,graffitoofAmenemopet: Leps., <i>Denkm.</i> , Text, Vol. v, p. 115. See Viceroys, nos. 6 h and 8 f.			
b. Amenophis IV.	"King's son."	Sehêl: Leps., Denkm., Text, Vol. IV, p. 125, no. 11; DE MORGAN, Cat. des Mon., Vol. I, p. 90, no. 84. The cartouche, given incorrectly by de Morgan, is "Neferkheperuwrē ^c -Wu ^c aenrē ^c ."			
c. Amenophis IV.	"King's son of Kush."	Buhen, northern temple, badly preserved stela of Amenophis IV: Randall-MacIver, Buhen, pp. 91—92. The name of the viceroy is illegible.			
d. Undated.	"King's son of Kush, [overseer of the Gold Lands] of Amūn, overseer of masons (?)."	Sehêl: DE MORGAN, op. cit., p. 86, no. 35.			
e. Undated.	"King's son of Kush."	Statuette from Gebel Barkal, Great			
<u> </u>	"Hereditary prince, toparch,(many signs missing), overseer of the border-lands of His Majesty, fan-bearer on the	Temple (B 500): Reisner, Journ. Eg. Arch., Vol. IV, p. 216.			

My attention was first called to the existence of a viceroy named Dhutmose by the fragment of a statuette which I found at Barkal (see no. 7, e). After making up the list I found what seemed a vacancy between Mermose and Huwy and then noticed for the first time the evidence given by inscriptions a and b. In the Sehêl inscription (b), the name of Dhutmose stands under a cartouche of Amenophis IV, given nearly correctly by Leps., Denkm., Text, but changed to Menkheperuwre by de Morgan. It is easy to see how de Morgan mistook the cartouche of Amenophis IV for that of Tuthmosis IV, but that mistake has led to the identification of our Dhutmose with a royal prince, Dhutmose, son of Tuthmosis IV. The three graffiti of Amenemopet, son of Ru(?)ti, at Ellesîyeh (a) are

king's right....."

equally decisive in their evidence. These three graffiti give the titles of Amenemopet under the viceroys Mermōse, Dḥutmōse and Ḥuwy. With the known vacancy between Mermōse and Ḥuwy, this would be sufficient to place Dḥutmōse between the two, but the titles of Amenemopet also show a progressive career which confirms that conclusion. He was:

- (1) sš šć-t sš nśwti Mrymś: "letter-writer of the king's son Mermōse."
- (2) sš imi-r³ k³wt...m (?) h-t(?) s³ nśwti Dhwtmś: "scribe, the overseer of works... in (?) the house (?) of the king's son Dhutmōse."
- (3) idnw n Kš n si nśwti Hwy: "agent of Kush of the king's son, Huwy."

These inscriptions (a and b) fix the place of Dhutmõse clearly to the time of Amenophis IV. He is then in all probability the viceroy of the Buhen inscription (c) of Amenophis IV, and his name is to be inserted in that inscription. The other two inscriptions are undated, but are important on account of the fuller titles that they give.

8. Ḥuwy-Amenhotpe. Ca. 1358—1350. Under Tutankhamūn. Always called Huwy except in tomb.

"King's son of Kush." a. Tutankhamūn. "King's son of Kush, overseer of the Southern Lands, fan-bearer on king's right." "King's son, overseer of the Southern Lands." "Hereditary prince, toparch, mry-ntrpriest, king's son of Kush." "King's messenger to every land, king's son of Kush, overseer of the Southern Lands." "King's son of Kush, king's scribe." Also, "sole companion," etc. b. Undated. "King's son." "King's son of Kush, Ḥuwy." c. Undated. "King's son of Kush." (Tutankhamūn era-"King's son of Kush, overseer of the sed and replaced by Southern Lands, fan-bearer on the Ramesses II.) king's right, Huwy." "King's son of Kush, king's scribe, Huwy."d. Undated. (As c, above.) "King's son of Kush, Huwy." e. Undated. f. Undated. "King's son."

Kurnet Murrai, tomb no. 40: Leps., Denkm., Pt. III, Pls. 115—118; Leps., Denkm., Text, Vol. III, pp. 301—306; BRUGSCH, Thesaurus, pp. 1133—1141; BREASTED, Anc. Rec., Vol. II, §§ 1019—1041. Territory, from Nekheb to Napata or Karay. Appointment of viceroy.

El-Kâb, temple of Amenophis III, fragment of sandstone statuette: Lefs., Denkm., Text, Vol. IV, p. 42. Sehêl, graffito: De Morgan, Cat. des Mon., Vol. I, p. 84, no. 8. Apparently 3 different graffiti. Cartouches of Ramesses II.

Sehêl: DE MORGAN, op. cit., p. 96, no. 153. Cartouche of Ramesses II. Cf. also the Sehêl graffito, op. cit., no. 161.

Bigeh: Leps., Denkm., Text, Vol. IV, p. 174; Brugsch, Thesaurus, p. 1217. Ellesiyeh, grotto of Tuthmosis III, façade,graffito of Amenemopet: Leps., Denkm., Text, Vol. V, p. 114. See Viceroys, nos. 6 h and 7 a.

The viceroy Huwy-Amenhotpe is dated to Tutankhamun by the inscriptions in his tomb at Kurnet Murrai which record his appointment by that king, but these are the only dated inscriptions of his which I am able to find. In spite of the certainty of his date

two of his graffiti are apparently dated to the time of Ramesses II by the accompanying cartouches (see c and d). Now in the tomb, all but two or three of the cartouches of Tutankhamūn have been erased except for the name of Amūn, and it is well known that the name of Haremhab has been substituted for that of Tutankhamūn on most of the public monuments of the latter. Thus the persecution of the memory of Tutankhamūn, either by Aye or Haremhab, is well established. It seems to me therefore plausible that the name of Tutankhamūn had been erased in inscriptions c and d, that the cartouches were found empty by some scribe of the time of Ramesses II and reinscribed with the name of the reigning king. In my judgment, that conclusion is much more likely to represent the truth than the assumption that there was a second Huwy who must be added to the long list of viceroys of Ramesses II.

It is to be noted that Ḥuwy in his Nubian graffiti never calls himself by his second name, Amenhotpe. The titles of the viceroy no. 5, Amenhotpe, show that he is not the same as Ḥuwy-Amenhotpe. The Louvre stela C. 72 (PIERRET, Rec. des inscr. du Louvre, Vol. II, p. 47) gives the name of an Amenmōse, whose son's name was "Amenhotpe, called Ḥuwy." The mother of this Ḥuwy was named Nubnofret; and two other women are mentioned, Apiy and Tanofret. I have been unable to connect any of these people with the viceroy Ḥuwy, but consider the identification as probable.

The suggestion, often made, that the viceroy Huwy or the Huwy of tomb no. 1 at El-Amarna is to be identified with certain officials named in the El-Amarna letters has a considerable interest, but the detailed examination of the material has no bearing on the present subject. I will merely say that, as the result of such an examination, I have reached the conclusion that the viceroy Huwy was not the same as the Huwy of El-Amarna nor is either to be identified with the Khai, the Khaya, or the Khâya of the letters (see KNUDZTON, Die El-Amarna Tafeln, no. 11, 19 and Rev. 13, 14; no. 289, 31; no. 112, 42 and 48; no. 255, 8; and no. 268, 16). The messenger Khu'a (op. cit., no. 11, 5) of the time of Amenophis III has been taken for an Egyptian, owing to the bad condition of the text, and has been identified with the viceroy Huwy; but the context leaves little doubt that he was a Babylonian. See also Davies, Amarna, Vol. III, p. 19.

9. Paser I. Ca. 1350—1315(?). Under Aye and Haremhab(?).

a. Aye.

"King's son of Kush."

"King's son of Kush, overseer of the Southern Lands."

b. Undated.

"King's son of Kush, overseer of the Southern Lands, fan-bearer on the king's right, king's scribe."

"Overseer of the Gold Lands of Amun, king's son of Kush, overseer of the Southern Lands."

Champollion gives also: "Overseer of the Lands of Amūn in Ta-Set" and "Overseer of the Gold Lands." Gebel esh-Shems, most northern of the four inscriptions, the stela of Paser: Leps., Denkm., Text, Vol. v, pp. 179—180; Leps., Denkm., Pt. III, Pl. 114, g; Breasted, Amer. Journ. Sem. Lang., 1906, pp. 19—20; Weigall, Lower Nubia, p. 141.

Gebel esh-Shems, single-chamber grotto ("petit speos") of Paser: Champollion, Notices, pp. 38—40 ("Maschakit"); Leps., Denkm., Pt. III, Pl. 114, e, f, h; Breasted, Amer. Journ. Sem. Lang., 1906, p. 20; Weigall, Lower Nubia, p. 141.

c. Undated.

"Hereditary prince, toparch, prince in the forefront of mankind, praised of his lord Amūn, king's son of Kush."

d. By his son.

"King's son."

Sehêl: Lefs., *Denkm.*, Text, Vol. IV, p. 126, no. 20; DE MORGAN, *Cat. des Mon.*, Vol. I, p. 86, no. 31; Brugsch, *Thesaurus*, p. 1214, p.

Assuan-Philae road: DE MORGAN, op. cit., p. 20, no. 123; Petrie, Season, no. 110. See Viceroy, no. 10, a and j.

Paser I is often mentioned as the viceroy of Haremhab or as "the well-known viceroy of Haremhab." Prof. Petrie (History, Vol. III), however, gives his name only under King Aye, and this view is confirmed by all the evidence that I have been able to find. All the inscriptions cited to connect Paser I with Haremhab refer to the small grotto of Paser at Gebel esh-Shems, in the district of Addeh. Here, in the face of a bold promontory of rock, there are four monuments close together. The northernmost is a stela of Paser dated to the reign of King Aye (a, above; see Breasted's photograph). Then, about a metre to the south, comes a small stela of the deputy of Wawat, Hor. A metre or more further south opens the doorway of the small one-room grotto of Paser, and finally south of that doorway stands the inscription of "the overseer of the mountains of Wawat. Katha." Also in the district of Addeh but a few kilometres further north at Abahudah is the well-known rocktemple of Haremhab. The above nomenclature is that given by Weigall (Lower Nubia, p. 141; cf. also Wilkinson in Murray, Guide to Egypt, 1858, pp. 427—428) and is undoubtedly correct. But the application of the name of the district, Gebel Addeh to both Gebel esh-Shems and Abahudah has apparently caused a certain amount of confusion. Lepsius' grotto of "Schataui," Champollion's "Maschakit," and Maspero's "Machakit" all refer to the small grotto of Paser at Gebel esh-Shems. Both Steindorff (BAEDEKER, Equpt, 1914, p. 410) and Maspero (Annales, Vol. XI, p. 139) speak of this as the grotto of Paser, the viceroy of Haremhab, while Breasted (loc. cit.) speaks of the four monuments as niches at Gebel Addeh, opposite the Island of Shatawi. Breasted and Steindorff (in Baedeker) speak of the temple of Abahudah under the name of Gebel Addeh. All these different names (except Maschakit) may be more or less justified, but they are applied in an inexact and arbitrary way, liable to great confusion.

Now the small rock temple of Abahudah which was made by Haremhab, contains no mention of the viceroy Paser, so far as I am able to discover from the publications. The grotto of Paser at Gebel esh-Shems, on the other hand, does not show anywhere the name of Haremhab, nor is it dated at all by the inscriptions as far as reported. On the west wall, south of the doorway, there is an inscription with a cartouche which Champollion read "Wesermarē^C-Setpenrē^C" (Ramesses II). Weigall says that it is illegible, and Breasted (op. cit., p. 20) makes no mention of it. If the cartouche contains the name of Ramesses II, which is to be doubted, the inscription is, of course, a later insertion. It may be noted that "Zeserkheperuwrē^C-Setepenrē^C" (Haremhab) might have been mistaken by Champollion for the name of Ramesses II, but I find no evidence in the publication for reading the name of Haremhab in the inscription. Nor am I able to discover elsewhere any reference to Paser which can be dated to Haremhab.

¹ In my own original copy of the inscription, made in 1908, I find the sign for Zeser marked without a query; this indicates the reign of Haremhab.—Ed.

At West Silsileh, in the rock-cut memorial chapel of Haremhab, in the reliefs in the corridor referring to Ethiopian affairs, a fan-bearer is shown walking beside the king who is borne along in his carrying chair. This probably represents the viceroy of Ethiopia of that day, but his name is not given (Leps., Denkm., Pt. III, Pl. 121; op. cit., Text, Vol. IV, pp. 84—89; Maspero, Struggle, p. 351). Indeed, I have not been able to find any mention anywhere of the name of the viceroy under Haremhab. Nevertheless, the circumstantial evidence makes it probable that Paser I served under Haremhab as well as under Aye:

- (a) The name of no other viceroy is known who might be dated to this period.
- (b) Both Paser and Haremhab served under Aye. Paser was of course in a less powerful position than Haremhab and may have been selected by Haremhab for his post of viceroy. The dominant position which Haremhab claims for himself in the reign of his predecessor favours the idea that Paser was a friend of his.
- (c) Aye reigned only 4 or 5 years, while the highest known date of Haremhab is only 8 years. Even if Haremhab be allowed 20 years, the total of the two reigns might have been covered by one viceroy. Viceroyalties of 20—30 years were not unusual.
- (d) The next known viceroy, Amenemopet, viceroy of Sethos I, was in office about 20 years. He was a son of Paser I. In the absence of direct evidence to the contrary, the average conditions of human life and of the continuity of family influence in politics, make it probable that Amenemopet succeeded his father, Paser I, in office. That is, Paser I continued to be viceroy under Haremhab, and until the appointment of his son, probably under Sethos I.
- (e) The proximity of the Abahudah temple to the Gebel esh-Shems memorials, taken with the absence of any inscription of any other viceroy in the neighbourhood, points to a probable connection in time between Haremhab and Paser I. The plausible course of events seems to me this: (i) Paser, as viceroy under Aye, was attracted by the bold prominence of the Gebel esh-Shems, untouched at that time by any memorial, and cut the northern stela on the most prominent position on the cliff, (ii) Haremhab, or Paser acting for him, selected the next promontory (Abahudah), a few kilometres to the north for the rock-temple of Haremhab; (iii) while the Abahudah temple was in course of construction, Paser utilized a gang of the men to cut for himself a more important memorial, the grotto at Gebel esh-Shems, a few metres south of his stela.

Such is the material which I have been able to find. In view of the lack of positive evidence to the contrary, I come to the conclusion that Paser was viceroy under both Aye and Haremhab, and was succeeded by his son, Amenemopet probably early in the reign of Sethos I, but possibly as early as the end of the reign of Haremhab.

10. Amenemopet, son of Paser I. Ca. 1315—1290. Under Sethos I and Ramesses II.

a. Sethos I.	"The first charioteer of His Majesty, the king's son, Amenemopet, son of the king's son, Paser." Cf. i, below.	Road from Assuan to Philae: DE Morgan, Cat. des Mon., Vol. 1, p. 20, no. 123; Leps., Denkm., Text, Vol. IV, p. 121, no. 18; Petrie, Season, Pl. V, 110.
b. Sethos I.	"Charioteer of His Majesty, king's son of Kush."	Same locality: DE MORGAN, op. cit., p. 20, no. 124; Petrie, op. cit., 109.
c. Sethos I.	"Fan-bearer on the king's right, governor of the Southern Lands, king's son."	Same locality: DE MORGAN, op. cit., p. 28, no. 5 (with fan); Leps., Denkm., Pt. III, 141, h; Leps., Denkm., Text, Vol. IV, 120, no. 6; Petrie, op. cit., Pl. VI, 130.
d. Undated.	", overseer of the Southern Lands, king's son."	Same locality DE MORGAN, op. cit., p. 29, no. 12.

e. Undated.	"King's son of Kush."	Sehêl: DE MORGAN, op. cit., p. 103, no. 53 (Mariette).
f. Sethos I.	"King's son of Kush."	Near Ibrîm, stela of Sethos I: SAYCE, in <i>Rec. trav.</i> , Vol. xvi, 1894, p. 170.
g. Undated.	"King's son of Kush."	Buhen, stela made by the attendant, Huwy: RANDALL-MACIVER, Buhen,
h. Sethos I.	"King's son of Kush."	p. 77. Dôsheh, stela: Leps., <i>Denkm.</i> , Pt. III,
·		Pl. 141, k; Breasted, Amer. Journ. Sem. Lang., 1908, p. 96.
i. Ramesses II.	"King's son of Kush, Amenemopet, son of Paser."	Bêt el-Wali temple: Leps., Denkm., Pt III, 176f.; Leps., Denkm., Text, Vol. v, p. 14 (reads Pawer); Champollion, Mon., Pls. LXVIII, LXIX; BUDGE,
		Sudan, II, p. 324 (plate prepared from Bonomi's coloured cast).

For commentary, see under no. 11, Yuni.

11. Yuni. Ca. 1290—?. Under Sethos I(?) and Ramesses II.

a. Sethos I.	"Head of the stable-of-Sethos-I, the charioteer of His Majesty, the king's son of Kush, chief of the Mazay."	Wâdy Abbâd (Redesîyeh), rock temple, façade: Leps., <i>Denkm.</i> , Pt. III, 138 n.; GARDINER-GUNN, <i>Journ. Eg. Arch.</i> , Vol. IV, p. 249.
b. Ramesses II.	"King's son of Kush." ("Man of Ehnasiyeh.")	Abu Simbel, rock stela north of smaller temple: Breasted, Amer. Journ. Sem. Lang., 1906, p. 29 (photograph); Champollion, Mon., Pl. IV, no. 2; Weigall, Lower Nubia, p. 137.

The inscriptions cited for Amenemopet and Yuni might be considered evidence that these two viceroys held office at the same time during the close of the reign of Sethos I and the beginning of the reign of Ramesses II.

The inscription 10, *i* occurs twice on the southern wall of the vestibule hall of the Bêt el-Wali temple (at Kalabsheh). On this wall is the famous scene of a battle in Nubia, while to the left of the battle-scene is a picture of the payment of the Ethiopian tribute. In the tribute-scene, the viceroy Amenemopet appears supervising the payment in each of the two registers and in each case with the inscription 10, *i*. The chief figure is Ramesses II, and there is no evidence of any erasures. Thus, the viceroy Amenemopet is an integral part of a scene made in the name of Ramesses II, and must be assumed to have served as viceroy in his time. The temple is not dated, but only two princes, Amenherwenemef and Khaemwēse, are shown. The scenes on the north wall relating to the Syrian wars are ordinarily supposed to be purely decorative, and I can see no reason for giving any greater historical weight to the Nubian battle-scene. The temple may have been completed early in the reign of Ramesses II.

The two inscriptions of Yuni are, on the contrary, both private memorials set up by Yuni himself. The Abu Simbel inscription (11, b) is clearly dated to the time of Ramesses II, while that of Wâdy Abbâd is in honour of Sethos I. In both, Yuni is called a "king's son of Kush." The fact that he is a fan-bearer at Abu Simbel but not at Wâdy Abbâd may be taken to indicate that the Wâdy Abbâd inscription is the earlier. The Wâdy Abbâd inscription speaks of Sethos I as if he were alive at the time.

The evidence appears clear. Nevertheless, there is no other case of a divided viceroyalty during the whole four centuries, and indeed the division of the administration was carried out in another way, by the appointment of sub-governors (idnw) for Kush and Wawat (see Part III). Thus, the apparent conclusion that two viceroys held office at the same time is so contrary to all the other evidence that I am afraid to accept it. Assuming the only alternative, namely that Yuni succeeded Amenemopet, I would place the inscriptions in the order, 10, i; 11, a; 11, b; and would suggest the following explanation:

- (a) There was a co-regency of Sethos I and his son, Ramesses II, as stated in the Abydos inscription of Ramesses II, lines 43-50 (Breasted, Anc. Rec., Vol. III, §§ 267-268). No material evidence has been produced for the rejection of this statement (see Gauthier, Livre des rois, Vol. III, p. 30, note 2; cf. Breasted, Anc. Rec., Vol. III, § 125 and § 254, with which I disagree).
- (b) The temple of Bêt el-Wali was made for Ramesses II during the co-regency, although there is no direct evidence of this. Amenemopet was still viceroy at the time and probably supervised the work. The temple may have been begun, of course, before the co-regency.
- (c) Soon after the completion of Bêt el-Wali, but still during the co-regency, Amenemopet was succeeded by Yuni as viceroy of Ethiopia. Yuni had risen as head of the stable and charioteer of Sethos I, that is, through the personal favour of that king (see the Wâdy Abbâd inscription). Being on a journey which led him to Wâdy Abbâd to a temple dedicated by his patron, he made a private prayer for Sethos, and this might have happened although Ramesses II was already the dominant member of the co-regency.
- (d) Being sent to Nubia by Ramesses II, he made a prayer for that king near his temple at Abu Simbel. The temple of Abu Simbel is supposed to have been begun under Sethos I and contains an inscription dated in the year 1 of Ramesses II. This inscription is on the doorway leading from the first to the second hall and seems to me to have been made later. The temple was certainly not finished in the first year of Ramesses II. At the time of Yuni's visit to Abu Simbel, Sethos may have been still alive.
- (e) I know of no evidence for ascertaining the length of the co-regency of Sethos I and Ramesses II, but even if it lasted only two or three years, its length would have been sufficient for the events suggested above. I imagine that Yuni as the particular favourite of Sethos I may have found no great favour with his son, especially if the appointment had been due to an intervention of Sethos I. I would assume that Yuni was replaced by another viceroy (Ḥekanakht?) as soon as Sethos was dead.

If there were evidence that the names of Ramesses II and his two sons had been inserted later at Bêt el-Wali, or if the Wâdy Abbâd inscription did not so clearly indicate that Sethos I was still alive, several different explanations might be offered. But as the material stands, the most plausible explanation seems to me that given above, which depends on the fact proved by the Abydos inscription that there was a co-regency of Sethos I and Ramesses II.

Sethauw, one of the viceroys of Ramesses II, has been ascribed to the reign of Sethos I and conclusions have been drawn from this ascription affecting the length of reign to be assigned to Sethos I. This is all a mistake: Sethauw was never viceroy under Sethos I; see Sethauw and the commentary, below.

HEKANAKHT. Under Ramesses II.

a. Ramesses II. "King's son of Kush."

Amada, temple, two inscriptions on the inside of each of the first pair of pillars in the hypostyle hall: GAUT-HIER, Amada, pp. 133, 136; Breasted, in Amer. Journ. Sem. Lang., 1906,

Kûbân, built in wall in village: Leps., Denkm., Text, Vol. v, p. 60.

b. Undated. "King's son of Kush, Ḥeka[nakht]."

	THE VICEROIS OF EI	HIOFIA 41
c. Undated.	"King's son, overseer of the Southern Lands." "Fan-bearer on the king's right." "King's son of Kush." "Messenger to every land, king's son." "Hereditary prince, toparch, royal sealbearer, pleasing (sndm?) the heart, witness of truth, glory of his lord, who goes when sent, in whom is satisfaction because of the greatness of his excellence, the king's son of Kush, the overseer of the Southern Lands."	Kûbân, statuette in Cairo, from Wilbour's collection, presented by Sayce: QUIBELL, in <i>Annales</i> , Vol. III, p. 240.
d. Ramesses II(?).	"[King's son of Ku]sh, overseer of the Southern Lands, [Heka]nakht."	Abu Simbel, south of the larger temple: Leps., <i>Denkm.</i> , Pt. III, 195, d; Champollion, <i>Mon.</i> , Pl. IV, no. 3.
c. Ramesses II.	"of the house of the palace-of-Ramesses- II, the messenger to every land, king's son of Kush, overseer of the Southern Lands, fan-bearer on the king's right,"	Assuan to Philae: DE MORGAN, Cat. des Mon., Vol. I, p. 27, no. 205; Petrie, Season, Pl. X, no. 275. The name is missing, but Ḥekanakht was the only viceroy of this reign who was a "messenger."
Possibly also:		
f. Ramesses II.	"King's son of Kush."	Sehêl: DE MORGAN, op. cit., pp. 99, 198. Rather than Sethauw.
g. Ramesses II.	"" ntary after no. 14, Sethauw.	Assuan to Philae: DE MORGAN, op. cit., p. 27, no. 207, bis.
	son of Minmose. Under Ramesses	TI.
a. Ramesses II.	"King's son of Kush, overseer of the Southern Lands, king's scribe, Paser, son of Minmöse."	Abu Simbel, rock stela between the two temples: Maspero, Temples Immergés, Rapports, Vol. I, p. 165.
b. Ramesses II.	"King's son of Kush, overseer of [the Southern Lands]."	Abu Simbel, rock stela, north of the smaller temple: Lefs., Denkm., Text, Vol. v, p. 168.
c. Ramesses II.	"King's son."	Abu Simbel, large temple, on basis of statue in small room before the sanctuary: Leps., <i>Denkm.</i> , Pt. 111, Pl. 196, b.
d. Ramesses II.	"King's son of Kush."	Family monument of Amenemyenet, in Naples: Brugsch, <i>Thesaurus</i> , p. 953.
For the commer	ntary, see after no. 14, Sethauw.	
14. Sethauw.	Under Ramesses II.	
a. Ramesses II, year 38.	"The hereditary prince, the toparch,, king's son of Kush." "King's son of Kush."	Abu Simbel, double stela, on rocks south of larger temple: Leps.,

"King's son of Kush";

"King's son of Kush, overseer of the Southern Lands, steward of Amūn, king's scribe."

b. Ramesses II, year 44 (?).

"King's son." "King's son of Kush." Denkm., Pt. III, Pl. 195, b, c; Breasted, Amer. Journ. Sem. Lang., 1906, p. 26 (photograph, general view).

Sebua, temple enclosure, stela no. IX: GAUTHIER-BARSANTI, in Annales, Vol. x1, pp. 84—85. See m, n, o, below.

c. Ramesses II, "King's son of Kush, overseer of the Tônkaleh, rock stela: Weigall, Lower year 63 (?). Southern Lands, [king's] scribe." Nubia, p. 113, Pl. LXIV, no. 7. d. Ramesses II. Among titles, "overseer of the Gold Sai Island: Breasted, Amer. Journ. Lands of Amūn." Sem. Lang., 1908, p. 98. e. Ramesses II. "King's son, overseer of the Southern Buhen, temple of Hatshepsut, pillar 3, Lands, king's scribe." N: RANDALL-MACIVER, Buhen, p. 22. f. Undated. "King's son of Kush, governor of the Same, pillar 31, W: op. cit., p. 47. city." g. Ramesses II. "King's son, overseer of the Southern Faras: Leps., Denkm., Text, Vol. v, Lands." p. 182; Sharpe, Inscriptions, II, p. 39; with "his sister," Nefret-Mut. h. Ramesses II. "King's son of Kush, [king's scribe?]." Ķaṣr Ibrîm¹, second grotto from the south: Leps., Denkm., Pt. III, Pl. 184, d; Weigall, Lower Nubia, pp. 121-122; Breasted, Amer. Journ. Sem. Lang., 1906, p. 38. With Nefret-Mut and officials of his staff. i. Undated. "King's son of Kush." Ellesiyeh, rock temple of Tuthmosis III, on left of niche: LEPS., Denkm., Text, Vol. v, p. 112. See foot-note to h. j. Ramesses II. Same, façade: op. cit., p. 114. "King's son of Kush, overseer of the Southern Lands.....king, overseer of the Gold Lands of the Lord [of the Two Lands],....." k. Ramesses II. "King's son of Kush." Tômas, graffito: Weigall, Lower Nubia, p. 108. l. Ramesses II. "King's son of Kush." Amada, temple, inscription of Ramesses II on southern embrasure of entrance: Gauthier, Amada, p. 184. m. Ramesses II. "King's son of Kush, overseer of the Sebua, temple enclosure, stela no. VII Gold Lands of Amūn, fan-bearer on (second from left): autobiography of the king's right hand, overseer of the Sethauw: Gauthier-Barsanti, in treasury, leader of the festival of Annales, Vol. XI, pp. 77-81. See Amūn, king's scribe." b, n, o. "King's son of Kush, overseer of the Southern Lands, great steward of Amūn, king's scribe." "King's son" (X); n. Ramesses II. Same, stelae I (1st from left), II (3rd), "King's son of Kush" (I, III, VI, VIII); III (7th), IV (4th), V (5th, name lost), "King's son of Kush, king's scribe (IV); VI (not in place), VIII (not in place), "King's son of Kush, overseer of the and X (6th): op. cit., pp. 64-86. Gold Lands" (sic) (II); no. VI has See b, m, o. titles similar to no. VII, see m, above. Sebua, temple, loose blocks, 12 inscrip-"King's son" (4 pieces); o. Ramesses II. "King's son of Kush" (5); tions, and 3 statuettes with 2 in-"King's son of Kush, king's scribe" (1); scriptions: Gauthier, Sebua, pp. 36

--40, 122-123.

"King's son of Kush, overseer of the

......" (2).

Southern Lands, king's scribe" (2); "....... [overseer of] the Gold [Lands]

¹ There are five grottoes, counting from the south—(1) Tuthmosis III, (2) Ramesses II, (3) Tuthmosis III, (4) Amenophis II, (5) unfinished. The tomb of Pennut is on the opposite bank, the west bank, behind Anîbeh. The rock grotto of Tuthmosis III at Ellesîyeh is *north* of the village of Ibrîm while Kaşr Ibrîm is *south* of that village. Thus Ellesîyeh is about 7 kilometres north of Kaşr Ibrîm.

p. Ramesses II.	"King's son of Kush, overseer of the Southern Lands, fan-bearer on the king's right hand, overseer of the treasury (?), chief of the priests of, overseer of the Gold Lands of the Lord of the Two Lands, king's scribe, [Sethauw]."	Abu Simbel, rock stela near a: Leps. Denkm., Text, Vol. v, p. 165.		
q. Ramesses II.	"King's son of Kush."	Gerf Husein, temple, on side of doorway: Leps., <i>Denkm.</i> , Text, Vol. v, p. 56.		
r. Ramesses II.	"King's son"; "King's son of Kush, governor of the city, overseer of the Southern Lands, king's scribe."	Gerf Husein, first statuette: op. cit., p. 56.		
s. Ramesses II.	"King's son"; "King's son of Kush"; "King's son, overseer of the Southern Lands, king's scribe."	Same, second statuette : Leps., $Denkm$., Pt. III, Pl. 178, f — i .		
t. Ramesses II.	"King's son of Kush" (A). "King's son" (B).	Road from Assuan to Philae: DE Morgan, Cat. des Mon., Vol. 1, p. 28, no. 3 (= A), and no. 4 (= B).		
u. Ramesses II.	"King's son of Kush" (A) with the singer of Amūn, Nefret-Mut.	Sehêl: op. cit., p. 97, no. 174 (= A), and p. 103, no. 27.		
v. Undated.	"King's son of Kush."	El-Kâb, chapel of Ramesses II, twice: Leps., <i>Denkm.</i> , Text, Vol. IV, p. 38.		
w. Undated	"King's son of Kush, Sethauw, who is overhead (hry-tp) of the land"; "Hereditary prince, toparch, royal sealbearer, sole companion, conductor of the festival of Amūn, the king's son of Kush, overseer of the Southern Lands, fan-bearer on the king's right hand, king's scribe."	El-Kâb, temple of Amenophis II, two pieces of statuette: op. cit., p. 42; Leps., Denkm., Pt. III, Pl. 174, b.		
x. Undated.	"Fan-bearer on the king's right, king's son of Kush."	Abydos, on a stone in a house in the village: Brugsch, <i>Thesaurus</i> , p. 1223; also Id., <i>Rec. de Mon.</i> , Vol. I, Pl. XII, 5.		
y. Undated?	"King's scribe, steward of the palace, king's son of Kush." As translated in Guide.	Lid of sarcophagus, red granite, in London: Guide to the Egyptian Galleries, Sculpture, p. 199, no. 720. The titles are probably fuller than given in the Guide of the B.M.		
α' . Ramesses II.	"King's son of Kush." Title expunged in every case. Wife, Nefretmut; mother, An.	Statuette, from Kom el-Aḥmar (?), in Mulhausen: Jacoby, in Rec. de Trav., Vol. xxII, p. 113.		
b'. Undated.	"King's son of Kush."	Stela of Pennesttauwi, in the Louvre: PIERRET, Rec. inscr. Louvre, Vol. II, p. 77.		
c'. Undated.	"King's son of Kush."	Shawabti in Turin: BRUGSCH, The- saurus, p. 1438, 46, h. Another in Brit. Mus., no. 8700 a (Petrie).		
d'. —	_	Reel of pottery in Louvre: PIERRET, Louvre Cat., pp. 158 and 636 (Petrie).		
		2 1.1 1.1 1.1 1. C. N. I.I.I. 1.		

The viceroy Sethauw has sometimes been identified with the high-priest of Nekhbet, Sethauw, whose tomb at El-Kâb (Lepsius' no. 4) is dated to the time of Ramesses IX. But the error has long been recognized.

Of this long list of inscriptions belonging to Sethauw, only f, i, v, w, x, y, b', c' and d'are undated. All the rest, twenty in number, are dated to Ramesses II, and there is no reason for supposing that the undated inscriptions belong to any other reign. Inscription a is dated clearly to the 38th year of Ramesses II, b without reasonable doubt to his 44th year, and c with some plausibility to the 63rd year. These dates indicate that the weight of Sethauw's term of office fell after the middle of the reign of Ramesses II. Now, there is one mention of Sethauw, not included above, which has been used to date him, as viceroy, to the 2nd year of Sethos I. This is in the Rollin papyrus, Pap. Bibl. Nat., 209, published by Prof. Spiegelberg in Rechnungen aus der Zeit Setis I, pp. 23 and 67, Pl. X b. Col. IV of the verso contains "a list of negroes who were brought from......," and in line 3 of this list occur the words: "servant of the king's (?) son (?) Sethauw, of (?)......." Spiegelberg restores: "servant of the king's son, Sethauw, of [Kush]." The papyrus is a palimpsest and the present text is written in several different hands (see op. cit., p. 2). None of the documents contained in the present text is dated, but Spiegelberg assigns it to the 2nd year of Sethos I on epigraphical grounds and because a list of bakers contained in Col. v of the recto contains some names which also occur in documents of that date (op. cit., p. 4). This list of Col. v is not in the same hand as the list of Col. IV of the verso. Thus the evidence is clearly of the most questionable kind. It will be noted that the signs read "king's son" do not correspond with the sign for "king" further down, while "Kush" is not in the text. In other words both the reading and the date are open to question. Against this, the fact is to be set that at least two clearly fixed viceroys, Amenemopet and Yuni, are known to have held office between the 2nd year of Sethos I and the 38th year of Ramesses II. It is simply impossible that our Sethauw should have been viceroy from the 2nd year of Sethos I to the 38th year of Ramesses II and beyond. The only possible way of saving the face of the Rollin evidence is to assume another viceroy Sethauw who held office before Amenemopet. He would thus become the viceroy of Haremhab, a man who came between Paser I and his son Amenemopet. For that, I can see at present no evidence, and prefer to reject Spiegelberg's conclusions drawn from the dubious material furnished by the Rollin papyrus.

With Sethauw, I have ended my list of viceroys of Ramesses II. Before taking up the order of the last three (nos. 12, 13, and 14), it is necessary to clear away the confusion caused by the ascription of other viceroys to this reign. The first of these is $\mathcal{H}uwy$ (no. 8, above), mentioned by Prof. Petrie (History, Vol. III, p. 93) on the basis of inscriptions no. 8, c and d. I take the name of Ramesses II in these inscriptions to be a later insertion (see under no. 8) and exclude Huwy from the viceroys of Ramesses. Next comes the viceroy Nakhtu of Dr Budge (Book of Kings, Vol. I, pp. 186—187), who is, of course, my no. 12, Hekanakht.

Prof. Petrie (op. cit., p. 95) also includes Messuwy among the viceroys of Ramesses, as does also Gauthier (Livre des rois, Vol. III, p. 113). This conclusion is based on inscriptions no. 15, h and b (see Messuwy, below). Inscription b, on the doorway of the Bêt el-Wali temple, is undated but is manifestly an insertion. It certainly cannot be used to prove that Messuwy held office under Ramesses II and I have no hesitation in dating the inscription in question to Meneptah. Inscription h is a graffito on the Island of Bîgeh. As given by Champollion, this inscription stands under the cartouche of Ramesses II. Now this inscription is without doubt the same as that recorded by Leps., Denkm., Text, Vol. IV, p. 175, as being on the rocks south of the temple: "Rechts von diesen Granitblöcken,

folgen andere. Auf einem, Sethos II (the text gives here a feathered cartouche containing "Weserkheperuwrē^C-setpenrē^C"). Darunter, ein (the text gives in hieroglyphics "king's son of Kush,.....y"), wohl Huwy." From the remains, the name might be Messuwy, as Champollion read it. Ḥuwy is, of course, out of the question if the viceroy has any connection with the royal cartouche, and in the case of an isolated graffito a direct connection is to be assumed. I have no hesitation in preferring Lepsius' copy and in finding in the inscription a record of Messuwy under Sethos II (see no. 15). In considering the list, I can see no reason why Messuwy may not have begun his service as viceroy towards the end of the reign of Ramesses II, but no direct evidence is obtainable that such was the case.

One other viceroy, Wentaperit (Petrie, History, Vol. III, p. 103) has been assigned to Ramesses II. The name has also been transcribed Wentahere and Wentawuat. None of his records are dated (see viceroy no. 19). Maspero and Legrain would place him towards the reign of Ramesses II, but advance no positive proof of date. I imagine either of them would have admitted the XXth Dynasty as a possible date. He was a High-priest of Amūn of Ramesses (or of Khnum-Wēset), not a great High-priest of Karnak, and no argument can be drawn from the order of the known High-priests. As will be seen below (no. 19), I identify this Wentawuat with a son of Hori II, on the basis of two defective inscriptions. On this ground, and because without him an unknown viceroy must be assumed for the XXth Dynasty, I have placed Wentawuat after Hori II. If I am mistaken in my reconstruction of the inscriptions, then the only probable place for Wentawuat is, as Petrie says, in the reign of Ramesses II.

The viceroys certainly assignable to Ramesses II are, then, Amenemopet, Yuni, Hekanakht, Paser II, and Sethauw. Amenemopet was succeeded during the co-regency with Sethos I, by Yuni, who, as the choice of Sethos I, probably did not long survive the co-regency. The viceroyalty of Sethauw according to his dated records fell for the most part in the second half of the reign. Thus the probability arises that Hekanakht and Paser II both came between Yuni and Sethauw. The co-regency would appear, but with no great certainty, to have come to an end before the first Syrian campaign in the year 4. The Kûbân stela, relating to the opening of the well on the Wâdy Allaķi road, is dated in the 3rd year, but it is difficult to say whether this is the date of the monument or the date of the council at which the king ordered the digging of the well. A viceroy of Nubia is mentioned several times in the text, but unfortunately without giving his name. Curiously enough the only viceroy, except Thuwre, whose records have been found at Kûbân is Hekanakht, a viceroy of Ramesses II (see no. 12, b and c). This piece of evidence is almost imponderable, yet it has almost unconsciously influenced me in identifying Hekanakht with the viceroy of the Kûbân stela and placing him as the successor of Yuni.

Paser II has left only three records in Nubia, all at Abu Simbel, but these simply prove that he held office under Ramesses II and was the son of Minmõse. His previous career seems to have consisted of the office of king's scribe and he holds no titles of honour. Apparently, to judge from the material (which may be defective), he had a short and inglorious career as viceroy. His chief record, however, is the family monument of the chief of the Mazay, Amenemyenet, at Naples (Brugsch, Thesaurus, pp. 951—957). This monument gives the names and titles of 24 relatives of Amenemyenet and his wives, nearly all of whom were people of high office in the priesthood, the army, or the civil administra-

tion. The family evidently had great political influence,—a "pull," as it is termed in American slang. The list is as follows:

First Generation:

- (5) Minmose, high-priest of Min and Isis, paternal uncle of A.
- (6) Pennesuttauwi, head bowman of Kush, paternal uncle of A.
- (1) Wennefer, high-priest of Amun, father of A.
- (9) *Isis, great favourite of Amūn, mother of A.
- (8) Ruma, priest of Min and Isis, maternal uncle of A.
- (15) Minmose, sem-priest in the temple of Sokaris, father-in-law of A.
- (21) *Henutmehy, singer of Amūn, mother-in-law of A.

Second generation:

- (14) Amenemyenet (A), chief of the Mazay, director of works on the monuments of His Majesty.
- (2) Hori, director of works, high-priest of Anheret, eldest brother of A.
- (7) Khaemwēse, scribe of the divine rolls (?) in Per-Amon, brother of A.
- (10) *...., wife of the steward of Amūn, sister of A.
- (11) *....., spss-t in the king's house, sister of A.
- (12) *Henutmehy, wife of the steward of the Ptah-temple, sister of A.
- (13) *...., wife of the head bowman (19), sister of A.
- (3) Amenemopet, high-priest of Heliopolis, favourite of the Lord of the Two Lands, cousin (sn) of A.
- (4) Paser (II), king's son of Kush, cousin (sn) of A.
- (22) *Wiay, singer of Amūn (d. of 15+21), wife of A.
- (23) *Nefertiry, singer of Amun (d. of 15+21), wife of A.
- (16) Amenemyenet (B), charioteer of His Majesty, brother of A's wives.
- (17) Hatiay, high-priest of Monthu, brother of A's wives.
- (19) Piyay, head bowman of the chariots (horse troops), brother of A's wives.
- (20) Supara, overseer of priests, brother of A's wives.
- (24) *Sa (?)-Hathor, sister of A's wives.
- (25) *Nefretiry, wife of 16, sister-in-law (?) of A's wives.

The monument is dated by the cartouches of Ramesses II but not with a year-date. The inscriptions distinguish between "brother of one mother" and "brother." "Brother" may mean, as usually, cousin or "relative." Paser is clearly the son of Minmōse the High-Priest of Min and Isis, the paternal uncle of Amenemyenet (A), the nephew of Pennesuttauwi, who was a head bowman of Kush. The tomb of Pennesuttauwi is No. 156 (Gardiner-Weigall) at Thebes but is unfortunately only dated to the "19th Dynasty"." I would select the High-Priest of Amūn, Wennefer, the father of A., as the founder of the family fortunes, and it is to him that one might look to establish the date more exactly. But the present monument appears to bear the only record of his career. The most suitable place open for him is between the High-Priest, Nebwenenef (year 1 of Ramesses II) and the High-Priest, Bekenkhonsu (years 41–47?), see Wreszinski, Hohenpriester, Nos. 16–19. Moreover, the impression conveyed by the Naples monument is that the family enjoyed its power entirely under Ramesses II. Thus Paser, the nephew of Nebwenenef, and a member of the second generation, would hardly have held office long before the middle

¹ There are several men recorded of the name of Pennestitauwi or Pennesetauwi, see Lieblein, *Dict.*, nos. 1044, 2052, and 2544. Of these, No. 2052 was a Pennesetauwi, son of Haremhab, and a scribe of the table of Kush under Sethauw. His father may be the scribe, Haremhab, named in the inscription of Sethauw at Ibrîm. It is conceivable that a scribe of the table should rise to be head bowman of Kush; but the difference in the name causes me to negative the identification.

of the reign, nor would he have received the appointment after the term of office of Nebwenenef. I have therefore placed him after Ḥekanakht and before Sethauw, the latter of whom held office during the priesthood of Bekenkhonsu, who was in all probability later in date than Nebwenenef.

It is clear that the exact order of the three viceroys, Ḥekanakht, Paser II, and Sethauw, is not capable of positive demonstration, and the tentative solution which I have proposed must yield to any contradictory evidence which may be forthcoming. The succession of the viceroys during the closing years of Ramesses II is also still a matter of uncertainty. Sethauw had a very long career, as is shown by the extraordinary number of records left by him and his subordinates, and he may well have outlasted the lifetime of Ramesses II and have been succeeded by Messuwy. Or Messuwy may have succeeded Sethauw during the closing years of Ramesses. Even the third alternative, that another viceroy (Wentawuat?) held office for a short time between Sethauw and Messuwy, is not excluded by the evidence.

15. Messuwy. Ca. 1225—1209. Under Meneptah, Amenmesses (?), and Sethos II.

	10. MESSOW1.	one 1220—1200. Under Menephan, Amerimesses (1), and Deinos 11				
<i>a</i> .	Meneptah.	"King's son of Kush, overseer of the [Southern Lands], fan-bearer on the king's right, king's scribe."	Road from Assuan to Philae: Petrie, Season, Pl. II, no. 11; de Morgan, Cat. des Mon., Vol. I, p. 18, no. 87; Leps., Denkm., Pt. III, Pl. 200, f.			
<i>b</i> .	Undated.	"King's son of Kush, bearer of the fan and crook on the king's right, [king's scribe], Messuwy, chosen one of the south land (stp n t/ šm<)."	Bêt el-Wali, temple, graffito on side of entrance: Weigall, Lower Nubia, p. 74; Leps., Denkm., Pt. III, Pl. 176, g. Often cited in order to date Messuwy to Ramesses II.			
<i>c</i> .	Meneptah. After year 5.	"King's son of Kush, fan-bearer on the king's right, king's scribe."	Amada, temple, entrance, northern embrasure, inscription of Meneptah: GAUTHIER, Amada, pp. 186—188; BREASTED, Amer. Journ. Sem. Lang., 1906, p. 46.			
d.	Meneptah.	"King's son of Kush."	Amada, temple, façade, north and south of entrance: Gauthier, op. cit., p. 181.			
e.	Undated.	"King's son of Kush."	Pyramidion: Gauthier, op. cit., p. 195. Name lost.			
f.	Meneptah.	"King's son of Kush, fan-bearer on the king's right."	Aksheh, between Sarreh and Faras: Leps., <i>Denkm.</i> , Text, Vol. v, p. 188.			
g.	Meneptah.	"King's son, overseer of the Southern Lands."	Buhen, temple of Hatshepsut, two graffiti on 4 W and 5 W: RANDALL-MACIVER, <i>Buhen</i> , pp. 22, 24. Name of viceroy illegible on both.			
h.	Sethos II.	"King's son of Kush."	Bîgeh, graffito: Lefs., Denkm., Text, Vol. IV, p. 175; Champollion, Notices, Vol. I, p. 614.			

For the commentary on Messuwy's supposed activity under Ramesses II, see under no. 14, Sethauw, above. See also commentary under no. 17, Ḥori I, below.

16. SETY. Ca. 1209—1203. Under Siptah.

 Ramesses-Siptah, year 1. "King's son of Kush."

b. Ramesses-Siptah, year 1 (?).

"Hereditary prince, toparch, king's son of Kush, overseer of the Gold Lands of Amūn, fan-bearer on the king's right, king's scribe of the letters of Pharaoh, first chief in (?) the stable, eyes of the king of Upper Egypt, ears of the king of Lower Egypt, high-priest of the Moon-god, Thoth, overseer of the treasury, overseer of the letter-scribes in the Court of the Palace-of-Ramesses-Miamūn (?), in the Court."

c. Ramesses-Siptah, year 1.

"King's son of Kush."

d. Meneptah-Siptah, year 3. "Fan-bearer on the king's right, king's son of Kush, overseer of the Southern Lands."

Below are the same titles preceded by "Hereditary prince, toparch."

e. Meneptah-Siptah.

"King's son of Kush, overseer of the Gold Lands of Amūn, fan-bearer on the king's right, great steward of the king, king's scribe of the letters of the Pharaoh." Abu Simbel, south wall, inscription of the king's messenger, Rekhpehtuf, "when his lord came to establish the king's son of Kush, Sety, in his place": Breasted, Anc. Rec., Vol. III, § 642.

Abu Simbel, north wall: Maspero, in Annales, Vol. x, p. 132.

Buhen, temple of Hatshepsut, pillar 6 W, graffito of the king's messenger, Neferhor, "when he came with rewards for the officials of Ta-Set and to bring the king's son of Kush, Sety, on his first trip": RANDALL-MACIVER, Buhen, p. 25; BREASTED, Anc. Rec., Vol. III, § 643.

Sehêl, graffito: DE MORGAN, Cat. des Mon., Vol. 1, p. 86, no. 29; Leps., Denkm., Pt. 111, Pl. 202, b; Breasted, Anc. Rec., Vol. 111, § 646.

Road from Assuan to Philae: Leps., Denkm., Pt. III, Pl. 202, c; DE MORGAN, op. cit., p. 28, no. 6; Breasted, Anc. Rec., Vol. III, § 647.

See commentary under no. 17, Hori I, and appendix, overseer of the Southern Lands, no. vii, in the next number of this *Journal*.

17. Hori I, son of Kama (?). Ca. 1203—1180. Ramesses III (?).

Under Siptah, Setnakht (?) and

a. Meneptah-Siptah,year 3.

"First charioteer of His Majesty, the king's messenger to every land, who sets the chiefs in their places, who satisfies his Lord, Hori, son of Kama, true of voice, of the-stable-of-Sethos-I, of the Court."

Buhen, temple of Hatshepsut, 16 S: RANDALL-MACIVER, Buhen, p. 38; BREASTED, Anc. Rec., Vol. III, § 645. b. Meneptah-Siptah, year 6.

"King's son of Kush."

Same place, 13 E: RANDALL-MACIVER, Buhen, p. 36 and Pl. 12; BREASTED, Anc. Rec., Vol. III, § 650. "That which made the first charioteer of His Majesty, the king's messenger to every land, Webekhuw(?)sen, son of the king's son of Kush, Hori" (sic. Quite clear in MacIver's photograph; and Prof. Sayce is justified against Profs. Steindorff and Breasted).

c. Undated. By his son. "King's son of Kush."

See below, Viceroy no. 18, a, Ḥori II.

The order of the kings of the XIXth Dynasty after Ramesses II has now been finally fixed by M. Daressy's article on "Ramsès-Si-Ptah" (Rec. trav., Vol. XXXIV). which he publishes proves that Ramesses-Siptah succeeded Sethos II, immediately on the death of the latter in his 6th year. The substitutions in the inscriptions at the Ramesseum prove that Amenmesses was later than Meneptah, while those at the temple of Abydos prove that Amenmesses was earlier than Meneptah-Siptah. The only point about which a question might remain is the identity of Ramesses-Siptah and Meneptah-Siptah, which Prof. Maspero sought to prove (see Annales, Vol. x, pp. 131—138). As Maspero points out, the viceroy Sety was appointed in the first year of Ramesses-Siptah, was still in office in the 3rd year of Meneptah-Siptah, and was superseded before the 6th year of the latter by Hori. The titles given in inscriptions no. 16, b, d, and e, show that the Sety of Ramesses-Siptah is the same as the Sety of Meneptah-Siptah. Consequently, Meneptah-Siptah must have succeeded Ramesses-Siptah. Maspero points out further that Ramesses-Siptah (in 16, b) and Meneptah-Siptah in his tomb have the same Horus-name. concludes that Siptah at first adopted the names $Sekhaenr\bar{e}^{\epsilon}$ and Ramesses-Siptah (see DARESSY, loc. cit., and no. 16, a, b, c), made his trip to Abu Simbel, and immediately on his return, i.e. two or three months after his accession, changed his names to Iakhenra and Meneptah-Siptah. It seems a very remarkable proceeding, but perhaps there were unusual circumstances. Siptah's anxiety to secure Ethiopia and his marriage with Tawesret, the widow of Sethos II (sic), both indicate a certain insecurity of tenure. Then there is the rôle of Bay, who first appears after the change in name. Bay, I think, is to be returned to his rôle of "king-maker." The translation of the Bay-inscription (Leps., Denkm., Pt. 111, Pl. 202, a, c) is just as grammatical when smn is taken as a perf. act. participle as when it is taken as the relative form of the verb, and indeed is more natural (cf. similar construction in no. 17, a, below)—"Bay, who established the king in the place of his father." It is evident that political events of doubtful issue were taking place during the accession and the first year of Siptah. The unilluminating recital of Daressy's ostracon means nothing; an ordinary scribe writing such a document open to the inspection of higher officials would be the last man to take note of a political struggle. On the whole, then, I reach the conclusion that Maspero is right and that the order of the kings after Ramesses II is: Meneptah, Amenmesses, Sethos II, Siptah.

Accepting this order for the kings who followed Ramesses II, their viceroys are: Messuwy, dated by five inscriptions to the reign of Meneptah and by one to that of Sethos II; Sety, dated by five inscriptions to the first and third years of Siptah; and Ḥori I, dated by one inscription to the sixth year of Siptah. Sethos II ruled only six years (see Daressy's

ostracon) and we have only the one record of a viceroy of his in Ethiopia. The name of Sethos II has only been reported from a few places in Nubia—twice from Abu Simbel (Leps., Denkm., Pt. III, Pl. 204, e, f), once from Bîgeh (no. 15, h, above), and once from Sehêl (De Morgan, Cat. des Mon., Vol. I, p. 95, no. 146). Messuwy was his viceroy, having continued in office, of course, during the short-lived reign of Amenmesses. The viceroy Sety, who served at least three years, but less than six, had the shortest term of office yet proved for any viceroy (cf. however, no. 11, Yuni). Hori, who succeeded Sety, is, I am sure, the same as the king's messenger who left his record at Buhen in the year 3 of Siptah, in the viceroyalty of Sety.

18. ḤORI II, son of ḤORI I. Ca. 1180—1160 (?).

IV. and Ramesses V (?).

a. Ramesses IV. "King's son of Kush, Ḥori, son of the King's son of Kush, Ḥori."

b. Undated. "King's son of Kush, overseer of the Southern Lands, King's scribe, Hori.

His beloved son, Wentawuat (?).

c. Undated. "King's son of Kush, overseer of the Gold Lands of Amen-Rec, King of the Gods, [Hori?]." "Son of the king's son, Wentawuat."

See commentary under no. 19 and also under no. 22.

Buhen, temple of Hatshepsut, 5 S: RANDALL-MACIVER, Buhen, p. 24, with Pl. 11. Holds fan and crook.

Under Ramesses III (?), Ramesses

Sehêl: DE MORGAN, Cat. des Mon., Vol. I, p. 84, no. 3. Two men with hands uplifted. The name is obscure, but the traces may be Wentawuat (see c, below).

Stela from Semneh: see no. 19, inscription a.

19. Wentawuat. Ca. 1160 (?)—1142 (?). Under Ramesses VI (?), VII (?) and VIII (?).

a. Undated.

A prayer for the ka of "the king's son of Kush, the overseer of the Gold Lands of Amen-Re\(\tilde{c}\), king of the Gods, \[N.N., made by\] the son of

the king's son, Wentawuat."

And for the ka of "the son of the king's son, the head of the stable of the

son, the head of the stable of the court, the first of His Majesty (sic), Wentawuat."

b. Undated. "....., head of the stable of the Court,
Wentawuat."

ted. I would reconstruct from Birch's translation: "the head of [the stable] of the Court, the son of the king's son, Wentawuat. That which made (?) the ship's captain (?),....., Amenshaa" The latter name is probably

Amenemopet.

"King's son of Kush, overseer of the Gold Lands of Amen-Rec, King of the Gods, the high-priest of Amūn of Khnum-Wēset, door-opener, steward of Amūn at Khnum-Wēset." Part of a stela from Semneh, now in Cairo (letter from M. Daressy); see also LIEBLEIN, Dict., no. 2114 (also from M. Daressy but incomplete). "Un personnage en grand costume de la XIXme dynastie est agenouillé, tenant de la main droite le flabellum," quoted from M. Daressy. The "N.N." is, I believe, Hori II.

Fragment of a stela, Buhen, near temple of Hatshepsut: RANDALL-MacIver, Buhen, p. 79. "Man in the full skirt of the later New Empire."

Abu Simbel, small grotto south of larger temple, hieratic graffito in ink: Edwards, *Thousand Miles*, Vol. II, p. 127, given only in a translation by Birch.

Statue from the great deposit at Karnak: Legrain, Cat. gen., Statues, Vol. II, pp. 25—26. The dress indicates a period towards the time of Ramesses II (Legrain).

c. Undated.

d. Undated.

e. Undated.

"High-priest of Amūn of Ramesses, king's son of Kush."

Brother of the High-Priest of Amūn of

Ramesses, Amenwahsuw.

Stela in London (no. 792): LIEBLEIN, Dict., no. 1002; MASPERO, Momies royales, p. 747. Maspero would place him towards the reign of Ramesses II rather than in the Ethiopian period.

The inscriptions fall into two groups, of which the first, a, b, and c, refer to the head of the stable, Wentawuat, the son of the viceroy, X, and the second, d and e, refer to the viceroy and High-Priest (of a minor temple of Amūn), Wentawuat. The father of the first Wentawuat, is perhaps the viceroy Hori II (see no. 18, c). Unfortunately there is nothing to connect the two groups except general probabilities. Wentawuat is certainly an unusual name, and I have been unable to find any other mention of the name. The head of the stable, Wentawuat, was the son of a viceroy, was much employed in the Ethiopian administration, and was a likely man for the office in succession to his father. It is perhaps not remarkable that on the statue and the stella the lesser title of head of the stable was passed over for the titles of viceroy and High-Priest. In the absence of positive evidence to the contrary, I have identified the viceroy Wentawuat with the head of the stable Wentawuat, and I judge that he became High-Priest of Amūn of Ramesses, or Amūn of Khnum-Waset, after losing his place as viceroy. He was certainly not High-Priest of Amen-Rēć, King of the Gods, and we need not concern ourselves with his place among the known High-Priests.

20. RAMESSENAKHT. Ca. 1142—1122 (?). Under Ramesses IX (?).

a. After Siptah.

"King's son of Kush, overseer of the Lands (sic), fan-bearer on the king's right, king's scribe." Buhen, temple of Hatshepsut, 26 E, on a graffito of the time of Siptah: RANDALL MACIVER, *Buhen*, p. 44.

There is no evidence which connects the viceroy, Ramessenakht, with any other official of the same name who lived in the XXth Dynasty, least of all with the High-Priest, Ramessenakht. See commentary under no. 22, Herihor.

21. Panehsi. Ca. 1120—1100. Under Ramesses XI.

a. Ramesses XI, year 12. "Fan-bearer on the king's right, king's scribe, commander of the army, overseer of the granary, [king's son of Kush?], overseer of the Southern Lands, commander." (Lieblein.)

"Great chief of the treasury." (Lieblein.)
"King's son of Kush."

b. Ramesses XI, year 17.

c. Ramesses XI.

"Hereditary prince, toparch, steward of Amen-Rec, king's son of Kush."

Turin papyrus: PLEYTE and Rossi, Papyri de Turin, p. 87, Pl. LXV a; LIEBLEIN, in Rec. de Trav., Vol. I, p. 141.

Lieblein, op. cit., p. 145.

Turin papyrus: Pleyte and Rossi, op. cit., p. 89, Pl. LXVI; Breasted, Anc. Rec., Vol. IV, §§ 596, foll.

Buhen, northern temple, forecourt, pillar 6: RANDALL-MACIVER, Buhen, p. 86; BREASTED, Amer. Journ. Sem. Lang., 1906, p. 15.

See commentary under no. 22, Herihor.

22. Herihor. Ca. 1100—1120. Under Ramesses XI.

 α . Ramesses XI.

"High-priest of Amen-Rec, king's son of Kush, overseer of the granary"

Commander-in-chief of the army."
"Director of works of all the monuments of His Majesty."

"Fan-bearer on the king's right."

Karnak, Temple of Khonsu: Gau-THIER, Livre des rois, Vol. III, p. 233; BREASTED, Anc. Rec., Vol. IV, § 615.

Same: locc. cit. Same: locc. cit.

Same: locc. cit.

After the reign of Siptah, the records of the viceroys are at present very meagre. According to my reconstruction, indicated above, the family of Hori I produced three viceroys-Hori I, Hori II, and Wentawuat-who held office in succession. Assuming for the moment that this is correct, there remain three viceroys, Ramessenakht, Panehsi and Herihor. Herihor is, of course, dated after Panehsi by his subsequent kingship. Panehsi is dated to the 12th and the 17th years of Ramesses XI (Menmare C-Setpenptah), and must have been the immediate predecessor of Herihor. Ramessenakht is dated after Siptah, and in view of the history of the viceroyalty after Herihor can only be placed before Panelsi. If my conclusion in regard to the Hori family is correct, he must come after Wentawuat. Thus we have the five viceroys, nos. 17 to 21, to cover the period between the 6th year of Siptah and about the 20th year of Ramesses XI, or a period which may be as low as 96 years and as high as 105 years. It is perfectly possible for five viceroys to have covered even the longer period if they each served their time untroubled by changes in the kingship and the priesthood. The history of the period is still obscure, but the group formed by Ramesses VI (Nebmarē^c-Meramūn), VII (Wesermarē^c-Meramūn-Setpenrē^c), and probably VIII (Wesermarē^c-Iakhenamūn) certainly showed enmity towards Ramesses IV and V, and represent a different branch of the descendants of Ramesses III. Nevertheless, in spite of political troubles, the High-Priests of Amun succeeded one another apparently without trace of any disturbance. The High-Priest, Ramessenakht, who appears in the 3rd year of Ramesses IV, was followed by his son, Nesamun, then by another son, Amenhotpe, who appears as late as the 17th year of Ramesses IX (Neferkarē^c-Setpenrē^c). The probabilities are difficult to assess with confidence, but the possibility is manifest that the viceroys may have succeeded one another subject to the same political influences as those which secured the succession of the High-Priests. Whether all political influence rested with the High-Priests, as is often assumed, or whether the movement for bringing all factors of power into the hands of the royal family had already begun, I think one can premise some sort of autocracy standing nominally under the king, yielding him obeisance in all ceremonial actions, and yet able to protect themselves in their places. In most matters, the king's wishes appear to have been carried out, and in everything the command ran in the king's name. Under the circumstances, as far as they are now visible, I think it probable that the five viceroys (nos. 17-21) succeeded one another as given in the list and covered with their terms of office the whole period from Siptah to Herihor (as viceroy). Nevertheless, it must be admitted that a different order is possible, that one or two viceroys may yet be found for this period, and that Wentawuat may possibly belong to the time of Ramesses II. The evidence is not precise and positive. The order of the viceroys adopted by me represents only my interpretation of the material as it stands.

23. PAICANKH. Under Herihor.

a. Undated.

"Fan-bearer on the king's right hand, king's scribe, commander of the army, king's son of Kush, governor of the Southern Lands, high-priest of Amen-Rec, overseer of the granaries of the Pharaoh, etc."

b. Undated.

The same titles.

Abydos, stela in Cairo: Petrie, *History*, Vol. III, p. 203 (illustration); Mariette, *Abydos*, Vol. II, p. 57.

Papyri, see Gauthier, Livre des rois, Vol. III, p. 238; Spiegelberg, in Notices et extraits des MSS. de la Bibliothèque Nationale, t. xxxiv, pp. 203—209. N.B. In the Karnak and Luxor temples, Paicankh is called "high-priest of Amūn," but not "king's son of Kush." He was the eldest son of Herihor and the father of Painozem I. He was never king.

24. NESIKHONSU, queen of Painozem II.

a. Siamūn (?),
year 5.

"First great favourite of Amen-Rēć,
priestess of Khnum, Lord of the
Cataract, king's son of Kush, overseer of the Southern Lands, etc."

b. Siamūn (?),
year 5.

"King's daughter of Kush."
"King's daughter."

Edwards' tablet in Univ. Coll., London: Petrie, *History*, Vol. III, p. 218 (figure).

Coffin, in Cairo: DARESSY, Cat. gen., Cerc. des Cachettes royales, no. 61,030, p. 110.

The political development of the XXth dynasty ended in the adoption of a policy by which all the more important administrations were gathered into the hands of the heir to the throne. Herihor had his son Paicankh appointed High-Priest of Amen-Rēc, overseer of the granary, viceroy of Kush, and commander-in-chief of the army. He himself had held these offices under Ramesses XI (Menmarēc-Setpenptah) being to all appearances the accepted heir of that Ramesses. This was a logical solution of the internal difficulties caused by the intrigues of a powerful bureaucracy and a wealthy priesthood in a state with theocratic tendencies. Subsequent misfortunes were due to other causes. The principle was so sound that when the Libyans obtained Thebes they continued the policy, by that time traditional, of appointing royal princes to be the heads of the chief administrations.

After Paicankh, none of the princes—the High-Priests Painozem I, Masaharta, Menkheperre and Painozem II—held the title of "king's son of Kush." Nor, when Iuwput, the younger son of Sheshonk I, was appointed High-Priest of Amen-Rec, and commanderin-chief of the army, did he or any of his successors assume the discarded title. Only once was the title revived and then it was to satisfy the vanity of a woman (no. 24), to give her an honorary rank which she could not claim as her birth-right. The disuse of the title, "king's son of Kush," is however no proof that the functions of the viceroy had ceased to be exercised, as might seem at first sight. In accordance with the policy adopted for the great administrations, the government of Kush would have been in the hands of the eldest son of the ruler of Thebes, or under the Libyans in the hands of one of the royal princes. Now it is manifest that to such of these as were already king's sons, the title of "king's son of Kush" was of less value than their inherited rank. Another point which may have had some influence in the abandonment of the title by Painozem I was the fact that his father, Paicankh, was politically subordinate to the king of Tanis. Thereafter, Painozem's own sons, Masaharta and Menkheperre, were king's sons by birth. Thus the title of "king's son of Kush" may well have been dropped without any change in the relations of Ethiopia to Egypt and without any break in the Egyptian administration of the southern lands.

The evidences of the relations of Ethiopia to Nubia between 1100 and 745 B.C. are few in number and almost all are of an indirect character. Painozem I (or II) has left a graffito at Sehêl (DE MORGAN, Cat. des Mon., Vol. I, pp. 94, 139) which appears to have been made by him when "commander-in-chief of the army of the South and the North" and to have had the title of High-Priest added later. Menkheperrēc is recorded by a graffito on Bîgeh (GAUTHIER, Livre des rois, Vol. III, p. 266) as High-Priest, son of king Painozem.

Sheshonk I, in his Karnak reliefs, speaks of "smiting the Inuw-Set" (Breasted, Anc. Rec., Vol. IV, §§ 719-720), of Amun, "the maker of Ta-Nehsi" (§ 724) and of the tribute of Ta-Nehsi (§ 724). Under Sheshonk III (?), in the Annals of the High-Priests (§ 770), fine gold of Khenthennüfer is twice mentioned. At Barkal, the latest dated object of the XXth Dynasty which the Harvard expedition found, was a fragment of a statuette (Reg. no. 16-4-316) with the cartouche, Neferkarë'-Setpenrë' (Ramesses IX). A vast area still remains to be excavated, but up to the present, the next dated object was found at the pyramids of Nûri, a fragment of an alabaster vase (Reg. no. 17-3-420) inscribed (1) "....., (2) commander-in-chief of the army, (3) Pashedenbast, true of voice, (4) son of the Lord of the Two Lands, Shashagen-Meramūn," with a number below "......30." This is certainly the same prince as the son of Sheshonk recorded by Legrain, Annales, Vol. XIV, pp. 14 and 39, as having been found at Karnak in an inscription in which his name is associated with that of Pedibast I. Legrain remarks: "Pashodou-Bastit paraît avoir gouverné la Thébaïde sous la suzeraineté de Padoubastit, et c'est à ce titre qu'il a fait 'une grande porte en pierre de grès après qu'il l'avait trouvée menacant ruine.' La porte qui menaçait ruine semble, dans l'occurrence, avoir été celle du Xe pylône." It is clear that Pashedenbast was the son of Sheshonk II or of the Sheshonk III placed by Breasted as the successor of Sheshonk II. I conclude from the Nûri fragment that he included Ethiopia in the government of the Thebaid. The new material for the XXIInd and the XXIIIrd Dynasties published by Legrain has not cleared up the difficulties of the chronology, while Daressy's reconstruction in the Rec. de Trav., Vol. XXXV, pp. 129 foll., exhibits clearly the wide departure which the material permits from the older conclusions. It is obvious that the chronology down to Shabaka needs re-examination. At present, I content myself with suggesting that Pashedenbast may have been the father of Kashta and the person through whom Kashta and Piankhy based their claim on Thebes.

This material is scanty, but there are other circumstances which make it reasonable to conclude that Ethiopia remained subject to Egypt:

- (a) Ethiopia had been thoroughly Egyptianized during the 450 years of the viceroyalty of Kush Even Ramesses IX is reported at Napata, and the Ramessides had no difficulty in holding the country It was in fact to all intents and purposes a part of Egypt.
- (b) Ethiopia appears still completely Egyptianized when the evidence of the monuments of the kings of Ethiopia becomes available, that is for the period from 720 to 500 B.C.
- (c) The assumption of independence by Ethiopia under Kashta was only part of a general movement taking place throughout Egypt itself about 750 B.C. The vassal kinglets of the Libyan monarchy were assuming independence and many of these were of Libyan descent. If there were no other evidence, it would be natural to conclude that Kashta was one of these local dynasts of Libyan descent to whose lot the government of Kush had fallen.
- (d) The historical material for the period in question (1100—720 B.C.) is otherwise very meagre, and the absence of inscriptions dealing with Ethiopia is not a matter of wonder, especially if the country was quietly submissive.

If then, as I conclude, the government of Ethiopia as a province of Egypt was continued during the XXIst—XXIIIrd Dynasties, the general policy of the rulers of Thebes, whether Egyptians or Libyans, justifies the assumption that the agent of the ruler in Ethiopia was one of the princes. The chief titles held by these princes are "High-priest of Amen-Rec" and "first (howy) great commander of the army." As commander-in-chief,

each of these men must have had control of the forces in Ethiopia and, as High-Priest of Amen-Rē^c, he must have had close relations with the Amūn-temples as far as Napata; but there is no special title which might include the government of that land. It may be, of course, that the main business at this time was the collection of taxes, which would be under the bureaux of Thebes, that the country was under the local toparchs, now largely Egyptian, that messengers and treasury officials were sent up from time to time, and that order was maintained by the "commander-in-chief" and his captains.

In any case, Paicankh, the son of Ḥeriḥor, was the last man now known to have borne the title of viceroy of Ethiopia.

(To be continued)

A STELA OF THE REIGN OF SHESHONK IV

By T. E. PEET, B.A.

PLATE VII shows a stela in the possession of Mr Harding Smith. It is of ordinary Egyptian limestone, has a rounded top and measures 35.5 cm. in height and 23 cm. in breadth. In the upper portion is a scene representing the dead man standing before the goddess Hathor. He appears to be nude, wears on the left side of the head the long curl of plaited hair symbolic of youth, and round his neck he has a necklace of beads from which hangs the sign of life. In his right hand he raises a sistrum, and in his left, which hangs by his side, is a menat. The goddess is clothed in a tightly fitting robe, and holds the sign of power in her left hand, while from her right hangs the sign of life. Behind her is a vertical line of inscription which reads "Recited by Hathor Lady of Tep-ihu." The two vertical lines of inscription behind the dead man read as follows: "The menat inin order to propitiate the Golden One." "The Divine Father Ankh-hor, son of Pemay."

The inscription contained in the eight horizontal lines which follow is, like that which describes the scene above, written in poorly cut hieroglyphs mingled with occasional hieratic signs. The translation is as follows:

- It is difficult to see how the group below the *m* should be interpreted. The sign on the right does not seem to correspond to the hieratic form of any sign which would fit the sense. That on the left is, despite the apparent horizontal cut at the bottom, probably merely the stroke. Of the possible suggestions, would give good sense, "The *menat* in the hand," but would require a c; , which would give "A *menat* of wood," is open to the same objection. Perhaps we should read or giving respectively "The *menat* as a protection" or "The *menat* about or behind (him)." is hardly likely, though palaeographically more feasible than the two last.
- ² This is clearly an enigmatical writing of the name Osiris. For the writing $\frac{1}{2}$, cf. Junker, Über das Schriftsystem in Tempel der Hathor in Dendera (Berlin 1903), pp. 6, 26, and for ? see Zeitschrift für ägyptische Sprache, vol. XLVI (1909), p. 95. I do not know of any exact parallel to the present form.
- ³ The last two groups are certainly which, the five dots in a vertical line representing the water pouring from the vase. This should be read kbhw, "cool draughts." Before this come the plural signs preceded by a group consisting of the hieratic form of some kind of vase with the sign \odot beneath. This group may contain the expected sntr, "incense," or mrht, "ointment," or even both.

The sign δ in the next line is probably determinative of $mn\hbar t$, but might just conceivably be the word sign for §\$\delta\$, "thread," leaving $mn\hbar t$ without a determinative.

- ⁴ Not unlike the hieratic for bnr.
- ⁵ I can make nothing of this. One expects a town name, since the preceding sign can hardly be other than *imt*.



STELA IN THE POSSESSION OF W. HARDING SMITH ESQ., R. B. A.

son of the Divine Father Pemay, son of the Divine Father Pesherenmūt, son of the Divine Father Nesmīn. A good burial of honour. May your names abide for ever and ever."

The stela is of interest in that it gives evidence of a local cult of Hathor. Let us first fix time and place. The king 'Okheperrē' is Sheshonk or Shisak IV, the last king of the XXIInd Dynasty, who ruled during the first half of the eighth century B.C.

The title of the goddess, "Lady of Tep-ihu," gives us the scene of the cult, for Tep-ihu is the Greek Aphroditopolis and the modern Aţfîḥ, a town on the right bank of the Nile nearly fifty miles south of Cairo. Aţfîḥ is indeed no more than an Arabic form of the older name. In Greek times it was the capital of the Aphroditopolite nome. Strabo (Geographica, C. 809) mentions the fact that a sacred white cow was kept in the town in his time. This was undoubtedly an incarnation of the goddess Aphrodite, the Greek form of Hathor, and the old name Tep-ihu, "Head of cattle" or similar, would take back the origin of the cult to an earlier date.

But what exactly does the scene represent? Cankhhōr, the Divine Father (a common priestly title), is shown to us in the rôle of an 'Iḥy priest of Hathor. Now 'Iḥy is a name given to Hor-sma-taui, the young son of Hathor, who is sometimes represented on the monuments as rattling a sistrum before her². The king, too, as impersonating the son of the Goddess is on occasion similarly shown and bears the same title of iḥy. Consequently the priests of Hathor, who according to Egyptian ideas represent the king, also impersonate Hor-sma-taui and are therefore entitled iḥy (variant iḥwy).

In the tomb of Amenemhēt at Thebes we find a scene which represents ceremonies connected with the annual Festival of Hathor³. Singer-priestesses (hnwt) stand before the goddess, described as Lady of Dendereh, holding up to her the sistrum and the menat-necklace. This last consists of a bead necklace with two menat-pendants so placed as to hang down the back of the wearer. In another part of the scene two hwy priests of Hathor or Nub "The Golden One," as she is there called, just as in our own stela, advance, holding up in each hand two human-headed castanets. All the objects shown in these representations are instruments of music, including the menats, which doubtless were of metal and jangled as the wearer danced, and all are, as such, peculiarly the property of the Goddess of Joy and Music.

In one of the Middle Kingdom rock-tombs at Mer is a very similar scene⁵, relating probably to this same annual festival of Hathor, though the fact is not actually stated in the accompanying text. There too we see the priestesses with *menats* and sistra, and the *lhwy* priests with the castanets. In another tomb at the same place three *lhy*-priests, whose names are written beside them, are dancing with castanets to the music of a harper who sits before them⁶.

The scene on our stela is now intelligible to us. The deceased man was an *lhwy* priest of the goddess. In his capacity as her young son he wears the side-curl of youth, and as her priest he presents to her the sistrum and the *menat*. How far back this local cult of Hathor at Aṭfiḥ actually goes we have no means of knowing, but proper names and other evidence show it to have been at least as old as the Middle Kingdom.

- 1 Obviously a muddled writing of krst nfrt.
- ² See Blackman, article Priest, Priesthood (Egyptian), in Hastings' Dictionary of Religion and Ethics, and bibliography there given.
 - ³ DAVIES-GARDINER, Tomb of Amenemhet, pp. 94-6, Pls. XIX and XX.
 - ⁴ See, however, Gardiner, Notes on the Story of Sinuhe, pp. 100-102, where this view is disputed.
 - ⁵ Blackman, Rock Tombs of Meir, Part I, Pl. 2. ⁶ Op. cit., Part II, Pl. XV, pp. 24 ff.

ON THE NAME OF AN UNGUENT USED FOR CEREMONIAL PURPOSES

BY AYLWARD M. BLACKMAN, D.LITT.

The word in such combinations as hit nt is, var. hit of cedar, hit in its sense of fore-part, front, with the meaning what is in front in respect of quality.

But so far as I can discover, ht and its compounds and derivatives convey, almost without exception, a sense of what is first or foremost in respect of place and time and not of quality. Thus $\frac{1}{2}$ itself means "forepart" of a person, animal, or object, e.g. the "bow" of a boat, and also "forehead," "beginning," "first-fruits." $\frac{1}{2}$ $\frac{1}{2}$

The only exceptions to the rule, as far as I know, are to be found in the use of $h\mathfrak{B}wty$ in *Piankhi Stele*, line 114, where it certainly seems to bear the meaning "choicest," and again in lines 109, 110, where it is written $\frac{2}{2}$, $\frac{2}{2}$, and where the meaning also seems to be "choicest," "best."

¹ See Gardiner, Journal of Egyptian Archaeology, vol. v, p. 180, footnote 2.

² E.g. Newberry, Ancient Egypt, 1915, p. 97 foll.; Murray, Saqqara Mastabas, pp. 32, 36.

³ Aegyptisches Glossar, p. 80.

⁴ Davies-Gardiner, Tomb of Amenemhêt, p. 65.

⁵ See Woolley-MacIver, Buhen, p. 71 foll.

⁶ E.g. th the list (or 'leading') cow," Pap. D'Orbiney, v, 8.

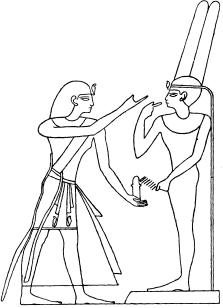
There are many representations on the walls of Egyptian temples of the king anointing

a divinity. We see him, as in the adjoining cut, applying his little finger, which he has dipped in the ointment, to the divinity's forehead¹.

A similar custom still exists in Lower Nubia. During a circumcision-celebration, which I attended at Derr in the winter of 1909, an old woman, after fumigating the guests with incense, anointed them with perfumed grease, smearing their foreheads with it just above where the hair begins to grow.

We have already seen that one of the meanings of h3t is "forehead." May not f f f f f be a fem. nisbe-form of f in that sense and mean "what belongs to the forehead," i.e. "unguent for the forehead," just as f f f in the sense of "bow" of a ship, and f f in the compound f f is the fem. nisbeform of f in the sense of "front"?

This interpretation of \bigcap is supported by the four following passages from the *Pyramid Texts*. (1) "Hail hitt $\left(\bigcap$ \bigcap)," said the mortuary officiant



The king anointing the forehead of Min-Amūn (after Lepsius, *Denkmüler*, Part III, Pl. 189, h).

as he offered unguent to the dead king, "hail thou that art on the brow (imyt-hit) of Horus, that Horus placed on the crown of the head (wpt) of his father Osiris (). I place thee on the crown of the head of my father NN., even as Horus placed thee on the crown of the head of his father Osiris?" (2) The formula pronounced at the offering to the deceased king of hit of cedar began with "Unguent (mrht), unguent, thou art that which is on the brow (hit) of Horus. Thou it is that art on the brow of Horus, who puts thee on the brow of this NN3." (3) As he offered hit of Libya the officiant recited: "O Osiris NN., I bring thee the Eye of Horus which he (Horus) hath taken unto thy brow ." (4) Lastly in Utterance 301 we find: "I put it (the unguent) for thee on thy brow (hit) in this its name of hit ()."

Seeing that $h racket{3}t$ means "brow" and that $h racket{3}tt$ is placed on it, we can hardly be wrong in supposing that $h racket{3}tt$ is a fem. nisbe-form of $h racket{3}t$ in this sense and means, as already suggested, "what belongs to the brow," *i.e.* unguent for the brow. If this suggestion is correct, then the unguents whose names are compounds of $h racket{3}tt^6$ must have been primarily intended for smearing on the forehead, or rather, perhaps, on the hair just above it.

¹ Mariette, Abydos, p. 41; Lepsius, Denkmüler, Part III, Pl. 185 d, 189 h; Blackman, The Temple of Derr, Pl. XXVII.

² Pyr., § 742. ³ Pyr., § 52 a, b. ⁴ Pyr., § 54. ⁵ Pyr., § 453 a.

⁶ For compounds of htt other than htt-s and htt-Thnw see Murray, Saqqara Mastabas, p. 33, items 25—27, p. 35, items 1—3; Petrie, Medum, Pls. XIII, XV.

Since, however, $h\mathfrak{R}t$ is said to be placed not only on the forehead $(h\mathfrak{R}t)$ but also, according to passage no. 1, on the "crown of the head" (wpt), it might be urged that my explanation of the word cannot be maintained and that "best-quality oil" is after all the correct rendering.

¹ See Sethe, Zur Sage vom Sonnenauge, p. 14.

² Grapow, *Urkunden des aegyptischen Altertums*, vol. v (*Religiöse Urkunden*), p. 138. Grapow, in his translation, renders h3t by "Kopf," "head."

NOTE ON THE HARVARD-BOSTON EXCAVATIONS AT EL-KURRUW AND BARKAL IN 1918-1919

By Professor GEORGE A. REISNER

On Dec. 24, 1918, the Harvard-Boston Expedition resumed its work in Dongola Province. I was accompanied by Mrs Reisner, my daughter, and Mr W. G. Kemp. We brought 40 trained Egyptian workmen and filled up the ranks with unskilled labourers from the local villages. The work at Gebel Barkal lasted from Dec. 24, 1918 to Feb. 20, 1919. Preliminary work was begun at el-Kurruw on January 30, full work on Feb. 21, and continued until May 8.

El-Kurruw is on the "east" bank about 8 miles down-stream of Barkal. The desert is a yellowish-grey sandstone plateau rising abruptly at first and then very gently towards the "east." The pyramid field is divided into three parts by two wadys—called by us the "North" Wady and the "South" Wady. Between these two wadys lies the Main Field containing the tombs of the kings. "North" of the "North" Wady is a small field of 6 tombs of queens, called the "North" Field. "South" of the "South" Wady is a much larger field, called the "South" Field, which contains three small groups of tombs of queens and a cemetery of horses. Lepsius' plan in the Denkmäler, Pt. 1, Pl. 122 shows only the "North" and the Main Fields, and is fairly correct as far as it goes. The large square behind represents a stone-quarry. The "westernmost" pyramid (Pyr. I) in the Main Field was the latest in date, ca. 350 B.C., that is 300 years after the next one before it in time. This was the pyramid of a king whose queen was buried in Pyr. II which was in the corresponding position in the "North" Field.

Leaving the two late pyramids out of consideration, four of the tombs in the Main Field were identified as the tombs of Piankhy, Shabaka, Shabataka, and Tanutaman. The tomb of Piankhy might have been either a mastaba or a pyramid, but the other three were pyramids. Now these four tombs of kings of the XXVth Egyptian dynasty (to which I reckon Piankhy), are the last four tombs of a cemetery which contains 20 tombs. The top of the Field, the primary site, is occupied by a circular tumulus of rubble covering a pit with step and side chamber. The orientation is "north-south." On the ground of its position, its type and its contents, I place this tumulus as the first tomb made at el-Kurruw. Near it but lower down the slope, there are three other exactly similar graves. Still lower down towards the "west," stands an improved tumulus grave, like the earlier tumuli but cased in grey sandstone against which a crude brick chapel was built and enclosed in a horseshoe-shaped enclosing wall of sandstone (Ku XIX). A second stone-cased tumulus stands to the "south" of this on the edge of the "South" Wady. Beginning in front of the stone-cased tumulus Ku XIX, a row of eight square stone-cased mastabas runs from "south" to "north" right across the Main Field to the edge of the "North" Wady, Ku XIV, XIII, XI, X, IX, XXIII, VIII and VII. In front of VIII is a very small tomb, Ku XX, while a larger one, Ku XXI, lies in front of the space between VIII and VII. The type of pit and burial, and the orientation are the same in mastabas XIV, XIII, XI, X, and IX as

in the tumuli. Ku XXIII and XXI are of the same type of mastaba as the others, but have a simple open pit orientated "north-south" like the tumuli. Mastabas VIII and VII have a different type of masonry from the others and have been restored in later times. Their pits are simple open pits but orientated "east-west," the orientation which from this date became traditional in Ethiopia. These burial pits are like those of the queens buried in the time of Piankhy, which were roofed with corbel vaults of stone. I have no doubt, therefore, that the open pits of XXIII, XXI, VIII, and VII were roofed also with stone corbel vaults.

Still lower down and about 20 metres "west" of the row of mastabas lies the tomb of Piankhy, built in front of the space between mastabas X and XI (the only pair which are separated by a space). The tomb of Shabaka is about 30 metres "south" of that of Piankhy and in front of mastaba XIV, the least important in the row. The site of Shabataka's tomb is behind mastaba VIII, which has been restored in the same kind of masonry as that used in the Shabataka tomb. Tanutaman selected a site close against the "southern" side of the tomb of his father Shabaka. Tirhaqa, it will be remembered, made his tomb at Nûri and it may be noted that the el-Kurruw field would not have borne so large a pyramid as Nûri I. It is clear that the builders of the four kings' tombs at el-Kurruw were conscious of the fact that these tombs were part of an older cemetery which was to be treated with respect.

The tomb of Piankhy is merely the older type of corbel-roofed pit with one addition. This pit was much larger and deeper (6 metres) than the older pits, and it was unsafe to build the heavy corbel after the burial. A doorway was cut in the rock, as well as a very rough, small stairway to give access to the pit, which thus became a large rectangular chamber. This is without doubt the first stairway tomb constructed in Ethiopia. The pyramid or mastaba stood directly over the chamber, so that the front of the pyramid or mastaba rested on the rock wall at the "east" end of the stairway. Thus the chapel must have been built on the debris filling the stairway—a very weak feature. Shabaka's masons rectified this by passing the stairway through a rock-cut tunnel to a rock-cut chamber and building the chapel over the tunnel. His pyramid was still directly over the large rectangular burial chamber. Shabataka ended his stair at the mouth of the tunnel and gave the tunnel a flat floor. Tirhaqa's extremely elaborate tomb shows this same plan but with the flatfloored tunnel converted into an ante-room with rabbetted doorway. Tanutaman took over this nucleus plan of an ante-room with a large rectangular chamber. Atlanersa, Nûri XX, repeated this plan and it is the traditional plan used for all queens' tombs down to the last at Nûri. Senkamanseken, Nûri III, introduced the three-room stairway-pyramid as a piece of ostentation and that type became traditional for the tombs of kings.

Thus the development of the three-room stairway pyramid can be traced from the old tumulus at the top of the knoll in the Main Field of el-Kurruw through the stone-cased tumuli, the mastabas and the pyramids of Piankhy and his successors to the first of the three-room type at Nûri.

It is clear that the older graves at el-Kurruw represent the cemetery of an important local family which may be regarded as the ancestors of Piankhy and his successors. The graves of the ancestors are sixteen in number and include females as well as males. For reasons the details of which would now take too much time, I divide these sixteen graves into six generations, the last of which consists of mastabas VIII, VII, and XX. Mastaba VIII is the most important of the three and contained without doubt the grave of the last chief

of the family before Piankhy. Unfortunately owing to plundering, the name of not one of these mastaba owners was recovered. The last chief of the family before Piankhy was no doubt Kashta and I believe that mastaba Ku VIII was the tomb of Kashta.

The "North" Field contained the tombs of five queens, the earliest of whom, Ku XXII was buried in the reign of Piankhy (or soon after). The others were as follows:

- 2. Ku IV, Khenensaiuw, king's wife, king's sister, king's daughter, time of Shabaka (or soon after).
- 3. Ku III, Nenpery, king's wife, king's sister, mistress of the Two Lands, time of Shabataka (or soon after).
 - 4. Ku VI, probably Pekankhary (?) of the Dream Stela, time of Tanutaman.
- 5. Ku V, Qalhata, king's mother, king's sister, also of the Dream Stela, time of Tanutaman, or soon after.

Thus it is clear that the "North" Field contained women of the blood royal who were probably descended from the queen of Ku XXII (time of Piankhy). Amenirdis was buried of course at Thebes. Peksater was probably buried in the "South" Field, as that contained at least one other descendant of Kashta. I am inclined to believe therefore that Ku XXII was the tomb of Kenensat.

In the "South" Field the earliest group of tombs, Ku 51—55, was on the "southern" bank of the "South" Wady. Four of these, 52—55, were close together, so close and so exactly aligned that they were certainly made at the same time and it is difficult to avoid the conclusion that all four burials were made at one time. The fifth grave, Ku 51, was apart, behind No. 52. All were of the corbel-roofed type. No. 53 was the most important, and in it was found a stela giving the name of Tabiry, "the foremost great wife of the king of His Majesty, Piankhy, living forever," "the daughter of Alara (cartouche), the daughter of Kasta (sic, cartouche)," and "the great one (fem.) of the Temehuw."

Further "south," were two groups each consisting of two stairway tombs. Ku 62, the nearest to the Piankhy group, was dated by an inscription on a broken ivory plaque to the reign of Shabaka. Ku 71, the furthest "south" was on archaeological grounds (tomb type, shawabtis) assigned also to Shabaka, while 72 was assigned to Shabaka and 61 to Tanutaman. These tombs were all smaller and less important than the contemporary tombs of the "North" Field, but the Piankhy tombs Ku 51—55 are larger than the Piankhy tomb Ku XXII in the "North" Field.

If we calculate the six generations of ancestors at 20—30 years each, the total period amounts to 120—180 years. If we take the beginning of Piankhy's reign at about 740 B.C., we get 860—920 B.C. for the date of the oldest ancestor, he of Ku, tum. 1. I reconstruct the history as follows. About the time of Sheshonk I, a chief of the Temehuw, the southern Libyans, imitating the example of the northern Libyans in Lower and Middle Egypt, came into Dongola province over the old oasis road and settled at el-Kurruw. This is based on Libyan arrow-heads of flint found in the tumuli, and on the Tabiry stela. He almost immediately obtained control of the trade routes between Egypt and the south and of some of the gold mines, for the fragments of alabaster vessels and faience found in the tumuli are of the best Egyptian work and gold was abundant. The dead weight of gold beads dropped by the plunderers in Ku, tum. 1, amounted to 38 gold sovereigns. With this control as the material basis of their power, these Libyan chiefs extended their territory until Kashta obtained control of Thebes and forced the adoption of his daughter, Amenirdis I, by Shepenwepet, the daughter of Osorkon-Saisit, as high-priestess of Amūn.

Thus the conclusion which I ventured some time ago that the Ethiopian royal family was of Libyan origin is in all probability correct. The Ethiopian proper names, at any rate the earlier ones, are to be examined as Libyan, not as Nubian or Meroitic, names. I have been long of the opinion that the early Ethiopian names bore resemblances in formation to the Libyan names known from the Egyptian inscriptions.

One other point has some interest. About 120 metres "northwest" of the Piankhy group Ku 51—55, we found a cemetery of horses. There were four regular rows of graves, —the first (on the "north") of four graves, the second and third of eight each, and the fourth again of four. All were plundered. The second row was dated by a cartouche amulet to Shabaka and the third by a number of such amulets to Shabataka. It is clear that row four is to be assigned to Tanutaman and row one to Piankhy. The horses were buried upright in the graves with their heads away from the tombs of the kings and bore originally their trappings and many strings of beads and amulets on their necks. The alignment of the graves leads me to believe that these horses were sacrificed at the royal funerals. This custom was introduced by Piankhy, who took great pride in his horses, as we know from the conquest stela.

One last word in conclusion without going into the details. There was only one Piankhy: Piankhy-Wesermaatra and Piankhy-Seneferra are one and the same king. Shabaka also had two throne names—Neferkara and Wuahibra (Athribis stone). The same is true of Shabataka,—Dedkara and Menkheperra (horse-graves). Piankh-Alara, given by Nastasan, is also the great Piankhy, probably confused by the later scribes with Alara the daughter of Kashta. The order of the kings is as follows:

1.	Kashta					Ku VIII ?
2.	Piankhy				• • •	Ku XVII.
3.	Shabaka			• • •		Ku XV.
4.	Shabataka		•••	• • •		Ku XVIII.
5.	Tirhaka					Nûri I.
6.	Tanutaman					Ku XVI.
7.	Atlanersa					Nûri XX.
8.	Senkamanseken					Nûri III.
9.	Anlaman	• • •	• • •			Nûri VI.
10.	Aspalta					Nûri VIII.

And so on as in my Nûri list. There are no other royal tombs, and no other kings are admissible to the list.

These are the chief results. But the work both at el-Kurruw and at Barkal has given a mass of material on many minor questions.

NOTES AND NEWS

THE post-war reorganization of the work of our Society has necessitated various changes in its constitution, and these, set forth in a circular letter distributed among our Members and Subscribers, evoked the most encouraging and satisfactory expressions of agreement. Before this number of the Journal is issued it is hoped that the alterations in our Articles of Association that were hereby rendered needful will have been accepted at two Extraordinary General Meetings convened for the purpose. The principal modifications to be made are the following: (1) The name of the Egypt Exploration Fund is to be changed to Egypt Exploration Society; (2) the distinction between Members and Subscribers is to be abolished, and the uniform status of Membership substituted; (3) Members will subscribe two guineas per annum, besides paying an entrance fee of one guinea; (4) all Members will receive this Journal gratis, and will be enabled to purchase other publications of the Society at a reduction of $33\frac{1}{3}$ per cent. off the retail price; (5) a Library will be formed and more lectures will be held than in the past, thereby emphasizing the fact that our Society aims at being an association of persons interested not only in excavation but also in the scientific study of Egyptology.

In connection with the Library, the Society already possesses a good nucleus in the books and periodicals that have been sent to it from time to time; and various Members of the Committee have already promised additional works. A particularly valuable gift has recently come to us from our late Secretary, Miss Emily Paterson, in the shape of a complete bound series of the Transactions and Proceedings of the Society of Biblical Archaeology and also a copy of the collected works of Sir Peter Le Page Renouf. The Rylands Library has presented us with Mr F. Ll. Griffith's fine Catalogue of the Demotic Papyri there preserved, and the Trustees of the British Museum have munificently promised examples of all the official publications which come within the scope of our Society. An appeal is here made to Members and Subscribers to contribute to the Library any Egyptological books that they can spare. In order to avoid unnecessary duplication it would be well if intending donors would send to the Secretary the titles of their proposed gifts. Presentations to the Library will be notified in the Journal from time to time.

In view of many difficulties, and particularly the political situation in Egypt, it has been found impossible to equip and send out an exploring expedition during the present season. An important site has long since been applied for, but the negotiations concerning it have not yet, in spite of all the Committee's efforts, been carried to a successful issue. It is not thought likely that much excavation will be carried out by anyone during the next few months, unless it be at a centre like Luxor. In the meantime there is plenty of work to be done at home. Professors Grenfell and Hunt are about to issue Vol. xiv of the Oxyrhynchus Papyri, and Dr Gardiner and Mr Peet are busily engaged in the preparation of the second volume of *The Inscriptions of Sinai*. The *Journal*, it is hoped, will henceforth appear punctually on the first day of every quarter. Among the articles already received for Vol. vi are some of the deepest interest and importance.

The first two lectures given by the Society in the present season will have been already held by the time this number of the Journal comes into our readers' hands: the first, by Mr T. Eric Peet, on November 21, when the subject dealt with was the Egyptian Origin of the Alphabet, and the second, on December 12, by Professor P. E. Newberry, who chose as his topic "The Tombs of the Kings at Thebes." Three further lectures have already been arranged, and the dates proposed (though these are subject to the convenience of the Royal Society, to whom we are again deeply indebted for the loan of their excellent rooms at Burlington House) are the Fridays January 23, February 20, and March 19, at 8.30 p.m. In January Mr T. E. Peet will discourse upon "El-Amarna, the Capital of the Heretic King"; in February Mr H. Idris Bell has kindly undertaken to speak upon "The Historical Value of Greek Papyri"; and in March we hope to have the privilege of listening to Monsieur Jean Capart, Conservator of the Musée du Cinquantennaire at Brussels, whose subject will be his recent researches in the domain of Egyptian Art.

All who were acquainted with the late Professor Leonard W. King, a greatly esteemed member of our Committee, will desire to associate themselves with the following tribute to his memory contributed by Mr H. R. Hall, his colleague at the British Museum:—It is with great regret that we have to chronicle the premature death, on August 20 last, at the age of 49, of a prominent worker in the closely allied field of the Mesopotamian archaeology and history, Professor Leonard W. King, Assistant-Keeper of the Department of Egyptian and Assyrian Antiquities in the British Museum, and Professor of Assyriology at King's College, London University. Professor King had been ill for some time, and overwork during the war as a member of the Intelligence Staff of the Admiralty, while he was at the same time pursuing without intermission his private Assyriological studies, no doubt contributed to his illness. We can only deplore in his loss that of one of the most prominent students and exponents of Assyriology. His work both as an editor and translator of cuneiform inscriptions and as the latest historian of Babylonia and Assyria is well known to all. As a critical historian his work was of the first order, and was of course marked on every page by original research. His duties at the British Museum as Assistant-Keeper of the Department which includes Egyptian antiquities naturally brought him into constant contact with Egyptological interests and problems, and though he never wrote on Egyptian subjects, either officially or privately, his knowledge of them was considerable and his interest both in Egyptian antiquities and in the kindred archaeology of Crete and prehistoric Greece was very great. In him the British Museum loses one of the most prominent and capable of its officials, and his colleagues and personal friends a most valued coadjutor, always eager to share his knowledge with others, and a most genial companion, one of the most cheerful, kindly and unselfish of men. "Whatsoever thy hand findeth to do, do it with all thy might"; "prove all things: hold fast that which is good,"—there have been many of whom these words might be said, but of none with more justice than Leonard King.

M. Bénédite desires to call attention to an unfortunate slip in his article on the Carnarvon Ivory: Vol. v, p. 227, note 1, fifth line, for 'hare' read 'greyhound'; the word in the French original was *lévrier*.

NOTICE OF RECENT PUBLICATION

Egyptian Mythology. By W. MAX MÜLLER, Ph.D. In vol. XII of The Mythology of All Races. Boston, Marshall Jones Company, 1918. Pp. xiv, 328. Two Plates and 220 figures in text.

The title of this admirable work is somewhat misleading; for it is by no means devoted solely to the mythology of ancient Egypt, but is a pretty complete survey of the whole field of Egyptian supernaturalism, special chapters being devoted not only to the myths, but to local and solar cults, nature-gods, the Osirian Cycle, the other principal gods, foreign gods, worship of animals and men, life after death, ethics and cult, magic, and the development and propagation of the religion. This is of course all to the good: a detailed account of Egyptian myths alone could hardly be made very interesting to general readers, by reason of the heterogeneous and contradictory character which the material (consisting largely of mere allusions) has for us at present; on the other hand the more studies that competent scholars give us of Egyptian religious ideas and practices the better. The book is palpably the outcome of a great amount of solid study, and is at the same time not lacking in fresh and interesting ideas, showing it to be much more than a mere compilation. The illustration is copious and original, and in itself goes far to confirm the statement in the preface that Egyptian doctrines often found a greater degree of expression in religious art than in religious literature. It is, however, a serious defect that in spite of the copious annotation of the text (there are 68 pages of notes at the end of the volume) references to the illustrations are not given; even professional Egyptologists would be hard put to it to identify many of the most striking ones. The total absence of hieroglyphic type is probably a distinct advantage in a work of this kind.

In his Introduction Dr Max Müller sketches the study of the subject in the nineteenth century, and lays great stress on the fact that both the classical and modern worlds have tended to overrate vastly the philosophical and mystic significance of Egyptian religion. He insists that we have to accept the fact. whether we like it or not, that the most highly developed people of the ancient near East held in religion a place no higher than that which is occupied by some barbarous negro tribes. This failure of Egyptian religious thought to refine itself (i.e., to lay increasing stress on subjective values) with increasing cultural development is attributed by the author to the extreme conservatism of the Egyptians. But this explanation, to be a satisfactory one, should further show why the conservatism was one-sided, tenacious of primitive beliefs far more than of primitive ways of living; why, for instance, they adhered to their forefathers' views on the nature of the sun, but broke clean away from their forefathers' tomb and temple architecture by employing stone instead of brick. Dr Max Müller is, I believe, endeavouring to explain a problem which, as formulated by him, is not really a problem at all. Is there not a fallacy in the assumption that in some way a development in material culture brings about a refinement in religious views? For in what way can material progress affect beliefs which are independent of material experience? A culture of a purely practical nature might conceivably develop much further than our present one, and its practitioners might yet hold the beliefs that food-offerings were of benefit to the dead, and that rain would fall if prayed for; there is nothing in the one to react on the other. The fallacy has probably come into existence from the spectacle of certain other ancient cultures (notably those of the Greeks and Hindus) in which refined beliefs about unseen things and high material civilisation are found together; but a little reflection will show that the causes of the former are as little material as themselves. They may be stated to be chiefly: abstract speculation; thought of the scientific type (both imagination and scepticism playing a part in these); and the personal teachings of certain religious innovators. And where these factors do come into play they often fail to influence the main stream of the religious life of the race, from a lack of general interest in them. Thus, any surprise which we may feel at the static and primitive character of Egyptian religion throughout its history, should exist, not in view of the high material culture obtained, but because we might well expect a race with the Egyptians' long history, high intelligence and preoccupation with religious affairs to have produced more original thinkers about the subject than they did. We have to do here, it seems, with a fact of racial temperament; the Egyptians, possibly because of their African blood, were not only almost incapable of evolving new and higher conceptions about religion, but were also not interested (at all events until the Christian era) in such new conceptions. Ikhnaton, the one real exception of which we know, was probably frustrated quite as much by lack of sympathy as by vested interests.

The enormous importance attached to Egyptian doctrines by the Greeks still seems to await a satisfactory explanation; Dr Müller deals with it in his Introduction on the usual lines of *ignotum pro magnifico*, "you Greeks are but children," etc., but this seems hardly sufficient to account for the traditions about such men as Solon, Democritus and Plato, to say nothing of the unanimous statements of the Neoplatonists.

Of special interest is the discussion, in the chapter on nature-gods, of the world-tree in Egyptian mythology; this conception is probably new to modern scholarship. Among many noteworthy features and ideas may also be singled out the evidence brought together (p. 157) of the early cults of Nubian gods, the references to the astral element in the mythology, the statement that if we knew the full history of even the greatest gods we should find them to have been originally spirits or fetishes protecting only the property of single peasants, and the view in the ninth chapter that the cause of the primitive veneration of certain animals is to be sought neither in their superior strength or swiftness nor in gratitude for their usefulness, but in the fear that they may possess reason and a language of their own which man cannot fathom and which connects them with the supernatural world.

The chapter on the Osirian Cycle contains no reference to the theory that in origin Osiris was no more than the lately deceased king. In the chapter "Life after Death" one might have expected somewhat clearer ideas than are expressed as to the nature of the ka and the ba. Dr Müller renders them both as 'soul,' and seems to consider any distinction between their natures to be due only to "some very late theologians."

The chapter on "Magic" states, in its opening sentences: "It is.....very difficult to state where religion ends and magic begins; and to the Egyptian mind magic was merely applied religion." I would suggest that the popular feeling about the two things should afford the fundamental criterion, and that to depart from this raises more difficulties than it obviates; namely, the view that in religious rites the thing desired is sought for as a boon, while in magical rites the thing desired is obtained by force majeure. Submission and domination are thus the characteristic attitudes of religion and magic respectively. Judged by this test, of course, about nine-tenths of what are regarded as Egyptian religious documents must be called magical.

A few philological points call for notice. It is somewhat misleading to translate nisbeh forms as e.g. "the One Before the Westerners," "the One of the City Ubaset," as on p. 21; it imports a nuance of uniqueness which the original words do not possess. Why not "he who is before the Westerners," etc.? "Gold" was the epithet given to Hathor, and not, as is stated on p. 30, "the golden." The seven petals (hardly a seven-pointed star) between the inverted horns over the head of the goddess of writing are, says the author (p. 53), a careful indication of a symbolism which we do not yet understand. It is hardly possible not to see in it a play between if the "seven" and if the "she who has put off (the horns)." It is clear from the earliest writings of the name of Harsaphes that this name does not mean "the ram-faced" as stated on p. 134, but "he who is over his pool (hri-i-i)." There is good evidence that the god-name which Dr Müller thinks (Ch. VIII, note 12) may be read Dedunti is to be read Kherti (hrti). The Graeco-Roman image of Ophois (Wp-wiwt) with the lower part of the body in the form of a serpent (Fig. 219) doubtless rests on a Greek popular etymology of the name from $\delta \phi_{is}$. Similarly the interpretation of Harpokrates as imposing silence was probably helped by an assimilation of the kr in this name to Egyptian gr "to keep silence."

There is a lengthy and up-to-date Bibliography by the Editor, Dr Louis H. Gray.

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SOME REMARKS ON THE SHEIKH EL-BELED

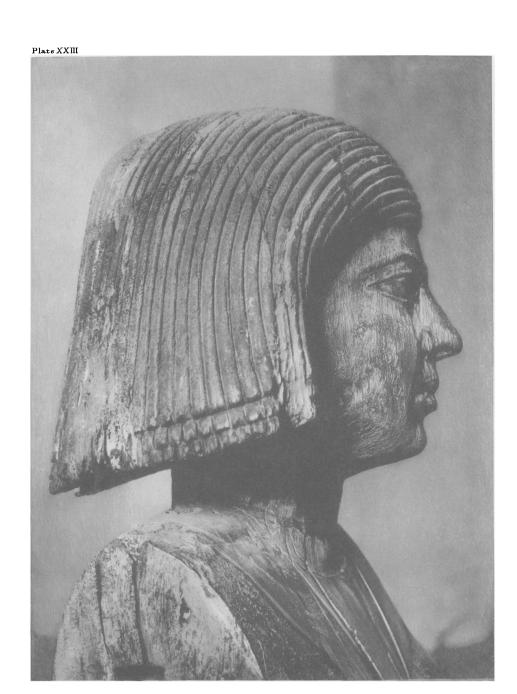
By JEAN CAPART

It would be unjust to condemn the old archaeologists for not having conducted their excavations with the same exactness and method that we have the right to expect from our modern explorers. We must take into account the circumstances under which they had to work, and try to extract from their publications as much useful information as possible without wasting time in lamenting the lack of precision there displayed. From this point of view, it seems to me that the comparison of certain documents discovered by various excavators during the last few years helps to throw light on some of the more celebrated Egyptian monuments. The aim of this article will be to furnish some examples of that method of research.

A fleeting glance at these two statues will show how completely different they are in appearance, and nobody could possibly dream of maintaining that both should be considered faithful likenesses of the person whom they claim to represent and whose name is carved on the base of each. The remark made by the authors of the discovery with regard to the first statue without doubt furnishes us with the explanation of the differences shown by the two pieces: they are really "commonplace images manufactured according to fixed types." It is interesting to insist upon this point and to show that the two types afforded by the large statues of Nakht were precisely those fixed by a tradition which certainly prevailed at Assiût. And indeed, besides the two statues from the chapel, there were found, in the funeral chamber, at the bottom of the shaft, lying beside the coffin and still in

¹ Chassinat-Palanque, Fouilles dans la Nécropole d'Assiout, pp. 29 foll., with Pls. III to XXVIII.

² Op. cit., pp. 31 foll.



THE WIFE OF THE SHEIKH EL-BELED

their original place, eight wooden statues or statuettes and one of stone. All the wooden figures, which vary in size (two examples, Pl. XXIV, bottom), show us the deceased standing in almost exactly the same attitudes which we have met with in the large statues from the chapel. On the one hand, there is the personage with the shaved head, or perhaps with very closely cut hair; he is dressed in the long apron, which descends below the knees and the edge of which he holds in his right hand. The other type shows us the same personage with his head covered by a wig, dressed in a short loin-cloth, the arms hanging at the sides, but the hands grasping the small sticks which represent, as is well known, the remains of the large bâton and the sceptre.

We shall not trouble ourselves here with the problem presented by the different character of the stone statue of Nakht or with that of the statues and statuettes in wood. We will content ourselves with bearing in mind that, throughout the tomb, all the standing figures represented the defunct in one or other of two fundamental aspects, (1) without wig and in a long skirt, (2) with wig and in a short loin-cloth.

The necropolis of Mêr, some thirty miles distant from Assiût, shows us, by yet another example, that these two varieties cannot be put down to a caprice on the part of Nakht, but that there is every probability that we have here to deal with a fixed rule. In fact, in the tomb of a person called Necankhpepikem (), of the VIth dynasty, were found, side by side, in 1894, two statues which represented the person in question, in the one case wearing a wig and a short loin-cloth, and in the other without a wig and with a long garment of which one extremity is held to the side by the right hand? The inscription on one of the statues shows that he was a person of considerable importance described as "Governor of Upper Egypt, Chancellor to the King of Lower Egypt, sole friend, lector-priest and overseer of the priests."

At first sight, one might perhaps be tempted to consider the two variants as a peculiarity of the district round about Assiût. But another example of the two types placed side by side is made known to us by the excavations of M. de Morgan among the maṣṭabas of the Old Kingdom in the necropolis of Dahshûr, where tomb No. 24 yielded a numerous series of figures representing the deceased and his servants³.

The type of statue with the long garment is comparatively rare in the Old Kingdom⁴. We are acquainted with it, however, in the case of a personage whom one can undoubtedly describe as illustrious in Egyptian Art, and who is no other than the High-priest of Ptah Ra^cnūfer. The tomb of Ra^cnūfer was discovered in the course of Mariette's excavations at Sakkareh. In his great posthumous work on the maṣṭabas, published by Maspero, we find some precise indications with regard to this⁵. The maṣṭaba of Ra^cnūfer, of great size, is characterized by a small exterior chamber attached to the southern part of the east face.

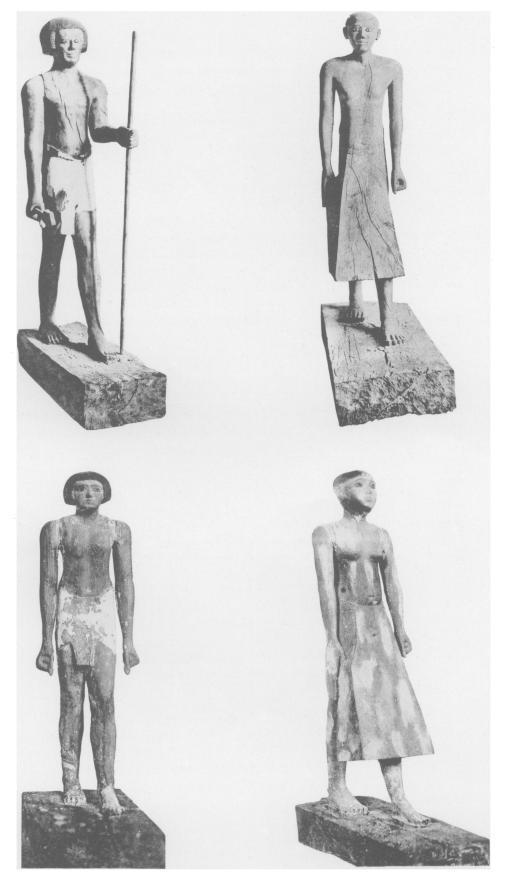
¹ See Spiegelberg, Der Steinkern in der Hand von Statuen, in Rec. de Trav., Vol. xxvIII, pp. 174-6.

² Borchardt, Statuen und Statuetten.....im Museum von Kairo, nos. 60 and 236.

³ J. DE MORGAN, Fouilles à Dahchour en 1894-95, pp. 18 foll., with Pls. III, IV. The name of the deceased as given by the editor (Sankh-ouaiti) probably rests upon an incorrect reading of the title

⁴ H. Bonnet, Die ägyptische Tracht bis zum Ende des neuen Reiches, p. 26: "Der Schurz mit Schrägfalte."

⁵ A. Mariette, Les Mastabas de l'Ancien Empire, pp. 121 foll.



wooden statues of nakht, found in his tomb at assiûț

The plan, or more accurately the sketch, made by Mariette (Plate XXV, at top), indicates to us the place occupied by the two statues of Racnūfer and by that of an unknown lady named Hekenu of their backs to the wall that faces the door; and in the angle of the wall out of which the door opens, on the right, was the statue of the woman. The inscriptions engraved upon the base of the two statues of the man show plainly that there can be no doubt about the identity of the person represented in either case, and it is a strange error that has led one writer at least to separate the two statues and attribute them to two different people bearing the same name². If we examine the two statues of Racnūfer (Pl. XXVI) we note that they give us once again the two fundamental variants that have been seen in the statues of Assiût. The one depicts the person without a wig dressed in a long garment, of which the edge is turned back at the side, since the artist has despaired of expressing in stone the gesture of the hand holding the edge of the garment. The other statue represents Racnūfer, his face framed in a very wide wig, and dressed in the short loin-cloth to which the name of gala-dress has been given³.

But the same long garment has been known for many years in one of the most famous works of antique art; it is the dress worn by the Sheikh el-Beled. This man exhibits a wigless head and wears the long garment that hides the knees and ends in a large fold on the right side. But if so, does it not seem likely that one should regard the statue of the Sheikh as one of a pair of effigies? This is the point that we will now proceed to investigate.

Everybody knows that the Sheikh was discovered in the course of Mariette's excava-Less is known, unfortunately, of the circumstances of the find. posthumous work, which has just been quoted, one comes across certain summary indications on the subject, accompanied by a sketch of the plan4. It will be noted at a single glance how great a similarity there is between the tomb of Racnūfer and that of the Sheikh. Both are gigantic mastabas without an interior chamber, of which the chapel is constituted by a small structure attached to the mastaba at the southern extremity of the east face. In the case of the Sheikh, a granite stela has been let into the face of the mastaba. facing the entrance door of the chapel reveals a little niche, marked B (see Plate XXV) middle). Mariette writes thus: "The importance of these explanations will be understood when it is realized that it is at the back of this niche B, belonging to the little chamber, that the precious wooden statue was found.... The head, the arms, the trunk, even the stick was intact; but the legs and the base had rotted irremediably, and the statue was only held upright by the pressure of the sand on all sides. At door C of the small chamber, in the sand and overturned at the place where it evidently had been thrown, was the other wooden statue....(the female statue)."

As it will be seen, the analogy between the two cases is very great. The two Racnūfers were upright, facing the door; the Sheikh likewise. The woman with Racnūfer was in the angle near the door; the wife of the Sheikh (Plate XXVII, left; the head is reproduced in the photogravure, Plate XXIII) was beside the door, in the sand and overturned.

¹ Borchardt, op. cit., nos. 18, 19 (Racnüfer); no. 53 (Hekenu).

² L. Curtius, Die antike Kunst, Berlin 1914, pp. 80-1 and Figs. 74-6.

³ Spiegelberg, Zu dem Galaschurz des alten Reiches, in Rec. de Trav., Vol. xxi, pp. 54-5.

⁴ A. Mariette, op. cit., pp. 127-9.

The stone statues do not seem to have moved since ancient times; the wooden statues, having less resistance, present themselves to us in exactly the positions one would expect: the sand, blown by the wind and accumulated into a slope within the chamber, has preserved at its place in the niche the statue of the Sheikh, in spite of the fact that the base and the feet had rotted away. The statue of the woman, not being supported by the sand, tumbled down when the feet were destroyed, and what remained over, namely the trunk, slipped down the slope of sand to the entrance of the chapel.

It is a little surprising to find that no work exists in which the Sheikh el-Beled (see Plate XXVII) has been properly published. Moreover, when one tries to collect a little precise information on the subject, one soon perceives the obscurity in which the question is enveloped. First of all, in what year was the discovery made? In the biography of Mariette published in the Bibliothèque Égyptologique, Maspero reports that during the year 1860 Mariette, "leaving the search for sarcophagi and statues of the Old Kingdom in the Pyramid-fields under the care of Vassalli and Gabet, hastened straight to the Upper Egyptian sites.... The famous Sheikh el-Beled, the statue of Racnūfer, that of Userkaf and twenty others were unearthed almost at the same minute." The Sheikh must consequently have been found in 1860, but Mariette was not there at the time of the discovery.

The discoveries of statues made in the course of the excavations executed under the direction of the great French archaeologist were notified at once to the Académie des Inscriptions et Belles Lettres, on the basis of the letters which he addressed to his colleagues. For example, in the Comptes Rendus of 1860, the following lines may be read2: "M. Mariette has also found at Sakkareh some twenty statues resembling in style and workmanship the famous scribe squatting on his heels which visitors to the Louvre so much admire; there is the same feeling, the same truth to nature, the same polychromy, sometimes obtained by artificial means, sometimes by the use of naturally coloured materials such as the milky quartz and the rock crystal used with such good effect for the white of the eye and the eye-ball respectively." In the Revue Archéologique of the same year³ may be read the extract of a letter from Mariette to E. de Rougé in which he says, among other things, the following: "Before leaving Sakkâreh, I will mention to you the discovery, made also in this necropolis, of a few private tombs in which I have found some twenty of those statues of ancient art, which are so admirably typified by the squatting scribe of the Louvre. A certain Ranofré, amongst others, a priest of the temple of Ptah, contemporary with the Fifth Dynasty, has ornamented his tomb with life-size statues which are not inferior to the scribe...."

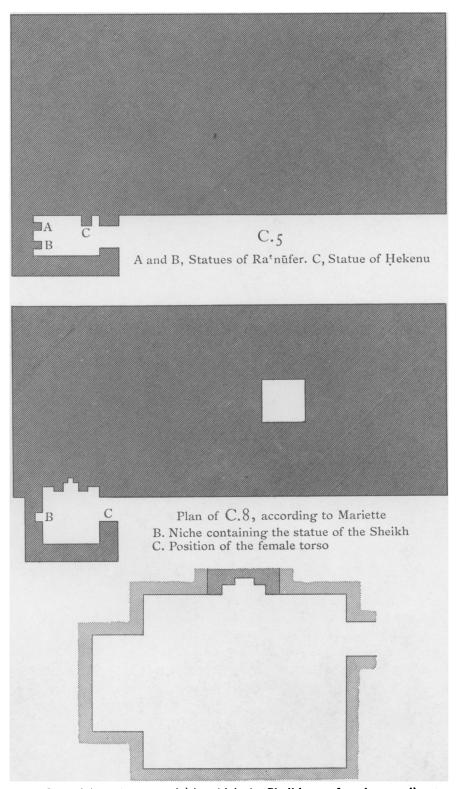
Let us emphasize the fact that Mariette mentions Racnūfer, but does not allude to the Sheikh el-Beled! Nevertheless, it was certainly in this year that he was found, according to the words of Maspero which we have quoted and of which we have confirmation in a passage of Vassalli's book on the Egyptian excavations. Mariette's collaborator attributes to the campaign of 1860 the discovery "of a beautiful wooden statue of a standing man,

¹ See A. Mariette, Oeuvres Diverses, Vol. I, pp. cviii—cix.

² Vol. IV, p. 73. See too E. DE ROUGÉ, Analyse d'une communication faite par M. de Rougé sur les fouilles dirigées par M. Aug. Mariette dans la vallée du Nil en 1859-60 in Oeuvres Diverses, Vol. IV (Bibliothèque Égyptologique, Vol. XXIV), pp. 34-5.

³ Nouvelle Série, Vol. 11, 1860, p. 23.

⁴ L. Vassalli, I Monumenti istorici egizi, il Museo e gli scavi d'antichità eseguiti par ordine di S. A. il Vicerè Ismail Pascia. Notizia sommaria. Milan, 1867, pp. 16—17.



The Chapel (on a larger scale) in which the Sheikh was found, according to Murray, Saqqara Mastabas, Part I, Pl. XXXII

holding in his right hand (sic) the bâton of command, whose eyes, made of a transparent glassy paste and set within bronze eyelids, give to the face a most life-like expression. This statue," he adds, "is one of such high artistic merit, that it may be considered the masterpiece of the Egyptian Museum." The Photographic Album of de Rougé's Mission (1863-64) confines itself to the observation that this statue is remarkable for the finesse of its execution and the naturalness of its pose¹. In de Rougé's Report we read the following: "The portraits of these antique statues, of which we have brought back some excellent specimens (photographic), show even to those least disposed to admit it, that the first principle of early Egyptian art was nature herself, faithfully observed and already at that time skilfully reproduced.... Such is the praise we can give to the artists of that early age, equally when they content themselves with the use of limestone, when they employ the splendid woods which grew in the Valley of the Nile or, finally, when they attacked the hardest rocks²." The Sheikh's name is not even mentioned! In December 1864 Renan manifests his enthusiastic admiration for the wooden statue: "It is a marvel without equal, this wooden statue of the Boulaq Museum, to which, when it was found, the fellâhîn unanimously gave the name Sheikh el-Beled 'the Sheikh of the village.' It is really the statue of a certain Ptah-Sé, son-in-law of the king. The statue of his wife was found close to him3." Let us notice that Renan puts down the discovery to the fellahîn and not directly to Mariette. I have not been able to find any earlier document in which the name of Sheikh is given to the wooden statue. Renan believes him to have been the son-in-law of the king, evidently confusing him with the Ptah-shepses of the large biographic stell found by Mariette at the same period. Later, during the Paris exhibition of 1867, when suddenly the whole world talked of this masterpiece of Egyptian art, the name Ra-em-ké was given to it. If Renan believed him to be the son-in-law of the king, Fr. Lenormant knew that he was probably of humble descent, though he had nevertheless the honour, or misfortune, to receive as wife a girl of royal blood⁴. By 1887 the legend that he was a Superintendent of Works seems well-established. Maspero writes on the subject⁵: "With the Sheikh one descends several degrees in the social scale. Ramké was Superintendent of Works, probably one of the heads of the corvées who built the Great Pyramid, and belonged to the middle classes. He has contentment and bourgeois self-sufficiency written all over him. One sees him standing and surveying his workmen, with a stick of acacia in his hand." In 1895, in his great Ancient History, the same author tells us that "Kaâpîrou, the Sheikh el-Beled, was probably one of the heads of the corvées who built the Great Pyramide." In 1911 he adds the following traits: "He was a boorish-looking, strongbacked, squat man, short in the leg, with energetic but common features; he spent his days more often in the office than in the open air, and after the age of fifty suffered from that superabundance of flesh which attacks men of his class and temperament."

¹ DE Rougé, Album photographique, no. 96.

² De Rougé, Rapport sur la Mission accomplie en Égypte en 1863—1864, in Oeuvres Diverses, Vol. IV (Bibliothèque Égyptologique, Vol. XXIV), p. 320.

³ E. Renan, L'Ancienne Egypte, in Mélanges d'histoire et de voyages, Paris, 1878, p. 44.

⁴ Fr. Lenormant, L'Antiquité à l'exposition universelle—L'Égypte, in the Gazette des Beaux Arts, no. 23, 1867, pp. 154-7.

⁵ Maspero, Archéologie égyptienne, 1st edition, pp. 209-10.

⁶ ID., Histoire ancienne, Vol. 1, pp. 407-8.

⁷ ID., Histoire générale de l'Art Égypte (Ars Una), p. 88.

We see that, if the history of the Sheikh is brief, his legend tends to develop, bringing ever new confusion into the interpretation of this famous monument. Various names are attributed to him: Ptah-Sé, Ra-em-ké or Ramké, Ka-aper or Kaâpîrou, not to mention Hotep-her-ichou, of whom we shall speak later and whose name was taken from an offering-table discovered in the same tomb.

Opinions differ as to the date when he lived, some favouring the first half of the Fourth Dynasty (Mariette¹ and Maspero²), and others the end of the Fifth (Bissing³ and Borchardt⁴). He has been made the son-in-law of a king, a Superintendent of Works, a head of *corvées*, and the attempt has been made to define with precision his physical and moral characteristics. We shall see in good time how much of all this can be retained.

The wife of the Sheikh (Pls. XXIII and XXVII, left) has not received much more satisfactory criticism. I have quoted above an extract from Mariette's posthumous book, stating that the torso of the woman was found at the entrance of the chamber. The same statement appears already in the guide to the Boulaq Museum of 1864⁵. Renan, in the article from which I quoted, after speaking of the Sheikh, says that the statue of his wife was found close to him. Lenormant, in the notice of the Gazette des Beaux Arts, repeats the same statement and tries, curiously enough, to give an exact characterization of the disposition of the woman: "It is enough to look at the head of the woman to realize that it was she who wore the breeches in that household. With all his administrative importance, Ra-em-ké, to judge by his portrait, was a good sort of fellow, easy-going, and at the same time weak in his private life. The face of his wife reveals a different character. She has tightly closed lips, hard features and a haughty, imperious expression. Looking at them both, the portraits of the woman and her husband, one can easily guess that the latter played the rôle of a sort of prince-consort, singing very low beside his wife." Arthur Rhoné writes in 1877: "That venerable ancestor had with him his wife, whose bust lay at a little distance; a very charming figure of wood, whose distinguished type indicates a finer and more aristocratic race than that of the master of the house; the physiognomy is a little sardonic and capricious. May she perhaps have been, as has been suggested, a woman of foreign race or of superior rank, some daughter of a king given in marriage to a person of small importance, as was sometimes done in those days⁶?" Maspero in the first edition of his Archéologie Egyptienne⁷ expresses himself thus: "The image of his wife, which he had caused to be buried beside his own, is unfortunately much damaged. It is no more than a trunk without arms or legs. It is impossible not to recognize in her a good type of Egyptian lady of the middle class, with common features and a peevish expression." The same author, when publishing the torsos, repeats that it was found by Mariette in the same tomb in which he discovered the Sheikh el-Beled. In the second edition of the Archéologie Egyptienne the unfavourable diagnosis of the woman is accentuated, this being the picture that we get of her: "She is of haughty bourgeois stock, common, peevish, rude to those who come in contact with her: she is the image of several fellahîn women I have met in the

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<sup>1</sup> For example in the Album du Musée de Boulaq, notices of Pls. 18 and 19.
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² For example in the great *Histoire ancienne*, Vol. 1, p. 408, n. 1.

³ Fr. von Bissing, Denkmäler ägyptischer Sculptur, notice of Pl. 11.

⁴ Borchardt, op. cit., p. 32.

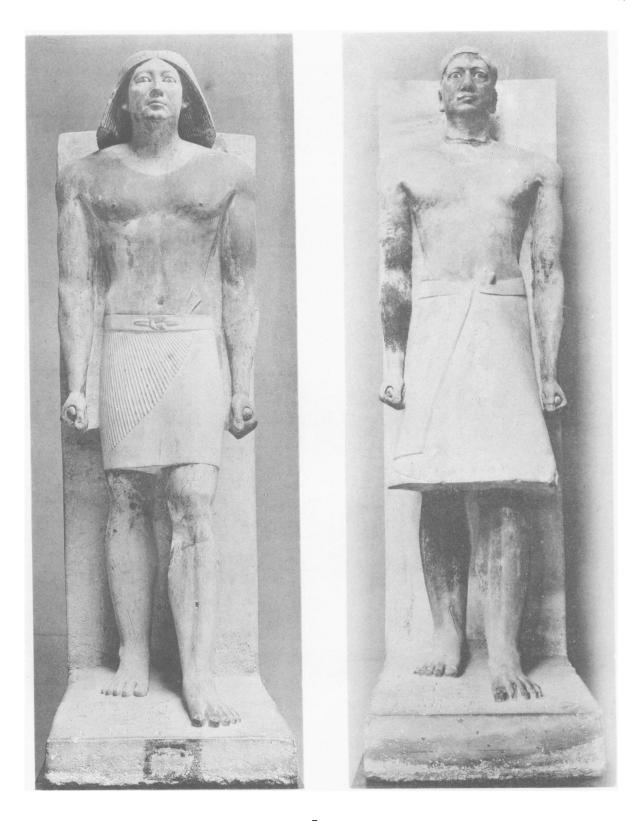
⁵ A. Mariette, Notice des principaux monuments exposés.....à Boulaq, 1864, p. 162, no. 371.

⁶ A. Rhoné, L'Égypte à petites journées, p. 82.

⁷ Paris, 1887, p. 210.

⁸ Le Musée Égyptien, Vol. 1, Pl. XIV, with pp. 13—14.

⁹ Paris, 1907, pp. 214-5.



THE TWO STATUES OF RA'NUFER IN THE CAIRO MUSEUM

villages of Upper Egypt, and I can easily imagine that she was no less quick with her tongue when occasion arose for her to nag her husband or to abuse her companions." But from this moment Maspero refuses to consider her as the wife of the Sheikh, affirming that the "tradition" relating to her discovery was contradicted by the evidence of Reis Roubi, who was one of Mariette's workmen'.

Fortunately, during the winter of 1903-4, the scholars of the Egyptian Research Account, while exploring a number of tombs excavated formerly by Mariette, opened, among others, the tomb of the Sheikh. Miss M. Murray, who published the result of the work², tells us that she had Reis Khalifa, son of Reis Roubi, to direct the excavations, and she adds that Reis Roubi, "whose memory was still as keen as ever, then gave instructions to his son where to find inscribed tombs³." The mastaba of the Sheikh was a gigantic mastaba of bricks, to which was joined an exterior chamber, also of bricks, a type of tomb now well known through the excavations at Gizeh to be of the Fourth Dynasty 4. Nobody will want to question, after the archaeological discoveries of the first years of this century, that the massive portion of the building and the adjoining chamber belong to one and the same monument. The statues found in the chapel-room are really part of the funerary furniture of the personage for whom the mastaba had been constructed. Now in this chamber was found, still in place, and let into the mastaba, a magnificent stela of red granite, formed out of a single block, and bearing one line of inscription, of which Mariette has chief lector-priest Kacaper."

The Sheikh, then, is a personage whose chief function was of a religious order. His name is Kacaper, which perhaps signifies "well-equipped double." It would be unwise to attach too much importance to the fact that a table of offerings was found lying in the chapel with "the inscription underneath," and bearing the name of a certain the chapel with "the tomb of this personage in the necropolis of Sakkareh is known: it is the Maştaba D 60 of Mariette, now in the Leyden Museum, of which the inscriptions bear exactly the same titles as are given on the table of offerings found in the chapel of the Sheikh. Miss Murray tells us that "the beautiful wooden statue of the so-called wife of the Sheikh el-Beled was found, Reis Roubi told me, in the doorway leading northward out

¹ Maspero, Guide du visiteur au Musée du Caire, 1902, p. 27, n. 35. Also fourth English edition, 1908, p. 49 and pp. 55–6.

² M. A. Murray, Saggara Mastabas (Egyptian Research Account), Part I.

³ Op. cit., p. 2.

⁴ Compare, for example, the photograph published by H. Junker, Vorbericht über die zweite Grabung bei den Pyramiden von Gizeh, 1912 bis 1913, in Anzeiger d. phil.-hist. Klasse d. kais. Akad. d. Wissensch., 11 June, 1913, Pl. II.

⁵ Sir Gaston Maspero in his *Guide du visiteur au Musée du Caire*, 1902, p. 20, writes thus: "the statue was upright in the recess of the granite stela which occupied the western wall of the tomb." This is in flat contradiction with the notes of Mariette published in *Les Mastabas de l'Ancien Empire* and quoted above. Further it would be necessary to read 'eastern wall' for 'western wall.'

⁶ This is a rare name. For its composition we may perhaps compare the foreign name , Steindorff, Zeitschr. f. äg. Sprache, Vol. xxxvIII, p. 18.

⁷ A. Mariette, Les Mastabas de l'Ancien Empire, pp. 340-48; Boeser-Holwerda, Beschreibung der ügypt. Sammlung.....in Leiden: Die Denkmüler des alten Reiches, pp. 11-18, with Pls. V to XXI.

of the tomb¹." That is a decisive piece of evidence, taken direct from Reis Roubi's own lips at a moment when the clearing of the tomb could hardly fail to revive his recollections.

It will be remembered that Mariette declared the statue of the Sheikh to have been found upright at the back of a niche, which in his sketch of a plan appears to be a narrow opening in the wall facing the entrance-door. One cannot help being very much surprised, on examining Miss Murray's scrupulously exact plan (see Plate XXV, bottom)², to find that Mariette's little niche has become a large one, occupying nearly the whole wall. In face of this fact will it be found too daring to assume, as I have done above, that there must have been two statues and not one, representing Kacaper in two kinds of dress and coiffure? The Sheikh has no wig and wears the long garment with the fold at the side. The second statue, in accordance with my previous remarks, ought to exhibit him wearing a wig and short loin-cloth, one part of it perhaps goffered, this being the ceremonial dress.

I have asked myself whether it would not be possible to find among the statues of the Old Kingdom in the Cairo Museum the counterpart of the Sheikh. I propose to recognize it in the torso No. 32 (Plate XXVII, right; the head alone, Plate XXVIII)³.

Let us first of all note that on several occasions Maspero has chanced to mention the torso immediately after the Sheikh and his wife⁴. Borchardt, in his Catalogue, describes first the bust, then the woman and then the Sheikh. One might easily believe that the two authors were struck by certain analogies of technique presented by the three pieces. The torso No. 32 is cut out of a piece of wood in the same way as the woman; the arms of the torso are joined to the body by means of pegs like those of the Sheikh. The incrusted eyes have been described by Borchardt in identical terms in the cases both of the torso and of the Sheikh. In both, again, the nipple of the breast is made by means of a small wooden plug fitted into the chest, a rather rare technical procedure which is employed in the case only of the right breast of the woman. An argument which I do not desire to press is the coincidence that the legs are missing here just as in the case of the Sheikh. Finally, the provenance of the torso is given by Borchardt, who tells us it was discovered at Sakkâreh in January 1860. It will be remembered that 1860 is precisely the year in which the Sheikh was discovered.

The torso shows us a personage wearing a wig and dressed in exactly the kind of garment that is needed to enable us to reconstruct, in connection with the Sheikh, a pair consisting of two figures reproducing the varieties of statues we have noticed in the tomb of Raćnūfer, as well as in the burials of Dahshûr, Assiût and Mêr.

The conclusions of this article may be rapidly formulated as follows:

1. We have been able to observe that at Assiût, at Mêr, at Dahshûr and at Sakkâreh it was the custom to place statues of the dead in the tomb, representing him in two aspects differing as regards his hairdress and his garment. (a) The first type shows us the person in question without a wig, the hair shaved off, or the cranium covered by a skull-cap; the dress is a long tunic hiding the knees, of which the extremity is held in the right hand or turned back at the right side. (b) The second type wears a wig, of which one perceives

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<sup>1</sup> Murray, op. cit., p. 4.
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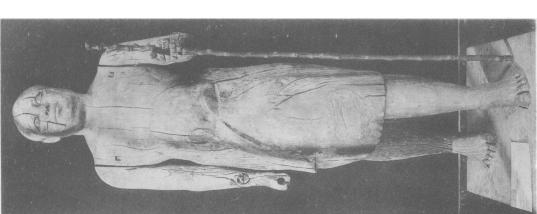
² Op. cit., Pl. XXXII.

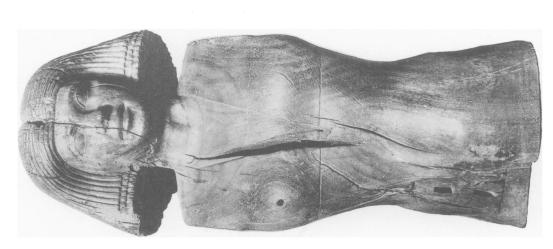
³ Borchardt, op. cit., p. 31 and Pl. VIII.

⁴ Maspero, Guide, 3rd edition, p. 53; Archéologie Égyptienne, 2nd edition, p. 215.

⁵ Vassalli quitted Egypt in May 1860 in order to join Garibaldi's army. See Maspero's biography of Mariette (above p. 228, n. 1), p. cxi, n. 1.

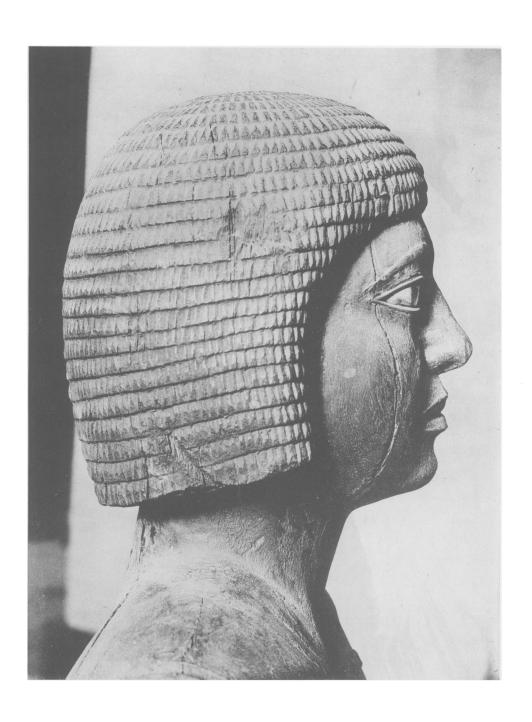






THE STATUES PRESUMED TO COME FROM MAŞŢABA C.8 AT SAĶĶÂREH 1. The Sheikh el-Beled. 2. The female Torso. 3. The male Torso No. 32

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HEAD OF THE WOODEN TORSO, CAIRO, No. 32

two kinds: (a) the curled wig following the general line of the head, and (β) the wig with locks widening out over the shoulders. The garment in this case is the short loin-cloth, often pleated at the side.

- 2. In the tomb of Ra^cnūfer at Sakkâreh we have been able to examine the exact position occupied in the chapel by the two stone statues of Ra^cnūfer accompanied by the statue of his wife Hekenu¹.
- 3. In comparing the arrangements of this latter tomb with that of the Sheikh el-Beled, we have seen that it was possible to remove all doubts as regards the wife of the Sheikh, and to indicate the possibility of the presence of a second male statue in the tomb.
- 4. The examination of the documents relating to the discovery of the Sheikh has revealed the obscurity and uncertainty attaching to this question. Mariette was not present when the discovery was made, and his sketch of the chapel is faulty.
- 5. The excavations of the Egyptian Research Account fortunately give us more precise information. The tomb dates from the Fourth Dynasty, and the defunct was a priest and was called Kacaper.
- 6. Finally we have seen that it is not too rash to suppose that the bust No. 32 of the Cairo Museum belonged to the same tomb. If we admit this thesis, we are thereby enabled to assume for the Sheikh a pair of statues for the man, supplemented by the statue of the woman, comparable to the set of statues in the tomb of Racnūfer.

The most serious objection to my thesis, and one which will certainly be brought, is the great difference that exists between the two heads which I propose to attribute, notwithstanding this fact, to Kacaper. I hope to have the opportunity of showing in another article that this objection is not as vital as it might seem to be at first sight, and that the problem of the portrait-statues of the Old Kingdom will have to be dealt with in a different way than has been done up to the present. The hypothesis that the difference in age explains the difference of features in statues of one and the same person does not solve the difficulty satisfactorily. In conclusion, I will beg those who disagree with me to examine critically the different statues of Khephren found in the temple of his pyramid.

¹ Two male and one female statue occur in many cases. In the tomb of Nakht at Assiût the statuette of a woman rested upon one of the two great statues of the men. *Cf.* also the two statues of Sepa and the one of Nesa in the Louvre. In the statue-chamber of the tomb of Hesy at Sakkâreh there are still three bases, the disposition and size of which suggest a similar grouping, see Quibell, *Excavations at Saqqara* (1911–12), Cairo, 1913, Pl. I. I cannot here discuss the question of the double statues or the double stelae, nor yet of the pseudo-groups of the Old Kingdom.

The sculptor of the tomb of Ti, in the inscription relating to the transport of statues, has desired to mark the difference existing between two types of standing statues. The determination of the word for "statue" shows us three statues, in conformity with the rule by which the triple representation of the determinative or of the word-sign serves to indicate the plural. These three statues are, nevertheless, different; one is seated, the other two are standing. In the case of the latter, it will be remarked that the first one wears the round wig that follows generally the contour of the skull, and the garment with the triangular apron; the second has the broad wig widening towards the base, and the cloak shows the transverse fold. It is not quite the same state of affairs as on the statues with which we have been concerned, but the distinction is an analogous one. See Steindorff, Das Grab des Ti, Pl. 61, left door-post.

- ² W. Spiegelberg, Die Darstellung des Alters in der ülteren ägyptischen Kunst vor dem Mittleren Reich, in Zeitschr. f. ügypt. Sprache, Vol. 54, pp. 67—73.
- ³ L. Borchardt, Die Statuenfragmente aus dem alten Reich, in Hölscher, Das Grabdenkmal des Königs Chephren, pp. 89 foll., with Pl. XVI.

THE HISTORICAL VALUE OF GREEK PAPYRI¹

BY H. IDRIS BELL, M.A.

It is a commonplace that in the writing of history the present age is pre-eminently the age of documents. Not, indeed, that the use of documents—by which I mean all historical evidences other than written history or oral tradition—is a modern innovation. Herodotus himself used documents of a sort, Thucydides yet more obviously; and their example has been followed by innumerable successors. But only within the last half-century has the search for documentary evidence become so systematic, its utilization attained such scientific precision, as at present. This multiplication of documents is not, perhaps, an unmixed benefit to the historian. It is a fallacy to assume, as some researchers appear to do, that historians and oral tradition may lie but that documents cannot; and moreover their accumulation may easily become an embarrassment and the historian disappear beneath a flood of references like M. Tapir in Anatole France's Île des Pingouins. Nevertheless, an abundance of documents neither removes the necessity nor precludes the possibility of cultivating the art as well as the science of history; and with whatever reserves we may qualify our enthusiasm for documentary research it remains true that to make accessible any new source of such evidence is to do a service to historical study.

These remarks are of course truisms which need no emphasizing for members of a body like the Egypt Exploration Society, whose primary aim is to discover and give to the world documents of various kinds; but it is no bad thing at times to take stock of our position, and it seemed to me that it might serve a useful purpose to sketch briefly certain of the advantages which may be obtained from a study of one class of our documents, the Greek papyri. It is of course impossible, in a paper of this kind, even to touch upon the innumerable points of detail which the papyri illustrate; my object is merely to indicate some of the chief directions in which they may prove useful to others than the mere specialist in papyrology.

In the first place, the papyri serve, like all such records, to correct the false focus in which we are so apt to see the past. As we read the works of historians we come to regard history as a succession of outstanding personalities and of dramatic or epoch-making events; while, if we study social and economic rather than political history, the economic processes, the social changes which have moulded the destinies of nations, are there presented to us with a clearness and a logical coherence of which we are not conscious in the events of our own time, and which, we may be sure, were not perceived by contemporaries. When, however, we turn from the writings of historians to the documents of the period with which they deal we are at once struck by a curious want of correspondence between them. I remember, for example, my own disappointment, when working at English charters during my first year at the British Museum, to find how slight were the traces left upon them by the events of English history. I must have read some hundreds of charters dated during the Wars of the Roses; but I cannot recall a single reference in

¹ A lecture given for the Egypt Exploration Society, Feb. 20, 1920,

them to that disastrous conflict, a single indication that anything unusual was happening in England; and much the same remark might be made of the Great Civil War, a struggle which was of far more universal concern than the Wars of the Roses. This is surprising enough in mere legal deeds like charters; but when, in reading the Greek papyri, which comprise not only such deeds but public and private correspondence and administrative documents of all kinds, we find how rare even there is any allusion to the events of history as ordinarily understood, the discovery assumes a significance not to be mistaken. "History," it is clear, for the average man, affects but the smallest part of life. Even when the papyri do, by an exception, refer to historical events, they present them under an aspect very different from that of the historian. Esthladas, for example, in the well-known Paris papyrus, writes to his father as follows¹:

"I have several times written to you to play the man and take care of yourself until things settle down, and now again you will do well to encourage yourself and those of our circle. For news has come that Paôs is sailing up in the month of Tybi with considerable forces to suppress the insurgents at Hermonthis and to treat them as rebels. Look after my sisters too, and Pelops and Stachys and Senathyris."

We would gladly know more of this insurrection at Hermonthis, of the causes which led to it, of the forces on each side, of the course it ran before it was put down; and if we can hardly expect Esthladas, writing to encourage his father and not for purposes of historical record, to relate for our benefit facts which must have been only too painfully familiar to his correspondent, yet we might at least hope to learn something of the popular attitude towards these events; but no such information is to be got from his letter. To the historian Esthladas is of importance merely for the glimpse he gives us of the insurrection, but to him the insurrection was of importance only for its bearing on his own destiny and that of his family. And so it is in other cases. Among the papyri from Apollonopolis Parva, consisting largely of the papers of Apollonius, strategus of that nome, is to be found important evidence concerning the great revolt of the Jews in the reign of Trajan; but it is casual and fragmentary, dropped by accident as it were amid the heat and tension of a crisis too actual to be regarded as the material of history. Thus, in one of these papyri, Aline, the wife of the strategus, writes to her husband, who has left for what we may call the front:

"I am constantly sleepless, filled night and day with the one anxiety for your safety. Only my father's attentions kept my spirits up, and on New Year's Day I assure you I should have gone to bed fasting but that my father came in and compelled me to eat. I implore you therefore to take care of yourself and not face the danger without a guard; but just as the strategus here leaves the bulk of the work to the magistrates, you do the same²."

To that rather solemn person the historian it is a matter of supreme indifference that Aline should have spent a sleepless night or failed to enjoy the New Year festivities, nor is he much concerned for the fate of Apollonius, who is to him merely a cog in the wheel of the Roman administrative machine; but Aline resolutely refuses to take the historian's point of view. She may probably enough have shared the popular detestation of what one

¹ WILCKEN, Chrest. 10. The date is 131-130 B.C.

² P. Giss. 19. It should be added that the letter does not expressly state that Apollonius was then engaged in fighting the Jews, but in view of the other evidence in the collection there can hardly be a doubt of it.

of these letter-writers calls the "impious Jews," but her prime concern is not for the fortunes of their rising, still less for the issues involved in the struggle between the majesty of the Roman power and the chosen people; she is not even anxious that Apollonius should, in the cant phrase of the war, "do his bit"; for to her he is not a character of history at all but a concrete individual, her husband and the father of her children.

Most often, however, the papyri do not vouchsafe us even such scanty glimpses into the recorded events of history as these. It is the common events of daily life, the little vexations or triumphs, the petty schemes of forgotten men, with which they deal. Perhaps a trivial instance will illustrate this as well as another.

The twenty years from A.D. 250 to 270 witnessed many remarkable and important events. Emperors rose and fell, pretenders to the Imperial dignity appeared, to win success or to fail, the unprecedented spectacle was seen of a Roman Emperor taken prisoner by the Persians, Germanic invaders penetrated deep into the Empire, Athens was sacked by the Goths, Antioch taken by the Persians, a great pestilence ravaged Europe and the East, the systematic evangelization of Gaul began; and if from political we turn to economic history we find that process of decay and disintegration going on which led to the great financial crisis at the end of the century and left to later Emperors a legacy of trouble and difficulty from which the Empire never recovered. During these eventful years¹ there was living at Arsinoe, the capital of the Fayyum, a certain Alypius, a man of considerable substance, and a lessee of extensive domain lands. Among the papers of Heroninus, one of his agents, is to be found much of his correspondence, together with other papers relating to his property. Now, it is not with external events that this correspondence deals; the capture of Valerian, the fall of Antioch, the destinies of Emperors and pretenders find no echo there; its themes are the details of agricultural routine and domestic economy. On Jan. 17, 256, Alypius wrote to Heroninus to announce his impending visit, and it is interesting to extract a short passage from his letter:-

"By God's will expect us to come to you on the 23rd; as soon therefore as you receive my letter have the bath well heated, ordering logs to be carried for it and collecting chaff from every side in order that we may have a hot bath this wintry weather; for we have determined to stay at your house, since we are going to inspect the other establishments also and to regulate the affairs of yours. Take care to prepare all other requisites also, above all a good pig for our companions; but see that it is a good one, not a lean, useless thing like last time²."

Which things are an allegory. The historian will of course record for us the fortunes and misfortunes of the Emperors, the soldiers, the statesmen, and will trace the economic processes and social changes of the period; but at the same time, if he is a judicious historian, he will not neglect the doings of Alypius and his kind; he will remember that to the average man, who, in all ages and all countries, makes up at least ninety-five per cent. of the human race, there is a charm in roast pig which not the fall of Empires nor the dethronement of immemorial deities can wholly take away.

But, it will perhaps be objected, do you really suggest that the historian should fill his pages with the doings of obscure men and women preserved for us by the chance survival of a few papyri? Is he to neglect the great personalities who have influenced, the great events which have marked, the development of human history, in order that he may

¹ The extreme dates found in the correspondence of Alypius are actually 254 and 268.

² P. Flor. II, 127.

chronicle the small beer of Egyptian villagers? The task is impracticable and of no profit; for it is the very function of the historian to select the more important facts from the less important, and out of the tangle of innumerable particulars to extricate the main threads which determine the texture of the world's life.

That is of course true, but it is not the end of the matter. Greek papyri may still be of the highest utility alike to the writer and to the student of history. To the historian they will serve as the "acid test" of the objectivity and concreteness with which he presents his narrative. In writing history, where it is necessary to select and arrange the material, and from a multitude of small details to deduce the general sequence of events, nothing is easier than to lose touch with reality, to schematize the development too much, and to make statements more sweeping than the facts justify. The best safeguard against this fault is to steep oneself in the life of the time and by the study of such more personal documents as have survived to learn in what way contemporaries reacted to the events of their day, what were their moods and sentiments, what their general attitude to life. Even in the end history must inevitably give a foreshortened and too highly coloured view of its subject-matter; and it is for this reason that the student of history, if he wishes to acquire a just appreciation of the past, will do well to supplement his reading of historians by the study of such documents as the Greek papyri.

What I have said applies of course to all historical study; but it has a special significance for Greek papyri. For the remoter the age we deal with, the greater is apt to be that distortion of which I have spoken, while at the same time documents of the more intimate and personal kind grow rarer. Now the papyri furnish a wealth and variety of material to which there is no parallel in any other branch of ancient history; and while it would of course be absurd to apply to other parts of the Graeco-Roman world the information as to points of detail which we derive from them, yet the general impression may, I think, fairly be taken as valid for the whole of it; and thus, not the specialist on Egypt only but the student of ancient history in general will find it very profitable to pay more attention to papyrological evidence.

This, then, is the first advantage I would claim for papyrological study, that it tends to correct the necessarily false focus in which history is presented to us. The second is really but an extension of the first. It is that the papyri reveal to us a class not represented in the works of historians. We tend to conceive the story of the remote past as a great drama played out between distinguished personalities, the men and women exceptional by their talents or the circumstances of their lives; while behind them, guessed at rather than seen, the dull, grey, neutral material out of which these protagonists of history carve their empires or build their polities, we are half conscious of other lives, that vast majority of the human race whose deeds no historian has recorded and of whose names and fortunes no memorial remains. But that is not our attitude to the history of our own times. We do not regard ourselves as merely foils for the glory or infamy of the Clemenceaus and Lloyd Georges and Bethmann-Hollwegs, the Fochs and Ludendorffs. Rather, these men are to us the representatives and executants of the popular will, and we estimate their good or ill success by the degree in which they promote the general well-being. Their political raison d'être lies, we feel, not in the great events with which history will associate their names but in the routine of ordinary life, the commerce and agriculture, the social progress, the science and art in which we are ourselves engaged and which, in practice, we assume to be the chief end of our existence.

Such is our own attitude; and when we study the records which the men of other ages have left us we find that such was theirs also. A philosophical view of history will, I think, approve this attitude; will see the protagonists of history not in the distinguished few but in the undistinguished many who profited by their labours or suffered for their errors, and the real stuff and substance of history not in the events which historians have made famous but in the common activities of daily life. The popular view confuses the drama with the setting. It is in the unrecorded events that the true drama lies; the kings and "purple tyrants," the soldiers, the statesmen, the adventurers, are no more than the framework of history; and in the last analysis Alexander has conquered, Octavian disputed the mastery of the world with Antony, Louis XIV and Napoleon have schemed and agonized, only in order that the common man might till his land and barter his wares and marry and beget children and be gathered to his fathers in peace. In his heart the common man knows this. He spares for the great ones of the earth the attention of an idle hour, and then turns with renewed zest to the ordinary pleasures and personal cares which fill up the measure of his days:

"Brightness falls from the air; Queens have died young and fair; Dust hath closed Helen's eye";

but Hodge will enjoy his beans and bacon and Alypius and his friends sample their roast pig with none the less gusto on that account.

Unfortunately the further we get from our own days the more difficult does it become to discover what were the activities and the mental attitude of the average man, and for the greater part of ancient history we have no material whatever. Society in classical Athens finds, in varying degree, some illustration in the comedies of Aristophanes, the dialogues of Plato, the Memorabilia of Xenophon, and the speeches of the Attic orators; but their evidence is fortuitous and partial. For Athens of the third century B.C., we have the New Comedy, whether in the still scanty Greek fragments or in the imitations of the Roman poets; but the New Comedy is too conventional and too limited in range to be a satisfactory source of information, and we may be sure that there were wide circles of Athenian society as little represented there as the world revealed to us by Mme. Craven's Le Récit d'une Sœur in Balzac's Comédie Humaine. The correspondence of Cicero, invaluable for the life of the official and upper classes in the last days of the Republic, throws no light on the lower grades of the social order. Only in the Greek papyri have we a fairly representative mass of evidence for the social life of almost all classes, from the well-to-do circles represented in the papers of the strategus Apollonius to the small peasant and artizan. Their letters show us something of their religious and moral ideas and social habits, while the miscellaneous documents reveal the economic processes, the legal transactions, the communal life, the administrative practice of Graeco-Roman Egypt.

True, even here, the evidence is not as complete as we might wish. There are many points on which we would fain have more light, and the fumbling sentences and conventional formulae of the private letters often leave us in doubt what the writers meant or how far they really meant it. Nevertheless, the papyri are of inestimable value, a rich quarry of historical material; and it is a quarry still but little worked. Various legal and administrative questions have been treated in detailed and valuable monographs, and of late, especially in Italy, good work has been done on the broader and more general questions of social life and mental atmosphere; but far more must be done before we can pretend to have exhausted the field.

Moreover, the papyri do not illustrate merely the life of the common man; they illustrate also the life of the common woman, and that is perhaps an even greater service when we consider how little we know of the daily activities and the point of view of women in the ancient world. Prof. Schubart has recently published a brief survey of the papyrus material illustrating this subject¹, while Signorina Mondini² has dealt with the letters of women in Egypt; but these articles are only brief and provisional. A really systematic investigation into the whole of the evidence would be an invaluable contribution to social history.

But the evidence of papyri does not end with women; it extends also to children, several of whom it brings before us with a considerable measure of concreteness and individuality; and it furnishes precious material for the whole life of the Graeco-Egyptian family, in its various aspects. Now the "spoilt boy" of Oxyrhynchus writes that if his father will not take him to Alexandria "I won't write you a letter or speak to you or say good-bye to you3"; now a boy of a different kind, and with an enthusiasm for study which would perhaps strike the average school-boy of to-day as morbid, implores his father to visit his schoolmaster "in order that he may teach me, as he is eager to do," but conforms more closely to the modern type in his postscript, "Remember our pigeons4." In one papyrus a father urges his son to devote his whole attention to his studies⁵; from another we learn that the son of the house was studying the sixth book of the Iliad⁶, and those of us who remember with what delight we first heard the "strong-winged music of Homer" will feel an instinctive sympathy with this long-dead Egyptian boy. That dark blot on ancient life, the practice of exposing unwanted infants, which was among the stock motives of the New Comedy and which we might easily come to regard as little more than a literary convention, acquires for us a sudden actuality when we find the writer of a papyrus letter telling his wife, with reference to an expected child, "if it is a boy let it live, if it is a girl expose it'; or when we read the report of a trial concerning a foundling "picked up from the gutters." One letter introduces us to a family dispute concerning the feeding of a newly-arrived infant⁹; and references to birthdays and family festivals are not infrequent. The squabbles or mutual affection of husband and wife, the good or ill fortune which followed marriage, find frequent illustration. A letter, by no means accomplished in style but of an extraordinary vividness and emotional intensity, brings before us a prodigal son, repentant in his utter ruin¹⁰; in another a young soldier, with a satisfaction which has more than a tinge of smugness, thanks his father for his good upbringing, which encourages him to hope for speedy promotion in his military career¹¹, and the writer of a letter recently acquired by the British Museum, reproving his brothers for their inconsiderate treatment of their mother, declares, "we ought to reverence our mother like a goddess, especially such a good mother as ours¹²."

Of course, the papyri concern only one portion of the ancient world, and that a portion which, in many ways, occupied an exceptional position; but many of the persons we meet in Ptolemaic papyri, especially in those of the third century B.C., were Greeks, who had not changed their psychology with their place of residence; while in the Roman and still more the Byzantine periods there was a strong tendency to a certain cultural unity throughout

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<sup>1</sup> Die Frau im griech.-röm. Ägypten, in Intern. Monatsschr. f. Wiss., Kunst u. Techn., 10, pp. 1503–1538.
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² Lettere femminili nei papiri greco-egizi, in Studi d. sc. pap., 2 (1917), pp. 9-28.

³ P. Oxy. 119. ⁴ P. Lond. Inv. No. 1575 verso. ⁵ P. Oxy. 531=Wilcken, *Chrest.* 482.

⁶ P. Oxy. 930.
⁷ P. Oxy. 744.
⁸ P. Oxy. 37.
⁹ P. Lond. 951=WILCKEN, Chrest. 483.

¹⁰ BGU. 846.
¹¹ BGU. 423=WILCKEN, Chrest. 480.
¹² P. Lond. Inv. No. 2102.

the eastern part of the Roman Empire. We can use the evidence of papyri for the general life of the Greek East only with the greatest caution; but with due caution it can and ought to be so used.

I spoke just now of the light thrown by the papyri on administrative practice; and this suggests another direction in which they are of value to the student of ancient history. The administrative system of Egypt was too individual, in the Ptolemaic and Roman periods, to furnish direct evidence for other parts of the Graeco-Roman world, and even in the Byzantine period, when a fairly high degree of uniformity was attained throughout the eastern half of the Empire, we have to allow for local peculiarities; but the number of possible—or at least of convenient and obvious—methods of notarial and administrative procedure is limited, and in any age there is usually a tendency to a general similarity. The papyrus documents written outside Egypt, like the well-known boxer's diploma in the British Museum, and even those on other materials than papyrus, the Dacian wax tablets for instance or the parchment deeds from Avroman recently published by Mr Minns¹, along with obvious differences, show striking resemblances to the papyri from Egypt; and Prof. Preisigke, in a recent monograph on the inscription of Scaptoparene, has used Egyptian evidence, to very good effect, in elucidating the various problems he discusses. Moreover, Egypt was pre-eminently the home of bureaucratic administration, and Egyptian methods were not without influence elsewhere—a subject, by the way, which requires and would doubtless repay more detailed investigation than it has yet received.

Thus, despite such differences as I have admitted, students interested in the subject of ancient administration, not only in the Roman Empire and the Hellenistic monarchies but even in the city states of Greece, may profit considerably by a study of the papyri. Nothing gives so clear and vivid an idea of the actual machinery of government and daily life as to see and handle these documents, to observe the hands and the arrangement of the text, the subscriptions and dockets and registration marks, the methods of folding and sealing; and teachers of ancient history would be well advised to acquaint their students with facsimiles of characteristic texts and even to visit with them any exhibition of papyri which may be accessible.

But the value of papyri in this sphere is not confined to matters of detail. Here again they bring in the human factor, the concrete as opposed to the abstract. In no department of history is that danger of excessive schematization to which I have alluded so obvious as in the treatment of administration. When we have constructed, whether from law-books, enactments and historical works or from actual documents, the general scheme of organization, we are apt to think that we know, without more ado, how a country was actually governed; and we sometimes find it difficult to understand why a system which looks excellent on paper should have worked so badly in practice; or, conversely, why a system obviously clumsy and imperfect should not have been more conspicuously unsuccessful. The fact is, administrative theory and administrative practice do not often coincide very closely, and did so far less in the ancient world than with us, for the simple reason that the system has to be worked not by machines but by men, with all the unaccountable element for which we have to allow in considering human activities. Now, the papyri show us the actual working, not the abstract scheme conceived by the legislator. Perhaps I may be excused if I again take a somewhat trivial instance.

¹ Parchments of the Parthian Period from Avroman in Kurdistan, in Journ. Hell. Stud., 35 (1915), pp. 22—65.

In Graeco-Roman Egypt the temples were subjected to a very strict state control, and were periodically visited by government inspectors. A papyrus found at Tebtunis¹ contains a second-century letter from one temple official to another concerning one of these inspections. The relevant portion is as follows:

"You must know that an inspector of finance in the temples has arrived and intends to go to your division also. Do not be disturbed on this account, as I will get you off. So if you have time write up your books and come to me; for he is a very stern fellow. If anything detains you, send them on to me and I will see you through, as he has become my friend. If you are in any difficulty about expense and at present have no funds write to me, and I will get you off now as I did at first. I am making haste to write to you in order that you may not put in an appearance yourself; for I will make him let you through before he comes to you. He has instructions to send recalcitrants under guard to the high-priest."

In those of us who during the war were employed in a Government office—and the number of those who were not must be small—this very human document will strike a sympathetic chord. We shall doubtless recall how on such-and-such a day the word was passed round the office that Colonel So-and-So or General Somebody Else was bound to us on a visit of inspection; how in a moment a department which had shown, let us now confess it, only too evident signs of what we may perhaps call "war weariness" was transformed into a hive of industry; how we developed a zeal and a power of concentration which we had never before suspected in ourselves; and how, after a more or less perfunctory inspection, the Colonel or the General departed in a glow of patriotic enthusiasm, more than ever convinced of the sterling qualities of the British race. We know in our own experience that official inspections may all too easily degenerate into a farce; the papyri show us that it was not otherwise in antiquity. They show us indeed more; for they reveal, as does, by implication, the letter I have quoted, the presence of a factor which, we are entitled to believe, is wanting in our own Government offices, that of deliberate and persistent corruption. And apart from corruption, as we read the documents themselves, and note the little carelessnesses, the accidental omissions, the signs of hasty and perfunctory work, we shall realize more clearly the part which human fallibility plays in the drama of history.

Another point to which attention must be drawn is the utility of papyri for the history of law. On the importance of this subject it is hardly necessary to dwell. Law may seem, to a layman, very dull, and sometimes, be it confessed, very foolish; but it is, so to say, the cement which holds society together, and though it usually lags behind the more advanced moral consciousness of a nation, it yet furnishes invaluable evidence for the history of civilization and for social and economic progress. Law-books, however, are by themselves an unsafe guide, since the law as actually practised usually differs in some degree from the prescriptions found in them. Historians have, for example, from the Brehon Laws of Ireland or the Laws of Hywel Dda in Wales drawn far-reaching inferences as to the state of culture in those countries during the Middle Ages; but if one reads these codes critically one is forced to the conclusion that, with their artificial symmetry, their triads and heptads and fantastic classifications, they represent rather the theories of jurists than the actual practice of the courts. The Celts have of course always been given to rather airy theorizing, but they are not peculiar in this want of correspondence between legal theory and legal practice.

Thus Mr J. C. Davies, in a recent paper on the law of felony in Edwardian Wales¹, says, in discussing his sources, that the Statute of Rhuddlan "expressed the ideal which was to be aimed at rather than any condition that really existed. When medieval legislation is being considered it is execution rather than enactment which is important."

It might indeed be thought that though all this is true enough of medieval society, with its rather primitive law and the anarchic tendencies of the feudal or tribal system, yet under the Pax Romana, and with the imposing structure of Roman law, the theory would correspond more or less exactly with the practice. As a matter of fact, the study of documents, and particularly of papyri, proves that this was not so; and it has been the special service of Mitteis and his followers to show how tenaciously the local and national maintained itself against the Imperial law; that indeed it profoundly influenced and modified the Imperial law itself. Not only after the Constitutio Antonina, when the sudden admission to citizenship of so many non-Romans might be expected to cause some disorganization, but even before that event, Roman citizens in Egypt did not by any means always follow in their legal transactions the rules of Roman law; and every new papyrological study of some particular legal problem brings additional evidence for this².

But this is not all. Our legal authorities, the Codes, the Institutions, the Digests, the Novellae, do not even furnish a complete idea of the Imperial law itself. Their evidence leaves many points obscure and must be supplemented, if possible, by that of documents. Moreover, changes in the law are not always recorded in our extant legal sources. One illustration of this fact may perhaps be quoted. The late Jean Maspero, in the first volume of his catalogue of the Cairo Byzantine Papyri, published a sixth-century text relating to the old Greek institution of apokeryxis, by which a man might disown and disinherit a child, in this particular case a daughter. Though a popular subject of rhetorical declamations, apokeryxis was not recognized by Roman law; and since the document in question has no dating clause, omits the names of the parties, and has many corrections, the editor, followed by most jurists, took it as a mere rhetorical exercise. Prof. Cuq of Paris, however, in an elaborate study of the text, maintained that it was a draft of an actual deed and suggested that Justinian had legalized the institution in a lost Novella. Sure enough, in his third volume M. Maspero was able to publish another deed of apokeryxis, about the documentary character of which there can be no doubt whatever. Thus it appears that Justinian did introduce a Novella recognizing and adopting into the Imperial system the institution of apokeryxis, but that all trace of it has disappeared3.

There are other subjects on which the papyri provide us with evidence of more than local significance; but with these I must deal very briefly. One of them is that of popular religion in the Hellenistic and Roman periods. Concerning the most interesting phase of this, the oriental mystery cults which during these periods were the most vital part of paganism and proved the most formidable rivals of Christianity, the papyri tell us disappointingly little; but a few noteworthy texts have been discovered, chiefly in the last

¹ Felony in Edwardian Wales, in Transactions of.....Soc. of Cymmrodorion, 1916-17, pp. 145-196.

² See, for example, Taubenschlag's article Die Patria Potestas im Recht der Papyri, in Zeitschr. d. Sav.-Stift., 37 (1916), pp. 177–230, or V. Arangio-Ruiz, Applicatione del diritto giustinianeo in Egitto, in Aegyptus, 1 (1920), pp. 21–36.

³ Possibly, indeed, no Novella was ever enacted introducing the institution into the Imperial law; it was accepted only as a local practice or perhaps even was merely recognized as customary law in the local courts. See, e.g., Arangio-Ruiz, op. cit., pp. 28 foll., P. M. Meyer, Juristische Papyri (Berlin, 1920), p. 25.

three or four years. Such is the hymn to Isis published in Part XI of the Oxyrhynchus Papyri¹, a document of the first importance for the Isis worship. Such, again, is a recently-published decree of Ptolemy Philopator, ordering all celebrants of the Dionysus mysteries to proceed to Alexandria and produce their credentials²—apparently an attempt to establish a sort of "apostolic succession" for this cult. Evidence of unusual value for the Mithras cult has, according to one view, been found in a large portion of a liturgy embedded in a late magical papyrus³; part of an Orphic ritual is preserved in a papyrus at Dublin, the publication of which is expected shortly; and the Sarapis cult is illustrated not only by several invitations to cult meals "at the table of the lord Sarapis" but by a recently-published letter of the third century B.C., the writer of which relates to the Finance Minister, Apollonius, how Sarapis had repeatedly appeared to him in dreams and ordered him to urge Apollonius to build him a temple, and how, owing to his failure to comply, the god had visited him with sickness⁴.

Most often, however, it is not such details, the ritual or what we may call the theology of paganism, that the papyri reveal to us, but the popular attitude to religion. No doubt their evidence is often ambiguous; for conventional phrases were as common then as now and the mere expression of gratitude or devotion to the gods may carry little enough of genuine religious feeling; but sometimes the note is unmistakeable. Thus, when Apion, newly arrived at Rome after a perilous voyage, writes to his father, "I give thanks to the lord Serapis because when I was in danger at sea he saved me immediately," we can recognize a real emotion. So too in Serenus's words, "By the help of the gods our sister has taken a turn for the better, and our brother Harpocration also is safe and well; for our ancestral gods always help us, giving us health and safety," or in the letter of Tays, the slave of the strategus Apollonius, to her master, "I was terribly anxious, master, on hearing that you were out of sorts, but thanks be to all the gods that they preserve you beyond our expectation.... Would that we could fly and come and make obeisance to you "—in utterances like these there is clearly far more than mere convention. And on the other hand we get vivid illustrations of the strictly commercial attitude towards the gods so typical of primitive societies, the expectation that the gods will requite their worshippers' devotion with a quid pro quo; as when one of our ancient letter-writers declares, "As the gods have not spared me, so will I not spare the gods," or another, still more prudential, says, "Know that I am not going to pay the god any attention if I do not first get back my son⁸." The subject of popular religious sentiment has recently been discussed in an interesting article by Signor Ghedini, but he by no means exhausts it, and much more can still be done by a study of the papyrus evidence as a whole.

- ¹ P. Oxy. 1380.
- ² See Schubart, Ptolemaios Philopator und Dionysos, in Amtl. Berichte aus den Kgl. Kunstsammlungen, 38 (1917), 189–198.
- ³ See A. Dieterich, Eine Mithrasliturgie, 1903. This view is, however, opposed by Cumont and Bidez; see, e.g., Bidez, La liturgie des mystères chez les Néo-platoniciens (Bull. de l'Acad. Roy. de Belgique, 1919), p. 2.
 - ⁴ PSI. iv, 435 and P. Edgar 7 (Ann. du Service, 18, 1918, pp. 173-6).
 - ⁶ BGU. II, 423 = WILCKEN, Chrest. 480.
 ⁶ P. Oxy. VI, 935 = WILCKEN, Chrest. 119.
- ⁷ P. Giss. 17=Wilcken, *Chrest.* 481. It is not indeed certain that Tays was a slave, which is only an inference of the editor's, and, though probable, not a necessary one.
 - ⁸ P. Oxy. VII, 1065 (= WILCKEN, Chrest. 120) and note.
- ⁹ Di alcuni elementi religiosi pagani nell' epistole private greche dei papiri, in Studt della scuola papirologica, Milan, 2 (1917), pp. 51-76.

The religious significance of the papyri does not, however, cease with paganism. They throw much light also on the earlier history of popular Christianity, and are all the more valuable since monasticism, so important in medieval history, derives its origin from Egypt. On the churches and monasteries, their organization and methods of administering their estates, on the place taken in the general life of society by monks and clergy, and on the gradual permeation of Christian ideas into the general consciousness, they contain a mass of evidence still very largely unused by historians. Moreover, it is of great utility to trace, in papyri and other documents, the borrowings of Christianity from paganism; how Christian saints, like Cosmas and Damian or the Archangel Michael, succeeded to pagan gods, how the pagan consultation of oracles was adapted to a Christian setting, how the pagan practice of seeking a cure for sickness in the temples was extended and ennobled in the Christian hospitals. On the other hand it is interesting to compare and contrast pagan and Christian sentiment, as, for example, in two letters of condolence which chance has preserved for us. The first is the letter of Irene to her friends on the loss of their child, a document which is very well known but which I must quote again for the purpose of comparison:

"Irene to Taonnophris and Philo, good cheer. I was as much grieved and wept as much over the blessed one as I wept over Didymas, and I did all that was fitting and so likewise all my household, Epaphroditus and Thermuthion and Philion and Apollonius and Plantas. But nevertheless one can do nothing against such things. Therefore comfort yourselves. Good fortune to you¹."

The other is a much mutilated letter to be published in the forthcoming sixteenth part of the Oxyrhynchus Papyri, of which I can quote only the middle portion:

"By God, my master, neither just men nor sinners ever suffered what you suffered; and nevertheless your sins are nought. But we glorify God because it was He who gave and He that hath taken away; but pray that the Lord may give them rest and may grant you grace to sing among them in Paradise when the souls of men are judged. For they are gone to the bosom of Abraham and of Isaac and of Jacob. But I exhort you, master, not to.....ruin your fortunes, but pray that the Lord may set (?) you in His favour. For the Lord has many good things and makes the sorrowful [to be of good cheer (?)] if they desire a blessing from Him; and we hope in God that through this grief the Lord may send joy to you and to your blessed brother."

Again, the papyri furnish much valuable evidence regarding that economic decay which was one of the prime factors in the decline and fall of the Roman Empire. Each province had, of course, its own special problems, but the main processes at work were everywhere similar, and a study of the conditions prevailing in Egypt will help greatly towards an understanding of this very perplexing question. On a small department of the main subject, the debasement of the coinage and the consequent extraordinary economic slump at the end of the third century, papyrus documents throw much light; and it is surprising that numismatists have hitherto, with a few exceptions, made so little use of them. A vivid illustration of the state of affairs about the middle of the century is given, for example, by the following proclamation, found at Oxyrhynchus and published in Part XII of the Oxyrhynchus Papyri²:

"From Aurelius Ptolemaeus also called Nemesianus, strategus of the Oxyrhynchite

nome. Since the officials have assembled and accused the bankers of the banks of exchange of having closed them on account of their unwillingness to accept the divine coin of the Emperors, it has become necessary that an injunction should be issued to all the owners of the banks to open them, and to accept and exchange all coin except the absolutely spurious and counterfeit, and not to them only, but to all who engage in business transactions of any kind whatsoever, knowing that if they disobey this injunction they will experience the penalties already ordained for them in the past by his highness the praefect."

Egypt has, moreover, given us many documents, not papyri only but wax or wooden tablets, ostraca, and the like, which illustrate the educational methods of the ancient world¹. Here, more even than elsewhere, we must be cautious in generalizing the evidence, since it is unlikely that the provincial schools of Egypt can have resembled very closely the best of those established in the great centres of Greek culture, still less the institutions for higher education, like the Universities of Athens or Alexandria; but they were probably typical of the more elementary schools throughout the Graeco-Roman world.

Lastly, this immense mass of documents, ranging over a period of more than a thousand years and proceeding from persons of every degree of culture and social status, contains evidence, whose value can hardly be exaggerated, for the history of the Greek language. Here too reserves must be made; we have to allow for local peculiarities, for the influence of Egyptian idioms and pronunciation; but the fact that the language of the papyri has so many features which characterize medieval and modern Greek shows that in the main the Greek of Egypt conformed to tendencies operative throughout the whole of the Hellenic world.

I have in the foregoing pointed out several subjects which require further investigation. The science of papyrology now covers so wide a field, the number of published texts is so great, the problems they raise are of so special a kind and concern so many matters of minute detail, that few but specialists can hope to deal adequately with the vast mass of material; and it is to the specialist we must look if the papyri are to be utilized to the full. It should be his task to study them from different points of view, to summarize and digest their evidence on various points, and to present his results in monographs which will relieve the non-specialist from the task of examining the thousands of documents available. The question naturally arises: what is our own country doing towards this work? I have had the curiosity to collect, from the bibliographies compiled by me for the Journal of Egyptian Archaeology, some statistics bearing on this point, with the following results. I find that in the four bibliographies hitherto published I have noticed the appearance of twenty-nine separate volumes or parts of volumes of papyrus texts, literary or non-literary. Of these seven, or a little over twenty-four per cent., were published in this country; and the percentage is really more favourable than appears at first sight, since several of the foreign volumes were quite small, whereas all the British ones were of substantial size, one, the second volume of the Rylands Papyri, being the second largest yet published. Here, it will be seen, we have no cause for shame; we are certainly doing our fair share—indeed more than our share—in the publication of texts.

When we turn, however, to the work of research into published papyri, the picture is a very different one. In my fourth bibliography, the longest of all and probably to be

¹ See especially P. Beudel, Qua ratione Graeci liberos docuerint, papyris, ostracis, tabulis in Aegypto inventis illustratur. Diss. Monasterii Guestfalorum, 1911.

regarded as fairly typical, I find references to thirteen separate volumes devoted to papyrological questions connected, wholly or in part, with non-literary texts. Only one of these, a very small one, was published in this country, or a little over $7\frac{2}{3}$ per cent. Finally, of articles dealing with such questions we may reckon sixty-four, of which nine, or just over fourteen per cent., were by British scholars; and whereas the latter are for the most part fairly short, the foreign articles include several which involved extensive research.

The responsibility for this not very satisfactory state of affairs does not rest upon the few British papyrologists. There is still in this country a vast mass of papyri whose publication, owing to the perishable nature of the material, is a matter of urgent necessity; and if this duty is to be discharged it is obvious that the existing editors can find little time for researches not directly connected with the texts they actually publish; though it must be confessed that Professors Grenfell and Hunt, in addition to editing more papyri than anybody else in the world, have managed to do a great deal of extremely valuable work on single problems of papyrology. Even their titanic energy is, however, subject to human limitations; and if the national output is to be largely increased we must look to the efforts of new workers in the field. Abroad the importance of papyrology is being more and more widely appreciated. France had for several years before the war a school of papyrology at Lille, whose activities, we may hope, will now be resumed. In Germany there is a similar school, directed mainly to the legal side of the subject, at Munich; another has now been started at Heidelberg; at Marburg Prof. Kalbfleisch and his pupils have published a series of papyrus texts with elaborate commentaries; and scholars like Wilcken, Mitteis and P. M. Meyer have not only done a vast amount of work themselves but have trained pupils to undertake the task of research. In Italy there is a school of papyrology at Milan, which publishes periodical volumes of Studi; and before the war the number of Italian papyrologists, both editors and workers on the published texts, was growing steadily and included several ladies.

In this country, on the other hand, which has done so much for the discovery and publication of papyri, the documents, once published, are treated with indifference. Only Oxford and Dublin have shown any appreciation of their importance; though we ought now perhaps to add Aberdeen. Cambridge apparently regards non-literary papyri as too late and unclassical to deserve its attention. London University, so progressive in some directions, takes no interest in papyrology; and the provincial Universities, even those, like Liverpool and Manchester, which have done excellent service for Egyptology, are equally indifferent. I cannot help feeling that these facts are by no means creditable to British scholarship, and that it is not merely the unbalanced enthusiasm of the specialist which makes me think it high time for a change to be made; for British Universities to give more encouragement, and British scholars to devote more attention, to a branch of history which holds such vast possibilities and gives promise of such valuable results.

¹ I ignore, here and below, items which concern papyri only incidentally, and under the heading "articles" have taken no notice of those which are little more than brief notes. The difficulty of drawing a hard-and-fast line makes the figures a little uncertain, but the general proportions are not seriously affected.

THE BARKAL TEMPLES IN 1916

(continued from Vol. v, p. 112)

By Professor GEORGE A. REISNER

V. THE BUILDINGS B 800 AND B 900

The site of the two buildings, B 800 and B 900, begins about 25 metres in front, or to the "west," of B 700 and extends about 60 metres towards the river ("west"); see Plate XXIX. Before excavation, the great bank of débris (see this Journal, Vol. IV, p. 213) crossed the "south-western" quarter (B 901-902), while the lower "northern" part was covered by a confused and tumbled layer of broken stones, potsherds of all dates, dirt and sand—the result of treasure-hunting, merôg-digging, and the removal of building-stones. Thus in some places the hard subsoil was exposed and in others the débris was piled up to a height of 200 cm. above the subsoil. The excavation was simple, requiring only the removal of all dead material so as to leave everything—walls, pavements and columns—in situ.

After excavation, the site was seen to be nearly level, sloping very slightly towards the river, and to be occupied by two closely related buildings bounded on the "south" by the Roadway. The number of the rooms in B 800 (on the "north") was recognized early in the work, and these were numbered correctly 801—804 from the front; but the plan of the "southern" part was obscure, and for the purposes of registration the rooms were numbered 901—908 from the back. Ultimately, it was discovered that B 903—908 really belonged to B 800, and the two buildings consisted respectively of the following rooms:

- (a) B800 = B801 807 and B903 908 (Cailliaud u, Lepsius E and F).
- (b) B 900 = B 901 902 (Cailliaud *u*, Lepsius G).

The building B 800 was clearly a temple, and presented three different periods of construction and occupation:

- (1) B 800-first,—a crude-brick temple including rooms 801 to 807-first and 903 to 908-first.
 - (2) B 800-second,—a red sandstone temple consisting of rooms B 801 to 804-second.
 - (3) B 800-Meroitic,—fragmentary and intrusive walls.

The building B 900 presented also three periods:

- (4) B 900-first,—a red sandstone structure consisting of rooms 901 to 902-first.
- (5) B 900-second,—a red sandstone chapel of one cell, B 901-second, built of re-used stones.
 - (6) B 900-Meroitic,—a red sandstone structure over B 902—908, built of re-used stones.

(1) TEMPLE B 800-FIRST (Plate XXX).

The remains of the stone temple recorded by Cailliaud, Lepsius, and other early travellers had been carried away except for the floors, bases of columns, and parts of the foundation walls. This destruction had laid bare a series of crude-brick walls, *i.e.* walls of sun-dried mud-brick. The foundations were preserved almost everywhere except under the "western" pylon of B 800-second, and in some parts the superstructure wall was still standing to a height of from 10 to 100 cm. The tracing of the plan was a long task, as I did not wish to cut away the remains of the later temple.

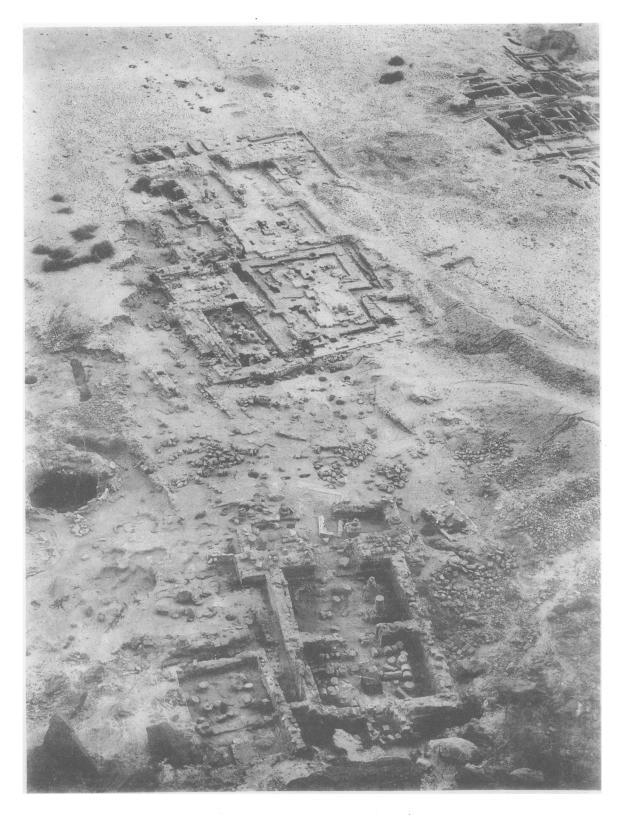
This crude-brick structure consisted of a typical temple and a series of subsidiary rooms on the "south" of the first two halls of columns. Structurally there were two parts—a nucleus building (B 803—807) and the rest of the rooms (B 801 to 802 + 903 to 908). The actual temple consisted of pylon, three halls of columns, anteroom and three cells. All walls were of crude-brick measuring about $35 \times 17 \times 8$ cm., but the bricks were so fused by moisture and pressure that exact measurements were difficult. The walls were coated with white plaster. The floors were paved with small slabs of grey, yellow and red sandstone mixed irregularly. The columns were built of drums of yellowish sandstone with foundation discs (sub-bases) of grey sandstone. The discs rested on the hard gravel subsoil. The pavement sloped slightly and gradually from back to front, having a level of 252.47 m. in the "eastern" end of B 805-first and of 251.77 m. in the "western" part of 801-first. The fall is thus only 70 cm. in a length of 50 metres, and there was no necessity for a step between any of the rooms. Nor could I find any trace of a step.

a. The Nucleus Structure, B 803—807-first. Plan I (p. 249), with Plate XXX.

The continuous, interbonded walls of the rooms B 803 to 807-first were separated from the front of the temple by a joint along the "western" face and thus formed a nucleus structure which was built before the outer rooms (B 801 to 802 + 903 to 908-first, see Plan II, Plate XXXI). But the brickwork, the pavements, and the columns were so much alike in the two parts of the temple that there was probably little, if any, difference in date of construction.

The axis of 803-first was not aligned with the axis of the back part and the axes of the three cells were certainly not parallel. These variations were no doubt due to the striking irregularity of the outside wall. The "northern" wall has an entrant angle, and of the four outer corners, only one, that at the "N.W.," is a right angle. The curious slant of the "southern" wall is noteworthy. These irregularities can hardly be attributed to anything except limitations of space imposed on the architect by the presence of older buildings on each side. On the "north," the older building was clearly B 1100 of which we exposed the margin in the present excavations; but on the "south" no trace of a building was discovered, since B 900-first was later in date than B 800-first. It is possible that there was some building of crude-brick which was destroyed when B 900-first was built.

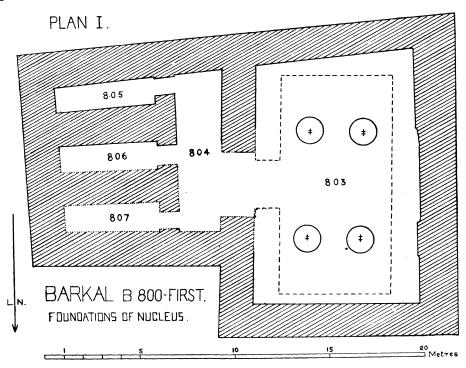
The room B 803-first showed a departure from the original plan as indicated by the lines of the foundations (cf. B 500-first). The foundation walls, sunk about 40 cm. in the hard subsoil, marked an irregular quadrilateral with an average size of 1300×820 cm.; but the superstructure walls (the broken line in Plan I), built partly on the foundations and partly on the hard subsoil in front of the foundations, formed a smaller rectangular room of about 1160×630 cm. Thus the faces of the superstructure walls rested on the hard subsoil,



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View of B800 and B900, looking down to "west" from the top of Gebel Barkal. In the foreground B600 and B700; in the upper right-hand corner part of B1200.

not on the foundations. Another and probably a later alteration in plan was the re-setting of the columns. There was a difference of 11 cm. between the centres of the foundation discs and the centres of the columns afterwards erected. Each column has been moved 11 cm. nearer the axis than were the discs. The pavement extended only up to the faces of the superstructure walls.



There were in 803-first two rows of two columns each. The columns had a diameter of 82 cm. each; the bases, 125 cm.; and the discs, 160 cm. The centres of the columns of each row were 280 cm. apart and 305 cm. from the nearer side. The middle aisle was 550 cm. wide between the centres. In the middle, between the two "eastern" columns, an altar, built of blocks of red sandstone, stood on the pavement.

The anteroom and the three cells were not strictly rectangular, as they followed the lines of the outer walls. The smaller dimension of 804-first was about 240 cm., while the cells were about 140—150 cm. wide. The pavements were well-preserved, but could not be entirely followed out owing to the later pavement. There was no altar in 805-first.

b. The Pylon of B 800-first. Plan II (Plate XXXI).

In a temple of the form presented by B 800-first, an outer pylon is to be presupposed at the entrance. This was probably of crude-brick, of about the size and in about the place of Pylon I of B 800-second. In Plan II, I have restored the crude-brick pylon so as to cover with the "south" wing the subsidiary rooms, B 903—908. It is clear that the construction of the later stone pylon of 800-second necessitated the complete or nearly complete removal of the old crude-brick pylon. In searching for the foundation deposits, we found no trace of crude-brick under the stone pylon, and if there be any traces, these are now inaccessible under the later masonry. The stone stairway, however, which ascends "southwards" from

the "S.W." corner of B 801-second must have belonged to the older temple, and had no doubt been continued through the brickwork of the old pylon to its top. The slabs composing the steps are of grey sandstone, a material used in B 800-first but not in B 800-second.

c. First Hall of Columns, B 801-first. Plan II.

The first hall of columns, B 801-first, had been largely destroyed in building the stone temple, but the bases of the columns, pieces of the stone pavement, and the cores of the crude-brick walls were visible. The interior faces of the crude-brick walls had been cut away to make room for the later stone walls. The exterior or "southern" face of the "southern" wall was visible in rooms 905, 907, and 908, where it was supported by a dividing wall and two buttresses. There was no joint visible in the brickwork.

The columns stood in two rows of four columns each. The columns had a base diameter of 105 cm. on a base of 125 cm. The column-centres in each row were 270 cm. apart and 275 cm. from the nearer wall (as restored). These spaces are by no means too great to have been roofed with stone slabs, but I would not exclude the possibility of a wooden roof. The middle aisle between the centres was 900 cm. wide and was of course open to the sky.

d. Second Hall of Columns, B 802-first. Plan II.

The wall between 801 and 802 was not a pylon; it was indeed only 200 cm. (4 ells) thick. The second hall was 70 cm. less in width than the first hall. Also the axis as shown by the columns was shifted about 30 cm. to the "north" of that of 801-first. This shift was not imposed by the widening of 904 but rather by the effort to approximate the end of the axis of 803-first. Thus the question is not why was axis 802 shifted to the "north," but why was axis 801 shifted to the "south"? To that question I have at present no answer, except the presence of an older building on the "north."

Hall 802 was nicely squared except on the "eastern" side. That side was formed by the face of the irregular nucleus structure which passes across 802 on a slant so that the axis 802 makes an angle with axis 803. This change of angle must again be due to an older building on the "north," perhaps the front part of B 1100. The joint between the sidewalls of 802 and the face of 803 was quite clear.

The foundation lines appeared to coincide with the faces of the superstructure walls and were traced on all four sides. On the "south," the white-plastered face of the crude-brick wall was preserved to a height of over 80 cm. behind the later stone wall. From this white-plastered face the stone pavement extended "northwards" under the later wall and was found intact with only a few penetrations over the whole hall.

The columns were in two rows of three each, each having a diameter of 82 cm. on a basis of 110 cm. (more slender than in 801). The centres of the columns in each row were 310 cm. apart and 345 cm. from the nearer side-wall, and the aisle was 680 cm. wide between the centres. These spaces are too wide to have been covered with single slabs of sandstone, and the only possibilities are (1) wood, (2) stone corbel, as in tombs at El-Kurruw, (3) crude-brick vault with leading courses or (4) the vault formed by two rows of inclined stone slabs (as at Nûri). The aisle was of course uncovered.

Opposite the space between the first and second columns in the "southern" row, a doorway led through the wall into B 904. This doorway had been roughly blocked with rubble and walled up by the "southern" stone wall of B 802-second.



B803-first and second, seen from the "north"



B800, from the "south-east" corner, looking towards the river

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e. The Subsidiary Rooms, B 903—908-first. Plan II.

The crude-brick walls of the subsidiary rooms, 903—908, were continuous in structure with the walls of B 801—802-first, but were separated from 803-first by a joint. The rooms as far as excavated were connected by doorways and room 904 was connected by a doorway with B 802-first. Thus these rooms, although not part of an ordinary temple plan, are structurally a part of the temple 800-first and contemporary with it in occupation.

Unfortunately it was not possible to complete the excavation of the "S.W." part of this complex in 1916 owing to the lateness of the season and the long carry to the dump. During the two seasons at Nûri, nothing could be done at Barkal; but work was resumed between B 500 and B 900 last winter and I expect to reach this complex from the "south" during 1919—1920. At present the description of the rooms is, therefore, not final.

The chief room was B 904 with a doorway into B 802-first, another into B 906 and probably a third into the small room, B 903. The plan of 903 was obscured by the holes excavated in digging merôg (sebakh). B 906 was a long narrow room which probably led to an outer doorway in the "southern" wall. Room 904 was 840×540 cm. in size with one row of two columns down the long axis. The "western" column is still preserved to a height of 175 cm. above the pavement of the room, and has a base diameter of 85 cm. on a basis of 125 cm. This type of room with a row of columns down the long axis is presented also by B 901-first, B 504 a, and B 504 b.

Rooms 905 and 907—908 (given two numbers for purposes of registration) are each broken by a buttress supporting the wall of B 801-first. Both however are paved with stone like 904 and must have been accessible. The dotted lines in Plan II show the approximate reconstruction.

The most interesting point about these rooms was their use as a dumping place during a restoration of B 500. On the floor of B 904 we found twenty large fragments of six granite statues of Tirhaqa, Tanutaman, Senkamanseken, Anlaman¹, and Aspalta; see Plates XXXII, XXXIII, XXXV. Among these, a head of Tirhaqa fitted on the torso found in B 500-Trench-A; two other fragments fitted on the Anlaman and Aspalta statues from B 500-A; a leg fitted on the Tanutaman statue from that place; and a head of Senkamanseken found in B 500-A fitted on a torso found in B 904. These pieces were mainly in the "north-western" quarter of 904 to the left of any one entering through the doorway from B 906, but the head of Tirhaqa (a very heavy piece) lay beside the "eastern" column, and one fragment lay directly in front of the doorway to 906. The undermost pieces rested on the pavement and the others rested on these. They had not fallen as if thrown from the tops of the walls but rested in the position of objects which had been carried into the room and been dropped from the height of the hands of bearers. At that time, the floors were practically clean as oriental floors go, and the dark earth in which the fragments were embedded had been deposited later (perhaps on the same day). The dark earth rose nearly to the tops of the walls as now preserved and was there covered with about 50 cm. of the coarse disturbed débris found over this area. There were abundant evidences of merôg-digging including penetrations in the walls; and one trench about a metre wide, apparently the work of some European, crossed the room from "N." to "S." passing over the second column and missing the head of Tirhaqa by about 10 cm. The second column had apparently been removed after the deposition of the

¹ This is evidently the king whose name was spelt Amananal in Vol. v, p. 109.—ED.

fragments and before the excavation of the European trench. None of the fragments was too large or too heavy to have been carried through the doorways now exposed.

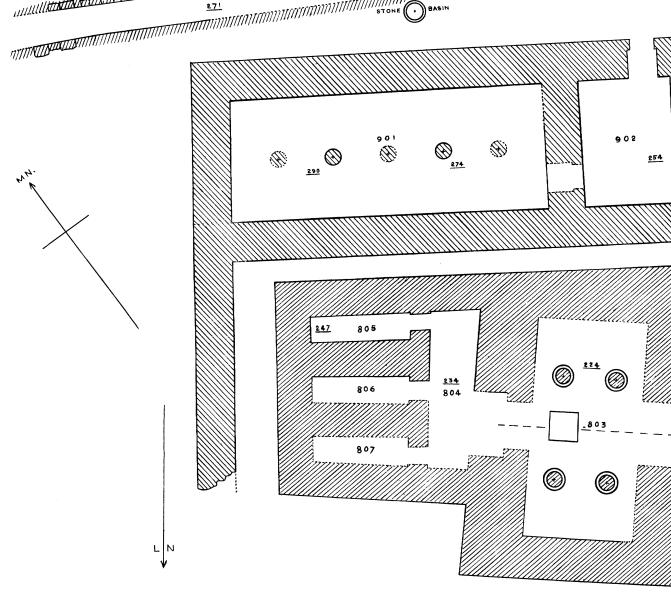
There were no large fragments of statues in the other rooms, but 905—908 were filled with the same dark earth. Now all this dark earth in 904—908 contained many small objects and fragments—conical offering vases of faïence, cylinders of blue and red frit, faïence amulets, faïence beads, potsherds (none of them Meroitic), a few pieces of bone (large animal), charred palm-wood, small fragments of statues, etc. Now it must be remembered that (1) débris of decay is usually free of objects (never so full as this débris), and (2) débris dumped from a height such as the tops of the present walls forms a layer of coarse débris (such as the faïence vases, cylinders, etc.) along the floor. This débris was carried into the rooms in baskets and thrown out in 904 on top of the statues. Thus it is clear that at the time of the removal of the broken statues from B 500 there was a certain amount of dirt and rubbish also cleared away. At this place, which had been cleaned up, there had been a fire made with palm logs or pieces of palm-wood.

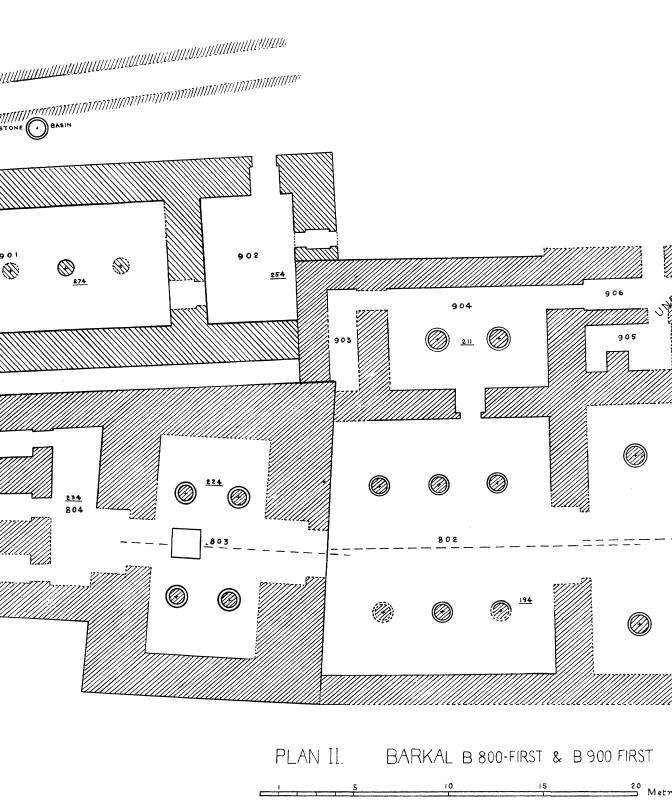
The doorway into 802-first had been roughly blocked up with a thin rubble wall. Then the "southern" wall of the stone room, B 802-second, was built across in front of the doorway. The rubble wall is of so shabby and manifestly temporary a character that it cannot have been made long before or long after the closing of the room by the later temple wall and was certainly earlier than the deposit of statue-fragments. It seems to me most probable that the rooms 903—908 went out of use when the stone temple B 800-second was built, and that the rooms were used to take the fragments of royal statues and the débris cleared out of B 500. For all practical archaeological purposes the construction of B 802-second and the clearing operation in B 500 were contemporaneous.

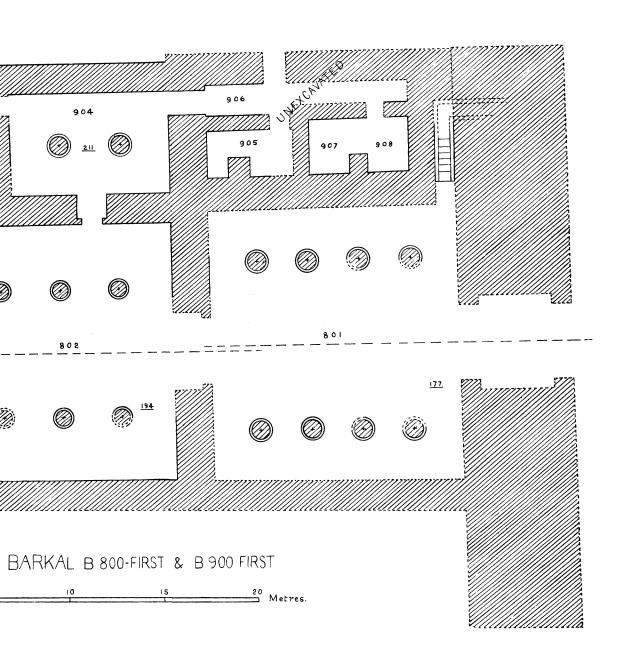
The deposit in B 500-A and that in 904 were contemporaneous, as appears from the presence of the fragments of the same statues in both. The reason for the use of two dumps is clear from the fact that the pieces in B 500-A were larger and more difficult to handle than those in 904. For the larger pieces it was more convenient to use the broad doorway through B 500-Pylon-I, while the small doorway in the "northern" wall of B 502 permitted an easy passage for the smaller pieces in 904. The pieces carried through the Pylon doorway were thrown down in the nearest spot out of sight, a place just beyond the "southern" end of Pylon I. The pieces (and the débris) which went through the narrow doorway in the "northern" wall of 502 were carried straight across the intervening space to the doorway assumed to exist in the "southern" wall of B 906, and so into B 904. The level of the floor of B 502 near its "N." doorway is 252.82 m. and that of 904 is 252.12 m. or 70 cm. lower. I estimate the level of the Roadway surface on this line at about 252.30 m. Thus the place of origin of the statue fragments was probably B 502 but may have been B 501, and it is needless to add that the statues were broken before the fragments were carried out to B 500-A and B 904.

A few other granite fragments were found which must be mentioned in connection with this deposit:

- (a) A fragment of the crown of the Aspalta-statue (in B 500-A) was found at the "S.W." corner of the pylon of B 901-second, under the great bank of débris and 80 cm. lower than the bottom of the pylon but not under it.
- (b) A fragment of a statue, not yet joined to the others, was found in a $mer\hat{o}g$ -hole in the "northern" end of B 903.
- (c) The head of one of the statues of Senkamanseken (in B 500-A) was found in B 801-second, in disturbed débris above the pavement of that hall.







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- (d) A granite door-jamb (or section of an obelisk?) inscribed on two sides with the names of Atlanarsa stood in a leaning position in B 801-second in the débris of the "south" aisle between the second and third columns. The base rests on débris above the second pavement, and the top rises above the late Meroitic floors. This is the so-called "altar" reported by Lepsius (L., D., Pt. v, Pl. 15 b and Textband, Vol. v, p. 266), but not transported to Berlin (cf. Gauthier, Livre des Rois, iv, p. 53). It is possible that the stone may have been moved slightly by Lepsius, but the top must have been visible in his day.
- (e) A granite stone, uninscribed and of irregular form, lies in front of the "southern" wing of the pylon of B 800-second, practically on the surface. This stone was also seen by Lepsius (loc. cit.).
- (f) A granite door-jamb (or section of an obelisk?) inscribed on three sides with the names of Senkamanseken. This is the second so-called "altar" found by Lepsius and this was transported to Berlin (L., D., Pt. v, Pl. 15 a and *Textband*, Vol. v, p. 266). According to the vague description of Lepsius, this was found, I take it, "south-west" of the pylon of 800-second but nearer to the pylon than to B 500. It must have been on the surface.
- (g) A large fragment of a granite obelisk(?) of Senkamanseken, inscribed on four faces, was found in the doorway through the pylon of B 700.
 - (h) A smaller fragment similar to (g) was found in the débris in B 520.
- (i) A headless statue of Akhratan (reigned between Harsiotef and Nastasan) was found on the hard subsoil about 20 metres "south" of the pylon of B 901-second (half-way between that and B 500). Discovered in 1918—1919.
- (j) The famous Barkal stelae were, according to my view, found not in the temple B 500 (hall 501) but in the disturbed area along the "north" wall of 501 or 502.
- (k) A daïs with steps, of dark haematitic sandstone, was seen by Cailliaud about 20 metres "west" of the well (B 1000), see this *Journal*, Vol. v, Pl. X, p. 99. This daïs is still in place, and has decorations in a style which is unmistakably early Meroitic.

It is clear that the objects a, b and c belong to the deposit in B 904 and have been fortuitously displaced. The objects i, j and k come from a clearing which took place after the reign of Nastasan. The position of i and k prove that this clearing was not the same as that from which our deposit came and thus we have to assume two separate clearing operations—one soon after the reign of Aspalta, and the other after the reign of Nastasan but affecting monuments as early as Piankhy. The position of object f (if correctly ascertained) and the distribution of objects f and g make it probable that f does not belong to the deposit in 904. Object e, the great stone slab, certainly cannot be from 904, and its present position is inexplicable as a stone derived from B 500. Thus it becomes very doubtful whether the Atlanarsa stone in B 801 has any connection with the deposit. It is difficult to conceive, moreover, how this stone could have reached its present place until after the destruction of the Meroitic structures (B 800-Meroitic and B 900-Meroitic).

To sum up, statues of Tirhaqa, Tanutaman, Senkamanseken, a queen of Senkamanseken, Anlaman, and Aspalta stood in B 500 (probably B 502) and were broken in pieces there, probably owing to, or by the use of, fire made with palm-wood. The broken fragments and other débris were afterwards cleared away. The larger fragments were carried out through the first pylon of B 500, and thrown down out of sight to the "south" of that pylon. The smaller fragments (and the other débris) were carried out through the doorway in the "N." wall of B 502, across the intervening space, into B 906 and so to the rooms now put into disuse, namely 904—908. These rooms were then clear of débris. This clearing took place not long after the reign of Aspalta, and the temple B 800-second was built about the same time.

f. General Remarks on B 800-first. Plan II.

A thorough examination of all possible places failed to reveal any foundation deposits under B 800-first. Foundation deposits were made under temples by Tirhaqa and Atlanarsa; but none has yet been found made by other Ethiopian kings under temples. One explanation is to be found in the fact that such sacrificial foundation deposits were made only under the original building. Thus B 700 has deposits of Atlanarsa, but none of Senkamanseken, and B 500 has only those of the original nucleus building and no others. But B 800-first is the original building on this site and the only possible explanation is that the builder knew nothing of the custom. The custom of making sacrificial deposits under the corners of pyramids was introduced by Senkamanseken (Pyr. III at Nûri) and from the work at El-Kurruw in 1918—1919, we now know that none of the kings from Piankhy to Atlanarsa practised this custom. Taking these facts into consideration, I would conclude that B 800-first, having no deposits, must be the work of a king previous to Tirhaqa.

Only a few objects, none of them exactly datable, were found between the pavement of the crude-brick temple and of the stone temple. Six crude scarabs, a few beads, and fragments of gold foil certainly belonged to the period of occupation of B 800-first. Possibly something might be found if we removed the stone pavement of the second temple, but that I have been loath to do. The objects in B 904—908 come from B 500, as shown above. The only bearing they have on B 800-first is that the facts prove that B 800-first was built some time before the deposit and was replaced by B 800-second about that time. This was soon after the reign of Aspalta.

The walls of B 800-first are of the cheapest available material, crude-brick, and are poorly built even for that material. The nucleus building is of remarkably careless construction. The entrant angle in the "northern" wall was no doubt due to the presence of B 1100 on the "north," but the slant of the "eastern" and that of the "southern" wall with the resulting angles at three of the corners can be attributed only to poor or careless workmanship. The weakness of the walls of B 803, caused by the diminution of the size of the room and the laying of the interior faces of the walls on gebel, is also noticeably bad work. It is clear that B 801—802-first and B 903—908-first were built after B 803—807-first and were of better work. It is therefore possible that B 803-first was rebuilt at that time and that the original nucleus building may have been erected a few years earlier than the final building. The nucleus building is certainly far too shabby a structure to have originated with any of the great kings between Piankhy and Aspalta, but the final building might very well have been an early reconstruction by Piankhy.

The plan of the nucleus building and of the final temple presents the main lines of the temples of the New Empire and the Early Ethiopian period at Barkal and Abu Sanam, *i.e.*, B 500-first, previous to Sethos I; B 500, Ramesses; B 300-first, pre-Ramesside; B 300-second, Tirhaqa; B 200-first, Tirhaqa; Griffith's temple at Abu Sanam, Tirhaqa.

It would thus appear from the above considerations that the temple B 800-first was built previous to Tirhaqa (absence of foundation deposits), and that the nucleus building at any rate was built previous to Piankhy. I infer that the probable builder of the nucleus rooms (B 803—807-first) was Kashta or his immediate predecessor.



Room B904, seen from the "east", with fragments of statues in situ



Room B904, seen from the "south-west" corner, with fragments of statues in situ

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(2) TEMPLE B 800-SECOND. Plan III (Plate XXXIV).

Temple B 800-second is the red sandstone temple of which the back part, B 803—804-second, was so well-preserved in the time of Cailliaud and Lepsius. This part has now been nearly completely destroyed, but owing to the material what is left is easily distinguishable. The walls, pavements and columns were all of the same material—a comparatively good red sandstone—so that no difficulty was experienced in tracing the temple "westward" to the pylon which formed its "western" extremity. This stone temple was built directly over the crude-brick temple at a height of from 60 to 40 cm., and followed the plan of that temple except in the sanctuary. Thus the plan presents a pylon, three halls of columns, and a single cell (omitting the anteroom and two cells of the older plan), and appears to be a restoration of B 800-first. The stone-paved floor slopes gradually from back to front like that of the older temple, but falls 90 cm. in the 50 metres instead of 70 cm. That is, the floor of B 804-second is 60 cm. above that of 805-first, while that of 801-second is 40 cm. above that of 801-first. But still there was no indication of a step. The foundations of B 800-second were laid wherever possible on the stone pavement of B 800-first.

Judging from the plans of Lepsius and Cailliaud and the present scanty remains, B 800-second consisted of a nucleus building (Pylon II, B 803, and 804) and an outer part (the two halls of columns, B 801—802, and Pylon I).

a. The Nucleus Building, Pylon II, B 803-804-second. Plan III.

The nucleus building of B 800-second is that previously reported, as follows:

- (a) Waddington and Hanbury: Journal of a Visit to Some Parts of Ethiopia, p. 166 (temple D) and General Plan (opp. p. 158). In December, 1820. "And there are some sculptures on the walls; we particularly observed the arms of a woman, beautifully soft and natural." Refers to B 803.
- (b) Cailliaud: Voyage à Meroé, Vol. III, p. 218; Pl. XLIX (temple u); Pls. LIX, LX, LXIII. In 1821.
- (c) Hoskins: Travels in Ethiopia, p. 140 (temple D), Pls. 17, 18, 25. In March, 1833. "It is much injured, and the sculpture and the hieroglyphics which ornamented the interior are quite defaced; scarcely a vestige of the latter remaining to tell that they existed."
 - (d) Lepsius: Denkmäler, Pt. i, Pl. 127 and Textband, Vol. v, p. 266. In 1844.

In the time of these travellers the walls stood to a considerable height, but now all that remains is fragments of the foundation walls, the greater part of the stone pavement, the bases of the four columns in B 803 and the altar in 804. Moreover, the foundation trenches can still be roughly followed where the wall itself is entirely gone, and the face-lines of the walls are marked by cut lines on the foundations where preserved. The lines give us the front of the pylon, the exterior line of the "S." wall of 804, and the interior lines of that room. Thus the material is sufficient to permit an approximate reconstruction of the nucleus, but for the details the measurements must be taken from the plans of Lepsius and Cailliaud. Unfortunately the condition of the ruins did not permit either of these two scholars to obtain accurate measurements, as is proved by the discordant figures which they give. For example:

	_						Lepsius		Cailliaud		At present
(a)) Distance	between	n colum	n cer	$_{ m tres}$		$290 \mathrm{~cm}$.		$300 \mathrm{cm}$.	•••	280—285 cm.
(b)	,,	,,	centre	and	"E." w	all	$245~\mathrm{cm}$.	•••	$230 \mathrm{~cm}$.		
(c)	,,	,,	,,	,,	"N."	,,	$320 \mathrm{cm}$.	•••	$405 \mathrm{~cm}$.		
(d) Width middle aisle between centres							$652 \mathrm{~cm}$.		$470 \mathrm{\ cm}$.		$645 \mathrm{\ cm}$.
(e)	Thicknes	s of Pyl	on II				$353~\mathrm{cm}.$		$370 \mathrm{\ cm}.$	•••	(385 cm.)

There are other discrepancies, but these suffice to show that Lepsius' measurements are usually, but not always, the nearer to the mark. I doubt very much whether the mouldings at the corners of the building as shown by Lepsius ever existed, but I have taken them on trust for the pylon.

The size of the pylon is still roughly indicated by the foundation trench, by the faceline of the foundation stones on the "west" and by a few foundation stones on the "east." The width was clearly somewhat greater than that given by either Lepsius or Cailliaud, so that the distance in room 803 between the "western" wall and the nearer column centres could not have been much different from that between the "eastern" wall and the nearer column centres on that side (i.e. 230 cm.). The latter distance is imposed by the measurement from the alter in 804 to the column centres, both of which are still in place.

Room B 803-second had two rows of two columns as in the crude-brick temple. It was built at an angle to the older room, probably in an effort to straighten the temple axis, and was somewhat larger. The columns have a diameter of 87 cm. on a basis of 105 cm., and consisted of whole drums. The foundation of each was an irregular block of five or six stones of the same size as those of the f.c. of the walls. These were laid on the older stone pavement. The column centres were 280—285 cm. apart in each row, and 230 cm. (estimated) from the nearer wall. The width of the middle aisle was 645 cm. on the "east" and 655 cm. on the "west." This indicates that the room was slightly wider on the "west" than on the "east," and on re-drawing the plan according to Lepsius' measurements alone I found that the result was a room so distorted.

The wall between 803 and 804 was very thick (both Lepsius and Cailliaud agree on 295 cm.). The single cell was larger than one of the old cells, and fell directly over 807-first in the axis of the new nucleus. Near the middle was an altar made of a single block of reddish sandstone (not "polished green stone"), set on the pavement. The inside measurements, as indicated by the lines on the f. c., show the width of the room to have been 435 cm. instead of the 477 cm. of Lepsius. In my plan I have kept Lepsius' measurement; the bottom course may have projected to form a narrow ledge around the base of the wall.

b. Second Hall of Columns, B 802-second. Plan III.

The stone nucleus building had not been turned quite enough to bring its axis in alignment with the axis of the outer crude-brick temple, and so the axis of B 802-second which was parallel to that of 802-first makes a slight angle with the axis of the stone nucleus building. But the "eastern" end of the axis of B 802-second had been brought in contact with the "western" end of the axis of the nucleus. Thus the face of Pylon II crosses room 802 at a very slight slant. Otherwise, 802-second is nicely squared and is rectangular.

The "northern" wall was built partly on the floor of the old temple and partly in a cutting made along the face of the old crude-brick wall. Thus it was built as a sort of casing to the old wall, which appears to have remained in place. There was plenty of room to have made 802-second as wide as 802-first, but the shift of the axis and the size imposed by using the old "N." wall brought the "S." of 802-second wall in front of the old crude-brick wall. The foundation stones were laid on the older stone pavement. The inner face was marked as usual by a line on the f. c., but there was no line for the exterior face, and the latter face was no doubt left undressed, as it was hidden by the old crude-brick walls of 904. The "western" wall was built like the "northern" wall as a casing to the old crude-













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- Granite head of Tirhaqa, found in B904.
 Headless statue of Queen Amanmalenra, found in B500-A.
 Body of statue of Senkamanseken, found in B500-A.
 Head belonging to 4, found in B801-second.
 Smaller granite statue of Senkamanseken; head found in B500-A, body in B904.

brick wall. The "S." wall passed in front of the old doorway to 904, while the floor of the new temple was about 40 cm. above the old floor in 904.

The columns were in two rows of two each, instead of the three of the older temple. This arose from the diminution in size of the room due to the thickening of the walls and the shift of axis. The columns had a diameter of 105 cm. on a basis of 125 cm., but the basis was cut down from a larger basis of 165 cm.; or to put it another way, the disc-basis and the basis of the column were formed by one stone, which rested on the old pavement. This basis was composed of two half-drums, but the column above was of whole drums. The space between the column centres in each row was 395 cm., and that between the centres and the nearer side-wall was 220—230 cm., while the middle aisle had a width of 645—650 cm. between centres. The difficulty of finding a sufficiently strong piece of sandstone 450 cm. long to cover the space of 395 cm. is manifest. It could be done, but it would be an enormously thick block. Heavy beams of good hard wood (acacia) were certainly available and it may be that the roof was partly or wholly of wood (cf. the remark on roofing under (1) d, above).

The remains of a screen wall, 42 cm. thick, were found connecting the columns of the "N." row and the "western" wall. Probably a similar screen is to be restored on the "S." also.

c. First Hall of Columns, B 801-second. Plan III.

The wall between 802 and 801 was 400 cm. thick, but was not a pylon. The thickening seems to have been due to the manner in which the crude-brick wall was cased with stone on both sides. The width of the doorway could be calculated from a fragment of the face preserved on the "S."

B 801-second is about the same width as the old hall, but was shortened by the thickening of the wall between that and 802, just mentioned. Therefore the axis of B 801-second was nearly the same as that of 801-first, but as B 802-second had been shifted "N." on 802-first, the difference between the axes of the two stone rooms was greater than that between the two crude-brick rooms.

The "southern" and the "eastern" walls were built by casing the old crude-brick walls, which had been cut back for that purpose. The "northern" wall was of a different character. There the first course of the wall was laid across the top of the remains of the core of the old crude-brick wall, while the outer stones in the foundation course were laid as headers on the outside of the old core. This wall was dressed on both faces.

Only one course of the masonry of the wall was preserved, but that was in place almost all around the three sides of the hall. On the fourth side the pylon was better preserved. The foundation course consisted of headers. The course was about $45 \,\mathrm{cm}$ high. The stones were about $80 \times 50 \times 50 \,\mathrm{cm}$, and the masonry was not much different from that of B 700.

There were two rows of three columns instead of the older four. The column had a diameter of 105 cm. on a basis of 125 cm. and a sub-basis of 165 cm.—like B 802-second. But the sub-basis, although circular, was built of small stones; and the basis and bottom drum of the column were of one stone. The distance between the column centres in the same row and that between the centres and the nearer side-wall were the same, namely 350 cm. The width of the middle aisle between centres was 730—740 cm. The room widened slightly towards the "west."

As noted above pp. 252—3, the black stone of Atlanarsa was found in the "S." aisle, and the head of the statue of Senkamanseken between the third column on the "N." and

the "E." wall. The head had come into its place after the destruction of the stone temple, perhaps in modern times. The black stone (not an altar) had been deposited after the destruction of the Meroitic walls.

d. Pylon I of B 800-second. Plan III.

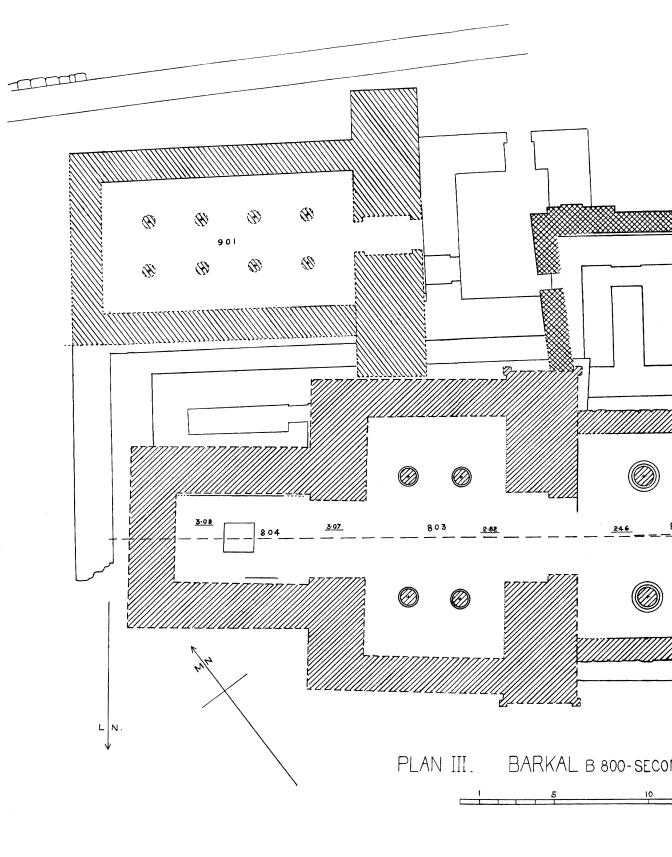
Pylon I of B 800-second is preserved to a height of two courses above the foundations, or in some places three. The facing courses are stretchers, breaking the joints above and below, while the core is badly built of stones laid irregularly. The foundation course is of headers, like the rest of the temple, but carelessly laid towards the outer ends of pylons.

On the "north" side of the niched doorway there was a re-used block of grey sandstone in the top course, on which was incised a Horus-name, "Ka-nekht...." (end missing). No contemporary inscriptions or reliefs were visible, but these would have begun above the part now preserved.

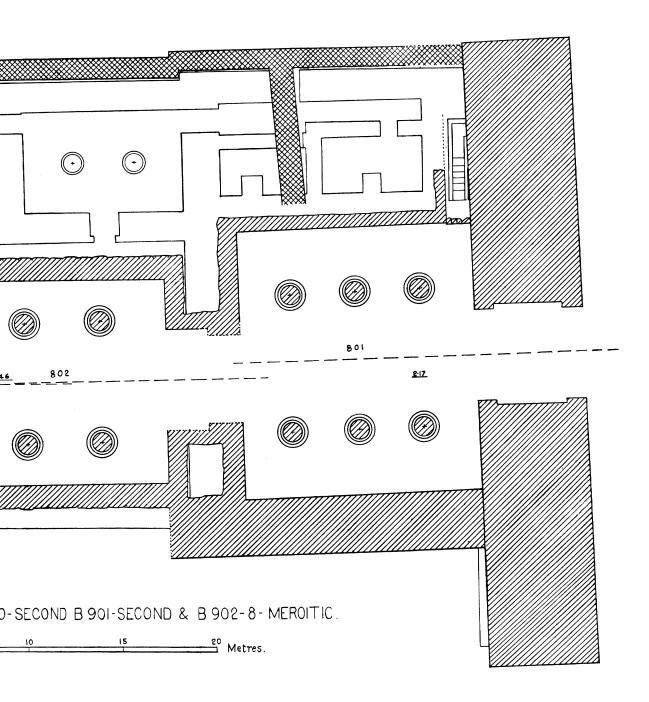
As stated before, the old crude-brick pylon appears to have been carried away to prepare for building the stone pylon. But the top of the crude-brick wall of the subsidiary rooms behind the "S." wing of the stone pylon was laid bare and was found to have been cut back 10—15 cm. by the foundation trench in which the stone pylon had been built. Along the older grey stone stairway, however, and for a metre or so to the "S." of the present end of the stair, the pylon masonry descended close beside the stairway. An entrance to the stairway had been constructed in the masonry of the "S." wall of B 801-second directly over the older entrance, but about 12 cm. wider, and the wall continued "southwards" to form a wider stairway. Thus there is a gap between the old steps and the "eastern" side of the second stairway, and it becomes probable that the older grey stair had been replaced by a red stone stairway during the construction of B 800-second. This red stair may be presumed to have followed the lines of the older stair and to have passed up through the masonry of the pylon. At some period during the occupation of B 800-second, the stairway had been closed by a wall of red sandstone, which projected slightly into room 801-second and was faced on the side towards that room.

e. General remarks on B 800-second. Plan III.

It is obvious that B 800-second is a reconstruction of B 800-first in red sandstone instead of crude-brick—an example of the reconstructions of brick temples in stone which are often mentioned in the Egyptian and Ethiopian temple inscriptions. It is more difficult to decide just how far the old crude-brick temple was in decay at the time of the stone reconstruction; but the topography points to the probable answer. The course of the rainwater after the time of Aspalta (drawn from excavations of 1918—1919) was along the "N." side of 801, and must have acted on the "N." wall of that room and the "N." wing of the pylon. Now this "N." wall is the only one which was entirely reconstructed, not cased (cf. 802). Thus it appears to me that the "N." side of B 801-first and the "N." wing of the crude-brick pylon had been brought down by running water before the stone temple was built, but that the rest of the temple was practically intact and in use. The floors were practically clean and the foundations of the stone walls and of the columns were laid directly on this pavement. The intervening spaces were filled in with dumped débris on which the second pavement was then laid. The only change in plan was the omission of the subsidiary rooms and the simplification of the sanctuary.



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The distinctive feature of the stone temple is the single cell preceded by a wide hall of columns. One looks in vain for an exact parallel. The later Meroitic temples have the cell and the preceding hall of the same width. A rock-cut temple which we discovered between Merawi and Barkal on the "east" bank in 1916 and dated to Senkamanseken presents the nearest approach, but differs essentially. And Tirhaqa's temple, B 300, omits the anteroom, but has three cells (and a small room off the middle cell). The temple B 700-Meroitic does indeed present the form of B 800-second, but the reconstruction to which it belongs was so clearly a makeshift that the example has little value. Possibly the form of the burial chambers of the royal pyramids may bear on the question. We have now (1919) a complete series of all the royal tombs from Kashta to Nastasan; and the exact duplicate of this plan of 803-804 (a wide room and a narrow cell) occurs in the tombs from Senkamanseken to Malenagan (i.e. Senkamanseken, Anlaman, Aspalta, Amtalqa, and Malenagan) but neither before nor afterwards. I mention this merely for the sake of completeness, not because I would venture to draw any conclusion from the fact. It is possible that the simplification of the plan in the stone temple was due entirely to lack of room. Between B 1100 and B 900-first, both of which were in existence at this time, the available width for B 800-second was only 15:40 m., of which the single cell 804-second fills over half.

No foundation deposits were found, nor any inscriptions. But the early travellers report (see above) that the walls of B 803 at least were covered with reliefs and inscriptions. The Meroitic walls in B 600, B 700, and most of those in B 500, have neither reliefs nor inscriptions, and the Meroitic reliefs and inscriptions (Amannutek?) found in a few places in B 500 are all in very crude fat relief (poor work).

The reddish sandstone used in B 800-second is of good quality, as far as I can judge from the same bed of stone as that in B 700-Ethiopian and B 500-Ethiopian. The masonry is very like that in B 700—masonry core cased with stretchers. It is in any case of an entirely different type from the Meroitic masonry at Barkal.

It is clear that the reconstruction of this temple in red stone took place previous to the Meroitic period. Above the conclusion was reached that B 800-second must have been built about the same time as the deposit of statues in B 500-A and in B 904-first, and that this was soon after the reign of Aspalta (see (1) f, above).

(3) B 800-MEROITIC.

In B 801-second there was a long rubble wall running the length of the hall and passing through the pylon-doorway to join with other contemporary walls of rubble and crude-brick in front of the pylon. These walls were built on a surface of decay 50—70 cm. above the stone pavement of the second temple and seemed to belong to the same period as B 100 and the late walls in B 500-A (later than the first century B.C.) but might have been even later. The conditions precluded the assumption that B 801 was still in use, but the walls may have been partially preserved and so utilized for domestic structures, as happens so often. These walls do not seem to be connected with those over B 902—908 (see below).

(4) B 900-FIRST. Plan II (Plate XXXI with Plate XXXV).

The building B 900-first, consisting of the two rooms B 901 and 902, has never before been recorded except by vague indications. No one had excavated it, although Dr Budge remarks (*The Egyptian Sudan*, Vol. 1, p. 138): "We turned over large numbers of stones

and dug a few trenches here, but we were just as unsuccessful in finding any traces of the plan of the building as Cailliaud, Hoskins, and Lepsius were." The only trench of European character which we picked up was that across 904, and probably Dr Budge's other trenches had been obliterated by the subsequent digging of merôg.

The building which I distinguish as B 900-first consists of a long hall still showing a pair of columns (probably originally five) down the middle and a smaller anteroom. There was no pylon.

The foundations were well built and set in trenches in hard subsoil. In the "N." wall alone, the f. c. consisted of slabs of greyish sandstone (like pavement slabs): in the other walls, the foundation wall consisted of one or two courses of heavy stones. These were laid usually as headers in the faces of the courses with two stretchers between, but in some places there was a header between, as the wall was three stones wide and exceeded the superstructure wall by 20—40 cm. The stones averaged about $80 \times 50 \times 50$ cm. In some places the bottom f.c. had stretchers on the outer face, but the interior was unattainable.

On this solid foundation the superstructure walls were built to cut lines as usual and dressed back to the lines after construction. Thus the actual wall was about 200 cm. in width with a margin of 10—20 cm. of the f. c. projecting beyond the wall. The stones were the same as in the foundations, namely a reddish weathering sandstone. The wall was two and a half stones wide, and the bonding was unusually good. The bottom course consisted of five stretcher-stones side by side echeloned so as to break joints; the second course consisted of three header-stones (shortened on the outer faces of the wall by dressing) laid end to end and breaking joints with the bottom course; the third course was like the bottom course; and although no part of the fourth or higher courses was preserved, the alternation was probably continued. At the "S.W." corner of 902, where the third course is preserved in both the side and the end walls, the stretcher-stones of the side-wall are continued straight across the end wall. The walls were dressed on both faces except on the "N." face towards B 800-first, and the "E." wall of B 901 was continued "northwards" behind 800-first as far as the side of B 1100. Thus this wall served as an enclosing wall for B 800-first.

Both 901 and 902 were paved with irregular slabs of reddish weathering sandstone or of red sandstone. This pavement was preserved over the whole of 902-first but only under the two columns in B 901.

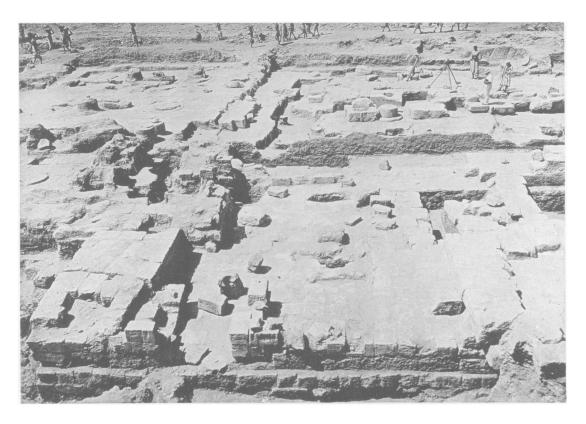
a. The Anteroom, B 902-first. Plan II, with Plate XXXV.

The "western" and "northern" walls of B 902-first were built against the crude-brick masonry of B 800-first at the "S.E." corner of the subsidiary rooms (B 903, etc.). Thus B 900-first was built after B 800-first (the crude-brick temple).

The masonry part of the "western" wall of B 902 was not a pylon, but its "western" face between the older crude-brick wall and the "S.W." corner was decorated with two large standing figures in sunk relief facing towards the "S.W." corner of B 902-first. Of these figures the feet only are preserved, but the scene was clearly original to the wall, and of the usual character of large wall-scenes (as on pylons). The doorway in the "western" wall of B 902 cuts through this wall-scene on the outside and is therefore not the original doorway of this room. It has a double rabbeting like a pylon doorway. The original entrance must be the doorway in the "N." wall of 902. This original entrance was blocked up after the other doorway was opened and we found the lower courses of this blocking wall in place.



Building B900-first, seen from the "east"



Room 902-first, seen from the "south". B802 and 803 in the background

THE BARKAL TEMPLES IN 1916

The room was paved as stated above, but the pavement showed no trace of columns. Now the columns would have been set on the pavement as in B 901-first, and all traces of centering may well have been weathered away. The width of the room ("E.-W.") seems to demand a single "N.-S." row of two columns. In addition to these hypothetical columns, there had been in the "S.E." corner of the room some structure built of masonry, but whether a rectangular basis or a stair, I could not make out, nor indeed its exact dimensions.

The wall between 902 and 901 was of the same width and of the same type of masonry as the other walls. The doorway was not marked but was certainly in the "northern" half of the wall.

b. The Main Hall, B 901-first. Plan II.

The paved floor of B 902-first was a few centimetres (about half the thickness of the slabs) higher than the top of the foundation walls of the hall, and rested on the hard subsoil. On the pavement stood the columns without any intervening basis. The remains of two columns were still in place, desperately weathered since their exposure by $mer\delta g$ -digging. In the disturbed débris in the room, there were a large number of column-drums and a capital (open papyrus flower) which were better preserved. The tops of the columns, as preserved, were a little lower than the base of the later wall of 900-second. Their diameter was about 82 cm. The distance between the centres of the two columns is so great (575 cm.), and the number of drums in the débris is so many, that I conclude the number of columns to have been originally five (as shown in Plan II). This would give 285 cm. between the centres of the columns compared with the 340—350 cm. between the centres and the two side-walls.

c. General Remarks on B 900-first. Plan II.

The pavement slopes slightly from back to front as in the two temples B 800, being at about 252:90 m. in the "eastern" end of B 901 and falling about 40 cm. to 252:50 m. in the "western" part of B 902. The Roadway, which had a level of 252:77 m. at the "S.E." corner of 901, was probably about on a level with the floor of 902 at a point opposite the doorway of the latter room. Thus the Roadway and the building 900-first had the same living level and must have been in use at the same time.

In addition to the fact, already noted, that B 900-first is proved by its relations to B 800-first to have been later in construction than B 800-first, it may be mentioned here that the re-used stones with which B 901-second was built probably came from B 900-first. The material and the size of the stones are the same, and some of them have reliefs and hieroglyphics in the same workmanship as the part of a relief-scene on the "western" wall of 902-first. The name of Piankhy occurs on one of these re-used stones, and thus B 900-first is probably to be ascribed to that king.

(5) THE CHAPEL WITH PYLON, B 901-SECOND. Plan III (Plate XXXIV).

On top of the second and third courses of B 900-first, a later building had been constructed consisting of a single room with a pylon. The remnants preserved showed the "southern" wing of the pylon, the foundations of the "northern" wing as far as the "N." wall, a small part of the "N." wall, and nearly the whole of the lower courses of the "S." wall. The "northern" part had been saved from total destruction by the great bank of débris already mentioned several times.

The material consisted as far as could be seen entirely of re-used blocks of the same

size and of the same reddish weathering sandstone as those of B 900-first. Some of the re-used stones bore sunk reliefs and inscriptions of the same workmanship as the reliefs on B 900-first, and the inscribed faces of these were all placed out of sight either inside the wall or in the back face of the wing of the pylon. It is to be noted that the re-use of dressed stones produces a greater irregularity than in the original masonry. Yet the bonding was again very good, at any rate in the wall. In the "S." wall, the three preserved courses were laid as follows: the bottom course resting on the third course of 901-first consisted of stretcher-stones on the inside face backed by two rows of header-stones end to end, so that the outside face showed as a header course; the second course had headers on each face and stretchers between them; and the third course had stretchers on the outside face backed by two rows of headers, the exact reverse of the bottom course. The pylon was much wider, and the masonry was of the type of B 700, headers in the core with a casing of stretchers on each face.

Around the outside of this chapel, on the "N.," the "E." and the "S.," there were considerable stretches of a course or two of undressed sandstone blocks (headers in the bottom course), apparently lined against the outside of the wall. These stones appear to have been laid as a support to the wall of B 901-second. They rest on from 60—100 cm. of débris and cannot be connected in any way with the older building.

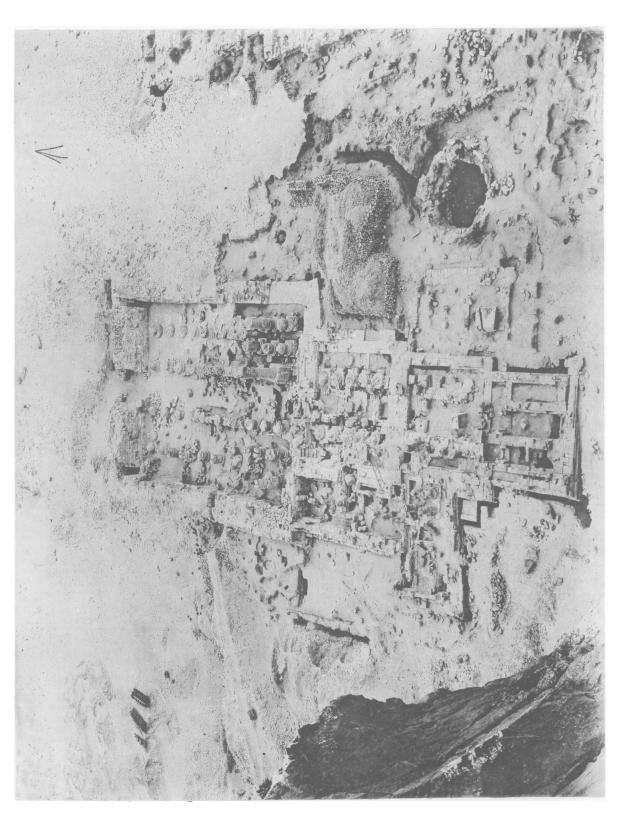
The floor of B 901-second was not preserved nor indicated by any marks on the walls, but it certainly lay above the third course of B 900-first and above the tops of the stumps of columns still in place in B 900-first. That means the level was 253.80 m. or more.

The single cell chapel with pylon was common enough in the Meroitic period, but in B 700-sub we have an example which was certainly previous to Atlanarsa and may have been as early as the Nineteenth Dynasty. I would reconstruct B 901-second on the general lines of the Meroitic chapel (cf. the chapel at el-Mesawwerât, Cailliaud, Voyage, Pl. XXX, No. 8) with two rows of four columns each. The re-used stones of Piankhy proved that the chapel is much later than his time, but I would not merely on the basis of form put it as late as the Meroitic period (i.e. later than Nastasan). The masonry would be against so late a date, I think; but the only Meroitic masonry I have seen is that of the first century B.C. at Barkal.

(6) The Rough Walls, B 902—908-Meroitic. Plan III.

Projecting into B 902-first and covering the subsidiary rooms B 903—908, we found a very poorly built structure of which only the foundations were preserved, and these by no means complete. The "S." foundation wall was fairly straight, as it followed the outside of the old crude-brick wall, but the cross-walls were askew. There seemed to be two rooms, a long room on the "east" and a small room on the "west." The entrance appeared to be in the "eastern" wall while the "western" end was formed by the "S." wing of the Pylon I of 800-second. Thus the orientation is towards the "east" in a direction opposite to that of all the temples at Barkal. In 1919, however, we found in B 1200 a series of temporary structures (coronation halls?) some of which had this orientation.

The wall projecting into 902-first descended to within 30—40 cm. of the old floor, where it rested on débris. The rest appears to have been built on the surface of decay formed by the weathered ruins of B 903—908-first, but the "S." wall had been sunk in the débris beside the old crude-brick wall. The floor must have passed over the top of the column stump standing in B 904 (i.e. more than 175 cm. above the floor of 904). The foundations of the cross wall rested partly on the tops of the remains of the old walls.



THE BARKAL TEMPLES IN 1916 Temple B500. Photograph taken May 18, 1919

The masonry of red sandstone was extremely poor even for foundation walls. In the "E." wall, there were a few re-used stones, one of which bore the cartouche of Harsiotef (Sa-mery-Amūn Har-si-iotef, in one cartouche). This was in a different style to the sculptures on B 902-first and on the re-used stones in B 901-second.

Considering the orientation, the plan, and the poor masonry of B 902—908-Meroitic, I am inclined to see in that building a temporary structure of the same nature as those found in 1919 in B 1200. The situation and the high level indicate a late period, but one in which B 800-second was still standing. The re-used stone of Harsiotef proves that the time was long enough after that king for a stone building of his to have fallen into decay. All this seems to me to point to the period of the Barkal pyramids, or the first century B.C.

(7) Conclusions on the History of B 800 and B 900.

The relative order of the different buildings which are included in the numbers B 800 and B 900 is clear, but evidence as to the fixed dates depends on the re-used stones of Piankhy, that of Harsiotef, and above all on the deposit of statue fragments in 904. This last point needs some further discussion. The statues stood in B 500 (probably 502), where they were broken through fire or by the use of fire, the pieces then being gathered and carried out with other rubbish, partly to B 500-A and partly to B 904. The fragments come from ten statues of five kings of Ethiopia and one queen. These five kings form a succession from which only one king, Atlanarsa, is omitted, and he had only a short reign, died unexpectedly and left his monuments in an unfinished condition. These five kings (with Atlanarsa) cover a period beginning in 688 B.C. and ending according to my last estimate about 563 B.C., or about 125 years. We have no proof at present that the temple ever contained statues of Piankhy, Shabaka and Shabataka; but statues were made at Napata for Amtalqa and indeed for so late a king as Akhratan (between Harsiotef and Nastasan). It is, therefore, significant that the destruction of these statues involved the monuments of these successive kings and none of a later date. Now B 502 was built in its present form (except for some repairs to one wall) by Piankhy, and the kiosk in the centre was built by Tanutaman. The hall is a vast lofty compartment with 46 columns, and 501 is a similar hall with fewer columns. We have thus two alternatives: (a) the statues of these kings stood in one part of 501 and were damaged by an accidental fire or one made by a foreign enemy, or (b) the statues of just these kings were wilfully broken by fire by a dynastic enemy. In such a vast and lofty room as 501 or 502, an accidental fire, even if the roof had been of wood, would have been well-nigh impossible. A foreign enemy invading the country might have plundered the temple treasury, but would hardly have troubled to burn the temple, and as a matter of fact there is no sign of a conflagration involving any of the walls from the "eastern" side of 501 to the very back wall of the temple. There remains only the rest of 501, which I have not yet examined. The conclusion to which I have come is that the statues were deliberately broken by a dynastic enemy. We know that Aspalta was followed by Amtalqa, Malenaqan, and Nalma'aya. The queens of Malenaqan and Nalma'aya were buried in the cemetery of the queens of the blood royal (Nansalsa, Madikani, etc.) who belonged to the family of Anlaman and Aspalta. Indeed, Henuttakhabit (?), the daughter of Aspalta, was buried by Nalma'aya and was probably his queen. The tombs of the queens

¹ For a view of temple B 500, discussed in Prof. Reisner's first article in this *Journal*, Vol. IV, pp. 213 foll., see Plate XXXVI.—ED.

which must on archaeological grounds be connected with Amtalqa were in the "southern" cemetery at Nûri. The evidence is all very indefinite, but it seems to me that we have here an indication of circumstances which might possibly fit the facts. I consider it as practically certain that the statues were broken intentionally soon after the reign of Aspalta. I infer provisionally that this was done by Amtalqa, that the remains and the rubbish were cleared away by him and that temple B 800-second was built by him. In no case would I agree to a date later than Netaklabataman, the successor of Nalma'aya, for the events in question.

With this result as a basis and taking into consideration the other conclusions reached in the course of this article, I would set forth the history of this group of buildings as follows:

- (1) B 1100. Not yet excavated.
- (2) B 800-first. Built by Kashta (?), or partly by Kashta and partly by Piankhy. Crude-brick.
- (3) B 900-first. Built by Piankhy (?). Reddish sandstone.
- (4) Roadway. Made during the occupation of B 900-first.
- (5) Breaking of statues. By Amtalqa (?), but not later than Netaklabataman.
- (6) Deposition of statues in B 500-A and in B 900. By Amtalqa (?), but not later than Netaklabataman.
- (7) B 800-second. Built about the same time as (6). Reddish sandstone.
- (8) B 901-first. Built by Harsiotef (?).
- (9) B 902-9-Meroitic. Built in First Century B.C.
- (10) B 800-Meroitic. Built after First Century A.D.

With this I close my report on the temples at Barkal as I left them in April 1916. After that, excavations were suspended until the end of December 1918, when I resumed work and continued until Feb. 20, 1919. The general course of the history of the sacred area beside Gebel Barkal was in 1916 quite clear, and has only become more certain during the later work. Nothing was found which might be previous to the New Empire except the two contracted burials in front of B 600. In the Eighteenth Dynasty at least two temples were built; they were small, but of first-class masonry and decorated in characteristic royal style. The great temple was founded by Tutcankhamun or Haremhab on a plan which omitted only the Ramesses chapel and the First Hall of Columns. By this act, the site was first established as an important religious centre. The great temple was restored by Sethos I, enlarged by Ramesses II, and probably received support from all the later kings down to the Libyan period; but no other temples appear to have been built at Barkal until the Ethiopian period. If I am right in my deduction as to the builder of B 800-first, then the revival of construction at Barkal began under Kashta, but Piankhy was the first to do great things. He made the earliest considerable reconstruction of the great temple of Amun and probably built B 900-first and the Roadway, if not the outer part of the temple of Kashta. No trace so far has been found of the work of Shabaka or Shabataka, but Tirhaqa worked on B 500, rebuilt the old New Empire temple B 300, and made the new rock-cut temple B 200. Tanutaman built the screen-work in the middle of B 502; Atlanarsa began B 700; Senkamanseken rebuilt B 503 and finished B 700; Anlaman and Aspalta are only known at present from the temporary coronation (?) halls in B 1200: and Amtalga probably rebuilt the Kashta-temple (B 800-first) in stone (B 800-second). It is clear, as indeed was to be expected, that the Early Ethiopian monarchy was the period of the greatest architectural activity at Gebel Barkal.

WHAT IS THE KA?

By N. W. THOMAS, M.A.

Under the name ka is understood an element that played an important part in the conceptions of the ancient Egyptians; but, if the literature of the subject is a guide, Egyptologists are by no means agreed as to the real nature of the ka. It is most commonly represented as a double, or a genius, or the image of a genius; but it has also been regarded as an image, or funerary statue of a deceased person, as the embodiment of the life principle or as a totem. I am not concerned to set out here the precise signification of the term, nor to scour the literature of Egyptology for all references, important or unimportant, to the subject; I therefore content myself with appending a few of those which have come to my notice.

I will however point out that the conception of the ka as a totem appears to rest upon a misconception. Moret, one of the upholders of this view, says that "primitive societies in their early stages believe in a supreme force which unites all the attributes attributed to the ka; the totem is an ensign, a distinctive mark, a name, substance, source of life from which a man comes at birth and returns at death, and finally it is human food."

It may be possible to find at one point or another on the earth's surface all these ideas associated with the totem; but it would be very safe to say that nowhere are they all found in the creed of any one people. Not only so, but some of the features assigned to the totem by M. Moret are definitely non-totemic; such is, for example, the idea that the totem serves as food to the members of the clan.

The view has indeed been put forward that the totem was originally eaten and then came to be tabu, but it is a theory and nothing but a theory; except among the Arunta, if we leave out of account decadent tribes whose totemism is no longer a living force, the totem is not eaten by the members of the clan², and even among the Arunta he eats of it sparingly, not as food for himself, but in the course of ceremonies intended to increase the numbers of the totem for the benefit of non-clansmen—clearly a very different thing from the use of the totem as food by the clan, which is implied by the words quoted above.

It may be true to say that primitive peoples believe in a supreme force, but if they believe, they do not recognise it; the supreme force is in fact an idea brought out by an effort of synthesis on the part of the armchair sociologist; at the same time it is possible that the idea is, from the standpoint of logic, to be justified.

Again, to say that the totem is the source of life is true, at most, in a very restricted sense; violation of totemic tabus is believed to entail barrenness in women, perhaps; but I do not recall any direct statement that the life of the individual is due to the totem whether by way of incarnation or as a creator who implants in the future mother the germ of a new life. The Arunta, it is true, associate pregnancy with the incarnation or reincarna-

¹ Revue de l'Histoire des Religions, LXVII, 181-191 (Moret); Zeitschr. f. äg. Sprache, XLVIII, 152 sq.; op. cit., XLIX, 126-7; Trans. Soc. Bibl. Arch., VI, 494 foll.; Ancient Egypt, I, 28.

² I allude below to the ritual eating of the Edo totems.

tion of totemic ancestors or their emanations; but there is good reason to believe that the Arunta philosophical system is a comparatively late product, which has overthrown an earlier totemism of a more ordinary type; in any case it is illogical to argue from a single exceptional case.

This brings me to another point; M. Moret says that totemism is associated with primitive peoples in their early stages. With that statement in view, it is natural to expect in his article some justification of his assertion of the existence of totemism in Egypt, which was certainly not primitive at the time when we first learn anything of the ka. He however accepts the view that totemism cannot be shown to have existed in Egypt, at any rate so long as better evidence is not brought to light.

The term totemism is, in spite of an enormous literature, a vague one; and writers on the subject hover between two opinions, making the essence of totemism alternately the social side, i.e. the association of sections of a tribe into definite groups, and the magicoreligious side, i.e. the performance of rites like those of the Arunta in virtue of a bond of union between the kin and the totem. On the whole the tendency seems to be to throw overboard one after another all the ideas originally associated with totemism and to recognise that no definition can be given which will hold good for all areas in which are found institutions which we term totemic. There is certainly much to be said for the view that there is no single origin to which we can trace all such forms¹; it is prima facie far more probable that, as with secret societies, elements have combined in different proportions in different areas and, by a process which anthropologists term convergence, have come to bear similar or somewhat similar aspects without being in reality referable to identical causes.

Even if it were possible to lay down with some definiteness that totemism was known in Egypt at some early stage of development, it would still be a very different proposition to argue that any Egyptian institution of historic times can be referred to totemism for its origin. There may be parts of the world where totemism has developed into a cult of local gods or into ancestor worship or into some other form more in keeping with later ideas; but such cases are, so far as our evidence goes, infrequent; in the ordinary way totemism, when decadence sets in, simply disappears. There are considerable remains of totemism in West Africa; the Edo of Benin City², for example, have different burial rites for each totem kin, and the central feature of their rites is the ceremonial eating of the flesh of the totem; in certain families the rite is degenerate and the food is simply thrown away; yet in spite of this the mention of, or questions about, the totem of a family will often provoke a smile on the part of the informant at the idea of any one being interested in anything so insignificant. If this is the case with a people among whom the totem still plays a part in ritual, still more is it true of the peoples, and they are the majority, among whom no such rôle is or has ever been, so far as can be seen, attributed to it.

Even if then totemism were proved for primitive Egypt, it would still be far from proven that the idea of the ka was derived from it. Before such a proposition could be admitted it would be necessary to treat from a historical point of view the notion of the ka

¹ It has now been shown that in Fiji two kinds of totemism exist which cannot be referred to a single origin.

² In Anthropos, XXI, 234-48, there appeared a paper on this subject over my name; but I never received a proof, and I observe that at least one table and possibly a portion of the MS. has been omitted or lost in some way.

and show that it existed in something like the form assigned to it in later times, at an epoch when totemism was still, if not a living force, at any rate so near the common stock of ideas as to make it a fruitful source of secondary principles.

As I have pointed out above, the procedure adopted by M. Moret is to summarise the ideas associated with totemism in every part of the world and to assume that, if totemism existed in ancient Egypt, the picture thus drawn would be a true portrait of Egyptian totemism. It is, as I have said, a composite photograph; and the types from which it is built up are so different that we can hardly recognise the traits of a single one in the picture thus drawn.

It may not be out of place to observe that from the point of view of method, M. Moret's procedure was indefensible. If one desires to draw with some amount of realism a portrait of an institution, the natural procedure is, if direct evidence as to its central features is not available, to collect evidence as to similar institutions in the peoples contiguous to the area whose social organisation is in question; and then, if there are no reasons for supposing that they differed widely from those of which a hypothetical sketch is to be constructed, to evolve the latter from a consideration of the relevant evidence. In other words, if we wish to arrive at an idea of what ancient Egyptian totemism was like, if it ever existed, the proper procedure is to sift the African evidence—and the evidence from any other area which may have left its impress on Egypt, and on this basis to evolve a sketch of the Egyptian creed.

If this method had been adopted, M. Moret would have found himself short of many of the concepts which form his totemic parallels to the ideas expressed in the ka.

In point of fact it can hardly be said that one single point of all those enumerated by M. Moret is characteristic of African totemism.

At most there is a vague resemblance to a protective genius to be found in some of the aetiological myths that are told to explain the association of the sacred animal with the kin. A family that respects the python tells, for example, a story that one of its ancestors once crossed a river on the back of a python, on which were growing plants, so that he thought it was dry land; after he had crossed, the python sank with a great noise into the depths of the river and the man was amazed; hence his descendants respect the python to this day. In the Ibo country some towns account for their sacred animals by saying that once when their forefathers were pursued by enemies, the sacred animal, a squirrel in two cases, obliterated the tracks of the fugitives and saved their lives.

This is however by no means the same thing as regarding the animal as a genius; and it is this that M. Moret's theory requires. In order to come into that category a totem must be supposed to act as a living helper to the kin at the present day. It must be remembered that an aetiological myth by no means corresponds to an event in the history of a tribe; it is a story invented to explain an association of an animal species with a human kin, and has no more claim to authority than has a folk-etymology among ourselves to a place in the Oxford Dictionary.

Not only so; but in other cases, so far from the totem being regarded as a benefactor, the aetiological myth explains its sanctity as being due to its once having brought disgrace on an ancestor. One of the Edo awaighe, ihiehie (black beans), was being eaten by a man when visitors came to see him, and fragments clung to his teeth when he went out to see them; here there is no vestige of the totem as genius.

Apart from stories of this sort there are two main features in West African totemism-

respect for the totem and usually, but not invariably, an exogamous rule for the kin; neither of these figures in M. Moret's list of essentials. There is, therefore, not even remote evidence of a totemic origin of the ka, if we survey the facts which should throw light on the subject.

Even were it otherwise, the difficulties raised by the theory would be only beginning. If it were argued that the ka began by being a royal emblem which was later extended to other men, the gods and material objects, the theory might be unintelligible; but it would be possible, from the point of view of totemism. We have evidence that the totem of the chief may be taken by his people as a national emblem; or that for some reason the whole or greater part of a kin may be segregated and give rise to a form of local totemism, with the same ultimate result. But this is not the contention; in fact M. Moret says that in protohistoric times we find represented on the most ancient monuments as "enseigne de collectivité" the ka. But this signification appears to have been lost.

What we have to account for, then, is the use of the ka as a universal emblem for individuals; and it is here that totemism clearly leaves M. Moret in the lurch. The totem may be common to a local group, but it is not common to the tribe; a tribal emblem is not a totem, nor is the sacred animal of a tribe. Much less is the sacred animal of a whole nation a totem. But this is precisely what M. Moret's theory demands. If the ka was evolved from a totem, it was evolved presumably from more than one totem simultaneously. Or are we to suppose that one totem kin evolved a ka, that the others followed suit, but, instead of taking their own totems for their ka, agreed to adopt that of another, possibly remote, perhaps hostile kin? Now that is not the way in which the totem is honoured and where totemism is a living force; a man respects his own totem, not that of another man, not even that of his own wife. This is an objection that does not seem to have occurred to the supporters of the ka-totem theory; but it is a solid one and fatal to their hypothesis.

Even if this objection could be evaded, there is another form of so-called totemism to which the ka is far more akin than to totemism proper. I need not go into details as to the "bush soul," which will be found in the Golden Bough; I will simply quote one early authority to show the kind of belief to which I allude. Writing of the Nalu and Baga in 1594, Alvares d'Almada¹ says that they "say that they put their souls in animals, such as leopards and lions and all the most courageous animals; and that if the animal dies in which they say they have put their soul they also die." This belief appears at times to be associated with true totemism; but its real kinship is with the double or "life-index," to which I shall have occasion to allude below.

It is of course improbable that all the Egyptians would have had the same soul animal; but there are concrete instances in which this is found to be the case; if M. Moret had advanced his theory in this form it would have been far more plausible. At the same time it would not have explained why a ka is attributed either to a god or to a material object. In order to do that we must turn to another West African belief which is in various forms found from Calabar to near the Atlantic Coast in the west, perhaps not in every tribe, but at least in many, and those the tribes on whose beliefs we have the most reliable data.

If any one familiar with West African customs—or even with the literature of the subject—were asked to say which side of them comes nearest to the notions embodied in the Egyptian ka, he would probably refer the enquirer, among other authorities, to the

¹ Tratado breve del Riòs de Guinea, Lisbon, 1841, p. 69; cf. Anthropos, XXI, 195.

summary of the beliefs of the Mandingo and other tribes which is found in the work by M. Delafosse, entitled *Haut-Senegal-Niger*. From that work, which is itself a summary of unpublished reports, we learn that there are two central conceptions—the breath of life and what we may term the soul—that go to make up man, as he appears on earth.

I will not attempt to summarise the account given by M. Delafosse; I have dealt with the subject in an article on Reincarnation in the next volume of Hastings' *Encyclopaedia* of *Religion*, to which I will also refer for a more detailed presentation of the other West African beliefs to which I allude in this paper.

But a much nearer parallel to the Egyptian view is found among the Agni-Twi, Ewe-Edo and Ibo tribes, which inhabit the coastal area from the Gold Coast to the Kamerun boundary. I have summarised these beliefs in the article alluded to².

If we examine the Ewe ideas, we find that, as in Egypt, we are sometimes dealing with a genius, sometimes with a double, sometimes with the image which represents these personages. Among the Edo it is impossible to say whether the central feature of the native idea is that the *ehi* is a tutelary spirit of a man or that it is a counterpart of a man who remains in *elimi*, when the man is on the earth, and at his death takes in his turn a human body and makes his appearance as a man.

But before I go into detail on the subject it may be well to say a few words on the terminology of the native languages. The words to which I am referring appear in three sub-groups, the Agni-Twi, the Edo-Ewe and the Ibo-Efik; the Yoruba intervene between the Edo and the Ewe at the present day; they appear to share the ideas of the tribes which I mention, but do not belong to any of the sub-groups mentioned, though, like the others, they form part of what is sometimes called the Kwa group of Sudânic languages.

In this group of languages and also in other groups of Sudânic tongues there is a suffix li, which is of unknown meaning; it is, especially in Ewe, Twi and Ga, added to nouns without, so far as can be seen, altering their meaning. This suffix li is found to undergo various changes; added to a word with a root vowel a, the vowel of the suffix may be assimilated, so that the word takes the form bala; this again takes the forms bla, ba'a, ba, bal; there are other possible variations with which we are not now concerned.

Now in Ewe the word for genius or double is *aklama*, in Twi *kra*, *kara*, or *okra*, in Ga *kla* or *okla*. These words have been derived by Westermann³ from a root meaning "to promise" and associated with the idea that the spirit of man, when he leaves the other world to be born on earth, gives a solemn promise to return to the other side within a given period. This promise has, according to Westermann, been personified and is now the double or genius of the man.

It is quite possible that the idea of a promise is associated with the word and with the genius in the Ewe area; but so far as my experience goes it is not a feature either of Edo or of Ibo beliefs.

In the Efik language of Calabar, which is an older branch of Ibo, so far as can be seen, the *akaña* is a solemn promise to return; but it is not associated with any idea of a double or genius. The Ibo *ikenga*, a personal tutelary spirit, is perhaps to be associated with this

¹ M. Delafosse, Haut-Senegal-Niger, 3 vols, Paris, 1912.

 $^{^2}$ See also N. W. Thomas, *Edo Report*, vol. 1, 40-41; *Ibo Report*, vols 1, 30-34, IV, 18-27; London 1910, etc.

³ Die Sudansprachen, Hamburg, 1910, p. 147.

Efik belief; but here again there is no idea of a double; the *ikenga* is in no way associated, so far as I recall, with reincarnation beliefs. If therefore the promise is in the Ewe area personified and incorporated in the genius or double, it is far from improbable that syncretism has been at work. This view is borne out by the account which is given by Christaller of the *okra*. He takes the view that the natives believe it to exist before a man's birth and that it may be the soul of a relation or other person already dead who obtains leave to visit the world again; when he is sent down from heaven he takes with him his fate and the assignment of his fate is in Fanti described by the word *kra*. There is a double view as to the nature of the *okra*, or *kara*, which figures both as a soul and a genius; when a man dies, it leaves him gradually; but once gone it becomes a *sesa* or *osamba*.

In another sense the ϱkra is the same as the kraba, a young slave taken by his or her master to be a confidant and sacrificed on his tomb when he dies. This slave is looked upon as the soul of his master or mistress¹.

It seems therefore to be quite open to question whether Westermann's derivation, though plausible, is correct.

If there were no traces of Egyptian influence in Africa, it would undoubtedly be imprudent to look for an Egyptian origin for the kla. It has been pointed out above that, so far as the morphology of the word goes, the form kla is precisely what we should expect to find. But even this is a slender prop for a far-reaching speculation. If however we turn to the Fang language, of the N.-W. Congo area, although we do not find the word ka, the circle of ideas associated with it is represented by terms whose intimate connection with the corresponding Egyptian words it is not easy, bearing in mind that the correspondences are comparatively numerous, to dismiss as a theory devoid of foundation. We find for example $khun \ (=khu)$, spirit or ghost, $ba \ (cf. ba, soul) = creative principle, <math>sele \ (=sebe)$, circumcise, not to speak of more doubtful correspondences such as edza-ran, name, or $ki \ (cf. sekhem)$, power.

Even if we had only the single case of khun = khu, it would surely be highly improbable that both this and the kla should by pure chance correspond so closely to Egyptian words and ideas.

If we turn to customs², we find much in the burial rites of West Africa which recalls mummification. In one of our earliest records of native customs, at the opening of the XVI century, we find that in Sierra Leone³ the body of an important man was opened by an incision in the side; the entrails were taken out and washed, and sweet smelling herbs, meal and rice used to fill the body cavity. Again, in the present day in the Ibo country a blacksmith is kippered for fourteen days, instead of being buried immediately; his body is placed over a slow fire as a means of drying up the fluids. From linguistic evidence it is clear that there is an element in the Ibo people which came into the country from the north-east; they are probably to be identified with the people of Aguku or Nri, in the Ibo country, who regard themselves as the spiritual lords of the Ibo, and distinguish themselves from the people by whom they are surrounded. I do not of course suggest that this

¹ Westermann, Sudansprachen, p. 147; Christaller, Dictionary of Fanti and Ashanti Languages s.v.; T. J. Hutchinson, Ten Years in Ethiopia, p. 129; J. Adams, Remarks, p. 27; H. C. Monrad, Bidrag til en Skildning, p. 247.

² Cf. Zeitschr. f. Ethnologie, XLIII, 1-79.

³ Abh. Hist. kl. Bayer. Akad., IX, i, 133.

stock was of Egyptian origin; but it may well have been the bearer of Egyptian culture, and both the rites alluded to are reminiscent of Egypt; but probably the migration in question was the last of many, and occurred too late to account for the facts.

The archaeological results of the Frobenius expeditions¹ appear to have provided the necessary testimony for those who ask for more than inferential evidence from resemblance of customs. If the heads dug up in the Yoruba country do actually afford proof of contact with Egypt two thousand five hundred years ago, it is not going beyond our evidence to argue that the reincarnation beliefs with which I have been dealing can be traced, at least in part, to Egyptian influence.

I do not suggest that there is no native element in the beliefs; on the contrary, it would be astonishing if they were transferred from one culture to another without undergoing all sorts of modifications, to which it would be easy to find anthropological parallels elsewhere.

Take for example the confidential slave, which represents an element unknown, so far as I know, in Egypt. The double or genius was known in Benin as *ehi* and there was a person known as Ehioba, the king's *ehi*; in the rites of Ake at Idumowina, close to Benin, when the priest was absent from the *ogwaibo* or shrine, a woman sat in his seat; and I was told that she was his *ehi*. In Sierra Leone some of the chiefs, when they succeed, choose their nearest friend to occupy a certain position; this man must not live in the same town; he may demand money or anything else he pleases from the chief, with whose life his own seems to be bound up; if the chief refuses his demands, he may take a palm nut and crush it; and the chief will find his life in danger; if the "friend" draws his sword half way from its sheath, the chief's health is affected; and so on.

In these three cases the "life-index" is associated with a person of rank or functions above the common; in the case of Sierra Leone there is no suggestion that a belief in reincarnation has anything to do with the custom; in fact reincarnation is not part of the creed of the tribes of that area. It is therefore probable that the "life-index" element of the custom of the Fanti, to which the authors allude, is associated with the kra complex by a process of syncretism. And the same may be true of other features; the development may have been parallel, complicated by lateral influences.

I give the Sierra Leone facts, mentioned above, only in the merest outline, as my notes are for the time being not accessible; but similar facts as to other less noteworthy cases were published in my report on Sierra Leone. In one chiefdom was a man who was called the *krift* (spirit) of the chiefship; he was not to live in the same house as the chief and at the death of the latter another man was chosen. At Maka the name given to this personage was Sanko; when the chief died he was compelled to remain indoors. In both these cases we have a dim reflection of the Gold Coast custom.

There is an interesting series of facts as to customs in which when a man is dead one of his relatives represents him and sits in his chair; in the Edo country this man is called the *nodiraia*; I have dealt with some of the cases in an article on Secret Societies in the next volume of the *Encyclopaedia of Religion* and will not deal with them here; but it is clear that they are parallel to the customs under discussion.

Both in the Yoruba country and among the Temne if one of twins dies, it is the custom to make an image; without it the remaining child would probably die; this brings

¹ Und Afrika Sprach, vol. 1, Hamburg, 1912.

us very near to the doll; and in the Ibo country the doll does in fact seem to perform some magical purpose in the hands of full grown women or betrothed girls. By the side of the facts as to the use of images of the kra these customs are very significant.

It may therefore be taken as established that there is in West Africa a wide-spread custom or belief as to the association of a living person, an image, or an imaginary being with a living person, and that the two elements are so closely bound together that their lives or existences depend, in large measure, on each other. If need be, further facts could be quoted from Ibo beliefs; the ci is associated with the birth of a child; it corresponds in part to the ago or spiritual ancestor of another part of the Ibo area; from another point of view the ci is a tutelary deity, the emblem of which is cut in pieces when the owner dies. But enough has been said to establish beyond question the point at issue. If these facts had been known to M. Moret 1 cannot but believe that he would have found nearer home a parallel to the ka, and would have explained it from African data instead of ransacking the world for parallels of doubtful validity.

I speak advisedly when I use the term parallels; it is conceivable that the ka has developed in Egypt uninfluenced by native African beliefs; and that the latter have again gone on their allotted cycle without interference from the higher culture of Egypt. That is a question which will be ripe for discussion if, one day, an American millionaire wakes up to the fact that the traces of Egyptian influence in West Africa are worthy of study, and sends out an expedition to collect the necessary data before they vanish into the limbo of forgotten creeds and rites.

If native tribes have left an impress on the more developed ideas of Egypt, it is perhaps by gradual infiltration and moulding of germs already in existence; if Egypt has influenced the wilder peoples, it may have been by the slow spread of ideas from tribe to tribe; but trade, the search for gold and more direct influences cannot well have failed to play a part. One thing is certain; if there was anything like direct transference of ideas or customs, they would remain comparatively unchanged in their new home only if something closely analogous were already in existence there.

We have to reckon with two other possibilities besides simple transference; they are parallel development (i.e. of something in the nature of an *Elementargedanke*) and descent from a common source. If the facts are related in minute detail, both these theories can be ruled out. It is a question on which further research may throw more light. But logical alternatives do not mean that we must in practice trace our facts to one source or expect to find uncontaminated data. We may find parallel development or descent plus lateral influence.

If I am right in supposing that the kla can be traced back to the Egyptian ka, it can only have effected a lodgement and confirmed its position because it found kindred ideas in the native mind, perhaps in a less organised form. But I lay less stress on the phonetic and semantic equivalence of the terms than on the maxim that parallels on which to base explanations of Egyptian beliefs must be sought, not in ideas drawn at random from the whole wide world, but from the cultural areas most intimately associated with Egypt. This would hold good even were the data invoked from distant continents good in quality and indisputable in interpretation; still more does it hold good when, as in the parallels cited from totemism, the supposed facts are either non-existent except in the imagination of arm-chair ethnologists, or are, at best, neither wide-spread nor normal elements of the complex which they have been taken to represent.

POSTSCRIPT.

Since the above was written the study of Trilles, Le Totémisme chez les Fang, on which I relied for the parallels quoted above, has disclosed that he has understated the case for the connection with Egypt. The absence from the list of any word related to ka, though it might be explained away, was a puzzling and somewhat disconcerting feature of the case; if there were no trace of the ka in Fang beliefs or vocabulary, the inevitable result was to weaken the force of the argument from the half dozen words quoted.

I find however in the work cited (pp. 349 foll., etc.) an account of the akamayon, or "aka of the nation" or clan (ayon) by which is meant, according to the author, the "materialised totem" or the totality of objects which constitute the totem and are related to it.

It would take me too far to discuss the question in all its bearings; I therefore content myself with putting forward the hypothesis that this aka, made up of a number of different objects, but in its essence the material representation of the totem, is derived from the ka and can be correlated with the various West African forms of the genius. A recent study of West African totemism has led me to the view that, in some of its forms, it is intimately connected with the reincarnation complex; the hereditary totem was probably the "bush soul" of the founder of the family or, at least, derived from some closely related belief.

So far as the Fang was concerned, the probability of this view is increased by the fact that a part of the *aka* is known as the *mvamayn* or "spiritual ancestor of the tribe," represented as a rule by a fragment of his skull: in fact the chief constituent of the *bian-akamayon* is this very fragment of skull surrounded with nine other objects destined to reinforce its power.

It is an important point that the *mvame* is concerned, like the *kra*, with the things of this life, there is no *mvame* in the future life. As a working hypothesis therefore there is, it appears to me, ample justification for regarding the *aka* as a derivative of the *ka* and my argument from the Fang parallels, put forward in the body of my paper, gains correspondingly in force. If I am right in taking this view, it is not less, but more, probable that the *kra* can also be equated with the *ka*. On the other hand, the fact that among the Fang the *ka* complex is associated with a form of totemism lends no support to M. Moret's view as to the origin of the *ka*. Where reincarnation beliefs are associated with totemism, the latter appears as a derivative of the former; it may be possible to maintain the opposite view; but whereas the theory put forward here accounts for the origin of one form of totemism and explains how the contradictory views as to the *ka* came into existence, the opposite view leaves totemism unexplained and gives us, as I have shown above, a theory of the origin of the *ka* which is full of difficulties for the student of totemism.

BIBLIOGRAPHY 1918-1920: ANCIENT EGYPT

By F. LL. GRIFFITH, M.A.

THE following pages are intended to record principally the printed output of the last two years; they include however many items which appeared earlier but had escaped note in the *Journal* owing to the war. Doubtless the record is still far from complete; it would have been more so but for the kindness of the Editor and Prof. Rostovtzeff in lending me books and furnishing references.

The British Museum has published a small and very convenient illustrated handbook and written by a group of experts especially for travellers in the Near and Middle East. It is entitled *How to observe in Archaeology*. Flinders Petrie contributes the special section on Egypt.

Professor Breasted writing on The place of the near Orient in the career of man and the task of the American Orientalist (Journal Amer. Or. Soc. xxxix 159) points out the analogy between the bridge uniting North with South America and that joining Europe and Asia as the nidi of civilisation for their respective areas. He urges that the Orientalist should pay attention to material remains and conditions equally with language, and announces the foundation of an Oriental Institute in the Haskell Museum at Chicago for the study and collection of material of all kinds in the Ancient East. In a further article entitled The Oriental Institute of the University of Chicago (American Journal of Semitic Lang. and Lit. xxxv 196) Breasted calls on America to do what impoverished Europe cannot so justly be expected to accomplish, namely to explore the perishing records of the mother of our civilisation in lands formerly under Turkish rule now more open to research. Mr Rockefeller has given an endowment of 10,000 dollars annually to the Institute for the object of tracing the rise of man in the Near East from savagery through various degrees of civilisation, and the transmission of this civilisation to Europe.

It is earnestly to be desired that Prof. BREASTED's views may prevail not only in America, but also mutatis mutandis in the British Empire, so that its government may at length range itself with those of European countries in the fostering of historical research in the Near East. A note on the petition to the Treasury for the establishment of a British Institute in Cairo is printed in Journal v 303. The stirring and judicious Presidential Address of Sir Charles Hercules Read to the Society of Antiquaries, 1920, with the subtitle Archaeology after War may be commended to the attention of the British nation; in reproducing General Maude's Proclamation regarding antiquities in Mesopotamia as an encouraging sign of the times, Wainwright makes some apt remarks on the destructive effects of ignorance and treasure-hunting upon historical and artistic remains, Anc. Egypt, 1920, 88.

Amongst the British Museum Guides written by Sir E. A. W. Budge is one on *The Book of the Dead*, explaining its name and purpose, with illustrations of deities, vignettes and writing, and another on *The Rosetta Stone* with a sketch of the decipherment of Egyptian and a summary of the contents of the decree of Epiphanes.

Mrs Grant Williams gives an account of the beginnings of American interest in Ancient Egypt, culminating in the acquisition of the Abbott collection after a prolonged effort in 1860. It appears that the designation Amerikani was hardly known in Egypt before 1832, in which year an American consular agent was appointed for the first time. The place of the New York Hist. Soc. in the growth of American interest in Egyptology, N.Y. Hist. Soc., Quarterly Bull. IV 3.

Miss W. E. Howe has written a *History of the Metropolitan Museum of Art* (which was founded in 1869) with an introduction on early institutions for Art in New York.

BRECCIA reports on work at the Alexandria Museum during the war; the stone pylons and altar of the temple of Pnepheros were transported from Theadelphia to the Museum where they were re-erected in 1915–16. A large mosaic from Thmuis was transferred from Cairo. Municipalité d'Alexandrie, Rapport sur la Marche du Service du Musée 1914–15, 1915–16, 1916–17, 1917–18.

The Institut Égyptien, founded in 1859, on 1 Nov. 1918 changed its designation to Institut d'Égypte, the title which had been adopted in 1799 by the savants of Napoleon's expedition. Its *Troisième Livre*

d'Or has just been published, containing the names of members, list of publications etc. for the period 8 May 1909 to 31 Oct. 1918.

A review of Egyptology and Papyrology entitled *Aegyptus* has been founded at Milan. The editor is Prof. Calderini who is assisted by P. de Francisci and G. Farina. It is to be published in four parts annually; of the first volume two have already appeared.

The publication of Ancient Egypt has now been resumed. Consequent on the absorption of the Society of Biblical Archaeology by the Royal Asiatic Society, Legge has contributed a sketch of the history of the former society to the Journ. R. As. Soc. 1919 p. 25.

The Revue Egyptologique, which ceased to appear in 1914 owing to the death of its Editor Eugène Revillout, has made an excellent beginning in a new series edited by Moret and Jouquet.

Bibliographies are numerous:—of Africana for 1916 by Ashenden Harvard African Studies II 305; systematic bibliography of Egyptian research during three or four years past including papyrology, Calderini Aegyptus I 111; of Ancient Egypt 1915—1917 by Farina in Rivista degli Studi Orientali 1919 viii pp. 01—011. A General Index to the "Proceedings" of the Society of Biblical Archaeology, vols. XXXI—XL is compiled by W. L. Nash.

Breccia reviews recent Egyptological events and discoveries, a special feature being a chronicle of the remarkable results of Reisner's Harvard-Boston expeditions in Egypt and Nubia since 1912, and particulars of the extraordinary find of temple silver-work at Dendereh, of Ptolemaic time; unfortunately the silver is poor in style and in very poor preservation. Aegyptus 1 83.

Of books of travel in Egypt, Briggs Through Egypt in War-time contains some illustrations of archaeological interest on the El 'Arish road, the Siweh Oasis etc. Huber's Im Reiche der Pharaonen 600 pp. is condemned by Wreszinski as a waste of good paper Or. Lit.-Zeit. XXII 89. The human side of an excavator's life in the Near East is pleasingly portrayed by C. L. Woolley Dead Cities and Living Men. In two well-illustrated volumes By Nile and Tigris Sir E. A. W. Budge records his adventures as a collector of Egyptian and other treasures for the British Museum from 1886—1913; one of the plates figures a column from a papyrus of precepts of Amenophis III, a new delight in store for scholars.

LEGRAIN'S Lougsor sans les Pharaons is reviewed by Moret Rev. Égyptologique N.S. I 128. Canopus Menouthis Aboukir by Faivre, translated into English by A. Granville, is a guide to the history and remains of those places.

The following contributions to African anthropology etc. have been met with in preparing this Bibliography, and seem of interest in connexion with Egypt: in the Harvard African Studies vol. II p. 105 a detailed account of The Kababish, a Sudan Arab tribe by C. G. and B. Z. Seligman: p. 194 some Bisharîn baskets in the Peabody Museum by Sterns: p. 299 Siwan pottery (hand-made, by women) by O. Bates: p. 316 green pebble in a gold harness said to be from Gebelên (Editorial Notes): p. 317 Nubian belief that certain men can change into crocodiles: p. 320 walking sticks of cane from Sennâr with roots trimmed, making rude head and ears as of the sceptre; the sceptre can be illustrated from Mexican prayer sticks (Editorial Notes). In Sudan Notes and Records II 8 H. C. Jackson refers to the use of a flag that has been offered at a holy man's grave to protect cultivation and property left by the way-side cf.

Hans Stumme, the well-known authority on Berber languages, reviews the state of our knowledge of the Sîwan dialect. The materials (vocabularies only) are all very imperfect, owing largely to the lack of consecutive texts and of phonetic precision in the record. He publishes the vocabulary made by Freiherr von Grunau in the two winters 1898—1900. Eine Sammlung über den berberischen Dialekt der Oase Siwe (Ber. Sächs. Ges. zu Leipzig, 1914). To these materials may now be added a short vocabulary with phrases etc. collected by Mr Quibell and Mr Tweedie published at the end of Quibell's Visit to Siwa (Ann. du Service XVIII 97).

EXCAVATIONS AND EXPLORATIONS.

Having purchased the portfolios of drawings made on G. A. Hoskins' journeys in 1833 and other years, Dr A. H. Gardiner announces that these interesting but not very skilful records are available to any student who may wish to consult them in London. *Journal* v 304.

BUTANA. J. W. Crowfoot describes Meroitic and other sites visited in 1916, in the region which lies between the Atbara and the Blue Nile and eastward of the broad sandstone belt on the right bank of the Nile, and gives a drawing of the remarkable Meroitic rock-carving on Jebel Geili. He considers that the

habitation, cultivation and abandonment of ground and settlements at different periods are due to political rather than climatic changes. Old Sites in the Butana (Sudan Notes and Records III 85).

Napata. In Harvard African Studies II, Reisner publishes a Preliminary Report on the Harvard-Boston excavations at Nûri: the kings of Ethiopia after Tirhaqa. A systematic though summary account, with illustrations of the brilliant results of Reisner's excavation of the pyramids at Nûri in 1917, giving us 20 sepulchres of the Ethiopian kings (eleven of the names were previously unknown) as well as many queens. Literary sources and inscriptions touch only a few of the kings, but from the position of their pyramids and the changes of style in the archaeological remains, Dr Reisner is able to arrange them in a provisional order which seems more than plausible. Wonderful series of ushabtis, and of foundation deposits consisting of plaques and model tools, and a little jewellery were found. These 20 kings appear to represent practically the entire Ethiopian dynasty from Tirhaqa down to the revolution of Ergamenes who slew the priests of Napata.

Since then Prof. Reisner has had the good fortune to discover (Feb. 1919) the sepulchres of Piankhy, Shabako, Shabataka and Tanutaman in the remains of four small pyramids at el-Kurrû, on the right bank of the Nile a few miles down stream from Gebel Barkal, thus completing the list of burials of Ethiopian kings. As Tanutaman was not buried at Nûri, the pyramid attributed to him there in the previous year can now be assigned to his missing successor Atlanarsa. It is very important to have proved that Shabako and his successor were buried at Napata and not in Egypt. Moreover it is evident that el-Kurrû had been the seat and burial-place of Shabako's ancestors for several generations. The pyramids were almost absurdly small, but the funerary deposits had been valuable, and even the remnants left by tomb-robbers comprise much precious metal. A number of arrowheads of flint and chalcedony were among the finds in several of the ancestral tumuli. The dynasty was of Libyan origin. Reisner, Discovery of the Tombs of the Egyptian XXVth Dynasty at el-Kurruw in Dongola Province (in Sudan Notes and Queries II 237). Important facts and suggestions regarding this dynastic family and their burial places are given by Reisner Note on the Harvard-Boston Excavations at el-Kurruw and Barkal in 1918—1919 in Journal VI 61.

LOWER NUBIA. Second livraison of Les Temples immergés de la Nubie, Documents sur l'État ancien des Monuments, tome I, completing the volume and the valuable series of plans and views of the temples etc. made between 1826 and 1838 and preserved in the Hay and Burton MSS. in the British Museum. The first part, published in 1912, contained twelve plates of the temples of Dakkeh and Kalabsheh with Hay's very brief notes; the present one, 23 plates of other monuments from Amada northwards, with remarks by Mr Somers Clarke.

Kubanieh. A richly illustrated memoir publishing in a very complete and detailed manner a prehistoric necropolis, a cemetery of Dyn. XII, and another of the Christian period. The first included Early, Middle and Late Prehistoric graves, and in the rarity of stone vessels etc. resembled the Nubian more than the typical Egyptian remains of the kind. Junker Bericht über die Grabungen der Akad. d. W. in Wien auf den Friedhöfen von El-Kubanieh-Süd, winter 1910—1911 (Denkschriften of the Vienna Academy, Bd. 62 no. 3).

THEBES. West Bank. DARESSY publishes a report written in 1888 of the clearance of the tombs of Ramesses VI and Ramesses X, in the course of which large numbers of ostraca were discovered, Rapport sur le deblaiement des Tombes 6 et 9 de Biban el-Molouk (Ann. du Service XVIII 270).

The work of the French Institut in the spring of 1917 and the winter of 1917-18 included clearance of tombs at Gurnet Murrai, where were found the tomb of Amenemonet (see Journal v p. 288) and some others; the tomb of Amenemopet, seen by Wilkinson, was re-discovered, and that of Mermôsi, viceroy of Nubia, was nearly located by funerary cones. At Dêr el-Medîneh the tomb of Kha-bekhonit (with a curious scene described by Foucard) and another were discovered, Gauthier Rapport sommaire sur les fouilles de l'Inst. Fr. dans les nécr. Thébaines en 1917 et 1918 (Ann. du Service XIX 1). Funerary cones, many of them new and interesting, discovered at various points Id. Cônes Funéraires trouvés à Thèbes en 1917 et 1918 (Bull. Inst. Français XVI 165). In the present year on the hill behind Sheikh Abd el-Kurneh Winlock working for the Metropolitan Museum has found a tomb of Dynasty XI crammed with an unexampled variety of wooden models of sacrifice, etc. Journal vi 220; south of the entrance of King Meneptah's tomb, Lord Carnarvon and Howard Carter have found some large alabaster jars with the names of Ramesses II and Meneptah, Journal vi 221.

East Bank. Daressy reviews Legrain's results from clearances, between the Luxor temple and the river, in the light of his own notes made in excavations of 1885 and subsequently. Legrain's interpretation of the Roman monuments found in 1917 as belonging to a *forum* has not been justified by the subsequent

work; texts of two hieroglyphic stelae of Trajan found here in 1887 and 1891. Notes sur Louxor de la période Romaine et Copte (Ann. du Service XIX 159).

Amarna. The work of the Deutsche Orient-Gesellschaft in the two seasons 1911—1913 was noticed in Journal 1 258. The excavations were resumed on 16 Nov. 1913. Borchard's report shows that the builders of Akhetaton were not deterred by the possibility of torrents from covering the low-lying ground with buildings; in such situations the ruins are completely hidden by a compact layer of detritus, over a metre thick. The city was continuous for about 7 kilometres from north to south with a maximum breadth of $1\frac{1}{2}$. The building began on either side of the usual road track (still the main road between the modern villages of Et-Till and Haggi Qandîl) and was then extended by parallel roads with cross streets at right angles. The main excavation has been along the wealthy quarter of the broad "Street of the High Priests," eastward of and parallel to the original road which has only been touched here and there by the excavations. Outside the town the roads are seen to be (1) the very ancient and well-made desert road to the distant alabaster quarries of Hat-nub; (2) two late roads, both leading to a Roman alabaster quarry not previously observed; (3) many roads made in the Tell el-Amarna period, leading to various tombs, boundary stelae and other monuments; also circular ways around the outskirts, probably for guarding and policing. Research for further boundary stelae was fruitless; if the precise statement of the inscriptions that the measures on the east and west sides were alike is to be accepted literally, Borchard can only suggest that they were taken along the river courses, of which a second may have existed then at the edge of the Libyan desert. The excavations of 1913—1914 were mostly among small houses previously examined or plundered by excavators and natives. A new point recognised is that while the private gardens of great houses were shut off by high walls, trees were planted outside these walls for the benefit of the public. The doors of one house had been bricked up by its owner, evidently when he left Tell el-Amarna for Thebes, showing the same precautions that are taken now-a-days when a house is left empty. Sculptors' workshops yielded evidence that modelling was done in wax mixed with clay. Two cuneiform fragments, a syllabary, and a literary text entitled "King of the Battle," afford hope of further finds of tablets in the future. Ausgrabungen in Tell el-Amarna 1913-14 (Mitteil. d. deutsch. Orient-Ges. no. 55 Dez. 1914).

At the beginning of these excavations in 1911 a very complete and precise survey of the site of Tell el-Amarna on both sides of the river was made, and was enlarged subsequently to include the alabaster quarries etc. many miles away in the Eastern desert. Paul TIMME, Tell el-Amarna vor der Deutschen Ausgrabung im Jahre 1911, one of the large memoirs of the Society, published in 1917, gives a reduction of the whole survey and a sectional map in eight sheets on the large scale of 1—25,000, with an account of how it was made and a detailed description of the ground illustrated by many photographs. It forms a most valuable contribution to our knowledge of the capital of Akhenaton and its surroundings. Reviewed by WRESZINSKI Orientalist. Lit.-Zeit. XXI 97.

Lahûn. The results of Petrie's excavations in 1920 include a Prehistoric (?) and First Dynasty cemetery at Lahûn, a gold uraeus inlaid with carnelian, lapis-lazuli, and garnet from the rubbish inside the pyramid, a very fine inscribed alabaster jar accompanied by pottery from the tomb of the princess whose jewellery was discovered in 1914, remnants of the tomb of the chief architect of the pyramid, the sarcophagus of a crown prince variously named Pracmesse and (in a cartouche) "Ramesses beloved of Truth," whose identity is discussed Petrie Excavations at Lahun (Anc. Egypt 1920 1).

FAYYÛM, Bath Harît (Theadelphia). Description of the site and the temple of Pneferôs with its inscriptions. Breccia Theadelfia (Bull. Soc. Arch. Alex. N.S. IV 91).

SAKKAREH. Excavation of pits with coffins etc. of Saite period. Châban Fouilles dans la nécropole de Saqqarah (Ann. du Service XIX 208).

ABUSÎR. After an armed conflict with some illegal diggers Tewfik Boulos found many wooden ushabtis in the sand (some in little coffins), of the XVIIIth Dynasty official Amen-ken whose tomb is at Thebes, Digging at Zawiet abu Mossallam (Ann. du Service XIX 145), described by DARESSY Les Statuettes funéraires trouvées à Zawiet Abou Mesallam (ib. 149).

Heliopolis. Tomb of a Mnevis bull dated in year 26 of Ramesses II, with stela, canopic jars etc. Châban Rapport sur la découverte de la tombe d'un Mnévis de Ramsès II (Ann. du Service xviii 193), Daressy La tombe d'un Mnévis de Ramsès II (ib. 196). It lay close to another Mnevis tomb (reported on by Ahmed bey Kamal as of Ramesses III) of which the component slabs are in the Cairo Museum and are now republished by Daressy who shows that it was built in reality by Ramesses VII La Tombe du Mnévis de Ramsès VII (ib. 211).

ALEXANDRIA. Col. Tubby and Lt.-Col. James describe some excavations in the cemeteries in the autumn of 1916 An account of Excavations at Chatby Ibrahimieh and Hadra with sketch plan (Bull. Soc. Arch. Alex. N.S. IV 79). Breccia reviewing Jondet Ports submergés de l'ancienne Île de Pharos and Canopus Menouthis Aboukir deplores the destruction for building materials of cisterns and other ruins on the coast which were found only in 1915–16 (ib. 137).

ISTHMUS OF SUEZ. In an interesting article on the military aspects of the north-east frontier of Egypt in ancient times CLEDAT points out that the railway and water-supply made by the British troops ensure a permanent population to the Jifâr along the sea-border between Egypt and Palestine. He notes that Ostracine was not on the sea but on the south-east shore of Lake Serbonis, at the end of a canal from the Nile, Pour la conquête de l'Égypte (Bull. Inst. Égyptien XVI 189). In a second paper, accompanied by a map of the southern end of the Isthmus of Suez showing caravan-routes and monuments, Clédat states that (1) he has excavated and collected the fragments of the red granite stela of Darius at Kabret, removing them to Ismailîeh where he hopes ultimately to be able to restore a great part of the text (which is very good news). He has found the names of the Persian provinces of Egypt and Libya, but others copied by earlier investigators have disappeared. He has examined the quartzite base and limestone foundations, showing that it was destroyed in Roman times. (2) He has planned the remnants of a Byzantine fortress at Kabret, commanding the passage between the Bitter Lakes—the route from Serapiu to Clusma. (3) On the caravan route from Suez to the Wady Tûmîlât, where LINANT noted two stelae, he has found them to be granite stelae of Ramesses II with remnants of a temple close by, dedicated to Hathor. (4) This discovery has a bearing on the route of the Exodus. CLEDAT makes Sinuhe reach Palestine by the north route and Serbonis; the Israelites started along the same road as far as Etham, which Clédat places at Tharu (El Kantareh), but then turned south to Pihahiroth (i.e. the newly discovered temple of Hathor) and proceeded to Nakhleh before turning south to Sinai. (5) The stela at Suez is not of Darius like those further north, but of Xerxes, indicating that the making of the canal proceeded from the Nile to the sea, its progress being marked by stelae of Darius from point to point, but the sea end was not completed until Xerxes Notes sur l'Isthme de Suez (Bull. Inst. Ég. XVI 201).

A summary account of the Antiquities on the Desert Coast between Egypt and Palestine especially at Flustyeh (Ostracine?) on Lake Serbonis, from observations of Mr Hort and Mr Bennett, is printed in The Geographical Journal LV 466.

PUBLICATIONS OF TEXTS.

(a) From sites in Egypt etc.

Asrûn. Decree of year 23 of Ptolemy Epiphanes, essentially a duplicate of one already at Cairo published in 1911. Unfortunately the text of each is very fragmentary as well as ill-engraved and faulty in the most important historical part, comprising half of the inscription. Daressy Un second exemplaire du décret de l'an xxIII de Ptolémée Épiphane (Rec. de Trav. XXXVIII 175).

Thebes. Granite statue of Sety, chief royal scribe, treasurer etc., found south of the Birket Habû, near the Roman temple of Isis named Dêr esh-Shelwît. Daressy *Une Statue de Deir el Chelouit (Ann. du Service* xviii 282).

DENDEREH. Late stell of high priest of Hathor; fragment naming Antef-co, governor of Upper Egypt; statue in Greek costume of a general and high priest in the southern nomes [named Pamenkh, son and successor of Pakhom, who is called by the Greek name Hierax in the demotic of the pedestal] Daressy Inscriptions Tentyrites (Ann. du Service XVIII 183).

Tehneh. Endowment of a tomb of Dyn. IV, the children of the deceased being the ka-priests under certain regulations as to inheritance. Lefèbvre and Moret Nouvel Acte de Fondation de l'Ancien Empire à Tehneh (Rev. Égyptologique N.S. 1 30).

ABUSIR. Twenty-two fragments from funerary stela of a royal scribe Min-hotp called Hu-tutu (Dyn. XVIII). DARESSY Une Stèle fragmentée d'Abousir (Ann. du Service XIX 127).

Fostât. Base of statue of Chephren, fragment of obelisk of Sethos I and Ramesses II, and statue of astrologer holding gnomon, found in the excavations of Aly-bey Bahgat, unfortunately bearing no references to the ancient city of Babylon (Fostât). Daressy Antiquités trouvées à Fostat (Ann. du Service XVIII 275).

Ķана. Blocks of Menephtah removed to Cairo appear to have formed part of a Heliopolitan obelisk, Daressy L'Obélisque de Qaha, with remarks on the ka-names given to the king (Ann. du Service XIX 131).

Edfû. Stela probably of Dyn. XXII—XXVI but of a style commonly attributed to the Ptolemaic period. Winlock (who remarks that the whole question of date of the later antiquities needs thorough reexamination) A stela of Pernesbastet from Hassaïa near Edfû (Journal VI 209).

Benhâ (Athribis). Statue covered with figures of deities and inscriptions of unusual length consisting of magical texts and others recording the pious work of Zeho-pshad especially in seeing to the welfare of the sacred hawks and their embalming in lavish manner. Daressy Statue de Zedher le Sauveur (Ann. du Service XVIII 113, and a supplementary fragment ib. XIX 66).

Pillar of statue of Nekhtnebo I (Nekhtnebf). In Un débris de statue de Nectanebo II (Ann. du Service xix 136).

(b) From Museums etc.

CAIRO. Transcript of hieratic papyrus of the Persian period containing a decree of Amen-ra-sonther in favour of Osiris, Horus, the sacred cities of Osiris and the goddess Isis. Daressy *Un décret d'Amon en faveur d'Osiris* (Ann. du Service XVIII 218); late religious texts on boards placed at back of mummies in the bandages Id. Planches de momies (ib. XIX 141); base of statue (belonging to a dealer) sculptured with wife and daughters of a Memphite priest of Imhotep with important list of festivals of the god. Gauthier *Un Nouveau Monument du dieu Imhotep (Bull. Inst. Français* XIV 33).

FLORENCE. Notes on texts including the famous stela of Sesostris I from Wady Halfa. Farina Minima (Sphinx XXI 24).

Berlin. Archaistic tomb-stone with the hawk-headed god of the Antaeopolite nome and unusual texts. Burchardt and Roeder Ein altertümelnder Grabstein der Spätzeit aus Mittelägypten (Zeits. f. äg. Spr. Lv 50).

BRUSSELS. Large and fine though injured Book of the Dead of Dyn. XVIII, with rare chapters, reproduced by photography on a reduced scale and described. Speleers Le Papurus de Nefer-renpet.

GRENOBLE. Commencement of the publication of the small but highly important collection of Egyptian antiquities from the château d'Uriage, given in 1916: comprising a fine stela of the end of Dyn. III, two statues and stela of Dyn. XVIII, the famous Kuban stela of Ramesses II, all completely copied and described, with photographs. Moret Monuments Égyptiens de la collection du Comte de Saint-Ferriol (Revue Égyptologique N.S. I 1).

Paris. Transcript of letter of Dyn. XVIII in the Louvre (first edited by Maspero) concerning the abduction of a young weaving-slave. Spiegelberg Ein Brief des Schreibers Amasis aus der Zeit der Thutmosiden (Zeits. f. üg. Spr. Lv 84). Statue in the collection of the Comte de Blacas dedicated by a pastophorus of Osiris with long genealogy. Blacas Une Statue d'Osiris de la XXIII^e Dynastie avec généalogie (Revue Égyptologique N.S. I 39).

LONDON. Duplicate seen by Offord of the stell from Medinet Habû recording Taharqa's restoration of an enclosure for "six gods." Gauthier Les stèles de l'an 111 de Taharqa de Medinet-Habou (Ann. du Service XVIII 190).

(c) Miscellaneous.

ERMAN has collected and edited the short legends which accompany scenes in the Old Kingdom, consisting of conversations, exclamations and songs, classified according to the character of the scenes. This work is the result of forty years' study of these interesting scraps. The vocabulary used belongs rather to vulgar speech and differs to some extent from that of the contemporary inscriptions of a formal character. Reden, Rufe und Lieder auf Gräberbildern des Alten Reiches (Berlin Acad. Abh. 1918).

Tablet of year 22 of Sheshonq IV for a priest of Hather of Aphroditopolis; he is shown standing naked before the goddess in the character of the child-god 'Thy, holding sistrum and menat. Peet A stela of the reign of Sheshonq IV (Journal VI 56).

(d) Hieratic and Demotic.

Erman, reviewing Dévaud's careful publication Les Maximes de Ptahhotep Vol. I, objects to the author's method of introducing doubtful emendations into the text while MS. readings are relegated to footnotes, a proceeding which is not justified by our present knowledge of the Egyptian language. Deutsche Literaturzeitung 1917 857; cf. Moret in Revue Égyptologique N.S. I 115, Wreszinski Orientalist. Lit.-Zeit. XXII 15.

Ostracon from Thebes in which Pay appeals to his son for help in an attack of ophthalmia sent by the god Amûn—one of several documents which display amongst the poorer classes of the people in the necropolis a peculiar piety and personal relationship to the deity. Erman Der Brief eines Kranken an seinen Sohn (Amtliche Berichte XL 62).

The difficult "abnormal hieratic" texts, dated in y. 14 of Takellothis (Dyn. XXII) on the back of a papyrus of hymns at Berlin, have been published by Möller, who shows that they are memoranda of marriage contracts at Thebes, the earliest evidence regarding Egyptian marriage contracts yet found.

This interesting discovery is supplemented by Möller's piecing together of a fragmentary papyrus in Cairo, giving a similar text. Two of Dyn. XXVI previously known are compared, showing substantial identity in form for all that precede the Persian conquest. The author takes the opportunity also to define the formulae of various later groups, belonging to the Persian and Ptolemaic periods. Zwei ägyptische Eheverträge aus vorsaïtischer Zeit (Berlin Acad. Abh. 1918). Sethe reviewing the work in Göttingischer gel. Anzeigen 1918 362 advances the interpretation of the contracts very considerably. Before the Persian time the business was transacted between the bridegroom and the father of the bride; afterwards the contract is between the bridegroom and the bride herself.

Sixteen demotic and other papyri in the British Museum are edited by Nath. REICH; including a loan in "abnormal hieratic" dated y. 20 of Apries, papyri of Amasis, Darius, Ptolemy II, III, IV, V, the native ruler Harmakhis, and Ptolemy VI. The publication is based on admirable photographs, the texts are transcribed and translated with elaborate commentaries and indices: it was laid before the Academy in 1911 but bears the date 1917 and has been further delayed so that the author in an additional note is able to refer to Möller's above work of 1918. Papyri juristischen Inhalts in hieratischer und demotischer Schrift aus dem British Museum (Vienna Acad. Denkschr. Bd. 55).

Sethe republishes a marriage contract on an ostracon, first dealt with by Spiegelberg in 1909 and shows that it was with a divorced woman and terminable after nine months if the woman prove to have been with child. Ein ägyptischer Vertrag über den Abschluss einer Ehe auf Zeit in demotischer Schrift (Göttingen Nachrichten 1918 288).

As was noted in Journal III 273 the Leyden papyrus known as the "Kufi" (which contains amongst many other things the Aesopian fable of the Lion and the Mouse) has been recognised by Prof. Spiegelberg to describe the mission of the eloquent Thoth-ape (Kufi) to bring the fierce cat-goddess Tephenis home to her father the sun-god at Heliopolis. It is now edited with a full transcript and translation of the long text and an index of its exceptionally rich vocabulary; a new facsimile of the obscure and fragmentary text is due to the skilled hand of Prof. J. J. Hess and is accompanied by photographs of two well-preserved portions. The work constitutes a very important addition to demotic studies. Prof. Spiegelberg attributes the MS. to the second century A.D. and the story in its present form to the Hellenistic age. Der ägyptische Mythus vom Sonnenauge (der Papyrus der Tierfabeln "Kufi").

HISTORY.

Breasted's $Ancient\ Times$ is very favourably reviewed by S. R[einach] in $Rev.\ Archéologique\ v$ Sér. t. x 257.

Reviewing Capart's Les Origines de la civilisation Égyptienne, Giuffrida-Ruggeri takes the view that the Egyptian civilisation, originating in the Delta, was essentially Mediterranean, and that the Egyptians were Semitised Nubians. Aegyptus i 104.

GAUTHIER has provided his great collection in five volumes of the Egyptian royal names (*Livre des Rois d'Égypte*) with an extensive index of names and titles, published in the *Bull. Inst. Français* xv 1, and entitled *Répertoire Pharaonique*.

BORCHARDT re-examines in detail the Palermo stone of annals and the early pages of the Turin Papyrus, with good results in detail (e.g. the recognition of periods of anarchy, and the liturgical (corvée) character of the biennial "services of Horus"); and arrives at the conclusion that the First Dynasty began in 4186 B.C., about 800 years earlier than has been generally supposed of late years, but leaving the date of the beginning of Dyn. XII undisturbed about 2000 B.C. Die Annalen und die zeitliche Festlegung des Alten Reiches der ügyptischen Geschichte (Quellen und Forschungen zur Zeitbestimmung der ügyptischen Geschichte Bd. 1). The book is elaborately reviewed by Peet, who finds his chronological work entirely inconclusive, though full of ingenious arguments and reconstructions. Journal VI 149. Cf. Lehmann-Haupt Zur älteste ägyptische Chronologie (Klio XVI 200).

R. Weill's papers on the Middle Kingdom printed in the *Journal Asiatique* are collected in two volumes entitled *La fin du Moyen Empire*; they are reviewed in *Ancient Egypt* 1920 22, where the conclusions are severely criticised, though the collection of material is admitted to be useful.

Gauthier adds two middle-kingdom viziers Res-senb and Hennu to the list compiled by A. Weil in 1908, and proposes to make one wazîr Ankhu out of the two in R. Weill's work. *Trois Vizirs du Moyen Empire (Ann. du Service* XVIII 265).

REISNER The Viceroys of Ethiopia (Journal VI 28) gives a catalogue of these great officers of the Empire, establishing their order by the monuments from their origin in the reign of Amenophis I to their

end in Dyn. XX. This valuable paper marks another great step forward in our knowledge of the history of Nubia: it contains an interesting suggestion also regarding the expansion of the title "king's son" to "king's son of Kush" under Tuthmosis IV. In a continuation of the paper (Journal vi 73) Reisner enumerates the known officials who acted under the Viceroy, and discusses the Viceroy's titles and insignia.

Gauthier collects and discusses the titles connected with "the Place of Truth" (i.e. the Theban necropolis), some forty in number, making a great advance on earlier collections. La Nécropole de Thèbes et son personnel (Bull. Inst. Français XIII 153).

Borchard gives some of the results of working out the finds at Tell el-Amarna Aus der Arbeit an den Funden von Tell el-Amarna (Mitteil. d. Orient-Ges. no. 57, März 1817). The use of wax for modelling is certain; "altar pieces" of the worship of the Aton are recognised in earlier collections; and the attributions of the portraits of the kings are somewhat revolutionised. The "normal" faces are those of Akhenaton's father Amenophis III with the cartouches altered; the Aton-blocks in the tenth pylon of Karnak date from Amenophis III and in some cases are even earlier; probably the Heliopolitan worship of the sun was brought to Hermonthis and thence to Amarna. The cult of the sun at el-Amarna seems to be as early as Tuthmosis IV.

Schäfer publishes some studies on the Tell el-Amarna art and religion. He points out the survival of some of the older funerary observances, but with many differences; publishes fragments of the sarcophagus of princess Mektaton in Berlin with figures of the queen where protecting goddesses stood later. Vulgar Egyptian is employed for inscriptions even in the brief texts on the coffin of Amenophis IV, and probably many of the old formulae had new meanings attached to them. He reviews Borchard's Aus der Arbeit, criticising its tone in regard to earlier views and traversing some of his conclusions. With regard to the portraits Borchardt has proved that certain figures of normal type have had the name of Amenophis III altered to Amenophis IV; but his attempts to assign others to various members of the heretic's family are less successful, and Schäfer reproduces a large number of representations of Akhenaton and his queen Nefertite to show in how many respects they vary among themselves. Borchard's discoveries afford clear evidence of independent worship of Aton during the reign of Amenophis III: at that time the god is figured as of human form with hawk's head; the sun with rays is probably an invention of the next reign. The temple of the former must have been at Karnak; Amenophis IV was crowned in Hermonthis, but BORCHARDT overstrains this piece of evidence, for e.g. the bull of the new cult was the Heliopolitan Mnevis not the Hermonthite Buchis. Borchard's view that there was Aton worship at Tell el-Amarna before Akhenaton is in direct contradiction to the statement of the older boundary stelae. Names of buildings connected with earlier kings—Amenophis III, Taia and Amenophis IV simply commemorated those ancestors whom Akhenaton desired to honour. Finally when Borchardt treats Akhenaton as devoid of originality his arguments are unsound. Altes und Neues zur Kunst und Religion von Tell el-Amarna (Zeits. f. äg. Spr. LV 1).

Previously to this Schäfer had figured the Berlin block from the Karnak temple of Aton used in the construction of Pylon X, portions of the reliefs in the temple of Ramose, and a scene of Amenophis's pylon at Soleb, in order to prove that they give no support to Borchard's theory that the works in the style of Amenophis III which have been attributed to the early years of Amenophis IV really belong to the former reign (Die frühesten Bildnisse König Amenophis des IV, Amtliche Berichte XL p. 211, July 1919): in the September number, however (p. 283), Borchardt proved by a large reproduction of Breasted's photograph that the Soleb relief indeed belonged to Amenophis III and was altered by Amenophis IV. Later, a thorough cleaning of the block from Karnak has revealed a startling fact: the bust of the hawk-headed Aton and his titles are in quite a different style from those of the king and show remnants of an earlier design; the king's features are presumably those of Amenophis III. Thus the figure of Aton and his titles do not belong to the reign of Amenophis III and are again to be referred to Amenophis IV. Schäfer Eine Überraschung beim Reinigen eines Reliefs aus der Reformationszeit (Berliner Museen Berichte XLI 158).

Schäfer also, discussing the "Akhenaton" portraits of the canopic jars, absolutely rejects their attribution to Akhenaton and suggests that they may represent his queen Nefretite. Zeits. f. üg. Spr. Lv 43. He also writes on the slab of Akhenaton published by the present writer in the Journal (v 61); Borchard pointing out that the "pillar" separating the scenes is really a door; the cartouches of the king have been altered to Akhenaton from Amenophis IV, and Schäfer would attribute the sculpture to the 5th or 6th year. He rejects the date of year 4 on the earlier boundary stelae of Tell el-Amarna [although it would seem to be well authenticated]. Die Anfänge der Reformation Amenophis des IV (Berlin Acad. Sitzungsber. xxxvi 477, 1919).

Gauthier collects the known records of "royal sons of Ramesses" of whom he distinguishes seven, one of them a woman, ranging in date from the XXIst Dyn. to the end of the XXIInd. They are evidently the recognised descendants of the Ramesside kings, and it is possible that Pshedenubasti, whom Reisner makes the progenitor of the Ethiopian kings, was one of them. Variétés historiques V, Les "Fils Royaux de Ramsès" (Ann. du Service XVIII 245).

MÖLLER, republishing the obscure name on a royal ushabti in the Berlin Museum (which was read by Wreszinski as Re-Harakhtî-snb), reads it as perhaps "Khu-taui Seb" and compares the name with that of "Sibu, tartan of Pharaoh" and "So king of Egypt" in II Kings xvii 4 and the Annals of Sargon, the ushabti belonging to about this period. König Sibu, der ägyptische Gegner Sargons (Or. Lit.-Zeitung xxii 145).

REISNER contributes to Sudan Notes and Queries II 35 a paper on the First Kingdom of Ethiopia, the fourth part of his Outline of the Ancient History of the Sudan, and the most important of the series for the new light thrown on the history. He derives the dynasty of Piankhi from the Libyan royal family of Egypt and reconstructs it thus. About 775 B.C. Pshedenubasti; son of Sheshong III, was governor of Ethiopia, and became semi-independent: Kashta his son and successor assumed the title of king with his capital at Napata, dispossessed Osorkon III of Thebes and compelled Osorkon's daughter Shpenwopi, high priestess of the Theban Amun, to adopt his own daughter Amyrtaeus (Amenertais) as her heir, thus uniting the Thebais with the warlike population and wealth of the Sudân. To Kashta succeeded Piankhi, who added Lower Egypt to his empire, but left Tefnakhti to rule it. Shabako removed Tefnakhti's son Bocchoris and ruled all Egypt himself, and so Egypt continued in the hands of the Ethiopians till Tirhaqa was driven out by the Assyrians. Tirhaqa was the first Ethiopian king buried at Nûri. Thereafter Psammetichus and his successors of Dyn. XXVI ruled Egypt, and Ethiopia was cut off from Egypt. About twenty successive kings were buried at Nûri: REISNER makes four groups of them, five in the first down to about 600 A.D., five in the second to about the date of Cambyses' invasion, five again in the third to about 440: the raising of Meroe to the position of political domination is attributed to the first king of the final group of nine kings, the wealthy Malewiyaman, though this is conjectural. A list of Ethiopian kings extracted from this paper is printed in Ancient Egypt 1920 39 (see also above p. 61 publication of the finds on which this reconstruction is largely based, and for the further results of later excavations). SAYCE enumerates the royal names discovered at various times in Garstang's Liverpool excavations at Meroe. The Ethiopian Sovereigns at Meroe (Anc. Egypt 1920 70).

ROSTOVTZEFF'S writing on *The foundations of social and economic life in Egypt in Hellenistic times* (*Journal* VI 161) considers that the Ptolemaic *régime* which he expounds was founded on that of earlier times but systematised by the Greek genius.

GEOGRAPHY.

GAUTHIER reviews a work by SIMAR on the early geography of Central Africa and puts together the evidence of early Egyptian discovery Mélanges (Bulletin de la Soc. Sultanieh de Géographie IX 131): other geographical reviews and bibliographies by the same writer are to be found p. 153, two Bulletins Bibliographiques of recent literature 167, 283, and a general sketch Bibliographie des Études de Géographie historique Égyptienne p. 209.

Daressy digests in alphabetical order of names the abundant geographical material of Arab age contained in the "Livre des Perles enfouies," a guide to the discovery of hidden treasures in Egypt. Indicateur topographique du "Livre des Perles enfouies et du Mystère Précieux" (Bull. Inst. Français XIII 175, XIV 1).

Daressy in L'emplacement de la ville de Benna (Ann. du Service XVIII 279) upholds the identification of Tell el-Mokdâm with Leontopolis, capital of the xixth nome of Lower Egypt; Beni and Sahragat which the Coptic-Arabic scalae give as the equivalents of Leontopolis are both in the neighbourhood, the name of Beni or Bana, a town which was destroyed before the 14th century appearing to be preserved in Binnai, the name of a hod or irrigation basin two kilometres from Tell el-Mokdâm.

Gardiner, having in previous papers enumerated and discussed the towns of Ramesses named in the papyri and inscriptions, endeavours in a long section of his essay to fix the position of the Delta capital of the Ramesside kings. The Biblical Shihor is the Egyptian Pshihor on the banks of which that capital stood, and apparently designates the Pelusiac mouth of the Nile, so that the capital ought to be identical with the later Pelusium. The claims of Tanis and other sites to represent Ramesses are discussed and rejected. Incidentally it is suggested that Pithom-Heroopolis is Tell er-Retâbeh, and that Tell el-Maskhûteh

may have been the fortress of Theku. The Delta Residence of the Ramessides (Journal v 242). Gardiner collects the evidence of papyri and inscriptions regarding the military road to Palestine, amongst other things discussing its representation in the expedition of Sethos I on the walls of Karnak, and concludes that the regular route must always have followed the line of the present one through Kantareh. The Ancient military road between Egypt and Palestine (Journal vi 99).

Daressy criticises Sir W. Willcocks' view of the Exodus and the passage of the Red Sea with his usual learning in the geography and monuments of Egypt. *Bull. de la Soc. Sultanieh de Géographie* Nouv. Sér. t. VIII 361.

FOREIGN RELATIONS.

The Evolution of the Dragon by G. Elliot SMITH may be noticed here, since throughout the book Egypt is made to play a very prominent part in the origination of ideas and methods. The endeavours of the Egyptians to combat the effect of death by conserving or restoring the vitality of the corpse gave rise to embalming, statuary, the use of incense and libations, ritual etc. and in combination with other factors led to the notion of divinity and gods. The book is full of interesting matter and ideas, though the underlying principle, that there cannot be independent invention of the same notion in different centres, is hard to accept as an axiom. If nature repeats its developments in form and habit in entirely distinct portions of the realm of the animal world, why should not the minds of men during countless ages produce coincident ideas independently in regions of the earth that are difficult of access to each other? The same writer in a paper on Ships as evidence of the migrations of Early Culture (Journal Manchester Eg. and Or. Soc. 1915—1916, p. 63) traces the influence of Egypt in wide-spread features of boat construction.

Europe:—R. Weill discussing Jondet's discovery of early marine constructions about the island of Pharos, argues that they are not of Egyptian origin but foreign and presumably Cretan. Les ports antéhelléniques de la côte d'Alexandrie et l'Empire Crétois (Bull. Inst. Français XVI 1).

In Anc. Eg. 1920 52 the Editor reviews Vivis y Escudero La Necrópoli di Ibiza, making comparisons with Egyptian examples of pottery, glass etc.

ROUSSEL contributes a valuable article on Serapea in Greece (Les Sanctuaires Égyptiens de Délos et d'Érétrie) to Rev. Égyptologique N.S. 181.

Asia:—Rostovtzeff in his remarkable paper on The Sumerian Treasure of Astrabad (Journal vi 4) points out that the gold objects display an art very closely akin to those of Sumer and Elam, less so to prehistoric Egyptian, but in one particular, the shape of the rosette employed in decoration, the agreement is complete only with prehistoric Egyptian. The whole evidence seems to point to a culture spread widely in the nearer East, and differentiated gradually in the various centres during the fourth millennium B.C.: reviewed by S. R[einach] Rev. Arch. x 382.

Capar Le 'Pseudo-Gilgamesh' figuré sur le Couteau Égyptien de Gebel el 'Arak au Louvre (Comptes Rendus de l'Acad. des Inscr. 1919 Sept.—Oct. 404) points out the resemblance of the figure strangling two lions to that of the hieroglyphic sign for the name of the city of Cusae at Meir. He suggests that the former represents the same deity or genius as the hieroglyph and that it is a truly native figure in spite of its strange appearance and costume. M. Bénédite however adds a note contrasting the 'keeper' of two tame panthers in the Egyptian hieroglyph with the fighter conquering two furious lions in the sculpture on the knife-handle, and maintains that the latter is essentially Asiatic and non-African in its peculiarities, though a precise equivalent has not yet been found in Asia.

Paton's Egyptian Records of Travel in Western Asia, Vol. II, is reviewed by Miss Murray Journ. Manch. Eg. and Or. Soc. 1916—1917 71.

ALBRIGHT reviews the history of the theory that Egyptian is a Semitic tongue, deals with the connexion of names of parts of the human body and of the numerals in the two languages, and proposes a large number of new equations. Amer. Journ. of Sem. Lang. XXXIV 81, 215.

Sethe discusses the Semitic alphabet which seems likely to have originated in the alphabetical characters of Egyptian Der Ursprung des Alphabets (Göttingen Nachrichten 1916 88) and continues the discussion in a further paper Die Neuentdeckte Sinai-Schrift und die Entstehung der Semitischen Schrift (ib. 1917 437) consequent on Gardiner's partial decipherment of the Sinai hieroglyphic as a primitive form of Semitic writing (reviewed by Farina Aegyptus i 235). Hans Bauer's pamphlet Zur Entzifferung der neuentdeckten Sinai-schrift und zur Entstehung des Semitischen Alphabets criticises the decipherment offered by Gardiner and Cowley and starts afresh, viewing the title read Ba'alat as in reality a verb. The alphabet would then appear not to be constructed on the acrophonic principle, and reasons are given for

doubting the probability of that principle appearing in these inscriptions. Lehmann-Haupt has begun a long and elaborate article Zur Herkunft des Alphabets (accepting the probability of an Egyptian starting point) in Z. d. Morgenländischen Ges. LXXIII 51.

EISLER in Biblische Zeitschrift 1918, Heft I calls the inscriptions Kenite, as belonging to the metal-workers of Sinai, and suggests many new identifications of Semitic words in them. His arguments are fully developed in a separate publication Die Kenitischen Weihinschriften der Hyksoszeit im Bergbaugebiet der Sinai-halbinsel. Basing his work on the clue discovered by Gardiner the author claims to have deciphered all the "proto-Semitic" inscriptions of Sinai together with an allied one found by Petrie at Kahun as early as 1889. He certainly handles the theme with an extraordinary amount of varied learning, but how far Eisler's decipherment hits the mark can only be ascertained when more and better material comes to light (reviewed in Rev. Arch. x 380). Sayce's paper on The Origin of the Semitic Alphabet (Journal Roy. As. Soc. 1920 297) is a review of Eisler's work.

An article by Prof. Petrie on the origin of the alphabet was contributed to *Scientia* for Dec. 1918 (reviewed in *Rev. Arch.* x 379).

BREASTED, after illustrating from the sculptures the two methods of writing by signs painted on papyrus in Egypt and impressed on clay tablets in Babylonia and Assyria, shows clearly from Assyrian sculptures of the eighth century the adoption of the Egyptian method in Mesopotamia, the cuneiform scribe with his stylus and tablet being seen side by side with the Aramaean scribe using an outfit resembling the Egyptian. The physical processes of writing in the Early Orient and their relation to the origin of the Alphabet (Amer. Journal of Sem. Lang. XXXII 230).

A lecture by Mr Peet New Light on Ancient Mining in Sinai is summarised in Journ. Manch. Eg. and Or. Soc. 1918—1919 21. Natural turquoise is very seldom found in Egyptian antiquities. The turquoise of Sinai deteriorates rapidly when exposed to light and must have been mined chiefly to be employed as a colouring matter for glasses and paints. Peet doubts Petrie's view that the worship of Hathor at Sinai was Semitic.

Albright suggests that Menes is identical with "Mannu the mighty, king of Magan" who was overcome by Narâm-sin, and discusses the names Meluḥa (Ethiopia) and Magan (Egypt?) and the chronological question involved. *Menes and Narâm-sin (Journal* vi 89).

Borchardt has recognised that a much-worn entry on the Cairo fragment of the "Palermo Stone" records a "Smiting of the Sethyt," i.e. Asiatics, in the reign of Athothis of the First Dynasty. A Sethyt person is represented with a full beard on an ivory fragment from the tomb of Ka-a at the end of the First Dynasty. Königs Athothis asiatischer Feldzug (Mitt. d. Vorderas. Ges. 1918 = Vol. II of Studien dedicated to Fritz Hommel, p. 342).

In an elaborate study of the name of the Phoenicians Sethe makes out a strong case for a non-Greek origin of the word $\Phioi\nu\iota\xi$ in all its senses; it originally meant "Phoenician" and agrees in form and sense with the Egyptian expression "Fenchu" or "Fenchu-lands" which occurs in Egyptian inscriptions from the Fifth Dynasty onwards as a term for (apparently) the lower lands of Southern Syria and Palestine and their people. The word probably died out early from the living language of Egypt, and it is undeniable that much still remains that is obscure about the names Fenchu, Phoenix and Poeni or Carthaginians. Der Name der Phönizier bei Griechen und Ägyptern (Mitteil. d. Vorderas. Ges. 1916=Vol. 1 of Studien dedicated to Fritz Hommel, p. 305). Peiser would connect Fenchu with Assyrian Kn\(\ell\) (Kina\(\hat\)) and the latter perhaps with a Sumerian Kiengi="plain." Zum \(\text{illesten Namen Kana\(\frac{a}{a}\) (Or. Lit.-Zeit. XXII 5).

CLAY'S The Empire of the Amorites is reviewed in Anc. Egypt 1920 21, the reviewer suggesting that the invaders of Egypt at the end of the Old Kingdom and again at the end of the Middle Kingdom were Amorites of Syria.

Handcock's Selections from the Tell el-Amarna Letters (Texts for Students, no. 16) consists of translations of ten letters, five being from Abdikhiba of Jerusalem.

Spiegelberg identifies the Rabis Maia as the father of an official of Amenophis III mentioned on a statue in the British Museum. Der Rabis Maia der el-Amarna-Tafeln in einer ägyptischen Inschrift (Zeits. f. Assyriologie xxx 299).

Ed. Meyer in 1914 published a work on the Hittites Reich und Kultur der Chetiter, illustrated with many facsimiles, drawings and photographs from monuments in Asia Minor, Syria and Egypt; it includes notes on the writing of royal and divine names based on MS. contributions by H. Prinz. In the Mitteil. d. D. Orient-Ges. no. 56 (Dez. 1915) Weber reported on the work of the Society in preparing the cuneiform texts of Boghaz-keui for publication; Hrozny described his decipherment of the Hittite texts as

belonging to the Indo-Germanic group of languages, and Ed. Meyer commented on this theory in a judicious manner. There are some 20,000 tablets or fragments from Boghaz-keui in the museum at Constantinople, the greater part in Hittite, and others derived from the same source are scattered. The two "Arzawa" texts of Tell el-Amarna are in the Hittite language. Weidner copied the texts in Berlin, Weber, Figulla, and Hrozn's those in Constantinople.

Meissner translates and discusses the treaties etc. of the Babylonian texts, Zur Geschichte des Chattireiches (95 Jahresber. Schlesischen Ges. f. vaterl. Cultur 1917). He transcribes and translates the treaty with Ramesses II, comparing the Egyptian version Der Staatsvertrag Ramses' II von Ägypten und Hattusils von Hatti in akkadischer Fassung (Berlin Acad. Sitzungsb. 1917 282). He discusses synchronisms of Hittite, Egyptian, Babylonian and Assyrian kings—Khattusil with Ramesses II and Kadashman Turgu and Kadashman-enlil II of Babylon; Muwatalli with Ramesses II; Murshil with Sethos I; the long reign of Murshil's father Shubbiluliuma reached back into the reign of Amenophis III Synchronismen (Or. Lit.-Zeit. xx 225) and reviews Figulla and Weidner Keilschrifttexte aus Boghaz-köi, especially the Babylonian texts Or. Lit.-Zeit. xx 118. Schroeder writes on the glosses šir and marianu in Ribaddi's letter, both appearing to have the same meaning "noble" Or. Lit.-Zeit. xx 125. Roeder has written an illustrated account of Egyptian documents concerning the Hittites and the relations of the latter to Egypt; a description of the battle of Kadesh is quoted from an unpublished paper by the late Max Burcharder. Roeder Ägypter und Hethiter (Der Alte Orient for 1919), reviewed by Wreszinski Or. Lit.-Zeit. xx 1120.

Langdon and Gardiner subject the published Babylonian and Egyptian texts of the famous treaty to a minute scrutiny, their Egyptian material being supplemented from a collation by Sethe, and give new translations and historical results. The Hittite king now appears to have taken the position of the combatant who had been worsted. The names of Hittite deities and cities at the end lead to some new identifications. The Babylonian and Egyptian versions differ in detail; probably the idea of signing 'identical copies' of international documents had not yet been established and each party held his own version of the transaction. The Treaty of alliance between Hattušili, king of the Hittites, and the Pharaoh Ramesses II of Egypt (Journal VI 179).

FARINA *I popoli del mare* (Aegyptus 1 8) brings up to date the evidence regarding the peoples named as allies of the Hittites against Ramesses II, those of the Libyans against Menepthah, and those against Ramesses III, placing them on and about the S. coast of Asia Minor.

WILLCOCKS' From the Garden of Eden to the Crossing of the Jordan is reviewed Anc. Eg. 1920 60: a letter from Geden on the subject of Dr Gardiner's article on Goshen is printed Journal v 303: H. Wiener has contributed further articles on the Exodus to Bibliotheca Sacra Oct. 1917, Oct. 1918 (two articles), Oct. 1919 (two articles).

Offord writes on Some Migdols of Palestine and Egypt, Pal. Expl. F., Q. S. 1920 23.

Vernes argues that the syncretism of the worship in the Jewish temple of Elephantine was borrowed from that practised at Bethel, where the goddess (Anat and other deities belonging to Syrian and Palestinian cities must have been associated with Yaho (Jehovah) after the destruction of the kingdom of Israel; he relies especially on the information given in II Kings xvii 24 et seqq. The S.P.C.K. has published a very useful little volume by Cowley containing revised translations of the principal documents from the Jewish colony at Elephantine. The introduction clearly shows their great importance for the history of the Jewish religion on which the Christian religion was founded, Jewish Documents of the Time of Ezra translated from the Aramaic. Sidersky proposes to restore certain figures in a double Egyptian and Jewish date on a Berlin papyrus from Elephantine, in order to obtain a satisfactory correspondence [but apparently quite unjustifiably]. Journal Asiatique t. xi 184.

LIDZBARSKI traces the demotic word mtkte "army" to the Assyrian madaktu "camp," an interesting relic of the brief Assyrian occupation of Egypt. Zeits. f. üg. Spr. Lv 93.

Rowe An Egypto-Karian bilingual stela in the Nicholson Museum of the University of Sydney, photograph of the stela and hand-copy of the Carian inscription. Journal R. Asiatic Soc. 1920 85.

CLERMONT-GANNEAU records the discovery near Cairo of a Nabataean inscription dated in the reign of one of the Ptolemies. *Comptes Rendus* Août 1919 349.

Africa:—Wainwright illustrates ancient Egypt instruments and weapons by modern examples from Africa chiefly in the Museum of the Soc. Sult. de Géographie—throwstick, bow (the composite bow introduced during Dyn. XVIII), Khopesh scimetar, spear-head, tomtom, harp, lyre, head-rest, revolving fan, basket, mat, sandal, gazelle-trap, bellows, tall fans used in royal processions, polished pottery, wooden bowls etc. Ancient Survivals in Modern Africa (Bull. de la Soc. Sultanieh de Géographie Ix 105, 177).

MÖLLER on the tribal name Μεγαβαρος in demotic [already noted Or. Lit.-Zeit. XVII 356] quoting the conjecture of the traveller Burckhardt that the name may be preserved in that of the Mekaberâb on the East bank of the Nile about ed-Dâmer. Zeits. f. ag. Spr. LV 79.

Amongst other questions relating to Democritus and his travels, EISLER discusses the title of a work, attributed to him by Thrasyllus "concerning the sacred writing in Meroe." This, if genuinely his, must be at least as early as the beginning of the fourth century B.C., yet EISLER considers that it may well refer to the "Meroitic" hieroglyphic script, finding in the Meroitic alphabet which contains vowel-signs as well as consonants evidence of comparatively early derivation from the Egyptian, quite separate from the use of vowel-signs which began in Egypt under the Ptolemies on the analogy of Greek. He would attribute its origin to the Egyptian Jews who constituted a flourishing colony at Elephantine on the frontier of Ethiopia even before the Persian conquest in 525 B.C. Zu Demokrit's Wanderjahren (Archiv für Gesch. d. Philosophie xxxi 204).

Conti Rossini points out that friendly relations existed between Meroe and Aksum about the end of the third century A.D., but were wholly upset in the course of the fourth century. Meroe ed Aksum nel romanzo di Eliodoro (Rev. degli Studi Orientali viii 233).

PHILOLOGY

In the report on the Egyptian Wörterbuch for 1918 Erman abandons for once the statistical statement of progress, and recalls the high purpose of the undertaking as furthering investigation of the beginnings of our civilisation, its origin in 1897 and the lines on which the dictionary is now being prepared in order that the final publication may be within the reach of moderate purses. The working up of material has reached the end of \otimes , and in spite of the delays caused by the war about two-thirds of the task is accomplished. Erman refers also to the lexicographical difficulties due to the imperfections of Egyptian writing. Finally, after recalling the names of collaborators of many nationalities, he expresses the fervent wish that the spirit of sacrifice for the common good of science should continue after the war to animate the undertaking. Berl. Acad, Sitzungsberichte 1919 23.

A specimen of the Wörterbuch (*Druckprobe für das Wörterbuch der ügyptischen Sprache*) was circulated in 1916 amongst contributors; it contains part of the root *rl*₂ (occupying three folio pages of type and 13 autographed pages of examples) together with an explanation of the system, which aims at compactness and moderate cost.

Sir E. A. W. Budge has published An Egyptian hieroglyphic Dictionary, a very large volume containing, beside the dictionary of Egyptian words, alphabetic lists of kings, gods and places with an English-hieroglyphic index and a variety of tables of alphabets and other useful information.

ERMAN has published a short and cheap grammar (Kurzer Abriss der ägyptischen Grammatik zum Gebrauche in Vorlesungen) with table of characters, chrestomathy and glossary in Grapow's clear autograph. On the spelling of the word hat as a test of date Id. Ein Orthographisches Kriterium (Z. f. äg. Spr. LV 86).

The last part of Maspero's Introduction à l'étude de la phonétique Égyptienne is contained in Rec. de Trav. xxxvIII 113, a long section expounding with a great wealth of illustration Q as a approaching \check{e} ,

a approaching o, ____ guttural a approaching y, and semivowels [], [], ___, [], ___, [], ___, [].

This Introduction is the very last piece of work from the pen of the great French Egyptologist, and all that he left of it is collected in a reprint from Vols xxxvIII and xxxvIII of Rec. de Trav. The memoir was intended to form an Introduction to the study of Egyptian grammar; the existing fragment seems to be nearly complete for Phonology, covering all except four letters of the alphabet. Maspero's mastery of material is illustrated here by his abundant use of ancient transcriptions of Egyptian words into cuneiform and Greek, Coptic derivations etc. etc.

KUENTZ suggests that there are uses of the perfect $s\underline{d}m \cdot n \cdot f$ resembling those of a Semitic perfect to express a certain future, a certain but conditioned future, and an optative future; also that a change from $s\underline{d}m \cdot f$ to $s\underline{d}m \cdot n \cdot f$ may take place in either a consecutive perfect or consecutive imperfect series of sentences, much as in Hebrew. Deux points de Syntaxe Égyptienne (Bull. Inst. Français XIV 231).

Sethe writes on the auxiliary relative participles in demotic, and traces one surviving in old phrases of the Coptic Pistis Sophia. Die relativische Partizipial-umschreibungen des Demotischen und ihre Ueberreste in zwei Ausdrücken der hellenistischen Mysteriensprache (Göttingen Nachrichten 1919 145).

 \sim unlike other biliterals terminating with r is written without a phonetic complement. The

apparent irregularities of the verb ir "make" are due to this peculiarity in the use of the sign, and the verb really conforms to the rules of verbs III^{ae} inf. An explanation of the orthographic peculiarity is sought in superstition regarding the eye. Loret À propos d'un prétendu verbe irrégulier (Bull. Inst. Égyptien XVI 245).

Dévaud, in lexicographical and other comments on a large number of passages in the Story of the Shipwrecked Sailor, makes some distinct advances in its interpretation. Le Conte du Naufragé (Rec. de Trav. xxxvIII 188).

On a difficult phrase regarding a building dedicated to Horus of Pharbaethus. Chassinat À propos d'un passage de la stèle no. 8438 du Musée de Berlin (Rec. de Trav. XXXVIII 180).

On an ostracon published by Weill, Sottas "MNW" = socle (Revue Égyptologique N.S. i 28). The title Gw = "scholar" rather than "dragoman," "interpreter." Read (Bull. Inst. Français XIII 141).

GAUTHIER studies the title mr-chnwti with a great wealth of examples, proving that it existed for many offices and departments, and proposes to render it "head of office" for any department named with it. Le Titre Imi-ra akhnouti (Bull. Inst. Français xv 169).

Ancient high-priestly titles beginning with wr "great," meaning "principal of the seers," "principal of the physicians," "principal of the master-workmen" etc. Sethe Zu den mit wr "der Grosse" beginnenden alten Titeln (Zeit. f. äg. Sprache Lv 65).

Transliterations and translations made by Sir H. Thompson of several demotic tax-receipts on wooden tablets from Gebelên, together with similar texts in Greek. MILNE Wooden Tablets from Egypt (Bodleian Quarterly Record II 314).

Moret contributes to Scientia xxv (1919) 94 an article on Egyptian hieroglyphic writing and its decipherment by Champollion. L'écriture hiéroglyphique en Égypte.

Sethe and Spiegelberg discuss the source of the alphabetic value of the latter quoting the Coptic $\Delta \Delta \omega = \underline{d}.t$ ($\underline{d}y.t$) and Sethe contending that the name $\underline{W}\underline{d}yt$ the Buto serpent is the source both of the Coptic word and of the alphabetic value of the symbol. Das Grundwort zum Lautzeichen (Zeit. f. äg. Sprache LV 89).

Schäfer suggests a phonetic reason for the numeral 16 signifying joy (ib. 93).

DARESSY quotes an elaborate instance in the Louvre of as three jackals. Le signe mes aux trois chacals (Ann. du Service XIX 176).

Dévaud tabulates forms (beginning in the Hyksos period) of the hieratic sign for \\ replacing a duplicated determinative just as \ replaces a single one. Un signe hiératique peu connu (Rec. de Trav. xxxvIII 182).

Nubian:—In 1912—1913 an educated and very intelligent native Christian from the Nuba mountains (Gebel Dair) in Kordofân, but settled in Cairo, gave Prof. Junker and Dr Czermak opportunities of studying his almost unknown dialect, and the results (texts with grammatical sketch and glossary) were published by them in 1914 (Kordofân-Texte im Dialekt von Gebel Dair). In 1914 these studies were resumed and Czermak found Samuel a most helpful and enthusiastic exponent of the phonetics of his mother tongue. The native of Central Africa, unhampered by traditions of writing, being naturally eloquent and attaching great importance to fine speaking, has developed the powers and control of the organs of speech to a very high degree. These powers may go to the very root of the language. Czermak has discovered not only "tones" (somewhat as in Chinese) which Meinhof had already found to exist in Africa in the speech of the Ewe, but also another essential element in the Nuba tongue which may be designated as "modes of utterance" (Ausspracharten). His new work gives us a minute account of these with examples and a glossary in which the Nuba words appear in an exceedingly elaborate notation. The language is akin to the Nubian spoken by the Barabra on the Nile. Kordufānnubische Studien (Vienna Acad. Sitzungsb. Bd. 177, 1 Abh.).

Schäfer prints a letter written in Arabic by a Nubian, showing characteristic phonetic errors recalling those of the Ethiopian-Egyptian inscription of Nastesen. *Nubisches Ägyptisch.* (Zeit. f. äg. Sprache Lv 82).

In a series of papers Prof. Meinhof gives the results of his linguistic researches in the Egyptian Sudân, Zeitschrift für Kolonialsprachen Band VI—IX. He finds there languages which work by means of prefixes, like Bantu but not of the Bantu group, others Nilotic, and others again Nubian. A long section (VIII 17, IX 43, 89, 167) is concerned with the truly Nubian dialects of Kordofân and Darfûr and comprises a comparative grammatical sketch and a lexicon of as much as is known. There is also some new material on the Nilotic Berberine dialects of Nubian (IX 226).

RELIGION.

Articles relating to Egypt in Hastings' Encyclopaedia of Religion and Ethics Vol. x are Points of the Compass by Atkinson, Poles and Posts and Possession by Barton, Prayer (Egyptian) by Griffith, Precious Stones by Petrie, a long article Priest, Priesthood (Egyptian) and Purification (Egyptian) by Blackman, Relics (Primitive and Western) by MacCulloch, Righteousness (Egyptian) by Blackman.

W. Max Müller's Egyptian Mythology is reviewed by Gunn, who suggests an explanation of the Graeco-Roman form of the god Ophois. Journal vi 67.

Kreglinger Études sur l'Origine et le développement de la Vie Religieuse, I, Les Primitifs, l'Égypte, l'Inde, la Perse, reviewed Anc. Egypt 1920 57.

Following on his memoir on the Exodus of Hathor-Tefnut from Nubia (1911) and Sethe's on the Ancient Egyptian myth of the Sun's Eye that was in Foreign Parts (1912), Junker resumes the subject in another elaborate and valuable memoir, in which he distinguishes two main themes, (1) the myth of the Eye of the God of Light: the moon, left eye of Horus, is stolen from him and recovered after victorious combats; (2) the legend of This: Onuris, a form of Horus, armed with spear and cord, brings the liongoddess from the desert to This. These two themes were varied and mingled together, and changed under the influence of the cult of the sun-god Rec. Pyramid Texts and other early religious texts allude to them, and the inscriptions of Ptolemaic and later temples are full of references to the goddess of many names who was brought or persuaded to come from the Eastern desert amid rejoicing. Several pages are devoted to the long tale of the "little wolf-monkey" lately re-edited by Spiegelberg (above p. 280). Junker's memoir is full of quotations from the difficult inscriptions of the later temples, in the interpretation of which he is an adept. Die Onurislegende (Vienna Acad. Denkschrift 59).

Mercer has contributed articles to the Journal of the Society of Oriental Research II 1, III 1 on Egyptian Morals which are reviewed in Anc. Egypt. 1920 62.

Turaeff has written an important note on the Gods of the Sea among the Egyptians (in Russian [probably contributed to a volume written in honour of D. Karsakov, Kazan 1913], p. 539). He translates stele 4130 in the Moscow Museum (Golénischeff collection) of a certain Yup, chief of priests of all the gods of the sea (w3d-wr), naming the nome of Aphroditopolis, which nome reached across the desert to the Red Sea and Sinai. Turaeff names Hathor, Osiris, Astarte, Neith, Bes, Ammon and a monstrous figure in Pap. Salt as possibly the gods referred to. [See also the sarcophagus in Petrie's Hawara Pls. I—III which seems to show that the Fayyum Lake might at times be included in the nome of Aphroditopolis.] Boğestva more u Egiptan.

In 1916 Turaeff published the text of the Salt Magical Papyrus in the British Museum; in the Zapiski of the Classical Section of the Russian Archaeological Soc. IX 231—241 he publishes photographs of the more pictorial representations and special symbols.

Gauthier writes a long account of the statues of Sakhmet made by Amenophis III for the temple of Mut and for his own funerary temple, tracing their dispersion as completely as possible. The standing figures in the back row of the Mut temple are rough and uninscribed, the seated figures in front of them and elsewhere are inscribed each having its own divine epithet; of these epithets Gauthier makes a catalogue. Les Statues Thébaines de la déesse Sakhmet (Ann. du Service XIX 177).

Mrs C. R. WILLIAMS describes figures of divinities in the Abbott Collection with many illustrations. The new Installation of figures of Egyptian gods (New York Hist. Soc. Quarterly Bull. III 41, 71).

The Solar boats Macanzet and Msektit are those of day and night respectively, not of morning and afternoon as is sometimes stated. Marie Chatelet Le rôle des deux barques solaires (Bull. Inst. Français xv 139).

On the Apis-bull represented as bearer of the coffin on the footboards of coffins. Wiedemann Der Apis als Totenträger (Or. Lit.-Zeit. xx 298).

NAVILLE upholds his translation of rwti as "sphinx" as against Gardiner's "double lion" Le Sphinx III (Sphinx XXI 12); reviews Kees Der Opfertanz des ägyptischen Königs (Sphinx XXI 32); upholds the old interpretation as against Sethe's of Les premiers mots du ch. xvii du Livre des Morts (Bull. Inst. Français XVI 229).

Spiegelberg translates and explains a long text on a late tombstone in which the dead man asks for prayers from the people of the necropolis on the ground that he died childless, so that there was no one to carry on his funerary cult. Die Bitte eines kinderlosen Aegypters um Totengebete (Archiv f. Religionswissenschaft XVIII 594).

Summaries of three lectures by Dr Blackman "Egyptian conceptions of Immortality," "The Ceremonies performed at the Embalming of an Egyptian Mummy" and "The House of the Morning" are printed in Journal of Manchester Eg. and Or. Soc. 1916-17 12, 1917-18 12, 1918-19 15. The same scholar endeavours to re-establish the true sequence from various representations and from internal probability seeing that the ritual is based on royal toilet episodes; The Sequence of the Episodes in the Egyptian daily temple Liturgy (ib. 1918-19 26); and suggests from ritual practice that the true meaning of 13tt in the lists of sacred oils etc. is "ointment for the brow (forehead, or crown of the head)." On the Name of an Unquent used for Ceremonial Purposes (Journal VI 58).

Langdon contrasts the Egyptian attitude in prayer, raising the hands with palms outwards, with that of the Semites, who generally have the palms inward "throwing the kiss." Gesture in Sumerian and Babylonian prayer (Journal R. As. Soc. 1919 548).

Les déesses armées dans l'art classique grec et leurs origines by M^{me} Le Lasseur, which discusses the representations of armed goddesses also on Egyptian monuments, and their relation to the Greek forms, is reviewed by S. R[einach] Rev. Archéologique v Sér. t. x 262.

SCIENCE.

Food in Egypt (Mém. prés. à l'Institut d'Égypte I) is one of many treatises for which the late Sir Armand RUFFER had collected notes and begun to arrange them, hoping to find leisure for working them out after retirement from his multifarious duties. His lamented death in 1917, through the torpedoing of the ship on which he was in the Mediterranean, has deprived us in this case of a memoir which would have given the evidence of the monuments as to the food of the Egyptians, as well as that of the classical authors, and the conclusions based on that evidence. Lady RUFFER has here put together the raw material collected by Sir Armand in the hope that it will guide future investigators to the sources of information.

Wreszinski reviewing Weindler Geburts- und Wochenbetts-Darstellungen auf altägyptischen Tempelreliefs condemns it as the "work of a dilettante." Or. Lit.-Zeit. XXI 242.

In an article on Silver in Roman and Earlier times (Archaeologia LXIX 121) Dr Gowland devotes a section (pp. 135-8) to Egypt and explains from Japanese practice Agatharchides' description of the Egyptian method of purifying gold (from silver and other things) by means of salt.

MACKAY has observed beeswax laid over or used in painting from the time of Hatshepsowet to Amenophis II, resin in late XVIIIth and in one XIXth Dyn. tomb, and discusses the mode of their application. On the use of beeswax and resin as varnishes in Theban Tombs (Anc. Egypt 1920 35).

Dr Sobhy publishes a skull bearing a remarkable resemblance to the cranium of Akhenaton as seen in the sculptures. Description d'un crâne trouvé dans une tombe à Tell el-Amarna (Bull. Inst. Français XIV 65).

HOOTON Note on a deformed skull from Sive Oasis (Harvard African Studies II 101). One of several ancient skulls procured by the late Oric BATES in 1910.

Daressy Une mesure Égyptienne de 20 (sic) hin (Ann. du Service XVIII 191). Fragments of a cylindrical measure of black granite with the name of Thutmosis III; it apparently contained 20·177 litres, which Daressy equates with 40 hins.

A. Segrè studies Ptolemaic measures and their connexion with the earlier Egyptian measures from the standpoint of a student of Graeco-Roman Egypt. *Misure tolemaiche e pretolemaiche (Aegyptus* I 159).

Sethe has written a very full and instructive treatise on the Ancient Egyptian divisions of time. Die Zeitrechnung der alten Ägypter im Verhältniss zu der der andern Völker, I das Jahr, II Jahr und Sonnenlauf, III Einteilung des Tages- und des Himmelskreises (Göttingen Nachrichten 1919 287, 1920 28, 97).

LITERATURE.

Grapow, who is engaged on the great Egyptian Wörterbuch, has written a small treatise in which he classifies the similes employed in Egyptian literature; the author suggests that a corresponding work for the cuneiform and Biblical literatures would be well worth undertaking. He notes that gold flies were awarded to heroes in Egypt as a symbol of persistent attack. Vergleiche und andere bildliche Ausdrücke im Ägyptischen (Der alte Orient for 1920).

A certain famous Leyden papyrus contains a very difficult text of the Middle Kingdom which was interpreted by Lange as a Messianic prophecy and by Gardiner as a picture of contemporary troubles prefacing instructions for the guidance of a state in face of internal and external enemies. Erman now

offers a third alternative recognising in it a candid counsellor's bold presentment of decline and fall to a monarch too old to govern. He very naturally connects it with the decline of Egypt under Pepy II whose portentously long reign of 94 years led to the ruin of the Old Kingdom culture; apparently it was the officials of the government that earned the hatred of the people by their exactions and so brought about the catastrophe. Die Mahnworte eines ägyptischen Propheten (Berlin Acad. Sitzungsber. 1919 804).

MÖLLER reports that in mummy-cartonnage of the first century B.C. from Abusir el-Melek he has found a portion of a new story in demotic, placed in the reign of Amasis (?) and relating the marvellous discovery of the well-known "Book of Breathings" on the mummy bandages of king Psammetichus. Eine neue demotische Erzählung (Amtliche Berichte 1918 XXXIX 180).

LAW

Moret's article Chartes d'immunité dans l'Ancien Empire in the Journal Asiatique (see Journal IV 274) is continued by a third part in Journ. As. t. x 359 where he publishes or discusses (1) the later decrees of Coptos under the kings Neter-biu (Neferkauhor), Demzibtaui (the latter, following Sethe, he places in Dyn. VIII with a predecessor Wazkarē' who is named in the same decree but is otherwise unknown), (2) the Dahshûr decree of Pepy I, (3) the Abydos decrees of Neferarkarē', Tety and Pepy II (cf. Bull. Metrop. Mus. XIV 144).

For the important contributions of MÖLLER and SETHE to the history of marriage contracts in Egypt see above pp. 279–80. Spiegelberg traces a phrase back to Dyn. XIX (in the complaint of a husband to his deceased wife) Zeits. f. äg. Spr. Lv 94, and Möller interprets the word hbst "bride" or "wife" in contracts as meaning "the wrapped" and quotes the modern Nubian custom by which the bridegroom has to promise all his property to his closely-wrapped bride before she will reveal her face ib. 95.

ARCHAEOLOGY.

Prof. Schäfer, director of the Egyptian department of the Berlin Museum, gives the result of many years' comparative study of Egyptian design in two volumes entitled Von ägyptischer Kunst, besonders der Zeichenkunst. He here endeavours to assign to Egyptian art its true place and to mark its essential methods and features as an art which time after time attained its own ideal of perfection. The Greek realisation of orderly perspective introduced for the first time into the world an entirely new conception and aim. Dealing especially with the Egyptian draughtsman's method of representing objects and scenes, he compares unaided drawings by children, primitive designs and the designs of artists in other countries than Egypt such as Japan which are little affected by the Greek applications of perspective. The second volume consists of comments on individual points and 54 plates.

Prof. Capart, director of the Brussels Musée du Cinquantenaire, has published Leçons sur l'Art Égyptien, which is practically a History of Egyptian Art. It is the product of many courses of lectures in Belgian universities and schools. Unfortunately it is only a provisional issue, for owing to difficulties resulting from the war not a single footnote (to give bibliographical references) nor a single illustration accompanies the text of 500 pages. Though its value is thereby greatly diminished, anyone well acquainted with the subject will profit greatly by reading these leçons in which M. Capart's wide and exact knowledge of the monuments and literature of Egyptian art is well displayed. For example in ch. xvII the precise connexion and provenance of several famous statues of the Old Empire preserved in Cairo and the Louvre are for the first time established by documentary evidence and analogy.

The summary of a lecture on Prehistoric Egypt by Prof. Petrie denies the existence of a Neolithic age in Egypt, copper appearing along with flints of Magdalenean type in the earliest graves. *Journ. Manchester Eg. and Or. Soc.* 1918–19 10.

Prof. CAPART in 1914 published an illustrated supplement to his Débuts de l'Art en Égypte under the title Les Origines de la civilisation Égyptienne.

Flint and chert implements of cave and palaeolithic types found by Capt. Cunnington during 11 months' residence at Sîweh: summary report with figures by Reginald Smith Man xix p. 103.

F. W. Read argues that boats, not fortified villages, are represented on the prehistoric painted vases. Boats or Fortified Villages? (Bull. Inst. Français XIII 145).

Bénédite examines the series of animals figured on the Carnarvon ivory and its congeners: from their limited variety and more or less fixed order in different examples he conjectures that they may illustrate some story or group of ideas. *The Carnarvon Ivory (Journal* v 227).

Miss Murray studies *The First mace-head of Hieraconpolis* (Ancient Egypt 1920 15) and suggests that if all the fragments belong to one object, the scene represented the competition for the throne in the presence of the dead king deified.

The Tomb of Perneb (1916 reprinted in 1918) is one of the excellent guides printed by the Metropolitan Museum of New York. Lythgoe describes the discovery and excavation of this mastaba of Dyn. V, its removal to New York and treatment for preservation from salts, and the re-erection of the façade, offering-chambers and serdâb. Miss Caroline Ransom explains the sculptures and inscriptions.

JÉQUIER has published a second livraison of his L'Architecture et la décoration dans l'ancienne Égypte, I, des Sanctuaires primitifs aux temples de la xVIII^e dynastie, containing about 20 fine large plates of the temples from that of Chephren (the "Sphinx" temple) to Karnak. Apparently there are to be 80 plates in all.

Mrs C. R. Williams completes her catalogue of *The Egyptian Collection in the Museum of Art at Cleveland, Ohio: inter alia* a group of coffins with papyri and other funerary equipment including strap ends stamped with cartouches of Osorkon I; and a very fine tomb slab of about the beginning of the third century B.C. (*Journal* v 272).

The first part of the catalogue of the great Golénischeff collection in the Moscow museum by Turaeff and Malombers was published in 1917, dealing with the statues and statuettes ranging from the Middle Kingdom to Roman times, 120 in number; there are twelve photographic plates of statues and detail, printed copies of the inscriptions, indices of proper names etc. etc. Opisanie Egipetskago Sobranie 1.

Farina has published eight notable Egyptian monuments in the National Museum in Rome, including the famous Ludovisi "Hyksos" bust. *Monumenti Egizi in Italia (Ausonia* ix 1914 1).

The Musées royaux des Arts décoratifs at Brussels has issued a catalogue of its Egyptian textiles by Isabelle Errera. They are of all periods from Dyn. I to the Moslem times, but none of the examples with designs precede the Roman age. Collection d'Anciennes Étoffes Égyptiennes.

The veteran Professor Valdemar Schmidt has published a large work on coffins and other funerary remains in order of date, illustrated by a wonderful collection of more than 1500 photographic and other figures Levende og døde i det Gamle Aegypten, Album til Ordning af Sarcophager, Mumiekister, Mumiehylstre o. lign. With the omission of a considerable number of figures (busts etc.) and a special introduction of 17 pages, it is also issued as a typological atlas of coffins etc. Editions in French and English are contemplated, review by Wreszinski Or. Lit.-Zeit. xxIII 66.

G. MÖLLER'S Das Munienporträt (Wasmuth's Kunstheft, Heft I) contains 13 good photographic reproductions of notable wax portraits on boards, with introduction and descriptions; it is issued at a very moderate price.

Guy Dickins' Hellenistic Sculpture, the unfinished work of its lamented author, contains an important chapter on the school of Alexandria, pointing out the peculiarities of its often admirable art, whether serious, humorous, or decadent, and the curious but intelligible parsimony in the use of marble by its sculptors.

Kaufmann's Graeco-Ägyptische Koroplastik (1915) is a second edition of the catalogue of his very large collection of terra-cotta figurines etc. in the Frankfort Museum, the first having been issued in 1913 under the title Ägyptische Terracotten. The specimens, classified on 74 plates, belong to the Graeco-Roman and Coptic periods and come chiefly from the Fayyûm. The new edition is very considerably enlarged and at the same time more compactly arranged.

Curt Sachs Altägyptische Musikinstrumente (in the series Der alte Orient 21 Jahrgang) provides a very interesting but brief account of the principal varieties of musical instruments in use in Ancient Egypt with well-selected illustrations. A large work by the same author is announced.

Prof. Ranke of Heidelberg (who is engaged on a new edition of Erman's Aegypten) throws new light on the obscure but very ancient and curious 'snake game,' which seems to have fallen into disuse in the Middle Kingdom. He figures the board and pieces, finds and discusses its name mhn and quotes references to it and its allies from the Pyramid Texts and the Book of the Dead. Das altügyptische Schlangenspiel (Heidelberg Acad. Sitzungsberichte 1920).

In various journals the following articles on archaeological subjects occur:

Journal of Egyptian Archaeology. WINLOCK Statue of the steward Roy singing the psalm to Rec, in New York, Dyn. XVIII, with a second example and a relief of a similar subject, the stella before the singer only added as a means of recording the words of the hymn (vI 1): Davies An alabaster sistrum dedicated by King Teta, in the Carnarvon collection, dedicated to Hathor, surmounted by hawk and uraeus, with

full discussion of its interesting form (VI 69): REISNER Note on the statuette of a blind harper in the Cairo Museum from a tomb of about Dyn. XI (Gardiner adding a photograph of a female harper not blind) (VI 117): Newberry A glass chalice of Tuthmosis III, at Munich: enumerates examples of datable early glass from Egypt including the mosaic glass pendant of Dyn. XII from Dahshûr which is here for the first time figured in colour; the earliest known factories date from the reign of Amenophis III, but the N.W. Delta may have been the earliest home of glass making (VI 155): Blackman A painted pottery model of a granary from the Colman collection (VI 206): Another statue of a man named Roy as worshipper of the Sun-god by the Editor, from the Hoskins and Rider Haggard collections, the hands in adoration rendered in an unusual manner (VI 212).

Ancient Egypt. Somers Clarke Nile Boats and other matters, after tracing some changes in the types of Nile boats in recent centuries and especially the disappearance of the square sail, deals with the persistence of a very ancient type of boat-construction in the modern nakar, and describes the ancient methods as revealed in pictured scenes as well as in two original boats of Dyn. XII discovered by de Morgan at Dahshûr, the building of a nakar under Mr Clarke's constant observation by an Egyptian boat-builder using traditional methods, references to the figures of ships at Beni Hasan and Deir el-Bahari, and the account of the Nile boat in Herodotus II 96 (1920 2, 40). Petrie An early portrait, note on portrait of Smerkhuptah etc. from New York Hist. Soc. Qu. Bull. (1920 18): A Mentuhetep statue, head of a remarkable ebony figure from Deir el-Bahari (1920 33): review of Mace and Winlock The tomb of Senebtisi at Lisht (1920 56). Winlock Notes on the jewels from Lahun very important, reconstruction of a cowrie girdle, the hanging of a pectoral pendant, and a lion-head girdle (1920 74).

Journal Manchester Eg. and Or. Soc. Summary of lecture by Petrie on Scarabs with designs, which he concluded were worn by the living as amulets (1917–18 11): Miss Crompton A stamp seal from Egypt, limestone seal from Aswan with rude designs of a man and animals (1917–18 59).

Bull. N.Y. Metropolitan Museum. WINLOCK The Statue of Iny and Rennut fine group of New Kingdom with inscriptions, from Asyût (XIV 32): ROBINSON Bust of Herodotus, Roman period, said to be from Benhâ (XIV 171): LYTHGOE Statues of the goddess Sekhmet, seven from the Amherst collection, traced back to Athanasi at Thebes in 1817 etc. (supplementary Part II of Bulletin Oct. 1919): Lythgoe The Treasure of Lahun, very interesting account founded on Petrie's report in Ancient Egypt with new illustrations and minutely careful restorations (supplementary Part II of Bulletin Dec. 1919): announcement of opening of room of Egyptian jewellery (including that from el-Lahûn) in which also are exhibited scarabs, necklaces etc. in various materials (xv 111). The June and July numbers (xv p. 121 etc.) are chiefly occupied with matters connected with the fiftieth anniversary of that marvellous and admirably worked institution, which makes so wide an appeal to the public. A special show of loan objects was organised for the occasion along with those recently acquired. Amongst other recent arrivals from Egypt, either found in the excavations or purchased, there are figured a Romano-Egyptian panel portrait The Fiftieth Anniversary Exhibition (p. 121), a group of king Sahurēc with the divinity of the nome of Coptos (p. 128), a splendid diorite sphinx of Sesostris III (p. 129), statue of a priest Harbes holding an image of Osiris (p. 130) and a sculptor's model of the ram-head of a deity (p. 131). In July (xv p. 151) A. C. M[ACE] The Caskets of Princess Sat-Hathor-Iunut describes the careful restoration of two caskets of ivory and ebony with inlays of gold, silver, carnelian and glaze, from the Lahûn find of jewellery.

N.Y. Historical Soc. Quarterly Bull. April 1919. Mrs C. R. Williams A bronze figure of Horus in its original mold, Abbott Coll., an interesting waster.

In the Amtliche Berichte, a fine plaster mask of about Dyn. VI from Abusîr is figured by Borchard and compared with others of Dyn. V, Mumienmasken aus Gips aus den letzten Zeiten des Alten Reiches in Aegypten (XXXVII 267): Schäfer on a lion's head in alabaster of the Old Kingdom, and a wooden head of Anubis of Dyn. XVIII made in two pieces Zwei Tierköpfe (XXXVIII 144): Borchardt publishes fragments of a papyrus from a cartonnage of the 2nd cent. B.c. with designs for a sphinx viewed from the front, from above and from the side Sphinxzeichnung eines ügyptischen Bildhauers (XXXIX 105): Möller on coloured pottery, in vogue in the prehistoric period and again in Dyn. XVIII under the influence of faïence, Bemalte Tongefüsse (XXXIX 217). The palace balcony or window (represented on a Berlin ostracon), which showed only the upper half of the king's person, was apparently introduced by Amenophis IV and thereafter was adopted also in the shrines of divinities, Schäfer Der König im Fenster, ein Beitrag zum Nachleben der Kunst von Tell el-Amarna (XL 41), a most valuable article.

Orientalistische Literaturzeitung. GENNEP and JÉQUIER Le Tissage aux cartons reviewed by WRESZINSKI (XX 240): BOESER Muniensürge des Neuen Reiches (Leyden) reviewed by RANKE (XX 332): HALL Catalogue

of Egyptian Scarabs etc. in the British Museum reviewed by Wiedemann (XXI 91): Bonnet Die ügyptische Tracht bis zum Ende des Neuen Reiches reviewed by Wreszinski (XXII 134): note of paper on ancient ships read by Busley before the Schiffbautechnischer Gesellschaft (XXII 138): Volbach Die Cheironomie im Alten Ägypten suggests that representations of singers and dancers indicate a system of musical symbolism or notation in the movement of the hands (XXIII 1, 129).

Annales du Service des Antiquités de l'Égypte. Late sandstone group of two nude children with serpents, one male with Egyptian symbol of sun, the other female with moon, uniting Egyptian ideas with Greek: Daressy (XVIII 189).

Bulletin de l'Institut français d'archéologie Orientale. Jéquier Quelques objets appartenant au rituel funéraire sous le Moyen Empire, rare representations on coffin of Si-Wazyt from Rikkeh—pair of mooring pegs, pair of obelisks, hoe (all occurring in tomb-scenes of visitations of shrines by the funeral cortège), bayt or leveller?, swan (xv 153): Jéquier Queue de Taureau insigne des Rois d'Égypte the tail worn on the royal girdle, not of lion or canine animal, but of bull (xv 165).

PERSONAL.

Losses by death during the past two years have been less severe than in 1918. From W. Max MÜLLER, a man of great talents but hampered by circumstance, who died in July 1919 of heart failure (*Or. Lit.-Zeit.* XXII 286) at Philadelphia, more years of good work might have been expected; but Joseph Offord died at a ripe age, and Leo Reinisch, the celebrated Africanist of Vienna, reached the age of 87 before his death on Dec. 24, 1919 (*ib.* XXIII 37).

Obituary notices of Professor L. W. King have appeared by H. R. Hall *Journal* vi. 66, and by R. Campbell Thompson *J. Roy. As. Soc.* 1919 625.

Dr Granville sketches the life of Henry Salt (1780—1827) who was British Consul-General in Egypt from 1816 to 1827 and made great collections of antiquities; his name is very prominent in the early annals of Egyptological research. He was buried in the now disused English cemetery at Alexandria. Bulletin d'Alexandrie N.S. IV 119.

Of Oric Bates (1883—1919) a short account is prefixed to the second volume of *Harvard African Studies*. An enthusiastic student, first of Libyan archaeology and then of African humanity in general, in 1914 he was appointed Curator of African Archaeology and Ethnology in the Peabody Museum of Harvard University. It can only be hoped that his loss as an energetic explorer of a neglected field will be repaired by the effect of the example which he set to others.

Mrs Grant Williams tells us of the Anglo-American enthusiast Gliddon, and his once popular Chapters on Early Egyptian History, Archaeology etc. published in 1843. A surprising sales' Record in Bulletin of N.Y. Metrop. Mus. xv 88.

A sympathetic tribute is paid by M. Lacau to the lamented Georges Legrain (1865—1917), and his devotion to Karnak. Born in Paris, educated in the primary schools, trained as an artist and gradually drawn to the study of Egyptian archaeology, Legrain began his career in Egypt in 1892, particularly as draughtsman and copyist, and in 1895 was appointed by de Morgan to the colossal task of exploration and conservation of Karnak, where his energy reaped so great a harvest of discovery. The Director-General expresses much regret that although annual reports were issued there has been no systematic publication of the completed portions of Legrain's work, and it is evident that he will take steps to remedy this state of things so far as it is possible after the death of the responsible excavator. Ann. du Service XIX 105. Munier adds a bibliography of Legrain's writings extending from 1887 to the year of his death ib. 118. A note on Georges Legrain by Somers Clarke is printed in Ancient Egypt 1920 18.

An article on the founder of the *Revue Égyptologique*, who did brilliant work in Coptic and demotic in the 'seventies and early 'eighties of the last century, is contributed by H. Sottas to that journal, Nouvelle Série I 101 (*Eugène Revillout et le démotique*).

Biographical sketches of Gaston Maspero are contributed by Jéquier to Sphinx (XXI 1), and by Chassinat, the new editor of the Recueil de Travaux, to his journal (XXXVIII 211) with a portrait of the veteran editor with whom its history is so closely bound up. The Recueil de Travaux was founded by Rougé in 1869 but, partly in consequence of the Franco-Prussian war, the first volume was not completed till 1880 under Maspero.

NOTES AND NEWS

In the account of last season's excavations given in the July number of the Journal, no reference was made to an exceedingly interesting discovery made by M. Lefebvre of the Service des Antiquités at Tûneh, south of Eshmûnên. In this place, it would appear, there was found the mortuary chapel of a certain Petosiris, high-priest of Thoth at Hermopolis. A short Greek graffito, which Professor Grenfell, as well as Messrs Edgar and Lefebvre assign to the third century B.C., is to be found on one of the columns of the façade, and enumerates the names of a number of tourists who came to visit "the tomb of Petosiris." On the other hand, M. Golénischeff, to whom we are indebted for the present information, inclines, on the strength of the hieroglyphic inscriptions, to date the monument itself to the beginning of the Roman period. The anthropoid sarcophagus of Petosiris was of dark wood finely inlaid with incrustations of multicoloured glass; this is now in the Cairo Museum.

Mr N. de G. Davies asks us to call the attention of Curators of Local Museums and owners of private collections to the Corpus of Funerary Cones upon which he is engaged. Mr Davies would be grateful for any copies or rubbings of inscriptions occurring on this curious class of objects. Letters to Mr Davies on this topic should be addressed to the office of our Society.

Professor Peet is engaged upon the publication of the important Mayer Papyri preserved in the Liverpool Free Public Museum. These two papyri contain depositions of the robbers who forced their way into the Royal Tombs at Thebes towards the end of the Twentieth Dynasty. The tomb-robberies at this period gave rise to a series of causes célèbres of which the records are now scattered over the various museums of Europe. The famous Abbott papyrus of the British Museum is the best known example of the series, and has been often translated; but there are three other closely related documents in the British Museum of which nothing has been made known as yet except a few scraps that are to be found in Prof. Spiegelberg's essay on the juristic system of the Pharaonic times published nearly thirty years ago. Professor Peet's work will contain a very careful handfacsimile of the longer of the two Liverpool papyri, which is of great palaeographic importance. The present condition of the document makes it impossible to photograph satisfactorily, but the hand-copy was made upon photographic prints and elaborately controlled with the original both by Professor Peet himself and by the writer of this note. Pap. Mayer B, a short and incomplete document of less interest, will be reproduced in collotype.

Captain Engelbach, who was an assistant to Professor Petrie in his pre-war excavations, has been appointed Inspector-General of the Service of Antiquities for Upper Egypt.

COMMUNICATIONS

Ι

MENES AND NARÂM-SIN

DISCUSSION BY DR W. F. ALBRIGHT, PROF. STEPHEN LANGDON, REV. PROF. A. H. SAYCE, AND THE EDITOR

Readers of the last number of the *Journal* but one may have derived a certain malicious amusement from the fact that, at the same time as Prof. Peet was criticizing Dr Borchardt's attempt to date Menes between 4510 and 4170 B.c., Dr Albright of the Johns Hopkins University was seeking, on the strength of a Babylonian synchronism, to fix the date of Menes at 2950 B.c. This divergence of views shows to what extent the chronology of the earlier Egyptian dynasties must still be considered *sub judice*; and the Editor has felt it his duty (without compromising his own opinions in any way) to lay the columns of the *Journal* open to further discussion on the subject.

In a letter written from Cairo on December 26, 1919, Dr Albright states: "While in New York, I had the opportunity to examine very carefully one of the alabaster vases carried from Magan by Narâm-Sin, and inscribed with a statement in cuneiform to this effect. The past week I have devoted mainly to the wonderful Egyptian museum here. There is one vase, and one only, which is almost an exact replica of the Narâm-Sin vase, and it belongs to the Thinite period! The vase in question is Mahasna, no. 18,711, and is now in Case A, Room B in the first storey. The material, shape and size are all the same. The alabaster vase Abydos, no. 14,448, from the First Dynasty, in an adjoining case (Mus. no. 3054) is very similar in shape, but much larger. This is an additional confirmation of great archaeological weight.

"In my paper (into which, as I was unable to correct the proof, errors may have crept), I was in doubt as to the provenance of the *sâmtu* of Meluḥḥa, as malachite is found in the Sinaitic peninsula, and was also brought from Punt. But as the mountains between Upper Egypt and the Red Sea, as well as those further south, contain a great deal of copper and malachite, it seems evident that Meluḥḥa refers to the western shore of the Red Sea, south of Qoççêr, the port of Magan=Egypt."

Professor Stephen Langdon has had the kindness to send us a few comments on Dr Albright's letter. "The vase-inscription of Narâm-Sin which mentions Magan is edited in Thureau-Dangin, Altsumerische und Akkadische Königsinschriften, p. 164, vase B. The vase from which this inscription was taken was lost in the Euphrates, and I did not know that the Metropolitan Museum in New York possesses a vase with identical inscription. When Dr Albright wrote his article on Menes he was not aware that Alfred Boissier had already published a new inscription of Narâm-Sin which mentions a long list of foreign kings, among them Ma-nu-um, king of Magan. A land called Manium (KI) is known from a tablet in Jerusalem, end of 25th century, where a certain Bašam is called a man of the land Manium, and it is certain that this means the land whose capital was a city Manium, named after the ancient Manium, king of Magan. The man who is here called a citizen of the land Magan has apparently a Semitic name. I am inclined to believe that Magan is a province in the region of the Red Sea coast. Narâm-Sin can hardly be put earlier than 2850. If you can get Menes down to that date it might be possible to equate him with Manium of Magan. Certainly the latter was a very important king in the minds of the Sumerian and Akkadian historians."

Last but not least Prof. Sayce has sent us a short article with reference to Dr Albright's theory.

MENES AND NARÂM-SIN

By the REV. PROFESSOR A. H. SAYCE

Dr Albright's proposal to identify Manium, "lord of Magan," with Menes is not new. The identification naturally suggested itself immediately after the publication of the inscription discovered by M. de Morgan at Susa, and it was discussed by Sir Gaston Maspero and myself. But I soon dismissed the idea; in fact, the Babylonian Chronicle subsequently published by Dr King made it untenable.

What reasons has Dr Albright for asserting that the use by Assur-bani-pal of the geographical names Magan and Melukhkha to denote Egypt and Kush is archaistic? There is no trace of any such use in early texts in the case of Magan, and the evidence from the Tell el-Amarna tablets in the case of Melukhkha is, to say the least, exceedingly doubtful. It rests upon Dr Knudtzon's conjecture that in a mutilated passage $kha \ka$ is to be filled up as "[Melukh]kha and Ka[si]." As Dr Otto Weber remarks, the soldiers from Melukhkha mentioned in the Tell el-Amarna correspondence might easily have been Arabs; in Gen. x. 14 the Caphtorim are enumerated among the sons of Mizraim.

As for Magan we are expressly told (W. A. I. II, 51. 17) that "the mountain of Magan" was "the mountain of copper." The Egyptians like the rest of the ancient oriental world obtained their copper from Sinai, Cyprus, and the Taurus mountains, not from Kush. And as for "the reed (zippatum) of Magan," years ago I already suggested that it was the papyrus, comparing zippatum with the Hebrew \hat{suph} , both of which may have been borrowed from the same source, and reminding my readers that the Gulf of Akaba was called \hat{yam} \hat{Suph} "the papyrus sea" by the Hebrews. It is also years ago that I identified the shoham-stone of Gen. ii. 12 with the Assyrian \hat{samtu} -stone, with the further suggestion that it might possibly signify "malachite"—a suggestion, however, which I should now retract. In any case the Egyptians derived their malachite from the Sinaitic Peninsula and not from Kush.

Prof. Hommel's identification of Magan with Ma'an is attractive, but we should have expected the Sumerian form to be Makhan rather than Magan (at all events in the later age of the Sumerian language); a more obvious identification is with the classical Makna, the modern Makna, at the head of the Gulf of Akaba. I see no reason for dissenting from Prof. Delitzsch's conclusions in respect of Melukhkha, Havilah, from which the shoham-stone came, being Khûlâh "the desert," of which Melukhkha "the salt-region" would be the equivalent.

Dr Albright's rendering of the passage in the Babylonian Chronicle relating to the conquest of Manium is contrary both to the usage of the Assyrian language and to common sense. If the Babylonian scribe had wished to write "Mannu the mighty" he would have said rubû dannu, amelu dannu, or the like, and neither an oriental conqueror nor his historiographers would ever have described his vanquished enemy as "the mighty one." Qûtśu iksud, it may be added, means "his hand captured"; the general sense of "conquering" comes later when the mention of the hand is dropped. This latter point, however, is of little consequence; as Dr Albright very justly points out, Egyptian tradition believed that the reign of Menes ended in his being seized and slain by the enemy.

Dr Albright is very much astray in the position that he assigns to the city of Yarimuta, which is coupled in the early texts with Mari, Ibla and Urśu. We now know that Mari was Tell 'Asha, 3 kilometres from Dêr ez-Zôr on the Euphrates, while Jensen's identification of Urśu with the classical Arsus on the Gulf of Antioch has now been confirmed by the Boghaz Keui tablets (Keilschrifttexte aus Boghazkōi, I, 11. Obv. 19, Rev. 22). Some time ago I pointed out that Yarimuta is the Armuthia of classical geography, and that in the geographical list of Thothmes III the countries of (298) Arsha, (299) Mari, (300) Ibl and (301) Qarmatia follow one another, and that as Qarmatia is followed by the names of Umq and Aleppo we must see in it the representative of Armuthia. The Iyaruwattas of the Boghaz Keui tablets seems to be the same place.

The chronological question I must leave to others. Before the commencement of the Third Dynasty of Ur about 2500 B.C. Babylonian chronology is wholly uncertain, though there are reasons (which, however, are the reverse of convincing) which make me inclined to put the date of Sargon of Akkad at about 3200 B.C. Egyptian chronology I leave to Professor Petrie.

P.S. In the inscription of Narâm-Sin referred to by Prof. Langdon the list of foreign countries conquered by the Babylonian monarch places Magan between Mari (now Tell 'Asha near Dêr ez-Zôr), Markhasi (now Mer'ash) and Mardaman (Syria) on the one hand and Erech, Umma (now Nokha) and Nippur on the other. Presumably, therefore, it occupied some part of the country between Syria and Babylonia.

Π

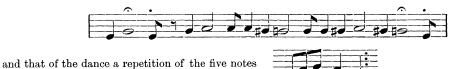
HATHOR DANCES

NOTE BY MR A. C. MACE

In Davies-Gardiner, *The Tomb of Amenemhēt* (p. 96), Dr Gardiner discusses the representation of Hathor dances in tomb scenes, and draws the following conclusion:

"...after these things the priestesses of Karnak doubtless paraded the town, stopping at one house after another in order to bestow upon their owners the blessings of Hathor, as symbolized in song and dance. From the eastern bank of the Nile they may have passed over to the Necropolis in the western hills, there to accomplish for the dead that which had been accomplished already on behalf of the living."

At Hû, where our camp was close to a large modern cemetery, I have frequently seen what I think must surely be a survival of this Hathor ceremony. At some interval after a funeral—I am not sure whether it coincided with the *rahma* or not—a band of singing women used to make procession to the cemetery with tambourines and red handkerchiefs. At frequent intervals on the path they would stop, form themselves into a circle, and dance, jumping up and down and beating the tambourines. The tune of the chant they sang was as follows:



A close parallel to this modern ceremony is shown in Rosellini, *Monumenti*, Vol. II (*Mon. Civili*), Pl. XCIX (=Wilkinson, *Manners and Customs*, I, p. 443), where the women carry palm branches in addition to the tambourines.

NOTICE OF RECENT PUBLICATION

The Tomb of Antefoker, Vizier of Sesostris I, and of his wife Senet (No. 60). By N. de Garis Davies, M.A., with a chapter by Alan H. Gardiner, D.Litt. Illustrated by six plates in colour by Nina de Garis Davies, and by forty-two plates in line and collotype. Theban Tombs Series: Second Memoir. London, George Allen and Unwin, Ltd., 1920; published under the auspices of the Egypt Exploration Society. Pp. 40.

Published Egyptological records receive a most valuable accession in this new volume of the Theban Tombs Series, inaugurated in 1915 with a monograph on the sepulchre of the accountant Amenemhēt. The subject of this second memoir is in a sense unique, being the only Middle Kingdom tomb known at Thebes which retains its wall paintings complete. These latter are moreover in a very fair state of preservation; the fire which at some time has been deliberately ignited in the tomb, perhaps to purify it for new occupants, has done little damage to the decorations beyond modifying the colours. The high social position of the original owner, Senet, wife of the Vizier, as well as the laudatory remarks left on the walls by many Eighteenth Dynasty visitors (among them the very Amenemhēt¹ whose tomb, perhaps imitated from this one in some particulars, formed the subject of the preceding memoir) show that we have here a quite representative rock-tomb of one of the Middle Kingdom capitals; that it does not display any striking superiority to those of the contemporary provincial nomarchs is but a further testimony to the power and magnificence of these latter. The quality of the paintings is however shown by Mrs Davies' coloured plates to be of the finest, and the remains of the great statue and of the other sculptured stonework are very beautiful. To praise the merits of Mr and Mrs Davies' reproductions would at this time of day be almost an impertinence. The extent to which Mr Davies, with his great knowledge of Egyptian taphology, avails himself of the comparative method in coordinating the paintings he describes with those of other tombs will fill all readers with admiration.

The confusion as to the original ownership of the tomb is not without interest. It seems that although it was originally made for Senet, Antefoker was not only shown as associated with his spouse in the chief funerary rites, but was also depicted alone in the customary scenes of hunting, killing wild fowl and spearing fish. At some subsequent time, however, most of the representations of him were carefully deleted—by his own wife, Mr Davies thinks. Nevertheless, not one of the Eighteenth Dynasty graffiti ascribe the tomb to Senet. Most of them mention it as "this tomb of Antefoker," one speaks of "this tomb of the time of Kheperkerë (Sesostris I)," and two others attribute it to, or to the time of, Queen Sebeknofru Whence comes the association of the tomb with the queen who terminated the XII Dynasty, some six reigns later than Sesostris I? The reasons suggested by Mr Davies (p. 8) and Dr Gardiner (p. 27) hardly seem sufficient. Very little is known about Sebeknofru, or Sebeknefrurë, as she is also called; if some dynastic feud raged round her as round the later queen Hatshepsut, resulting in the defacement of her representations and those of her ministers after her brief reign, the deletion of Antefoker's figure and that of the king may have led New Kingdom wiseacres to assign the tomb to this queen's reign. This, however, is but a random conjecture. Further difficulty is imported by the question whether Antefoker's "beloved wife, Sitsisebek," depicted on the north wall, is to be identified with Senet or is another wife.

- ¹ The absence of any titles but that of "scribe" seems to show that he left this *graffito* when young, as indeed he would be more likely to do than when hedged round with public dignities.
- ² I.e., the deletion of Antefoker, leaving Senet predominant, the majestic statue of the latter, the representation of a king (named, however, as Sesostris I) and the occurrence of a name Sitsisebek. The confusion of Khnemhotpe's tomb at Beni-Hasan with the "Temple of Cheops" is hardly a close parallel; for Cheops' cartouche occurs four times in the long inscription.
- ³ The clumsiness of this name, "Daughter of the Son of Sobk," is not necessarily a reason for reading it "Daughter of Sisebek" (p. 18); I believe it can be matched in the Middle Kingdom, and it may in any case be compared with such late theophorous names as Senpsenmonthis ("Daughter of the Son of Month"), Psensenpelilos, etc.
- ⁴ The demon of confusion is not easily exorcised from this tomb, it would seem; I find it hard to understandwhy the volume is entitled "The Tomb of Antefoker.....and of his wife Senet," since the editor definitely states throughout (cf. pp. 1, 6, 7, 21), that Senet alone was buried there.

The most interesting feature of the tomb is doubtless the texts, which are abundant. The speeches put into the mouths of the various figures are of a delightful raciness and naturel; the songs of the two harpers offer many points of interest; finally there is the large group of graffiti, thirty-six in all, dating chiefly from the first half of the XVIII Dynasty. On this valuable body of philological material, together with the translations given in the text, I have the following suggestions and comments to make.

A. THE FORMAL INSCRIPTIONS AND THE SPEECHES.

It might perhaps have been well to translate these a trifle more literally here and there, in the interests of readers who are in the earlier stages of hieroglyphic study and who will wish to further their knowledge by comparing the English and Egyptian. It is doubtful if anything is gained by rendering passive constructions with active ones, e.g., mf? ndt hr.....in rpti-c(!) pl. XIV, Englished on p. 17 as "the count.....looking at the New Year's festival gifts"; so also on pp. 11-12 and twice on p. 21.

- P. 4=Pl. XXXVIII. The photograph shows remains of \bigcap and \bigcap and \bigcap (for which latter *cf*. Pl. XVIII) at the tops of the first two lines.
 - P. 12=Pl. V. Depending "striking" birds with the throwing-stick rather than "netting."

 P. 13. The text reproduced here seems to read: "Come and put (it) down (wshtan) under this
- P. 13. The text reproduced here seems to read: "Come and put (it) down (wshin) under this olive-tree (?); a cool place......good well." Wsh similarly used Urk., IV, 1144/5.
- P. 15=Pl. XI. "I am earning a 'Heaven bless you." The facsimile reads $m \cdot k$ wi r rdit $dw \cdot t$ w $n \cdot i$ ntr "I shall cause them (lit., one) to bless me."—"Good luck would have befallen me" (hpr bw nfr $m \cdot c \cdot i$). Hpr $m \cdot c$ seems always to mean "to happen through the agency of" someone, and not "to befall," which is hpr n. Better, perhaps, "I could do some good."
- P. 16=Pl. X. "Which Sokar melted down with his fingers." Nb is "to model" rather than "melt down." Cf. that nbt Pth "glazed-ware which Ptah models," Nu, 64 long/7 (can the obscure word after hrst be that?). The rare word skr, which occurs also, in connection with cults, Siût, I/173, 232, must here be in relative $s\underline{d}mnf$ parallel with $nw\underline{d}n$, $m\beta cn$, nbn. It seems necessary to render this passage: "For thy kas! the oil of incense which Ptah has distilled and which the Lady of Punt¹ has sent; and what the (personified) Necropolis has adorned (?) and what Sokar has modelled with his fingers, namely silver, gold, lapis, turquoise," etc.
- P. 17=Pl. XIV. "The New Year's festival gifts from his estate $(prf[ni]\underline{d}t\cdot f)$ " an interesting illustration of "New Year's day, when the house is given to its master," $Si\acute{a}t$, I/278, 298; cf. also Buhen, Text, p. 71.
- P. 20=Pl. XVIII. "Giving worship to Osiris, doing homage to the great god, Lord of the West, on the occasion of the solemn pilgrimage of Senet." The passage certainly means: "Blessing Osiris, doing homage to the Great God, Lord of the West, at the Great Forthgoing, by......Senet." The "Great Forthgoing" (prt Gt) of Osiris was the principal Abydene festival³.
- Pll. XVIII, XXII. It is curious that the not uncommon priestly title \(\sum{\cong} \sum{\
- P. 20=Pl. XVIII. It seems necessary, despite the direction of the signs, to read the passage over the right-hand boat at the bottom from left to right: "Putting-to-land for the numbering of the Gwt of the wryt." For sa sparts of a boat cf. LACAU, Textes Religieux, 27/31. The person in the panther-skin is possibly the 'An-mutef,' for this officiant is associated with the wryt, Nebseni, 137B/5. The man on shore seems to be saying: "Don't sink! Make for us!"
- P. 21=Pll. XXII, XXI. I read the horizontal line: "To the West, to the West, to the place wherein is desire of thee! [Thou art drawn upon the portable sh]rine (mstpt) by vigorous oxen4, etc......[O Senet,] thou art not gone away dead, thou art gone away alive! Take thy seat upon the throne of Osiris, the
 - 1 "Punt" seems quite certain here. 2 Hardly "when the house gives,"
 - ³ See especially Schäfer, Die Mysterien des Osiris in Abydos, pp. 24-5.
 - 4 Restoring [sts-tw-k hr m]stpt in ksw wsdw; cf. Gardiner, Notes on Sinuhe, p. 69.

ceptre in thy hand, that thou mayest give commands to the living!" By a slip Wnw, in the middle of his passage and on Pl. XIX, is rendered "On" (pp. 20, 21), instead of Hermopolis.

P. 25 = Pl. XXVI, bottom. The speech of the left-hand man seems to be irii r nfr sp 2; [m]k mi ps wndw: "I shall do very well; see, this wndw-ox has been sent."

P. 26=Pl. XXX. "The toilet chamber has rendered thee living" does not seem a possible translation for thee! Thou art alive, etc."

B. The Harpers' Songs (pp. 24-5=Pll. XXIX, XXVII).

Khuyt's song, p. 24 = Pl. XXIX. I would suggest the following rendering: "Hail to thee, Gold! Thou hast shown favour as long as thou hast been². If I am moderate³ in praying to thee I shall find.....as the poor man finds (?) power (??). Thou knowest, Gold (rh nt, Nb), thy time of....., thy hour of giving audience4; thou wilt respond5 to what I say to thee—let the Vizier be freed for my sake! Thy nature is fair, thy form is seemly⁶; justice⁷ is within thy members. Do thou make to prosper (?)8......"

Didumin's song, pp. 24—5=Pl. XXVII. The entity $\bigcap_{i=1}^{n} \bigcap_{i=1}^{n} \bigcap_{i=1}^{n} \bigcap_{i=1}^{n} \bigcap_{j=1}^{n} \bigcap_{j=$ a star but a word meaning "nightfall," here personified. Cf. htp m Mnw tp ____ "who sets in Ma'nu at the point of nightfall," DÜMICHEN, Temp. Inschr., 34/10; htp m on wn "Thou who settest in 'Ankhet when it is nightfall," Lepsius, Todtenbuch, 15/40; htp:f m "he sets in 'Ankhet at nightfall," Edfou, 157. Cf. alsom hrw; N pw Wsir, pr m

nightfall," Pyr., 1761. Compare further the name of the second hour of the night in the Am-Duat "Seshat, who protects her Lord." Mkt nb's seems to be an added epithet; cf. D'tt-mkt-nb's, the name of the Ninth Hour.

Dr Gardiner states (p. 24): "A curious expression of the Ninth Hour.

Antefoker." On this interpretation the first is phonetic; but the group is quite unknown to the repertory of "syllabic" writings, and it seems difficult to accept this view unless no other is possible. I see no reason why this $n \cdot i$, being in every case preceded by $\bigcup \mathcal{D}$, should not be taken as dative "for me." 5 5 , may be a personal name, but in any case it is doubtless primarily the word 'child,' written

- is an error for \(\int \); see the old version of this passage Pyr., 134 b.

 kst hardly = "to praise" a god.
- ³ Hn "to order, arrange, subdue," also "to limit" (cf. hnti). 4 Śdm [mwd]w.
- ⁵ Cf. Late Egn. hsf "to answer" a letter (references Gardiner, Egn. Hier. Texts, Series I, Part I, p. 9*, note 1).
- ⁶ Taking twt as a writing of twt. ⁷ Reading śm^c[r] irt. ⁸ Tp-hśb seems sometimes to have this meaning.
- 10 The sign can hardly have been anything else. Cf. the summary form of on Pl. XXIX; is made quite differently.

On the basis of these remarks the song may be rendered somewhat thus:—

(Title) "The 'Child' has2 life for my sake."

"Heaven grows big with Nightfall, Heaven brings forth Nightfall; Nightfall belongs to her mother. The 'Child' has health for my sake; he of whom I speak (?)³ has health, the Vizier Antefoker, whom Senet bore, has health; the 'Child' has life for my sake. O Nightfall, give me my.....and I will give thee [thy]...... O Nightfall, benefit my 'Child' and I will benefit thy 'Child.'..... The 'Child' has life [for my sake]. The Vizier [Antefoker] has health...... I will go to sleep, I will make 4 my own body—these my breasts, these my....., these my palms (??)⁵, these my fingers, these [my joints] of my back (?). Thou hast not given these my.....to...... Evening arrives, its.....is broken, its cooking-vessel is cloven, it pours out the evil I have done. Nightfall belongs to her mother."

Khuyt's song, p. 25=Pl. XXVII. I suggest the following rendering:-

"I⁶ will describe (?) her arrival. Her arrival is the arrival of a loud-voiced swallow. Isis, sit thou down; I know what will comfort thee. I have learnt [that] thy son Horus has fought with his brother Seth, and has dealt him a very grievous wound the set that the should not......which is (?) seen the accordingly. Mine (?) then, is this. I will cease this, O Isis; my town stays to not for me, my.....hearkens [not] to me. I will...... The face is turned round, the nose turned back, the....... of the neck has been accomplished; Horus is (restored?) to Isis, not by the gift of him who fought (?) him. The Sovereign has health, and life, the Vizier Antefoker has health, he has life; this 'Child' has life for my sake."

C. THE GRAFFITI.

Nos. 2, 3. $Gm \cdot nf \not sw mi pt m \underline{h}nw \cdot si$. Translated "he found it like heaven in its interior." The antecedent of sw is is "tomb" but that of si can be only pt "heaven." The presence of the dependent pronoun si^{15} instead of the simple suffix seems to be a new grammatical datum; it is perhaps used for the avoid-

- ¹ See Griffith, Rylands Papyri, p. 220, note 14.
- ² In spite of the inversion (for iw śnb (or ϵnh) n X) this must be the meaning; cf. such names as Ni-ϵnh-śhmt 'Sakhmet is a possessor of life,'' Ni-wśr-Rϵ, etc.
 - ³ Reading iw ddi n snb. Dd "to speak of" or "name" a person as occasionally elsewhere.
 - 4 Obcerre idiom
 - ⁵ Cf. 3bhh n·k (wi "the hands are clapped (?) for thee," Pyr., 743.
- 6 Of the first two lines the following seems legible: iri luts, luts lut nt mnt 3 dds, St, lms t, rhi śndm tn, lw rhni [wnt?] ch st. Hr hnc śn. Stš, wdn. f (for wdn.f, a common type of error) st dw wrt......
- ⁷ Mnt (as here), "swallow," is apparently to be distinguished from mnwt "door," "pigeon" (so Erman, $\ddot{A}g$. Glossar). For Isis in the form of a swallow cf. Plutarch, De Is. et Os., \S xvi.
- ⁸ There is a play here on mnt "swallow," and mnt "suffering" or "(female) sufferer." For śndm mnt, "to relieve suffering," cf. Nu, 117/3, Ani, 147, I/15, III/8, Hearst Med., 7/14.
- 10 Cf. "that day on which Horus fought with Seth, when he (here Seth) dealt a wound (m wdtf \$t\$\forall v\forall v\forall i) in Horus' face," Urk., V, 32/7, 15. For wd st\forall w "to deal a wound," cf. also Urk., V, 67/17; wd wbnw "to make a bruise (?)," Ebers, 70/1. I know no support for the frequent rendering "dirt" for \$t\forall v\forall w\forall v\forall v\
 - 11 Or "which sees" (i.e., the Eye of Horus?) or "which one sees."
 - 12 Reading 3b.
 13 Btn.
 14 De Is. et Os., § xvII, trans. King; cf. Herodotus, II, § 79.
- ¹⁵ So, apparently, in both graffiti. One of these is probably a copy of the other. If \hat{si} is to be taken seriously it has probably nothing to do with the Late Egyptian possessives t-w, s-w discussed Gardiner, Zeitschrift, 50, pp. 114 foll.

ance of ambiguity: "he found it like heaven in the latter's interior," i.e., as beautiful as the very inside of heaven (?).

No. 33, last line. *Htptf*, though here written as though "his offerings" was meant, often occurs in this context as metathetic form of *tphtf* "his cavern¹."

No. 36. I read "May Rēc and Osiris give thee a thousand......"

Two points in connection with hieroglyphs may be mentioned. (a) The vine on its supports, Pl. XV, is an excellent interpretation of the sign (b), determinative of "grapes" and "wine." (b) Mr Davies' remarks, p. 19, on the bird perching on the top of a ship's mast as a good omen prompt me to suggest that the sign (b), (b), may perhaps represent a bird perched on a mast, the oblique lines being ropes and the horizontal one the upper spar of the sail.

BATTISCOMBE GUNN.

P.S. Šśłt "nightfall," discussed on p. 300 above, occurs also in the following passages in the *Pyramids*: "She (İḥmt) has borne K. to the yellow(?)-faced, the lord of nightfalls," 515 (Atūm is probably here meant; cf. "Atūm, the father of K. in the darkness," 605); "K. is Błbii, lord of nightfall," 516; Nrt has become pregnant with K. at nightfall," 568, 569.

With $ir\cdot i$ iwt in "I will describe (?) her arrival," p. 301, may perhaps be compared Pyr., 754 b, where $ir\cdot in$ seems to have the meaning "they say."

¹ Cf. Urk., IV, 51/4 and footnote.

² Cf. the old forms of the sign, Pyr., 287, 1018a, 1059, 1060, 1065, 1877; the form 1909c suggests a perch placed at the top of the mast (if mast it is). Other old forms, e.g., Pyr., 1018b^p, 1158, favour this interpretation less.

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A GLASS CHALICE OF TUTHMOSIS III

By PERCY E. NEWBERRY, M.A.

THE glass chalice bearing the prenomen of Tuthmosis III figured Plate XVI, below¹, was bought about the year 1825 by an English archaeologist, Edward Dodwell, F.S.A., who was then living in Rome and forming the well-known collection of Egyptian, Greek and Etruscan antiquities which, some years after his death in 1832, passed into the possession of Munich and is now preserved in the Antiquarium of that city. In a catalogue² of the collection printed at Rome in 1837, the chalice is thus described: "Calice di smalto turchino³ chiaro con ornamenti gialli e turchinoscuri; sul corpo v' e il cartello del Thutmose IV [sic] della dinastia XVIII (a. 0.4 e un quart. dia. 0.3)." It will be noticed that the chalice is here called "smalto" (enamel), and in the last "Guide" to the Antiquarium it is said to be of "faience." It is, however, of glass, and glass of a kind that was much prized in Upper Egypt from the Eighteenth to the Twenty-first Dynasty.

About fifty perfect, or nearly perfect, examples of this type of glass are known, and I have seen and noted fragments of at least two hundred and fifty broken ones. A certain number of specimens are dated by the names of the kings for whom they were made being worked into, or cut on, the glass. Besides the Dodwell chalice mentioned above there is a bottle in the British Museum⁵ of opaque turquoise blue glass with ornamentation in yellow, which bears the prenomen of Tuthmosis III. A dozen pieces bear the names of Amenophis III⁵, Amenophis III⁷ and Akhenaton⁵. The date of other specimens or fragments can be determined from their provenance. In the tomb of Maḥerpre, which dates from the reign of Tuthmosis III, was found a bottle⁵ of dark blue glass with ornamentation in green,

- ¹ The Plate is reproduced from a drawing made by Dodwell in 1825 or 1826. This drawing is preserved among the Dodwell Papers in the Manuscript Department of the British Museum $\langle Add. MS. 33,958, f. 42 \rangle$
- ² Notice sur le musée Dodwell et catalogue raisonné des objets qu'il contient, Rome, 1837. This catalogue was written by Dr Braun and contains an introduction by Bunsen.
- ³ Von Bissing (*Rev. Arch.*, Vol. XI, p. 213) says that it is of "verdâtre" glass and that the decoration was in "jaunes et noirs," but the chalice is discoloured. The body glass was originally blue and the ornamentation yellow and dark blue, as it is correctly described in the catalogue of 1837. The chalice is figured in colour by Rosellini, *Mon. Civili*, Pl. LXIIb and a photograph of it is given by Kisa, *Das Glas im Altertum*, 1908, Vol. I, p. 17.
 - ⁴ Christ-Dyroff, Führer durch das Antiquarium, p. 117, no. 630.
- ⁵ Figured in Wilkinson, Manners and Customs of the Ancient Egyptians (ed. Birch), Vol. 11, p. 140, no. 382.
- ⁶ Some of these pieces are figured by Daressy, Fouilles de la vallée des Rois, in the Cat. gén. of the Cairo Museum, nos. 24753, 24794 and 24804. Other examples nos. 24798, 24800-2 and 24816 are described in the Catalogue. I secured at Thebes two pieces, probably from the tomb of the king, with the prenomen of Amenophis II worked into the glass.
 - ⁷ From notes of fragments in dealer's hands.
 - 8 Petrie, Tell el Amarna, Pl. XIII.
 - ⁹ Daressy, op. cit., no. 24059.



I



2

1. PENDANT OF GLASS MOSAIC FOUND AT DAHSHÛR (Twice the size of the original)

2. GLASS VASE OF TUTHMOSIS III IN THE MUNICH ANTIQUARIUM

From water-colour drawings

white and yellow. Fragments of a large number of vases of different forms, and of cups, dishes and bracelets of similar glass were discovered in the tombs of Amenophis II¹ and Tuthmosis IV². Pieces of at least a hundred vases and scores of amulets, ear-rings and broken bracelets have been brought to light among the ruins of the palace of Amenophis III at Thebes³; and near by was discovered the earliest known glass factory, in which were found small crucibles containing dark blue glass and a quantity of different coloured rods of the same material⁴. Three or four similar factories of the time of Akhenaton were found at El-Amarna⁵, and hundreds of fragments of vases, bracelets, ear-rings and amulets have been collected in the ruins of Akhetaton⁶. A perfect bottle of the time of Amenophis III⁻, another bottle that can be dated to the reign of Tutankhamūn⁶, and a bowl and several bottles of the reign of Ramesses II⁶, have all been found in tombs at Gurob. At Lisht¹o there were extensive factories of this glass dating from the Twentieth Dynasty, and the site of another factory of about the same date was shown to me by Arabs on the east bank of the Nile a short distance south of Menshîyeh¹¹. To the Twenty-first Dynasty belong the famous cups of Nesikhonsu in the Cairo Museum¹².

A considerable number of similar glass vases have also been found outside Egypt, in Cyprus and other places of the Mediterranean. Fine examples were obtained from the tombs of Enkomi and Curium, and these are undoubtedly the work of Egyptian craftsmen of the period between 1450 and 1200 B.C. A very remarkable cup is recorded from Curium (tomb No. 89). This is figured in Murray, Excavations in Cyprus, p. 69, fig. 99. It has a high tapering bowl and foot, and is decorated in a calyx-pattern of alternating blue and yellow opaque glass with dark brown vandyke pattern round the top. The pomegranate-shaped vases from Enkomi (op. cit., p. 34, No. 1218 and p. 35, Nos. 1052, 1053, 1056) are precisely similar to specimens found in Egypt that appear to be not later than the Eighteenth Dynasty. In the tomb where these pomegranate-shaped vases were found were also unearthed a green faience bowl of Egyptian manufacture and an arragonite (?) vase (op. cit.,

- ¹ Daressy, op. cit., nos. 24753—24838. A glass vase is figured in the tomb of Rec at Thebes (no. 72 of Gardiner and Weigall, Topographical Catalogue), see Leps., Denkm., Part III, Pl. 62.
 - ² Carter and Newberry, Tomb of Thoutmôsis IV, pp. 135-142, with Pl. XXVII.
- ³ A small series of fragments is in the Victoria and Albert Museum, South Kensington. Larger series are in the Amherst and my own collection. In Davis and Newberry's *Tomb of Iouiya and Touiyou*, Pl. XXVII, are figured two dummy vases found in the tomb of the parents of Queen Thyi; these are made of wood and are painted to represent glass. One represents a dark blue glass with yellow wave lines; the other also represents dark blue glass and has yellow wave lines and rosettes.
 - ⁴ Notes made by me in 1902-3, when Mr Tytus and I were digging at this site.
- ⁵ Petrie, Tell el Amarna, pp. 25—27, Pl. XIII, where are figured the fritting-pans, glass rods etc., used in the manufacture of the glass.
- ⁶ Some of these pieces are preserved at University College, London, and others are in the Amherst Collection. I also possess a few typical pieces from this site.
 - ⁷ J. E. Quibell, Annales du Service des Antiquités, Vol. II, Pl. I, with p. 4.
 - 8 Petrie, Illahun, Kahun and Gurob, Pl. XVII.
 - 9 Op. cit., Pl. XVIII.
- ¹⁰ A. C. Mace, The Murch Collection, in the Supplement to the Bulletin of the Metropolitan Museum of Art, January 1911, pp. 24—26.
- ¹¹ This had already been completely plundered when I was taken there in 1911. I picked up some glass slag and a few rods of coloured glass and was told by the natives that several vases from the site had been sold during the previous season to Luxor dealers. Some of these vases were bought by the late Mr Theodore Davis.
 - 12 MASPERO, Les momies royales de Déir el Baharî, Pl. XXII, A.



TURQUOISE-BLUE GLASS BOWL IN THE COLLECTION OF THE EARL OF CARNARVON

p. 35, fig. 1048) of the same form¹ as the glass bowl in Lord Carnarvon's collection which is figured in Plate XVII. This latter bowl was found in Upper Egypt in 1856²; it is of brilliant turquoise blue translucent glass, and is certainly the most beautiful example of a self-coloured Egyptian glass vase that has yet been found. I should be inclined to date it to the reign of Amenophis III, but it may possibly be a little earlier.

The shapes of these vases are nearly all derived from well-known alabaster or pottery forms. In size they range from $1\frac{1}{2}$ inches to 16 inches in height. The colours employed are very varied and all appear to be due to metallic oxides. For the body-colour, blue is the commonest; it occurs in all shades from pale turquoise to deep lapis-lazuli and violet. Pale or dark plum colour comes next, then opaque white, green, yellow, and black; red and brown are very rarely found as a body-colour. Four vases are known of a pale greeny-white, but not a single example is known of anything approaching clear transparent colourless glass. The ornamentation usually consists of wavy or zigzag lines of a colour different from the body glass. Thus on a dark blue ground white, turquoise blue, yellow, green or red is used; on a turquoise blue ground, dark blue, yellow or white. Sometimes the body glass is ornamented with circular discs³, or with bosses⁴, of glass of different colours. In one specimen⁵ are sprays of foliage round the bowl and coat-of-mail pattern round the neck. Sometimes rosettes⁶ of different colours are employed, or bands of flattened rods⁷ of different colours, or plain crosses⁸.

The process of manufacture of these vases can be made out from an examination of the contents of the factories that have been found and by a study of the fragments that we possess. It was a very elaborate process, which necessitated constant annealing of the glass and the exercise of the greatest care to prevent the furnace attaining a temperature at which the glass would run. Whether the glass itself was made at any of the factories in Upper Egypt is doubtful; it is more probable that it was brought in the form of ingots from glass works in the north-western Delta, where the necessary materials for glass-making are to be found. These ingots were broken up into small fragments and put into crucibles or fritting-pans that were placed on inverted cups in the glass-worker's oven. The glass

- ¹ Arragonite bowls of this shape are well known from Egypt. One was figured in a recent number of this *Journal* (vol. v, Pl. XXVI, pp. 167—168).
 - ² It was brought to England in that year by the late Mr Hood of Nettleham Hall, Lincoln.
 - ³ Fragment from the palace of Amenophis III in my own collection.
 - ⁴ A dark blue glass bottle in the Liverpool Museum.
 - ⁵ This is the Tuthmosis III bottle in the British Museum.
- ⁶ See for example Daressy, op. cit., Pl. XLIII, no. 24761 and another form of rosette is figured in Davis and Newberry, Tomb of Iouiya and Touiyou, Pl. XXVII.
 - ⁷ Fragment from the tomb of Amenophis II in my own collection.
 - ⁸ Daressy, op. cit., no. 24761.
- ⁹ I discussed this subject in 1910 with Mr William Burton of Messrs Pilkington's works near Manchester, and he agreed with the method of manufacture as here described. Much the same method of procedure is given by Petrie in *Tell el Amarna*, pp. 25—27, and in the *Catalogue of the Burlington Fine Arts Club. Exhibition of the Art of Ancient Egypt*, London, 1895, p. xxv. Mr H. J. Powell of the White-friars' Glass Works, with whom I had earlier discussed the subject, believed that all the Egyptian vases were blown; see his article on "Glass" in the eleventh edition of the *Encyclopaedia Britannica*, 1910.
- ¹⁰ I have seen four of these ingots; one of a beautiful turquoise blue colour is in Lord Carnarvon's collection at Highelere Castle, and another of a similar colour is in the Metropolitan Museum of Art at New York. The other two specimens I saw in an antiquity dealer's hands in Cairo in 1904; these were of red colour.

¹¹ See below, pp. 159—60.

¹² Petrie, Tell el Amarna, p. 26, Pl. XIII.

was then fired, and when sufficiently soft the viscid glass was picked out by means of metal pincers and rolled into thin rods or tubes. These rods were then annealed and coiled round a sandy clay core2 into which a metal rod had been inserted, the metal rod being the handle by which the glass-worker held the vase. When a sufficient number of rods had been wound round the core for the bowl, and the metal rod for the neck, to make the glass coat or "body" of the required thickness, the whole was put into the oven and fired up to a heat sufficient to coalesce the rods but not great enough to cause the glass to run. The foot was modelled by a metal tool out of a separate piece of glass and attached to the bowl while the glass was still soft. The vase was then annealed again to enable the worker to wind round it rods of different coloured glass to form the ornamentation. When the rods had been placed in position on the surface, the vase was again placed in the oven until the whole of the glass was soft enough to allow of the rods being rolled into the body. It should be noted here that these coloured rods are always embedded in the body of the glass and never go through it as in mosaic or cane glass. Metal pins3 were then placed at intervals around the vase to hold the rods in place, while the surface between the pins was rapidly dragged up or down in such a way as to produce wavy or zigzag patterns. The hieroglyphs, rosettes, crosses, and other forms of decoration were placed on the surface and embedded in the same way. When the ornamentation was completed the surface was rubbed down with emery, or some other cutting material, to remove any surface imperfections. The vase was finally put into the oven for just sufficient time to make its surface vitreous⁵ and allow of the rims around the neck, feet and the handle or handles to be added. The vase and metal rod by which it had been held during the process of building up were then set aside to cool, and when quite cold the metal rod, which would then have contracted free of the glass, was removed. The final process was scraping away the sandy core from the inside, and the result was the finished glass vase.

The technique displayed in the manufacture of these vases is so elaborate, the quality of the glass so fine, and the colours so brilliant, that it is certain the craftsmen who made them had long passed the primitive or experimental stage of glass-making. They reveal the art in a high state of proficiency; they must be the outcome of a long series of experiments. Very little, however, is known about the early history of glass. The earliest factory that has been found in Egypt is one dating from the reign of Amenophis III at Thebes, but, as we have seen, some specimens of the kind of glass that we have been discussing date from three reigns earlier than Amenophis III, and the earlier specimens are of perfect workmanship. It has been suggested that, although these glass vessels were made in Egypt, they were the handiwork of foreign craftsmen and that the industry originated in Syria, not Egypt. But there is no real evidence to support this theory. No specimen of glass has been found in Syria that can be attributed to so early a date as Tuthmosis III.

- ¹ Petrie, op. cit., Pl. XIII.
- ² Every fragment shows the rough inner surface with sand adhering. The necks have invariably the marks of the metal rods. It is, I believe, only by this method of coiling that a uniform thickness for the "body"-glass can be obtained. At Tell el-Amarna the usual method of bead-making was by winding a thin thread of drawn glass around a thin rod of metal, and these metal rods were actually found with the threads still stuck on them. See Petrie, Tell el Amarna, Pl. XIII, 59—61.
 - ³ I have seen a few specimens in which traces of these metal pins can still be seen.
- ⁴ Mr Howard Carter pointed out to me that on the surface of some of the vases tiny air-bubbles often appear which have been cut across.
 - ⁵ This is obvious from many specimens.

On the other hand no trace of more primitive forms of this particular kind of glass have been found in Egypt. It is true that this style of glass descended into Greek times and was largely used throughout the Mediterranean; it is generally termed "Phoenician Glass," but Phoenicia was the adopted, not the native, country of glass-making. All the so-called "Phoenician" specimens are very much coarser and possess none of the brilliancy and vitreous surface that mark the earlier products. That glass-making was a very ancient industry in Egypt is beyond question; its history can indeed be traced back to prehistoric times, for glass beads have been found in prehistoric graves. Pieces of semi-transparent blue glass used for inlaying on wood and dating from the First Dynasty were found by Amélineau² at Abydos, and among the jewels of King Zer's queen occur plaques of turquoise blue glass³ of excellent quality. From the Twelfth Dynasty we have two well-authenticated pieces of glass mosaic. One of these is a circular disc in the centre of which is a figure of a white ox with black spots; this is set in a ground of pale blue and surrounded by a band of red and white rectangles, outside which is a border of pale blue. It is covered with a thin disc of fluor-spar and mounted in a circular frame of granulated gold work. This exquisite pendant was found by de Morgan' at Dahshûr among the jewels of one of Amenemmes II's princesses. It is described by de Morgan as being made of different coloured stones, but I examined it some years ago with a magnifying glass and am convinced that it is made of glass. The late Mr Harold Jones, who made a water-colour drawing of it for me (see Plate XVI, at top), was of the same conviction, and Sir Gaston Maspero in one of his last works⁵ definitely describes it as "glass mosaic." The second piece of glass mosaic dating from the Twelfth Dynasty is a rod in the Berlin Museum⁶ which gives the cartouches of Amenemmes III in white on a black ground. That it is contemporary with the king whose name it bears appears to me certain. Von Bissing attributed it to the Roman age because he was not aware of any early mosaic glass. In my own collection I have several pieces from the palace of Amenophis III, and we cannot doubt that this kind of glass was well known in Egypt at the time of the Eighteenth Dynasty. The Egyptians were also expert cutters and engravers of glass as early as the Intermediate period between the Twelfth and the Eighteenth Dynasties. There is a small piece of opaque blue glass which has a lion's head cut on one side of it and on the other side is engraved the prenomen of Intef Nubkheperre. This specimen is in the Slade Collection of the British Museum⁸. Many specimens of engraved glass are known from the Eighteenth Dynasty⁹.

I have remarked above that the earliest known glass factory in Egypt is not older than the reign of Amenophis III, but that the history of the industry goes back to very much earlier times. Egyptian glass is a lime soda silicate and all the materials for making it are to be found in the north-western Delta. It was here in later times that most of the

- ¹ Perrot and Chipiez, Hist. de l'Art dans l'antiquité, Vol. III, Phoenice-Chypre, pp. 732 ff.
- ² Now in the Ashmolean Museum at Oxford.
- ³ E. Vernier, La Bijouterie et la Joaillerie Egyptiennes, p. 84, n. 2, cf. p. 26.
- ⁴ J. DE MORGAN, Fouilles à Dahchour, Vol. II, Pl. XII, no. 62, p. 67.
- ⁵ Art in Egypt (Ars Una Series), 1912, p. 120.
- ⁶ Amtliche Berichte aus den Kgl. Kunstsammlungen, Nov. 1907, pp. 53-54.
- ⁷ Arch. Rev., Vol. xI, p. 211.
- ⁸ A. Nesbitt, Glass (S. K. Mus. Art Handbook), p. 10.
- ⁹ Several engraved pieces were found in the tomb of Amenophis II, in the palace of Amenophis III and at Tell el-Amarna.

glass exported from Egypt to Rome¹ was made. There are remains of extensive glass works in the Wady Natrûn and to the south and south-west of Lake Mareotis². Hadrian, in a letter addressed to the consul Servianus, mentions glass-making as one of the chief industrial occupations of the people of Alexandria. Strabo³ tells us that he heard from Alexandrian glass-workers that there is in Egypt a kind of vitrifiable earth, without which expensive works in glass of various colours could not be executed. The Egyptian name of glass is very significant in this connection. It is $thn \cdot t$. Just as we use the word $thn \cdot t$ "china" for a kind of porcelain which first came to us from China, so the Egyptians called glass $thn \cdot t$ after the country $(thn \cdot w)$ of the north-western Delta from which we may presume they derived it.

¹ Cicero, pro Rab. Post., 14. Alexandria sustained its reputation for its glass for many centuries. Martial xi, 11: xii, 74: xiv, 115. Vopisc., Aurel., 45.

² Wilkinson, *Modern Egypt and Thebes*, 1843, Vol. I, pp. 384, 394 and see note 8 to Rawlinson's *Herodotus*, II, 44. I have myself noted the sites of two factories to the south and south-west of Lake Mareotis.

³ Strabo, xvi, 11, 25.

ERRATUM

Page 160, lines 7—8; read "Just as we use the word "china" for a kind of porcelain..."

THE FOUNDATIONS OF SOCIAL AND ECONOMIC LIFE IN EGYPT IN HELLENISTIC TIMES¹

By Professor M. ROSTOVTZEFF

Many years of close study of the history of the ancient world have convinced me that one of the most important epochs in the evolution of the world is the Hellenistic period, i.e. the three centuries after Alexander the Great. I am sure that, if we desire to understand the peculiarities of Greek genius and the subsequent history of civilization, this epoch is quite as important as the flourishing period of Greek politics and the time of the Roman world empire. I will not repeat well-known truths, but I must emphasize two cardinal points which even in such a brilliant home of classical learning as Oxford are apt to be insufficiently considered.

First of all an idea of the Greek world based only on a knowledge of the Athens and Greece of the VIth to the IVth century B.C. is both incomplete and to a great extent misleading. One of the most important features of Hellenism is not worthily represented in this picture of the Greek world, i.e. the universalism of Greek genius and its accessibility to mankind in general. This feature is most characteristic of the Hellenistic epoch. Let us not forget that this age created the world-wide Greek language—the κοινή. It also produced writers of genius who were as near to the Greeks themselves as to the Hellenized and Romanized βάρβαροι. They were equally read by the fellaheen of Egypt, by Hellenized Syrians, by citizens of the world capital—Rome—and by Romanized Gauls, Britons and Berbers. I would cite, for example, the name of Menander—the father of contemporary drama so far as this drama has developed on classical lines. The Hellenistic period first put the idea of a "cultured world," οἰκουμένη, οἰκουμενικός, into general currency. For this cultured, i.e. Greek, world it created a world philosophy as represented by the schools of the Stoics and the Epicureans; the world learning, as represented by the works of the followers of Aristotle, the Alexandrian, Pergamene and afterwards Roman scholars; the world history as we find it in the great works of Ephorus and Polybius, Plutarch and the great Roman historians; finally the world literature. It is not fully realized that the greatest works of classical Greek literature obtained world-wide importance and a worldwide audience only through the great creative forces of the Hellenistic period. Due credit must be attributed to the creative power of that epoch which succeeded in spreading throughout the world the language, the habit of thought, and the culture of the Greeks. Such an epoch cannot be designated a period of decline. I take the liberty of affirming that people who know Athens and who are not thoroughly acquainted with Alexandria, Pergamon and Antioch do not know Greece. They cannot fully realize the exceptional work of Greek genius. Athens moulded everlasting specimens of beauty and thought. The Greeks of the Hellenistic period, continuing the work of the Athenians, made these specimens accessible to millions. They have handed them down to us and made it possible for us to establish on them, as a base, the foundations first of European, and now of our world culture.

¹ A lecture delivered before the Oxford Philological Society.

My second point is that without a proper conception of the great results achieved by the Hellenistic age in the domain of politics, economics and law we shall never adequately realize how the world empire of Rome developed. Without this knowledge we can never understand how the Roman Empire acquired the strength to enable it to exist throughout a series of centuries, and how it could afterwards provide modern European nations with a basis on which to found their political life. The Hellenistic age was the first to attempt to solve a fundamental problem of ancient political life, a problem which still remains unsolved two thousand years after the death of Alexander the Great.

The ancient world produced two types of state—the great monarchical and bureaucratic organization of the Orient, and the free, autonomous and democratic organization of the Greek city state. The Eastern state seemed to be quite incompatible with that of the Greek. The foundations of the Eastern state were a strong central power, an army of appointed, responsible officials, the blind obedience of the population, a tendency to make private property serve the interests of the State, and a desire to socialize and nationalize production. All these points seem to be incompatible with the economic and political bases of the Greek constitution, which comprised an annually elected central power remaining under the control of the people, an administrative organization on the basis of elective self-administration, an almost unlimited freedom of private initiative in economic life, and private property as the chief economic principle. It is well known that the Greek πόλις was powerless to unite the whole Greek nation into one concrete state. It was therefore obliged to submit to the old monarchical state system of the East, and to adapt the fundamental principles of its life to the bureaucratic organization of the Orient. The whole history of the Hellenistic period consists of slow and varied processes of fusion between the two principal forms of ancient political, economic, and social life. The Greek city states were gradually incorporated in the big monarchies of the East, infusing new forces into decrepit bureaucratic organizations. First of all, Greek genius supplied much constructive power in the building up of the Eastern political and economic system. It evolved a strictly thought out and carefully regulated bureaucratic system of a Greek monarchic state on an Eastern basis. The corner-stone of this system was the submission of the individual to the State in all spheres of his activity. This was the case in Ptolemaic Egypt. In other countries, such as Macedonia, Asia Minor and Syria, this same Greek genius tried to create a compromise between the Eastern monarchy and Greek polity. It started to build up a monarchic state as a conglomeration of Greek city states which preserved the basis of their economic and social life. They lost, however, their economic self-sufficiency (αὐτάρκεια) and their political autonomy (αὐτονομία). This gigantic, strenuous and exciting work was carried out in an atmosphere of continuous internal unrest and endless wars between the different Hellenistic states.

Rome inherited this work, and the Roman Empire attempted to unite its various threads and bring it to completion. An attempt by Rome to construct its world state by means of an alliance of various Italic city states in the IIIrd and IInd centuries B.C. brought forth no good results. A second attempt by Rome to revive the Athenian world power—to organize a world state founded upon a monarchical hegemony of the Roman citizens—met with the same fate. This second attempt resulted in endless civil wars, bloody revolutions and finally in the consolidation of a monarchical régime. This régime eventually was obliged to follow the example of the Hellenistic monarchies, and to continue, not without much trepidation and deviation, the work of combining the principles of the

Greek city state and the Eastern bureaucratic monarchy. Rome, however, as we are aware, did not bring this work to completion, nor has it been completed up to the present time. I do not know which elements prevail in our contemporary state—the elements of the Greek city state or of the Eastern bureaucracy. I can, however, affirm that the various stages of development in these processes in the ancient world are not as well known to us as they should be. This is certainly not due to lack of material, but more to the absence of systematic thought and study of this question. The specialists in Oriental history have applied all their powers to the reading and translating of Eastern documents and afterwards to the reconstruction of the political and dynastic history of the different Eastern states. Little attention has been paid to social and economic history. The specialists in the history of the Hellenistic period, in which nobody before Niebuhr and Droysen was interested, had also first of all to make known and explain the raw material, i.e. inscriptions and papyri. Afterwards they began to elucidate the fundamental problems of political history, to frame a satisfactory chronology, and to find their way through the chaos of fragments of lost historical works on the evolution of the Hellenistic world. They had no time to study the social and economic questions. Nevertheless in the history of the Hellenistic age, thanks to the efforts of the papyrologists, something has been accomplished. The economic, social and political structure of Ptolemaic Egypt has become more and more clear.

I have devoted the greater part of my life as a student to the elucidation of these questions, and have endeavoured to portray not only one land and one epoch, but to demonstrate on the one hand the dependence of Hellenistic culture on Greek institutions, and on the other the enormous influence of Hellenistic activity on the Roman Empire. It is impossible to give the outlines of my work in a short paper, but I would like to throw some light on a small part of the picture. Through the kindness of Prof. B. P. Grenfell I have been enabled to acquaint myself with the contents of a most valuable document which supplies much new evidence for the history of Ptolemaic Egypt. This consists of instructions from a minister of finance of (probably) King Ptolemy Euergetes I to one of the important financial officials of Egypt—the financial chief of one of the Egyptian νομοί. This document is unique of its kind; it is Greek in both language and thought, but purely Egyptian in character and contents, corresponding closely to the famous instruction of Tuthmosis III to his Grand Vizier Rekhmerē. This document has been read and restored in Grenfell's masterly style. In dealing with it I have examined again all the principal questions relative to the economic and social life of Egypt in the IIIrd century B.C. and have come to some new conclusions. Let me give you some idea of the way in which I arrived at them. You will see that the picture of Egypt during that period is not only interesting in itself but also very modern.

The economic life of Egypt is entirely built up on the exploitation of the productive forces of the Egyptian soil. It was only rendered possible by means of a skilful regulation of the water supply in combination with the annual inundation of the Nile. The products of the Egyptian soil watered by the Nile were always the most important source of Egyptian wealth. The foodstuffs, consisting mainly of cereals and oils, were consumed by the population, while millions of cattle both for work and slaughter, as well as domestic fowls, were fed in the rich pastures of the country. Linen and wool were used in the manufacture of clothes for rich and poor, for living and dead. All supplies over and above the needs of the population were exported. Egypt bought little abroad; what she lacked included wood for ship-building and metals, especially iron. She always attempted from the earliest times to hold Syria, and, beginning with the Ptolemaic dynasty, Asia Minor, in

order to provide herself with these products. In comparison with the products of the Egyptian soil other products play but little part in Egyptian economic life. Besides bread, meat and oil, the fish of the Nile occupied a very secondary position. Trading and hunting expeditions to Central Africa and Arabia brought home ivory, precious stones, gold, valuable and rare woods, and various perfumes, all of which supplied the raw materials for the different branches of industry and art in the large towns of Egypt, especially Alexandria. The abundant growth of papyrus in the Nile Delta supplied the important paper factories, while both coloured and uncoloured glass were produced in great quantities.

Such were the material resources of Egypt. How were they utilized? In direct opposition to the structure of economic life in Greece and Italy, the whole economic organization of Egypt was built up on the principle of centralization and control by the Government, as well as the nationalization of all production in agricultural and industrial life. Everything was for the State and through the State, nothing for the individual, except the mere possibility of a grey existence which saved the worker from starvation. Nowhere in the whole evolution of mankind can be found so far-reaching and so systematic limitations as those which applied to private property in Ptolemaic Egypt. I do not know how far this state of affairs existed in Pharaonic Egypt, but it is clear that the system reached its logical completion under the Ptolemies. They gave it the finishing touches by causing it to be elaborated by the Greek genius and Greek systematic and logical thought.

There is no evidence for the supposition that the national economy of pre-Greek Egypt was constructed on the basis of one clearly thought-out legal idea. Political conditions, religious ideas and administrative practice created a varied and changing picture. Its most important feature was a more or less far-reaching concession by the State of the rights of sovereignty to various influential corporations and persons, chiefly to the temples and powerful officials of a feudal type. This feature gives to the structure of pre-Ptolemaic Egypt a more or less clearly defined feudal character, which was more strongly marked in times when the central authority was weak, and less clearly defined during the rule of strong monarchs and dynasties. From the beginning of their rule in Egypt the Ptolemies adopted a decisive line of policy in combating the elements which weakened and disintegrated the central authority. They appropriated a politico-religious principle which had ever been the basis of the Egyptian state. The substance of this principle was that the king alone held absolute power and unlimited rights of disposal over the material resources of the country as a whole, and the wealth of individuals in particular. On this system of "divine right" the Ptolemies founded their administrative, social, and economic policy. They elaborated it in detail and constrained the feudal element in Egypt, especially the temples and the priesthood, to obey it. We are not aware to what extent they adopted the old system, or how many new elements they introduced into it, nor do we know the extent of the changes brought about by the Greeks in Egyptian theory and practice. But it is certain that the Ptolemaic system had as its core not Greek but Egyptian ideas—not Greek but Egyptian practice. The task of the Greeks in Egypt was to formulate Egyptian ideas clearly, to think them out and to adapt the Egyptian practice to the aims of the Ptolemaic state. Not less important was the task of making the Egyptian system acceptable to the new Greek population of the country.

The basis of the economic organisation of the Ptolemaic state was the principle of

supreme management by the Government. This principle embodies at the outset the idea that the king was the proprietor of the whole territory of Egypt and could dispose of its resources, including mines, lakes and rivers. Further it established the king's right to make use of civil labour if the needs of the State demanded it. The whole practice of Ptolemaic administration was built up on these two principles. I have no grounds for disbelieving that these were purely theoretical principles. I feel sure that they formed the basis of the whole economic policy of the Ptolemies. Deviation from them was both possible and natural, but it in no wise alters them in substance. In the majority of cases such deviations were survivals or new formations arising out of Greek influences.

The fullest expression of these principles was to be found in the agricultural life of the country. All the arable land in Egypt was meticulously registered, and was under the strictest control of the Government. One part of it was under the direct management of the State $(\gamma \hat{\eta} \beta a \sigma \iota \lambda \iota \kappa \hat{\eta}, \text{ crown land})$, while different corporations and private individuals were granted possession of the other part $(\gamma \hat{\eta} \ \dot{\epsilon} \nu \ \dot{a} \phi \dot{\epsilon} \sigma \epsilon \iota)$. In this case, however, the State granted concessions only in order to serve its own purposes. In order to provide the temples with means wherewith to maintain the cult of the gods and the king, the State allowed the priesthood to dispose of the income derived from certain lands $(\gamma \hat{\eta})$ is $\rho \hat{d}$, sacred land). Land was also granted by the Government to Greek gymnasia to finance education for Greek youths. Soldiers and officials were given land in order to ensure the defence of the country and its good administration $(\gamma \hat{\eta} \kappa \lambda \eta \rho o \nu \chi \iota \kappa \acute{\eta}, \gamma \hat{\eta} \acute{\epsilon} \nu \sigma \nu \nu \tau \acute{\alpha} \xi \epsilon \iota)$. Large concessions of territory were assigned to officials of importance, and to friends of the sovereign $(\gamma \hat{n} \hat{\epsilon} \nu \delta \omega \rho \epsilon \hat{a})$. A separate category was formed by land granted to individuals for continuous or sometimes perpetual use, the reasons being that this was the only method of getting such land cultivated, and it was necessary for the holders to lay out some capital on it, and to expend a certain amount of initiative and intensive personal labour on it. From the Greek point of view such land most nearly corresponded to the Greek idea of private landed property ($\gamma \hat{\eta}$ $i\delta i\delta \kappa \tau \eta \tau \sigma s$). I include in the same category gardens and vineyards, as well as sites for building purposes. The Greeks in Egypt regarded such land as private property $(\kappa \tau \hat{\eta} \mu a)$. It is possible that in other parts of Egypt (our evidence is mainly based on documents found in Fayûm) modifications existed in regard to the right of land-tenure which were more or less consonant with the Greek idea of private property. But these do not materially affect the substance of the question.

Statistics do not assist us in determining the respective dimensions of crown and private land in Egypt, but in the Fayûm, without doubt, crown lands predominated. If we add the sacred land and the land $\dot{\epsilon}\nu$ $\delta\omega\rho\epsilon\hat{a}$ to that of the crown (as the principle of the management of both was identical), we may deduce with comparative certitude that in the Fayûm private land was the exception. I am of opinion that the same conditions prevailed in other parts of Egypt, especially in the extremely fertile Delta—the granary of the whole country. It is possible that the order of things in the district of Thebais was different. Here the sacred lands may have predominated, and it is credible that the exploitation of them was in some measure dissimilar to existing conditions in the north.

In general the mode of exploitation of crown lands was typical of Egypt. These methods set the tone and defined the social and economic status of the majority of the agricultural population. It is highly interesting to note that the Ptolemies, by means of a series of measures both administrative and legal, fixed the relationship between the

State and the crown-farmers in a strictly regulated semi-Greek form, and this without any departure from the old customs which prevailed among the agricultural population.

The chief features of this system were:

- (1) From a legal standpoint the relations between the State and the agriculturist were regulated by the laws which applied to leasehold property, which might be held for a definite short period or for an indefinite long one.
- (2) De facto, however, the position of the farmer was complicated in two ways: (a) he was bound to remain at his place of registration ($i\delta(a)$), and was obliged to cultivate and sow his land, to gather, transport and thresh his corn, and (b) the State was not de facto bound by its contract with the farmer; it could at any time dismiss one farmer and replace him by another.
- (3) The State recognized as private property of the farmer both his residence and agricultural implements. *De facto*, however, in contradiction to this principle, the State sometimes sold all such property for arrears of rent and taxes.
- (4) Cattle were not absolute private property, since they could be requisitioned in case of need by the State.
- (5) Compulsory services were demanded from the farmer not only for the execution of his regular agricultural work, but also for the regulation of the economic life of the country at large, e.g. for keeping in repair canals and banks, for transporting Government property, etc.

If we take all this into consideration, we must admit that the farmers, while de jure free, were de facto bound to the soil; for while they were theoretically leaseholders, they were actually precarious possessors. This state of serfdom is shown more clearly by the following facts. In his domestic economy the farmer was not by any means free; he could not make his plans in accordance with his own desires. He received an annual order as to how much of his land he should sow and with what seed. He had no rights in the disposal of the fruits of his labour. The corn he grew was only his after the State had received its quota, i.e. the rent and the various taxes calculated in money or in produce. The State only released him from further liabilities, and allowed him to dispose of the residue of his produce, after payment of the full amount demanded of him and the transportation of such produce as was owned by the State to the Government granaries. But even this freedom of possession was not unlimited. The State still claimed the right to purchase a certain amount of corn at a fixed rate. The same rule applied not only to crown-farmers but also to the holders of private land. No freedom at all was permitted to agriculturists in disposing of products of special kinds; for instance, all the crops yielding oil fell into the hands of the State at a fixed price, and the same procedure was adopted with flax and perhaps hemp, and possibly with wool also. The agriculturist could not make use of green food for his cattle as he wished (such green fodder was sown after the harvest had been gathered, as is the case in Egypt to-day). He could only feed his own draught-cattle with this green fodder on condition of payment of certain taxes to the Government, which secured such payment by means of pledges. The remaining grass was claimed by the State, which was also the proprietor of all uncultivated pasture-land and meadows. Under these conditions every farmer, whether he owned some hundred head of cattle or only a few sheep and goats, was completely dependent on the State, and was obliged to pay heavy taxes in order to feed his live-stock. The Government was careful to register all animals

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and in this way was subsequently able to regulate the development of cattle-breeding in the same manner as it controlled agriculture.

Compulsory labour constituted a heavy burden for the agricultural population, who year by year worked on the canals in order to keep them in repair. This labour devolved upon the crown-farmers chiefly, but legally all the other categories of the agricultural and non-agricultural population were liable to take part in its execution. Of course, in view of their high social standing, soldiers, officials and Greeks in general did not perform such labour personally, but had to pay an equivalent tax. Obligatory work on the canals consisted not only in digging, but also in the provision of timber for their banks. Timber is scarce in Egypt, and the Government displayed great foresight in planting the banks with trees noted for their rapid growth. The obligation to plant, fell, and prepare this timber devolved upon the agricultural population. From time to time the Government had recourse to compulsory labour for cultivating and sowing the fields and for gathering the harvest. This happened when, from some cause or other, land had been left unsown or the harvest had not been gathered. In such cases the Government never differentiated between the social grades of agricultural labour.

It can therefore be clearly seen how far-reaching was the compulsory system, and to what extent freedom and independence in agricultural labour were curtailed. We are not dealing with haphazard methods, but with an elaborated and fully thought-out system.

The chief points of this system were as follows:

- (1) The binding of a great part of the agricultural population to their work at their place of residence.
 - (2) Control of the domestic economy of all individual members of the State.
 - (3) The State's claim to the largest share in production.
 - (4) Utilization to the fullest extent of manual and animal labour for the State.
- (5) A tendency to limit the rights of the agricultural population over its private property.

The same system was adopted by the Ptolemaic state for the control of all branches of industrial and commercial activity, and for the organization of taxation. Time does not allow of my dealing as fully with this subject as I have done with Egyptian agriculture. I must confine myself to a few remarks of a general character, which are based on a long and careful examination of Greek papyri.

- I. The whole of industry, internal commerce, and organized taxation was always either under the control of the State or under its direct management. Here again the Government abolished independence and freedom of action among the priesthood and feudal lords.
- II. The Ptolemies were the first to elaborate a universal and well thought-out state-system for the organization of industry, internal trade and taxation. The most characteristic features of this system are as follows:
 - (a) Industry and trades were placed under strict control and accurate registration.
- (b) The most important branches of industry, such as the production of oils, textiles and paper, the working of mines and quarries, were regulated with particular minuteness. For some of these branches the Ptolemies created a monopoly in production and trade,

while for others they devised milder measures for the maintenance of control and the concentration of trade in the hands of the State.

- (c) The less important branches of industry were more independent; but they were all heavily taxed and raw materials could not be purchased freely, since practically all of them were owned by the State. The right of sale was also limited.
- (d) In the most important industries, we discover the same system of compulsory labour as has been described in my remarks on the conditions applying to agricultural life.
- (e) Inspection of trades, industries, and taxes did not belong exclusively to officials and the police, as was the case in agricultural life. This task was divided between officials and tax-farmers. The Greek form of free state tax-farming was fully subordinated by the Ptolemies to the State. Being in Greece a free commercial operation, tax-farming became under the Ptolemies a form of state-control of industry and taxation. The tax-farmers, together with civil servants, formed a second line of people who were answerable to the State, and in the event of their not rendering its dues were liable to have their private property and the property of their sureties confiscated.
- (f) The greater part of Egyptian trade was not managed by free merchants, but by agents appointed by the State who sold the goods at fixed prices, and these agents were responsible to the Government in the same way as the tax-farmers. Like the latter, they received only a percentage of the revenue.
- (g) We are unable to find any traces of independent trading in Egypt. Most of the commodities were provided by the State and were sold at fixed prices. In some cases fixed rates were not used, but the State created a few inspectors—generally tax-farmers who levied a certain percentage on trade returns.
- (h) A very important innovation by the Ptolemies was the abolition of the system of natural economy and bartering, and the introduction of money payments into the domain of trade, industry, and taxation. It is not necessary to point out that the coinage was an exclusive monopoly of the king, as well as the trade in precious metals, gold and silver.

All the foregoing points involved the Government in the task of setting up elaborate machinery for securing the fulfilment of the duties of the population towards the State. First of all it became necessary to create a large number of police officials. They were the so-called guards (φύλακες), who probably totalled many thousands, part of them being an organized military force, while the majority were drawn from the local population and compelled to serve. As their duties involved material responsibilities, they were taken from the ranks of the wealthier portion of the population, and in order to secure respect for their authority they were generally selected from the senior ranks of the community. As their duties were detested and frequently brought men to financial ruin, every one tried to avoid this service. The Government was therefore obliged to make this service compulsory. Indeed, compulsory service was a characteristic feature of the Ptolemaic system. In the earlier periods of its existence this compulsory service was confined to the lower ranks of the police officials, but it is obvious that such a system was necessarily rapidly extended. The compulsory service of these officials was sometimes termed by the Egyptian Greeks λειτουργία; but with the classical Greek term, which implied a voluntary sacrifice of a man's property and labour for the good of the State, the Ptolemaic "liturgy" had nothing in common. It originated in the purely Oriental idea of serfdom (corvée): only the word

was borrowed from Greece by the Ptolemies. In substance it was a form of compulsory labour largely used by the Ptolemies.

Above this local police there was a formidable army of officials; but this is not the place to enter into a discussion of these functionaries. I would only refer to two conspicuous facts.

Firstly, the Ptolemies were the originators of an elaborate official system. They created a graduated scale of lower and higher ranks all appointed by the king or his delegates and responsible to the king exclusively. This system was thought out in minute detail. The idea of this salaried "official" army had its birth in the Orient, but the Greeks, and especially those of Egypt, were the first to elaborate it.

The second point is that the Ptolemies were the first to demand securities from their officials. The officials whose duties were to collect produce and money taxes and to control the tax-farmers were obliged to pay the State, if arrears were not fully exacted by them from the tax-farmers and tax-payers. In case of insolvency their estates and the guarantees of their sureties were confiscated. This innovation was very important, for it showed future generations how to divert the private property of the tax-farmers and officials into the State treasury.

These officials, together with the tax-farmers, formed of course a privileged class. Sometimes they became very rich, and by bribing the higher officials they steered their course through a sea of official correspondence with some degree of safety. One false manoeuvre, however, and their vessel was wrecked. As has already been pointed out, all officials were responsible to the Treasury, and for them to keep their affairs in absolutely correct order was practically unthinkable. So it is easily imagined that side by side with the lucky few there were many unfortunates. Besides those who enriched themselves there were many who became beggars. It is worthy of note that in the ranks of this red-tape army very few honest men were to be found. And these belonged almost exclusively to the category of "unlucky" ones.

If it is asked how many of the population, either civil or official, were out of reach of the State's economic control, the answer presents no difficulties. They were not to be discovered among the agricultural population, nor were they to be found in the industrial and commercial classes. Furthermore they were absent in the ranks of the army, navy, officials, and tax-farmers. There remained three categories—two economic, *i.e.* the dealers occupied (1) in external trade and (2) in transport; and one political—the citizens of the Greek towns Naucratis, Alexandria and Ptolemais.

Let us examine the last category. Their political freedom and autonomy were mere shadows. What were the limits of their economic freedom is unknown; but I am of the opinion that, if we take into consideration the direct connection of their economic life with that of the remainder of Egypt, we have no grounds for the supposition that they occupied an exceptional position as regards the State.

Very little evidence is available as to the organization of external commerce. The fact that the Alexandrian traders ($\epsilon\mu\pi\sigma\rho\sigma\iota$ and $\epsilon\gamma\delta\sigma\chi\epsilon\hat{\iota}s$) were to be found in all harbours and ports of the world supplies no evidence as to their relation to the State. But taking into consideration the fact that the organization of external trade was more an international than an internal matter, we may conjecture that the Ptolemies conceded more independence and initiative to those engaged in the export and import operations of the country. It is, however, hardly possible that they enjoyed the same freedom of action in the interior.

The whole organization of Egyptian economic life points to the fact that they mostly exported goods which were owned by the State and imported goods for it.

The foregoing applies with equal force to the supply of transport within the country. Although it was managed by private dealers, the greater part of it was obliged to serve the needs of the State, the requirements of private individuals being subsidiary. The position, therefore, of the dealers in transport both on land, by means of donkeys, camels, and horses, and on the river $(\nu \alpha \dot{\nu} \kappa \lambda \eta \rho o \iota)$ was practically the same as that of the tax-farmers who worked for the State or of the owners of small textile factories.

If my conclusions are correct, we may evolve a very instructive general picture of the economic and social condition of Ptolemaic Egypt. For the first time we meet with a broad and systematic plan for the nationalization of the whole economic life of a country. What were the results of this experiment? The State, of course, became greatly enriched by Egypt, as compared with the other Hellenistic States, or even with Rome, this system. was always the most opulent. The Ptolemies were the world's bankers, and they were well able to use their financial power. But this power was only one-sided. Money could purchase an army or a fleet, it could build up a beautiful capital with luxurious buildings and gardens, with money the Ptolemies could organize splendid ceremonies and festivals; but money alone could not create lasting power. The spirit of the nation was one of indifference—the dull obedience of serfs who possessed no initiative, no animation, and no patriotism, whose thoughts were wholly concentrated on the problems of their daily bread and economic interests. To this mood of the masses, who were conquered by the Greeks, the Ptolemies brought little by little the Greek conquerors themselves. Greek soldiers who had become semi-independent agriculturists were already losing their energy in the second generation, and were gradually and unconsciously assuming the spirit of those whom they had vanquished. The Greek officials became submerged in a mire of bureaucracy and bribery. Semi-stoical circulars, full of mild persuasions or even open threats, were by no means effective in causing these officials to discharge their duties to the State in a disinterested manner. The Greek traders and dealers found no room for private initiative, and eventually became officials and assumed the official habit of mind. Serfdom lay heavy upon the people, but protests were seldom heard. Dissatisfaction assumed a form typical among When they found that conditions were no longer tolerable, groups of men, agriculturists, workmen, sailors, or officials, said "We can bear no more" and fled to the temples to claim the protection of the gods, or disappeared in the swamps of the Delta. From the commencement of the IIIrd century B.C. these strikes were of common occurrence. were a constant terror to the officials, since force was useless in dealing with a psychology born of dull despair. The government was rich in money, but the country was poor in spirit, and hardly knew happiness. True, the country occasionally revolted, under the banners of the old gods and temples or under the influence of national feeling. But these insurrections invariably ended in massacres, and only when the energetic elements in them had been destroyed was an amnesty granted to the survivors.

Nevertheless, the achievements of the Ptolemies in Egypt had very great influence on the future. By Greek thought and Greek talent for organization they systematized the shapeless foundations of the Eastern, and especially the Egyptian, state. The structure which they built up furnished valuable data for all those who afterwards sought for suitable methods to create a rich and powerful state in a milieu where no competition existed and where autocratic government was supreme. The Ptolemaic system was at first continued

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by the Roman Emperors. As time went on, however, they adapted this system to the great organization of the Roman Empire, although not without some waverings and deviations. "All for the State and by means of the State" became their maxim also; and we see how some of the peculiarities of the political, social, and economic organizations of Egypt were organically developed in Rome. Where there had formerly existed free landowners, there gradually appeared "coloni." Free craftsmen and tradesmen were changed into corporations serving the State, and transport was centralized in the hands of State-organized naucleri. For powerful publicani were substituted strongly controlled tax-farmers of the Ptolemaic kind. The administration of the free cities was given over to groups of decuriones responsible for the payment of tribute and taxes by the population. The citizen army was replaced by a hired army which was gradually bound to the land, etc., etc.

We know that all these processes were on the one hand the cause and on the other the symptom of the steady decline which Roman civilization experienced in its vital powers and in its creative energy. But we also know that these processes connected with Egypt form only one side of the picture; not everywhere has Hellenistic influence displayed the same features as it did in Egypt. It was multiform and complex, and other forms of Hellenistic influence affected the Roman world just as strongly as this Egyptian form; and these other forms prevented downfall and decay.

The ideas of the ancient world penetrated the new European nations which were the descendants of the Roman provinces. Ancient culture was the prototype of the new European culture, and some centuries afterwards the same questions which the ancient world had proved incapable of deciding were again propounded: "does the individual exist for the State, or does the State exist to assure for the individual the free development of his creative powers?"

NOTES AND REFERENCES

Few modern historians have attempted to give a general picture of social and economic life in Egypt during the three centuries of the rule of the Ptolemies. But these attempts are mostly insufficient for different reasons. One of the best works on the economic and social structure of Ptolemaic Egypt—the well-known Recherches sur Véconomie politique, etc. of Lumbroso—was published at a time when but little papyrological material was available. The last attempts to summarize the data of the papyri—the most valuable book of Bouché-Leclercq, Histoire des Lagides, vols. III and IV, and the Introductions to Papyrology by H. Wilcken (Grundzüge der Papyruskunde, 1912) and W. Schubart (Einführung in die Papyruskunde, 1918)—important as they are, have treated the economic question as one of many problems presented by the papyri, and have not concentrated their attention on the leading ideas of the Ptolemies¹.

Valuable work has been done to elucidate different special points. I refer to the works of Lumbroso, J. Maspero, Jouguet, Lesquier, Martin, P. Meyer, W. Otto, Oertel, Fitzler, Reil, Chwostoff and to the introductions and commentaries in the recent publications of papyri, first of all to the masterly elucidations of different problems by Grenfell, Hunt, Johnson, Jouguet, Lesquier, Wilcken, Schubart, P. Meyer, Vitelli, Comparetti, etc. Some of the commentaries by Grenfell (e.g. to the Revenue Laws of Ptolemy Philadelphus and to the volumes of Tebtynis and Hibeh papyri) represent an exhaustive treatment of different economic problems and have as much importance as many of the above-named special works. I myself have endeavoured to deal with many different points in the domain of the economics of Greek and Roman Egypt, e.g. with the tax-farming, agriculture, transport, corn-supply, etc. But I have never before

¹ The same must be said about the sketches by Beloch (Griech. Gesch. v. III), Cavaignac (Hist. de l'antiquité, v. III), A. Reinach and P. Jouguet, L'hellénisation du Monde antique (Paris 1914), pp. 212 foll. and pp. 309 foll. Better and fuller is the treatment of the subject by W. Scott Ferguson, Greek Imperialism (1913), pp. 149 foll.

attempted to express my general views on the social and economic evolution of Egypt during the period of Greek and Roman rule.

That is the reason why I have tried in the text of my article to sketch the general background of Egyptian economic and social life in the time of the Ptolemies. I am fully aware that this attempt is liable to be obsolete a few months after its publication. It is to be expected that now peace is with us, the papyrologists will give us one important publication of new papyri after another. A new edition of the older publications of Ptolemaic papyri was expected before the war from H. Wilcken, and it is to be hoped that his work did not cease during the war. Everyone knows how full of sound ideas and new suggestions all the publications of Wilcken are. Nevertheless the task which I undertook seemed to me not useless. My generalizations may be perhaps too far-reaching, my picture too definite and too precise, my explanations of the fragmentary materials partly wrong, but doubtless every attempt to outline the general features of a complex epoch, if based on a careful first-hand study of the whole available materials, has its value. It clears the sometimes confused ideas of special inquirers and editors of fresh materials, evokes controversy, and brings many questions of detail to reasonable solution.

In these few notes and references I do not endeavour to give the full evidence for every point and question. A long enumeration of numbers and titles would be mostly useless, since the principal references under each head may be found without difficulty in the works of Bouché-Leclercq, Wilcken and Schubart mentioned above. I will discuss only a few points giving the fundamental evidence. The points which I have chosen are either those in which my views radically differ from the generally accepted ones, or those which are based on new evidence not available to the above-mentioned scholars. Where my statements are based on the new Tebtynis papyrus I shall not give the text of the papyrus and the parallels to it, but only refer to the papyrus in general. The text of the papyrus and the whole material to explain it will soon be published in vol. III of the Tebtynis papyri.

1. The first point is the question as to the general aims of the Ptolemies in their work in Egypt. Wilcken considered, and Schubart agreed with him, that the Ptolemies pursued a world-policy, that for them the Mediterranean was the chief point and Egypt was only a base supplying the economic foundation of their Mediterranean policy. I must confess that my point of view is diametrically opposed to that of Wilcken. The difference between the Ptolemies and the Seleucids lies to my mind just in their attitude towards the idea of a world-state. The Ptolemies never did pursue the idea of creating a world-state based on Egypt. Their leading idea was to create a powerful Egyptian state, rich and strong enough to be independent and secure from every attempt to conquer it from the outside. In order to guarantee the safety of Egypt the first condition was to hold the sea, to command the sea-routes approaching Egypt. The task was complicated and difficult. In the times of the Old, Middle and New Empire in Egypt the possession of the Syrian coast was enough to give the needed guarantees. But beginning with the first millennium B.C. the growth of Asia Minor and the steadily developing sea-power of the Greeks induced the rulers of Egypt to extend the sphere of their political influence to the whole Mediterranean region, not in order to conquer and rule Greece and Asia Minor, but with the object of watching carefully the rival sea-powers and checking their efforts to cut Egypt off from the main sea-routes leading to her north and east coasts. This command of the sea-routes was unobtainable without a strong fleet, and a strong fleet could not be built and maintained by the natural resources of Egypt. Wood and metals had to be imported from outside, and the best way to secure a safe supply of these was to hold some countries which were rich in forests and mines. That is why Egypt held firmly on to Sinai, Syria, and Cyprus, and tried to occupy some districts in Asia Minor, chiefly in Lycia.

On the other hand the strength and wealth of the Egyptian state depended entirely upon regular foreign commerce. To hire armies and to maintain a strong fleet great stores of money were needed. The only way to obtain large quantities of gold and silver was through an extensive foreign trade. And to carry on this trade it was necessary to command the trade-routes.

The complicated task of defending the safety and independence of Egypt, which rendered necessary a permanent army and a strong fleet, led directly to the internal economic policy of the Ptolemies. It was impossible to transform Egypt into a Greek country with free and autonomous cities and at the same time to maintain the strength of Egypt as a united state. The only course was to uphold the old system of administration and the old social conditions, but at the same time to open Egypt to the newcomers and to incorporate the new energies in the old system. That was what the Ptolemies achieved in the way of systematizing and perfecting the old Egyptian administrative and economic system. It would be

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unjust to affirm that the chief aim of the Ptolemies was to enrich themselves and to rob the population of the whole amount of what they produced. The Ptolemies wanted to have a rich and strong state, and they sacrificed the interests of the individuals to this principle. They did not want to be unjust and to make their subjects unhappy. It would be a very interesting task to analyse all that the Ptolemies themselves and the officials who repeated their exhortations expressed in their edicts and ordinances as to their aims and principles. I am sure that such an analysis would show how far-reaching was the influence of Stoic and Cynic ideas on the rulers of Egypt, quite as extensive as the influence of those ideas on Antigonos Gonatas. The view that the ruler was the servant of his subjects was quite familiar to the Ptolemies, and the teaching of Horace in his Roman odes concerning the duties of honest officials in the new state created by Augustus differ but little from the instructions of the Ptolemies to local officials, which inculcated honesty, justice, punctuality and energy. See Plut. Apopht. reg. 1890: Δημήτριος ὁ Φαληρεύς Πτολεμαίφ τῷ βασιλεία παρήνει τὰ περὶ βασιλείας καὶ ἡγεμονίας βιβλία κτᾶσθαι καὶ ἀναγιγνώσκειν· "ὰ γὰρ οἱ φίλοι τοῖς βασιλεῦτ οἰ θαρροῦσι παραινεῦν, ταῦτα ἐν τοῖς βιβλίοις γέγραπται," and cf. Lumbroso, Bull. de la Soc. Arch. d'Alex., 14, 151 foll.; Tarn, Antigonos Gonatas, 254 foll. It is to be noted that the treatises about βασιλεία were generally Stoic or Cynic in tendency.

I have but little doubt that the first results achieved by the Ptolemies were splendid, and believe firmly in the popularity of the first three Ptolemies among the population of Egypt. But the system as such was very dangerous, and led directly to the results that I have explained in the text of my article.

- 2. Agriculture. I will not repeat what I have stated in my book, Studien zur Geschichte des römischen Kolonates, Leipzig, 1910. The main points of my account of the agrarian relations between the State and private individuals are generally accepted. New papyrological evidence, as e.g. an important papyrus in the British Museum which will soon be published by Grenfell, shows that the treatment of granted land in the Thebais, to which the papyrus belongs, and in the Fayûm presents no important differences, and that crown land in the Thebais formed a large part of the territory of that region. But the question in general is very complicated and difficult, and a definitive statement would be possible only in the case of another discovery like that of Tebtynis, i.e. the discovery of a large number of documents describing the agrarian state of the Delta¹, Middle Egypt, or the Thebais. The practice of giving up state land and assigning it to different holders is older than the Ptolemies, being found constantly under the old Egyptian kingship. The Ptolemies resumed this practice chiefly in order to bind to themselves the foreign elements in the country. But gradually they relapsed into the dangerous methods of the Pharaohs, and came back to conditions which seemed to have been totally destroyed by the first Ptolemies. By granting land to the temples and to some eminent officials they restored the power of the priests and of local feudal chiefs But this development was checked by the strong hand of Augustus.
- 3. Cattle. The division into $\gamma\hat{\eta}$ $\beta a\sigma\iota\lambda\iota\kappa\hat{\eta}$ and $\gamma\hat{\eta}$ $\dot{\epsilon}\nu$ $\dot{a}\dot{\phi}\dot{\epsilon}\sigma\epsilon\iota$ (crown- and granted-land) is typical for the whole condition of economic life in Egypt. In every branch of agricultural life we see the State or the king as the greatest employer and as owner of the most important concerns. Private initiative was only subsidiary. So e.g. in the treatment of the cattle, the State was owner of large herds of different kinds of cattle. It was enabled to hold these by the ownership of the whole pasture-land— $\nu o\mu a\iota$. This ownership is shown by the payment of a tax $(\dot{\epsilon}\nu\nu\dot{\epsilon}\mu\iota\nu)$ for the use of $\nu o\mu a\iota$: see lately P. Ryl. II, pp. 314 foll. How the State managed these herds is not quite clear and requires a special inquiry which cannot be undertaken here. But I must point out that special attention was paid by the Ptolemies to cattle and other animals needed by the State for administrative, military, and religious purposes. To feed the court and the officials large flocks of geese and swine were kept. The $\chi\eta\nu o\beta o\sigma\kappao\iota$ and $\dot{\nu}o\phi\rho\rho\betao\iota$ who took care of these were in the position of $\beta a\sigma\iota\lambda\iota\kappaο\iota$ $\gamma \epsilon\omega\rho\gamma o\iota$ and workmen in the state-factories $(\dot{\nu}\pi\sigma\tau\epsilon\lambda\epsilon\hat{\iota}s)$; see Tebt. 5, 168, and cf. P. Petr. II, 10, 1=111, 32a; 107e; 112a II, 5; c, 12; d I, 9; e verso 26; g IV, 24; PSI. IV, 379; v, 534; Wilcken, Grundz. 248; Oertel, Liturgie, 25. I cannot agree with Wilcken, who thinks that

¹ Very important documents from Mendes in the Delta have been published lately by V. Martin, Un document administratif du nome de Mendès, in C. Wessely, Studien zur Palaeographie und Papyruskunde, xvii (1917). Though belonging to the HIrd cent. A.D., this document (enumeration of the unwatered land, $\gamma \hat{\eta}$ ä $\beta \rho o \chi o s$), which preserves the old terminology, gives valuable evidence on the conditions of land-tenure in the Ptolemaic period. It is to be noted, however, that no general conclusions may be drawn from this document as regards the general distribution of land in the Delta. Though the document enumerates only parcels of private land chiefly held formerly by soldiers, it may be supposed that this exclusiveness is caused by the fact that such land only was registered in this document, other categories being booked separately.

χηνοβοσκοί were farmers of geese belonging to the State. Oertel did not understand their position at all; to speak about requisitions from the χηνοβοσκοί is entirely inappropriate. Another large concern of the State was horse-breeding, chiefly for military purposes. Horses were always scarce in Egypt, where asses, bulls, cows, and camels were used for the transport and for agricultural work. Large iπποτρόφια belonged exclusively to the State, and were administered by ἱπποτρόφοι, whose position can be defined only by a special inquiry, but who seem to be nearer to officials than to $i\pi \sigma \tau \epsilon \lambda \epsilon is$: see P. Hib. 162 and 118; PSI. IV, 405; P. Petr. III, 62 c. Very complicated also is the question about μοσχοτρόφια, which are often combined with ἱπποτρόφια. No doubt they also belonged to the State and were destined to provide calves for sacrifices. Fresh evidence about the μοσχοτρόφια and ἱπποτρόφια is provided by the new Tebtynis papyri, where the whole evidence will be discussed. But it would be wrong to affirm that the State claimed a monopoly in the ownership of geese, swine, horses, and calves as well as bees (which were very important since honey was the only substitute for sugar), for private owners of them are very often mentioned. Most attention was paid by the State to draught-cattle indispensable for agricultural work. A special inquiry only can ascertain how this matter was treated by the State. But it is certain that the draughtcattle were most carefully registered (see P. Petrie, III, 98; cf. 94b and c; 101), and elaborate measures were taken to distribute the whole amount of cattle owned by the βασιλικοί γεωργοί during the season of work on the land, especially at the time of ploughing and gathering of the harvest. To supply the necessary draught-cattle in places where they were particularly needed state-owned cattle were first of all available. Large herds of bulls were entirely owned by the State; see e.g. Petrie, III, 62 c. At critical moments the whole amount of cattle in the country was mobilised and distributed, the cattle of the βασιλικοὶ γεωργοί as well as that of private land-holders (P. Paris, 63, 173 foll.). But in ordinary times the problem was to distribute rationally the available cattle belonging to the βασιλικοὶ γεωργοί: see the correspondence of Zenon, P. Hamb. 27, 13; PSI. IV, 429, 25; 422 (a very important document); v, 497, 482; P. Lille, 8; cf. P. Alex. 1 (Wilcken, Chrest. 198 and 241) and P. Tebt. 5, 178, where officials are forbidden to requisition cattle for their private use. Another important problem was to combine the requirements of agricultural work with the needs of State-transport of corn to the landing places where the corn was loaded on ships to be carried to Alexandria, Memphis, Thebes and other places. Preference was generally given to agricultural needs; see P. Tebt. 705; cf. 750, 753, 757. The technical term for cattle employed in agriculture is γεωργικά κτήνη, for cattle used for the transport - πορεία.

4. Hay and green food. In close connection with the distribution of draught-cattle for agricultural work, which was in fact a pure negation of the right of the agriculturists to dispose freely of their own cattle, stand the strong measures taken by the State to guarantee for the state-cattle and the γεωργικά κτήνη of the βασιλικοι γεωργοί the necessary amount of green-stuffs. I have mentioned already the ownership of the State over the whole unsown pasture-land ($\nu o \mu a i$). There is no available evidence to show whether, besides the State, private persons in the Ptolemaic epoch owned or disposed of large tracts of pasture-land. But very full evidence exists about pasture-land owned by the State. Under this head was included all unsown land, whether swamps or meadows or fallow-land. It was used chiefly for the large flocks of sheep and goats which were owned partly by the State, partly by ποιμένες (large employers, disposing sometimes of many hundreds of cattle); see the careful study by Johnson and Martin already mentioned, P. Ryl. II, 314 foll. For the right of pasture a tax was paid upon each head of cattle (ἐννόμιον); so that the whole amount of cattle in the country had to be carefully registered. Besides the ἐννόμιον, the cattle-owners had to pay special taxes for each head of cattle of every kind; see P. Hib. 33; P. Petrie, III, 72 b, 73 d (registration); ibid. 109 (note on p. 274); P. Amh. II, 83; PSI. IV, 368, 386; V, 509 (ἐννόμιον combined with φυλακιτικόν; the tax was farmed, and the farmers or the State had to provide a large number of guards paid out of the proceeds of the tax); PSI. IV, 351, 361, 380 (the practice of distribution

The state-owned cattle and the $\gamma \epsilon \omega \rho \gamma \iota \kappa \dot{\alpha} \kappa \tau \dot{\eta} \nu \eta$ were fed partly on these $\nu \rho \mu a \dot{\alpha}$, partly by green-stuffs—the so-called $\chi \lambda \omega \rho \dot{\alpha}$. After the harvest, large tracts of land were sown with different kinds of green-stuffs. The disposal of these was not free to agriculturists. They had the right to feed with it agricultural cattle only, and this only after having given securities ($\dot{\alpha}\sigma\dot{\phi}\dot{\alpha}\lambda\epsilon\iota a\iota$) for payment to the Government of an $\dot{\epsilon}\kappa\dot{\phi}\dot{\rho}\rho\iota\nu$ and for repayment of the $\sigma\pi\dot{\epsilon}\rho\mu a\tau a$. Since the payment had to be effected generally in money or in corn, a valuation of the crops ($\sigma\nu\nu\tau\dot{\iota}\mu\eta\sigma\iota s$ $\chi\lambda\omega\rho\dot{\omega}\nu$) preceded the permission to give the green-stuffs to the cattle or to bring it home; see P. Tebt. 27, 54 foll.; P. Hib. 51—53 and 75; P. Gradenwitz 8; cf. Piotrovicz, Eos, 1913, 11 foll. and P. Petrie, III, 21 ($\sigma\nu\nu\tau\dot{\iota}\mu\eta\sigma\iota s$ $\chi\lambda\omega\rho\dot{\omega}\nu$). New evidence is found in PSI. II. 372 and 400; cf. ν ,

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510, 7 and P. Tebt. 714, 715. It is to be noted that the rules for the use of $\chi \lambda \omega \rho \acute{a}$ or $\epsilon \pi \acute{a} \sigma \rho \rho \rho a$ were obligatory for both the $\gamma \hat{\eta} \beta a \sigma \iota \lambda \iota \kappa \acute{\eta}$ and the $\gamma \hat{\eta} \dot{\epsilon} \nu \dot{a} \phi \dot{\epsilon} \sigma \epsilon \iota$, and that persons breaking the rule were liable to have their cattle confiscated ($\dot{\iota} \pi \dot{\iota} \sigma \sigma \rho \sigma \iota \nu \dot{a} \nu \dot{\epsilon} \sigma \rho \sigma \iota \nu \dot{a} \nu \dot{\epsilon} \sigma \rho \sigma \iota \nu$); see P. Tebt. 27, 54 foll. and 70 foll.

The treatment of the cattle owned by private persons is typical of the policy of control adopted everywhere by the State in Egypt. It is hardly possible to affirm that in practice there were really private owners of cattle in Egypt at all. We must remember that besides the above-mentioned restrictions, the State appealed to cattle-holders to carry out the already mentioned transport of state-goods, demanded private cattle to organize the maintenance of canals and embankments, requisitioned from private owners pigs and fowls to feed the Court and the officials, and calves for sacrifices, and finally reserved probably for itself the right to buy the whole amount of wool produced by sheep and goats.

5. Control of crops. I cannot give here the evidence to show how state-control worked in other branches of agricultural economy, but I shall produce in my commentary to P. Tebt. 703 the evidence for the state-control of yearly crops; see meanwhile Pauly-Wissowa, Real. Enc. VII, 134 and 161. I have no doubt that the State prescribed to the agriculturists how much land was to be sown with corn, how much with oil-plants, etc. Though it is not clear whether these regulations referred to the $\beta a \sigma i \lambda \iota \kappa o i$ $\gamma \epsilon \omega \rho \gamma o i$ only or to the holders of the $\gamma \hat{\eta}$ $\hat{\epsilon} \nu$ $\hat{\epsilon} \phi \epsilon \sigma \epsilon \iota$ too, I am rather inclined to believe that certain restrictions were imposed upon the second category of land-holders.

A few words may be said also on two points which have not yet been fully illustrated in previous discussions of the agricultural life of Egypt. I mean the compulsory sale of corn to the State, and the rules about tree-planting and tree-cutting.

- 6. Σῖτος ἀγοραστός. This is well known to all papyrologists. Besides the ἐκφόρια and the taxes paid in corn, agriculturists had to sell a certain amount of their corn at fixed prices; see Wilcken, Grundz. 357. I should suggest that this obligation lay chiefly on, not the βασιλικοὶ γεωργοί, but the holders of γῆ ἐν ἀφέσει, especially the κληροῦχοι. It was a kind of substitute for their immunity from ἐκφόρια, a kind of supplementary taxation in a milder form. Besides the papyri quoted by Wilcken, I should refer to Tebt. 5, 178 foll., esp. 184: μηδὲ οἰνικὰ | ἢ σιτικὰ γενήματα ἐπιρίπτειν τιμῆς; cf. 194, where it is forbidden to demand more than usual for sale from the agriculturists. See also P. Hib. 40; 47, 14 foll. and Edgar, Annales du Serv. des Antiq., XVIII (1918), 1, p. 162, where I understand the βασιλικὸς σῖτος to be, not corn given by the State to the soldier as allowance, but corn bought by the State from the κληροῦχος.
- 7. Tree-planting. The evidence about tree-planting will be discussed in my commentary to Tebt. 703. I would like here to draw attention to a passage in Tebt. 5 which has not been rightly interpreted— ll. 200 foll.: $\delta\mu$ οίως δὲ καὶ τοὺς βα(σιλικοὺς) γ εω(ργοὺς) καὶ τοὺς ἱερεῖς] καὶ τοὺς (ἄλλους) | τοὺς τὴν ἐν ἀφέσει γ ῆν ἔχ[οντας καὶ] μὴ | καταπεφ(ντ)ευκότας τὰς καθη[κ(ούσας) φυτ(είας)] | ἔως τοῦ να (ἔτους) τῶν ἐξακολουθούντων προστίμων | τὴν δὲ φυτείαν ποιεῖσθαι ἀπὸ τοῦ νβ (ἔτους). καὶ τοὺς κεκοφότας τῶν ἰδίων ξύλα παρὰ ⟨τὰ⟩ ἐκ⟨κ⟩είμενα | προστάγματα.

It is clear from the context that the planting mentioned in the text quoted above refers not to some crops, but to trees, and that consequently the holders of $\gamma \hat{\eta}$ $\beta a \sigma i \lambda \iota \kappa \hat{\eta}$ and $\gamma \hat{\eta}$ $\hat{\epsilon} \nu$ $\hat{\epsilon} \phi \hat{\epsilon} \epsilon \hat{\epsilon} \omega$ were obliged to plant some land with trees. On the other hand, we see that even the trees growing on their own land could not be cut by the owners without certain formalities ordered in special $\pi \rho o \sigma \tau \hat{\alpha} \gamma \mu a \tau a$. One of these $\pi \rho o \sigma \tau \hat{\alpha} \gamma \mu a \tau a$ is preserved in an inscription of the II—I cent. B.C.; see Preisigke, S. B. 4626. Though fragmentary, the contents of this $\pi \rho \hat{\alpha} \sigma \tau a \gamma \mu a$ are clear. It contained an order concerning planting trees on the embankments, and a prohibition to cut trees already growing on them. More details are given by Tebt. 703; cf. PSI. IV, 382. I think that the often-mentioned $\xi \nu \lambda \hat{\alpha} \kappa \sigma \tau \hat{a}$ belongs in some cases to the cutting off of branches of state-trees growing on the embankments, and used generally for the embankments themselves; see e.g. P. Petrie, III, 39; 43, 2 and IV, 10; 48, 4. The land planted with trees is perhaps the $\xi \nu \lambda \hat{\alpha} \tau i s \gamma \hat{\eta}$; cf. P. Petrie, II, 39 (a), 7 = III, 88. On the $\xi \nu \lambda \hat{\alpha} \kappa \sigma \pi \hat{a}$ in Ptolemaic times, see PSI. IV-V, 323, 338, 339, 429, 499, 506 comp. 501, 545, and P. Lille, 5, 24; for Roman times see Wilcken, Grundz. 253; Archiv, I, 127; cf. P. Oxy. 1112, 1188 and 1421.

8. Industry. No comprehensive work on industry and trade in the Hellenistic period exists. The book of Reil (Beiträge zur Kenntnis des Gewerbes) is more a useful inventory of facts than a full inquiry into the subject. The article on Greek industry and trade in one of the last volumes of Pauly-Wissowa-Kroll, Recl. Enc. is disappointing. The author, Francotte, gives a careful study of the industry and trade of the Greek polis, but does not deal at all with industry and trade in the Hellenistic monarchies. With regard

to Roman industry, Gummerus in his excellent article on industry and trade in Italy and the Western provinces in the above-mentioned Encyclopaedia and in some articles in the Jahrbuch of the German Arch. Institute, has paid but little attention to Egypt and to the Hellenistic world in Roman times. Papyrologists, however, have produced many valuable special studies on the subject, references to which will be found in the above-mentioned Introductions by Wilcken and Schubart, who have themselves supplied good general sketches on industry and trade in Greek and Roman Egypt. To the list of special works on the subject given by them, I would join a reference to the recently published book of M. Chwostoff (in Russian) on the textile industry in Egypt (M. Chwostoff, Sketches on the organization of industry and trade in Greek and Roman Egypt. Kazan, 1914).

My attempt to give a classification of the different methods of organizing industry and trade is based partly on the above-mentioned studies, partly on fresh evidence. Though the lines of demarcation which I have drawn are rather rough and approximative, the future will perhaps render it possible to draw them more definitely, and to subdivide my types into more classes and categories. But I hope that my leading principle in defining the categories may be useful to future students of the subject. To illustrate my classification by a few examples, I add some short notes on the best-known and most typical branches of industry.

A classic example of the first category—the full monopoly—is the state-monopoly of oils, thoroughly studied by Grenfell in his commentary to the $\nu \dot{\rho} \mu o \iota \tau \epsilon \lambda \omega \nu \iota \kappa o \iota$ of Ptolemy Philadelphus. We meet here all the peculiarities of a modern monopolized branch of industry: nationalization of raw products, distribution of these among state-factories, nationalization of all the factories, compulsory labour in them, nationalization of products obtained in the factories, and full monopoly of trade with strong measures taken against illicit traders; finally, heavy taxes on imported oils and restriction of trade in them.

A milder form of organization was found in the textile industry. The documents concerning it are not so full as those dealing with the oil monopoly, but we can affirm with certainty that no full monopoly was introduced into the textile industry. It must be noted to begin with that in the textile industry we cannot trace any big factories, the single looms being scattered through the country in towns, villages and temples. Some of them stood in close relations to temples (Rosetta Stone, Dittenberger, Or. Gr. Inscr. 90, 17 and 29; P. Tebt. 5, 245 foll.), others to big land-owners (PSI. IV, 341), but that seems to have had no influence on the organization of this branch of industry by the State. Priests and estate-owners played apparently the same part as the farmers of $\partial\theta \rho\nu\nu\rho\rho\dot{\alpha}$, receiving a part of the product and being responsible for the payment of the weavers.

The main outlines of the organization of the weaving industry were as follows. Possibly raw materials were dealt with by the State in the same way as in the oil monopoly (Rev. Laws, col. 86 foll.); but the weaving-looms were not nationalized and remained the property of the weavers—property of course within limits, because the owners were not permitted to dispose freely of it, e.g. to sell the looms, or to make any repairs in them, without a special permit (P. Tebt. 5, 241 f.; P. Magd. 36 = Chr.). Nevertheless the textile-workshops were not owned by the State like the oil factories. They remained in the hands of the textile-workers, and the implements belonging to them were treated by the State on the same lines as the agricultural implements of the βασιλικοί γεωργοί (P. Tebt. 5). Though the textile-workers were in no sense free artisans, working for themselves and disposing freely of the products of their work, they were in a better position than the workers in oil factories. They obtained of course raw materials from the State, they were bound (by contracts?) to deliver a fixed amount of clothes of prescribed kinds, they were responsible for arrears in the delivery, and were not allowed to go away from their homes; but, on the other hand, they were not obliged to make use of all their looms, and we have no evidence of compulsory work exacted from them. They worked as much as they liked within the limits of the above-mentioned contract, and were remunerated for the clothes which they delivered in money at a prescribed rate fixed by the State (P. Hib. 68, 69). It is not quite clear whether they had to deliver all that they produced, or possessed the right to manufacture—in addition to what they were ordered—clothes for their own use or for sale. It is possible that the State did not carry the idea of nationalization to extremes, and allowed the owners of textile implements to work not only for the State but also for themselves. inclined to think that they did not have the right of free sale in regard to their work. The exclusive right of sale belonged probably to local dealers, who were allowed to deal with the state-products, and were treated by the State like tax-farmers (Rev. Laws, col. 91). More details about the textile industry may be found in my commentary to Tebt. 703, which supplies new and valuable information on the subject.

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A clear and typical instance of a branch of industry controlled, but not at any rate monopolized, by the State may be seen in the management of hunting and fishing. I cannot deal with the matter at length; but briefly the organization was as follows. Hunting was not free in Egypt. The State farmed out the right of hunting both on the Nile and in the desert. The farmers were allowed to retain a part of the produce. This involved the necessity of conferring these rights chiefly upon special bodies of hunters (κυνηγοί), who were in my opinion another kind of ὑποτελεῖs. Sometimes hunting was permitted to soldiers on an expedition, but always under the condition of paying the prescribed rate to the tax-farmers; see P. Meyer, Klio, xv (1918), 376; P. Ryl. II, 98; PSI. v. 458; cf. for Roman times P. Ryl. II, 98 a and App. p. 423, and concerning the bodies of κυνηγοί the inscriptions on the cliffs near Panopolis S. B. 235–291 and 293, 294.

Fishing was organized on the same lines. The tax was fixed at $25^{\circ}/_{0}$ of the produce, levied by tax-farmers. Possibly the right of tax-farmers to receive the fourth of the produce did not alter certain rights of temples and villages to fish and to hunt at different spots on the Nile and on the lakes. I do not believe that the whole produce of fishing had to be delivered to the farmers and was sold by dealers appointed by the State (Grenfell-Hunt, Tebt. I, p. 49); but I am sure that trade in fish was controlled by the State, and the dealers had to pay a special tax; the $\tau \epsilon \lambda os$ $\mu \epsilon \tau a \beta \delta \lambda \omega \nu$ d $\lambda \epsilon \epsilon \omega \nu$, Wilcken, Ostr. I, 136, § 6. The most important document on fishing is Wilcken, Chr. 167 (131 B.C.); cf. Grundz. 352; Ostr. I, 137. There is also much new evidence in Tebt. III.

The organization of fishing and hunting, as sketched above, affords a good illustration of State-control over every branch of trade and industry. Every party of hunters or fishermen was followed by agents of the tax-farmers, and every piece of game or fish caught was carefully registered by this tax-spy.

It is important to point out that the state-regulation of industrial life in Egypt stood in close connection with similar regulation of trade. I cannot deal with this point at length; but I can affirm that the whole internal trade of Egypt was under close control by the State. Most of the products of Egypt were sold at fixed prices by dealers appointed by the State; in some branches of commerce prices were not fixed, but the State watched carefully over these branches, asked the producers and dealers to fix the prices by themselves, and then levied for the State a part of their profits. Details on this subject will be given in my commentary to Tebt. 703, which provides important evidence on the subject. A very good instance is PSI. IV, 425, where the existence of careful regulations for the corn-trade must be supposed, these being very similar to those for the wine-trade. Apparently the State gave to some dealers the exclusive right to sell corn belonging to the State. Possibly the corn dealt with was the ἀγοραστὸς σῖτος; see above p. 175.

9. Administrative system. No good comprehensive work on the administrative system of Ptolemaic Egypt exists. The outlines are fixed, e.g. by Bouché-Leclercq, but many questions remain unsettled. One of the most important is that concerning the functions of οἰκονόμος. The recent work by Steiner (Der Fiskus der Ptolemäer, 1914) has confused the matter instead of elucidating it. No help is to be obtained from the recent investigations of Preisigke¹ and Oertel (see further below). The careful investigation of the Zeno-correspondence (the whole find is divided between Italy, Cairo, England and Germany) combined with a renewed study of the Tebtynis, Hibeh, Petrie and Paris papyri will certainly throw fresh light on the duties of the οἰκονόμος. Though Zeno in the second period of his life was certainly not the οἰκονόμος of the Arsinoite nome, he had in his quality of chief manager of the big estate of the dioecetes Apollonios very often to deal with different local officials, especially with the οἰκονόμος.

It is a pity that the careful study of Oertel (*Die Liturgie*, 1917), useful as it is for the Roman times, does not clear up the question of the so-called liturgy in Ptolemaic Egypt. He fails to recognize that the Greek liturgy closely connected with the city state has nothing to do with the compulsory labour of Eastern monarchies. What is new in the Ptolemaic system is the combination of compulsory work with administrative duties, which is noticeable first of all in the case of the different kinds of guards. This combination is peculiar to Egypt, and developed widely in Roman times. The municipalization of Egypt in the IIIrd cent. of the Christian era first brought together the Greek municipal liturgy and the compulsory administrative work of Ptolemaic and Roman Egypt.

Compulsory tax-farming is different. It has nothing to do with the Greek liturgy, and is due to the fact that tax-farming and administrative service approached nearer and nearer to each other as time went on. In the Roman period it is sometimes difficult to discover where the tax-farmer ends and the official begins.

¹ F. Preisigke, "Die Prinz-Joachim Ostraka" (Schr. der Wissenschaftlichen Gesellschaft in Strassburg, 19), Strassburg, 1914, pp. 52 foll.

Entirely apart from the foregoing stand the different categories of compulsory manual work for the State. In dealing with this matter it is necessary to avoid the word liturgy sometimes used by the Greeks in Egypt to design compulsory work in general. The similarity of this compulsory work to the compulsory work of citizens demanded sometimes by the city is only superficial; for the two institutions are based on quite different foundations.

10. The spirit of the nation. The most difficult task in historical investigations is always that of characterizing the spirit of an epoch, the mood of a nation. It is always a piece of guess-work and therefore subjective. My characterization of the psychology of an average Egyptian is based primarily on the contents of ordinary letters written by one hellenized Egyptian to another, mostly family letters. The matters dealt with in these are chiefly economic or of a family character. But I must acknowledge that this foundation for my deductions is rather weak. It is not certain what would be the result if we were to analyse in the same way some hundreds of letters mostly written by country-people and local officials of our time.

To corroborate my statement we have, however, some very characteristic facts. First of all the strikes. To show discontent through strikes was always customary in Egypt among a population working under constraint. It is the usual protest of an enslaved population. The fact that the régime of the Ptolemies did not put an end to this form of protest, but that under these strikes became quite regular, shows that the mood of the population did not change and the general conditions were unaltered. It is to be noted that our evidence about strikes is not confined to the later Hellenistic times. To judge by the available evidence strikes were as usual in the IIIrd cent. B.C. as in the second and first. We find from the beginning an elaborate technical language used by the strikers and the officials dealing with them: ὑπόπτως σχείν expresses the mood of the workmen showing that they were ready to strike; ἀναχωρείν οr ἀποδιδράσκειν to leave work and to look for a refuge—is the technical expression for the strike itself, etc. Different classes of the population go on strike: βασιλικοί γεωργοί (Tebt. 26, 18 and 41, 14; PSI. v, 502)—workmen in quarries (λατόμοι: Hib. 71, 6), guards of different categories (γενηματοφύλακες, χωματοφύλακες, etc.; PSI. IV, 421; v, 490; Tebt. 24, 34 and 52; 731), retail-dealers in wine (Tebt. 725, etc.). I will quote one characteristic passage to show how common strikes were, and how ready even the officials were to use this weapon against the State,—PSI., IV, 421, 6: ε τε | δεώρυξ πληρές έστι. ωστε εί | μεν διδοίς ημίν (supply καλώς έστιν) εί δε μή, ἀποδραμούμεθα οὐ γὰρ ἰσχύομεν.

In times of unrest and open revolt, and especially after the suppression of a revolt, the plight of the population was general, and annesty-decrees were bound first of all to call upon the ἀνακεχωρηκότα σώματα to go back to their homes and work; see Tebt. 5, 6 foll. (Euergetes II); P. Par. 63, col. 13, l. 2—4 (Philometar); Dittenberger, Or. Gr. Inscr. 116; cf. Holleaux, Arch. f. Pap. vi, p. 10 B and p. 17 n. 1.

The growth of the number of $\partial \nu a \kappa \epsilon \chi \omega \rho \eta \kappa \delta \tau a$ os shown by the increasing number of sanctuaries which possessed the right of $\partial \sigma \nu \lambda ia$ during the Ist cent. B.C. The State was too weak to repel the claims of $\partial \sigma \nu \lambda ia$ presented by bodies of priests or influential officials. One decayed sanctuary after another was restored by priests or private persons, and received from the king the right to hide the strikers and exploit their labour for their own purposes. The old feudal principle arose again, and the foundations of the "patrocinium" of private landlords and churches in the late Roman period were laid. Not less than seven inscriptions, all of the Ist cent. B.C., give us evidence about this right of $\partial \sigma \nu \lambda ia$ granted to different small sanctuaries, while for the IIIrd and IVth centuries we have no examples. See S. B. 620 (Athribis 97/6 B.C.); S. B. 1161 (Theadelphia, 58/7 B.C.); Breccia, Bull. de la Soc. Arch. d'Alex. 15 (1914—1915) (Theadelphia, 70/69 B.C.); S. B. 5219 (Euhemeria, 69/8 B.C.); S. B. 5827 (Euhemeria, 69 B.C.); S. B. 3926 (Ptolemais Hermiu, 76/75 B.C.); Jouquet, C. R. de l'Acad. d. Inscr. 1902, 359 (Magdola).

THE TREATY OF ALLIANCE BETWEEN HATTUŠILI, KING OF THE HITTITES, AND THE PHARAOH RAMESSES II OF EGYPT

BY PROFESSOR S. LANGDON, M.A., AND ALAN H. GARDINER, D.LITT.

The publication in Germany, during the war, of the Hittite archives discovered at Boghazköi by Hugo Winckler makes it at last possible to compare in detail the hieroglyphic and cuneiform versions of the famous treaty concluded by the Hittite king Hattušili with Ramesses II of Egypt. Archaeology has no more romantic coincidence to show than the recovery in the heart of Asia Minor, a thousand miles away across the Mediterranean, of those two clay tablets reproducing in Babylonian language and writing the self-same treaty that Ramesses II had commemorated upon hieroglyphic stelae in his Theban temples. The full details of the story are doubtless unknown to many readers of the Journal; we may therefore be permitted to narrate them briefly by way of preface to our more technical investigations.

In the course of the expedition to Egypt, wherein Champollion sought to turn to practical account his decipherment of the hieroglyphs, his attention was especially attracted to the sculptures and inscriptions recording the wars between Ramesses II and a people whose name he read as Schéto. The sequel to those wars was a treaty of alliance of which the full terms were set forth in a hieroglyphic version upon great stelae in the temples of Karnak and the Ramesseum respectively. Champollion copied both the more complete example at Karnak and the fragmentary one in the Ramesseum, but his tentative rendering of some lines in the Notices Descriptives¹, as well as a reference in his published letters², shows that he did not yet divine the exact purport. This was, however, quite clearly recognized by his pupil Rosellini, the first scholar to attempt a complete translation. Since those early days many translations and editions of the text have seen the light, but it must be confessed with some shame that Egyptologists have not yet provided themselves with quite definitive copies of this all-important historical document. The best edition available is one published by the late W. Max Müller in 1902, and it would be doing him an injustice to suggest that there is very much amiss with it; but a collation made by Professor Sethe, which, thanks to his kindness, we have been permitted to use for the present article (see Pl. XVIII), shows that in points of detail Max Müller's copy left a good deal to be desired; and a comparison of the first lines with the photograph of Béato pointed to the same conclusion. When will our scholars realize that the accurate copying of the monuments above ground is a task of far greater urgency than the exploitation of new sites?

Champollion was inclined to equate the people whose name he read as Schéto with

¹ Vol. 11, pp. 195 foll.

- ² Lettres écrites de l'Égypte, p. 426.
- ³ Monumenti Storici, Vol. III, Part II, pp. 268-282.

⁴ Der Bündnisvertrag Ramses' II und des Chetiterkönigs in Mitteilungen der Vorderasiatischen Gesellschaft, 1902, 5. W. Peiser, Berlin. A valuable translation, with good bibliography, is given in Breasted, Ancient Records, Vol. III, §§ 367–391. For a bibliography of previous translations, see Maspero, Histoire Ancienne, Vol. II, p. 401, n. 2.

the Scythians, and it was not until 1858 that their identity with the Hittites of the Old Testament was conjectured by Brugsch, almost simultaneously with De Rougé and Bunsen¹. What at first was a mere guess has been gradually converted into a certainty. Little by little the monuments of the Hittites themselves have come to light both in Northern Syria and in Asia Minor; the El-Amarna letters have revealed the existence of a great Hittite kingdom whose warlike rulers were pressing southward towards Phoenicia and Palestine in the times of Amenophis III and his successor; and finally, in 1906, Hugo Winckler discovered the capital of the Hittites themselves, the extensive city of Hatti, in the great fortified ruins of Boghazköi within the circuit of the Halys². Here, in the magazines of the largest palace, as well as at another spot, were unearthed a vast number of clay tablets that proved to be nothing more or less than the archives of the Hittite Foreign Office. All the tablets were written in cuneiform characters, but in many the language was that actually spoken by the Hittites. The diplomatic idiom of those times was, however, Babylonian, just as French is with ourselves, and in consequence the correspondence and treaties with the rulers of surrounding countries were couched in that tongue. The duplicate of the treaty with Ramesses II was recognized as such by Winckler himself³, but it was not until 1916, ten years later, that the full text was published. Fragments of two copies were recovered; they are written in the Canaanitic dialect of Babylonian, and though there are divergences from the hieroglyphic version that will have to be considered hereafter, a cursory examination reveals the fact that in many paragraphs at least the Boghazköi tablets represent the actual original text from which the Egyptian version was translated. It had long been recognized that the phraseology of the hieroglyphic version was non-Egyptian, and the newly discovered tablets, no less than the other treaties and similar documents found at Boghazköi, now prove beyond a doubt that it was purely Babylonian. Unhappily, both the tablets from Boghazköi are incomplete: the larger fragment, no. 7 in the publication, carries forty-three well-preserved lines containing about half the treaty; no. 25 furnishes only the beginnings of the first twelve lines. The first critical edition of the Boghazkoi version was given by Bruno Meissner, in a paper printed in the Sitzungsberichte of the Berlin Academy⁵; in that paper, which has been used for the present article with much profit, a full transcription and translation were provided, together with valuable comments and comparisons with the Egyptian counterpart. In a later work containing a résumé of the historical data obtainable from the Semitic texts of Boghazköi, Meissner repeats his translation of the treaty, placing the corresponding paragraphs of the Egyptian version in a parallel column; the translation of the hieroglyphic text used by Meissner is that of Breasted. A new rendering of the Egyptian text is similarly printed opposite a rendering of the cuneiform tablets in a recent well-written pamphlet by Roeder.

- ¹ See Brugsch, Geographische Inschriften, Vol. II, pp. 20 foll. with a translation of the treaty.
- ² For the gradual emergence of the Hittites into the light of history see the account in E. MEYER, Reich und Kultur der Chetiter, pp. 127 foll.
- ³ See Orientalische Litteraturzeitung, Vol. IX (1906), col. 629; and further, Mitteilungen von der Deutschen Orientgesellschaft, No. 35, December 1907.
- ⁴ H. H. FIGULLA and E. F. Weidner, *Keilschrifttexte aus Boghazköi*, Part 1, Leipzig, 1916 (henceforth quoted as *KTB*).
- ⁵ Der Staatsvertrag Ramses' II. von Ägypten und Hattušils von Hatti in akkadischer Fassung, in Sitzb. d. kön. Preuss. Akad. d. Wissensch., no. xx, April 1917.
- ⁶ Zur Geschichte des Chattireiches nach neuerschlossenen Urkunden des Chattischen Staatsarchivs, G. P. Aderholz, Breslau, 1917.
 - ⁷ G. ROEDER, Ägypter und Hethiter in Der Alte Orient, Leipzig, 1919.

1. \(\frac{1}{2} \) \(\frac{ 4. Nothing visible after dbh. — end 5. Tr-11-sb. 6. nw [sic 7. 8. ptri II; so too ll. q. 11. _ pi 1 q. ptri PA clear. 10. The Holling ; read A. H.G. _ The 'hmss?', S. 11. 13. Ofter the lacuna Illin; 'n:', S. _ The sie ? restore To E TO A.H.G_ & A.H.G_ & ALL A Prestore he [] ky hrwy, A.H.G. 18 2 19. Kill Milling ce. nt-htri. 20. Sintille ; 'handly room for = ', S. _ Mille Remssw _ Vall Handle Market Market - end of line iff 21. lolis - 5 to the state of the interest of the state of the st read ir m ht. - p: wr 3 [n] Ht. 1 22. after the lacuna with 24. dit intw n p; wr like _ = 25. mdt n p; halling we ?_ 26 10 i.e. m sš. _ mtrw 111 9 121 Ht3. - d in dmi has the ordinary form - D-p-i-r-n- 28 1 1 8 Mm - Mille R _ the preceding place name is & & I H 32. mtw The million — end A 33. beginning the e.e. 36. 27 2 - [p: w] Maria se probable, S. _ inhw 12. 38 00 _ Sal _ 20 }

In the present article Professor Langdon offers a new transcription and translation of the Boghazköi tablets, making abundant use of the other texts from Boghazköi for restoring defective passages and for commentating those parts of the treaty that are preserved in the hieroglyphic version alone. For the new rendering of the Egyptian text and for the form in which the two renderings are presented Dr Gardiner has assumed the responsibility. The comments are our joint work; but the chronological and historical conclusions in the last section (IV) are due to Professor Langdon alone.

I. TRANSCRIPTION OF THE HITTITE-BABYLONIAN VERSION.

§ 1.

- 1. [um-ma Ri-a-ma-še-ša ma-a-i] iluA-ma-na šarru rabû šar [matMi-iṣ-ri-i karradu]
- 2. [ka-du Ha-at-tu-ši-li¹ šarru rab]î šar ^{mat}Ha-at-ti ahî-šu a-na² na-ta-ni sa-la-[ma damka
- 3. [aḥûtam³ damikta ù a-na ṣa-ba-ti šarru-]ut-ti rabîti⁴ i-na be-ri-šu-nu a-di ni-[i-nu-ú-ma⁵ a]-di d[a?-a-ri-ti]⁶
- 4. [rik-za ir-]ku-us⁷ [Ri⁸-a-ma-še-ša ma-a-i] ^{ilu}A-ma-na šarru rabû šar ^{mat}Mi-iṣ-ri-i ķarradu i-na gab-bi mātāti mār-[šu ša]
- 5. [Mi-in-]⁹mu-a-ri-a šarri rabî šar ^{mat}Mi-iṣ-ri-i karradi-i mār māri-šu ša Mi-in-pahi-ri-ta-ri-a šarri rabî
- 6. [šar mat Mi-iṣ-]ri-i karradi a-na Ha-at-tu-ši-li šarri rabî šar mat Ha-at-ti karradi mār Mur- ši-li šarri rabî
- 7. [šar mat Ḥa-at-ti] karradi mār māri-šu ša Šu-ub-bi-lu-li-ú-ma šarri rabî šar mat Ḥa-at-ti karradi a-mur a-nu-ma at-ta-din
- 8. [aḥu-ut-ta¹¹ damik]ta sa-la-ma damka i-na be-ri-in-ni a-di da-ri-ti a-na na-da-ni sa-la-ma damka aḥ-ḥu-ta damikta
- 9. [i-na¹² rik-si] ^{mat}Mi-is-ri-i ka-du ^{mat}Ḥa-at-ti a-di da-a-ri-ti ki-a-am

§ 2.

a-mur te-ma ša šarri rabî šar mat Mi-is-ri-i

- 10. [\hat{u}^{13} \desirat a \desirat arri rab\hat{e}] \desirat ar \quad mat \bar{H} a-at-ti ul-du ta-ri-ti ilim\quad u-ul i-na-an-din a-na e-bi-\desirat i\quad i\quad nakr\hat{e}ta^{16} i-na be-ri-\desirat u-nu
- 11. [i-na rik-si a-]di da-a-ri-ti. a-mur Ri-a-ma-še-ša ma-a-i ^{ilu}A-ma-na šarru rabû šar ^{mat}Mi-iṣ-ri-i¹r a-na e-bi-ši te-ma
- 12. [ša iluŠamaš ù] iluTešub i-pu-šu a-na matMi-iṣ-ri-i ķa-du matḤa-at-ti i-na te-mi-šu i ša ul-tu da-ri-ti
- 13. lim-niš (?) [ul i-na-ki-]ir a-na e-bi-ši nukurta 16 i-na be-[ri-šu-nu a-]na ṣa-a-di ù a-du ku-ul.
 - ¹ Restored from 25, 2.
 ² Here begins 25, 3.
 ³ Restored from l. 8 and Eg. l. 7.
 - ⁴ Doubtful; restored from KTB, I, 6, 11. ⁵ Restored from KNUDTZON, El-Amarna, 29, 132.
 - ⁶ Cf. l. 11 and Eg. l. 7.
- ⁷ These are the traces on the tablet. The following break is not long enough to carry the name and title of the king, but the editors may have minimized it in their copy.
 - ⁸ Var. 25, 4 Za-ri!
- ⁹ So 25, 5.

- ¹¹ 25, 8.
- 12 25, 9. Meissner retores ina te-mi 'by agreement.'
 13 ù probably stood at the end of 25, 9.
 14
 - ¹⁴ AN-lim. Eg. l. 7 'the god.' ¹⁷ 25, 12.

- ¹⁵ 25, 11.
- ¹⁶ Written GALU- $K\dot{U}R$

¹⁸ 25, 13.

§ 3.

- 14. Ri[a-ma-še-ša] ma-a-i ^{ilu}A-ma-na šarru rabû šar ^{mat}Mi-iṣ-ri-i i-te-pu-uš i-na ri-ki-il-ti¹ eli ṭup-pi ša kaspi
- 15. ka-du [Ḥa-at-tu-ši-]li šarri rabî šar ^{mat}Ḥa-at-ti aḥi-[šu a-di û-]mi² an-ni-i a-na na-da-ni zu-lum-ma-a damkaáḥ-ḥu-ta damikta
- 16. i-na [be-ri-ni a-na] da-ri-ti ù áḥ-ḥu-ú it-[ti-ṭa sa-lim it-ti-]ṭa³ ù áḥ-a-ku it-ti-šu ù sal-ma-a-ku it-ti-šu
- 17. a-di da-[a-ri-ti ù ni-]i-nu ni-in-ip-pu-uš aḥu-[ut-ta-ni sa-la-]ma-a-ni u damiķta eli aḥū-ti ù sa-la-mi ša pa-na nu
- 18. ša mat M[i-iṣ-ri-i ù] mat Ḥa-at-ti a-mur Ri-i-a-ma-še-ša šarru rabû šar mat Mi-iṣ-ri-i i-na sa-la-mi damķi i-na aḥû-ti damiķti
- 19. it-ti [Ḥa-at-tu-ši-li] šarri rabî šar ^{mat} Ḥa-at-ti. a-mur mārê Ri-a-ma-še-ša ma-a-i ^{itu}A-ma-na šar ^{mat}Mi-is-ri-i
- 20. sal-mu áh-[hu-u it-ti] mārê ša Ḥa-at-tu-ši-li šarri rabî šar ^{mat}Ḥa-at-ti a-di da-ri-ti ù šu-nu a-ki-i te-mi-ni
- 21. ša aḥû-ut-[ti-ni ù sa-]la-am-ni ù ^{mat}Mi-[iṣ-ri-i] ka-du ^{mat}Ḥa-at-ti ù sa-al-mu aḥhû ki-i ni-i-nu a-di da-ri-ti.

§ 4.

- 22. ù Ri-a-ma-še-ša ma-a-i ${}^{ilu}A$ -ma-na ${}^{s}arru$ rabû ${}^{s}ar$ ${}^{mat}Mi$ -iṣ-ri-i la-a u -kár-ra ${}^{mat}Ha$ -at-ti a-na la-ki-e mi-im-ma
- 23. ina libbi-šu [a-na da-ra-]a-ti ù Ḥa-at-tu-ši-li šarru rabû šar ^{mat}Ḥa-at-ti la-a ú-kar-ra a-na ^{mat}Mi-is-ri-i
- 24. a-na la-ki-i mi-im-ma i-na libbi-šu [a-na da-ra-a-ti].

§ 5.

- [a]-mur par-su ša da-a-ri-ti ša ^{itu}Šamšu ù ^{itu}Tešub i-pu-šu
- 25. a-na ^{mat}Mi-iṣ-ri-i ka-du ^{mat}Ḥa-at-ti [a-na e-bi-ši sa-la-ma] ù aḥu-ut-ta a-na la-a na-da-a-ni nakrûta i-na be-ri-šu-nu
- 26. ù a-mur Ri-a-ma-še-ša ma-a-i ^{ilu}A-[ma-na šarru rabû] šar ^{mat}Mi-iṣ-ri-i iṣ-ṣa-bat-šu a-na e-bi-ši šu-ul-mi a-di û-mi an-ni-i
- 27. a-mur mat Mi-iṣ-[ri-i] ka-du mat Ḥa-at-ti [sa-al-mu tù áḥ-]hu-ú a-di da-ri-ti

§ 6.

ù šum-ma ^{amel}nakru ša-nu-u

- 28. il-la-ka⁵ [a-na ^{mat}]Ḥa-at-ti ù Ḥa-at-tu-ši-li [šarru rabû šar ^{mat}Ḥa-at-]ti i-šap-par a-na a-ia-ši um-ma-a al-ka a-na a-ia-ši
- 29. a-na ri-zu-ti-[ia] a-na ša-a-šu ù Ri-[a-ma-še-ša ma-a-i iluA-ma-]na šarru rabû šar mat Mi-is-ri-i
- 30. i-šap-par ṣâbé-šu narkabāti-šu ù i-da-ak-ku [amelnakra-šu ù ti-]il-la-[ta] 6 u-ta-ar a-na ^{mat}Ha -at-ti
 - ¹ 25, 15. ² Restored from l. 26 and Eg. l. 9.
 - ³ Restored from Eg. l. 10. The cuneiform text appears to be inaccurate; cf. KTB, p. 17, 6.
 - 4 Meissner restores is-sa-ab-ba-at (?) áh-hu(?)-zu.
 - ⁵ Cf. KTB, 1, p. 18, 48 amelnakru ša-nu-u i-tab-bi.
- 6 Uncertain. For tillatu, help, support, see KTB, I, 25, 44 ti-il-la-tam irriš, he shall ask for help. See also Knudtzon, El-Amarna, 71, 21-2, dannat tillat-šu, mighty is his strength. A variant is têlâtu, tillâtu; a-na te-el-ú-ti-šu, for his help, KTB, I, 16, 9, a-na ti-il-lu-ti-ia, I, 25, 66. The word is philologically identical with illatu, strength, and has the same ideogram. Note KTB, I, 17, 21 ana ILLAD-ti-šu. See now EBELING, Religiöse Texte aus Assur, p. 333, til-lat=puhru, totality.

§ 7.

- 31. ù šum-ma Ḥa-at-tu-ši-li šarru rabû šar ^{mat}Ḥa-at-ti [ir-da-ub¹ ana] eli ardê-šu at-tu-šu [ù šu-nu iḥ-]ta-tu-ú a-na eli-šu²
- 32. ù ta-šap-par a-na Ri-a-ma-še-ša šarri rabî šar ^{mat}[Mi-iṣ-ri-i] eli-šu a-[di]³ Ri-a-ma-še-ša ma-a-i ^{ilu} A-ma-na
- 33. ṣâbê-šu narkabāti-šu i-šap-par [ù] ú-ḫal-la-ku gab-bi-i-[šu-nu ša] a-na eli-šu-nu $[tar-da-bu]^4$

§ 8.

[ù šum-ma] ^{amel}nakru ša-nu-u il-la-ka

- 34. a-na ${}^{mat}Mi$ -iș-ri-i i Ri-a-ma- $\check{s}e$ - $\check{s}a$ ma-a-i ${}^{ilu}A$ -ma-na $[\check{s}ar]$ ${}^{mat}Mi$ -iṣ-ri-i $a\underline{b}$ u-k[a i- $\check{s}ap$ -par]a-na Ha-at-tu- $\check{s}i$ -li
- 35. šar ^{mat}Ḥa-at-ti aḥî-šu um-[ma-a al-]ka a-na ri-zu-ti-ia a-na e-li-šu a-di Ḥa-[at-tu-ši-li] šar ^{mat}Ḥa-at-ti
- 36. i-šap-par ṣâbé-šu [narkabāti-]šu ú-[da-a-]ak amel nakri-ja

§ 9.

ù šum-ma Ri-a-ma-še-ša [šarru rabû šar] matMi-iṣ-ri-i

- 37. ir-da-ub a-na eli ardé at-tu-šu ù šu-nu i-te-ip-šu he-ṭa a-na eli-[šu ù a-šap-par]
- 38. a-na Ḥa-at-tu-ši-li šar ^{mat}Ḥa-at-ti aḥî-ia eli-[šu] ù Ḥa-at-tu-ši-li [šarru rabû šar ^{mat}Mi-iṣ-ri-i]
- 39. i-šap-par ṣābē-šu narkabāti-šu ù ú-ḥal-la-ku gab-bi-[i-šu-nu] ù (?) ana-ku⁵ a-ra

§ 10.

II. COMPARISON OF THE HITTITE-BABYLONIAN AND THE EGYPTIAN VERSIONS.

Before embarking upon the translation of the cuneiform and hieroglyphic examples of the treaty, we must devote some words both to the form in which the names of gods, kings and countries are rendered in the original texts and to the equivalents adopted for these in our English versions. So far as the hieroglyphic writings of foreign names are

- ¹ Restored from l. 37, and on $ra'\bar{a}bu$ see Meissner's note, p. 292. ² Restored from Eg. l. 19.
- ³ So also Meissner restores from l. 35. This meaning of adi cannot be substantiated from parallel texts and may be an abbreviation for adi surri, cf. Meek in Beiträge zur Assyriologie, Vol. x, No. 76, 28.
- ⁴ In the text as published there is hardly room for this restoration. Meissner's restoration gab-bi [amelnakra] a-na mu[b]bi-šu-nu is unintelligible.
 - ⁵ Uncertain.
 - 6 Or restore [a-na sarrû-tim i-]kab-bu-su. Winckler may have misread kab as ib.
 - ⁸ After Meissner. ⁸ a-na, 'where?' see Am. Journ. Sem. Lang., Vol. 29, p. 205.

concerned, it is now recognized that the so-called syllabic writing employed for this purpose was not truly syllabic at all, and that for such a geographical name as $(1)^{-1}$

To avoid repetition of the Egyptian consonantal equivalents it will be well to state here the form in which the hieroglyphs render the names of the land of Hatti and of its rulers. For Hatti the Egyptian writes $\mathcal{H}\mathcal{B}$, purely consonantally. There is no more justification for the pronunciation Kheta adopted by the older school of Egyptologists than there is for Khetasar, Merasar, Metella and Seplel respectively. These names should henceforth disappear from the history books; the Egyptian hieroglyphs give no more than the consonants $\mathcal{H}t$ -s-r, M-r-s-r, M-t-nr and S-p-r-r and provide no warrant for any vowels in which we may choose to clothe those inarticulate skeletons. The Hittites themselves doubtless pronounced the names of their kings somewhat otherwise than did the Egyptians—there are certain variations even in the consonants, Babylonian \dot{s} corresponding to Egyptian s, and so forth. Nevertheless, we are not in a position to furnish the precise Egyptian equivalents of the Hittite names, and so we had best fall back on the native originals. Hence, in our translations both of the Boghazköi tablets and of the Theban stelae, we shall render uniformly Hattušili, Muršili, Muwattalli, Šubbiluliuma.

We are more embarrassed to know how to deal with the Egyptian royal names. cuneiform tablets, in writing the prenomen and nomen of Ramesses II as Wasmuariašatepnaria² and Riamašeša-mai-Amana respectively, set a standard of excellence (mutatis mutandis, as š into s, see above) which we cannot maintain elsewhere in transcribing Pharaonic names. Here we are usually content with the sort of pronunciation that was current in Greek times, the sort of pronunciation that Manetho used. For this reason we will adhere, in translating the Karnak text, to our conventional transcriptions Usima crecsetpenre (cf. Gk. Οὐσιμαρης) and Ra messe-mi-Amūn (cf. Gk. 'Paμεσσης Μιαμουν), while preserving the richer flavoured pronunciations in our versions of the Boghazköi texts, These latter give the equivalents Minmuaria for Menma rec Sethos I, Minpahiritaria (sic) for Menpehtire Ramesses I, and—in a letter, not in the treaty Maptera for Nefreteri, the consort of Ramesses II. It may here be noted that the hieroglyphic copies of the treaty fairly consistently alternate the prenomen and nomen of Ramesses II throughout the text, a common stylistic device at this period; the cuneiform tablets are content with the nomen The cuneiform tablets make no distinction of title between the kings of Egypt and Hatti-land; they are šarru rabû šar mat Mi-is-ri-i 'great king, king of Misr (Egypt)' and

¹ For a careful investigation of the problem here adumbrated see the book by M. Burchardt, *Die Altkanaanüischen Frendworte und Eigennamen im Aegyptischen*. Leipzig, 1909.

² See below, p. 203; not in the treaty itself. The *prenomen* signified 'Power-is-the-truth-of-Rē¢,' and the *nomen* 'Rē¢-gave-birth-to-him-beloved-of-(the god)-Amūn.'

³ See below, p. 204, end.

**sarru rabû **sar **mat ##a-at-ti 'great king, king of Ḥatti,' as the case may be; whereas the hieroglyphic copies have, in the one case 'the great ruler (\(\frac{h}{k}\) of Egypt' and, in the other, 'the great chief (\(\frac{h}{k}\) of Ḥatti,' with the less honorific term always applied to the Syrian and other foreign princelings.

As regards divine names, both the Hittite and the Egyptian versions exemplify the practice, almost universal in antiquity, of translating these into the indigenous equivalents. In our renderings we have perforce followed suit; the Egyptian sun-god, Prē^C, 'the Rē^C,' the sun' appears in the Boghazköi texts as Šamaš, the Semitic name of the sun-god; the Hittite god of thunder, Tešub, is represented at Thebes by Sētekh, the stranger-god par excellence, an equivalence which, from the Egyptian point of view, gained rather than lost through the sinister association with the enemy of Horus and Osiris.

We now proceed to the translation of the texts, appending to each section or paragraph such commentary as is necessary. The Egyptian version has an explanatory introduction (ll. 1—4) and a heading (ll. 4—5), which are not in the parallel texts from Boghazköi; the internal evidence would suffice to show that they were not translated, but composed by an Egyptian scribe.

It is important to note, from the outset, that the cuneiform version places Ramesses in the foreground as the principal contracting party; and he therefore sometimes uses the first person (ll. 7, 16). In the hieroglyphic version, on the other hand, it is Hattušili who employs the pronoun of the first person (ll. 10, 11, 14, 26), and his name and land are mentioned before Pharaoh and Egypt. This agrees with the statement l. 4 (cf. l. 3) that the Karnak stela gives the translation of the silver tablet sent to Ramesses by Hattušili. In §§ 6—9 this reversal of rôles leads to the position that while the paragraphs retain their regular sequence in both versions, in actual substance Babylonian § 6 corresponds to Egyptian § 8, and Babylonian § 7 to Egyptian § 9.

EXPLANATORY INTRODUCTION (Eg. only).

- (1) Year 21, first month of winter, day 21, under the Majesty of the King of Upper and Lower Egypt Usima recesstreet, son of Rec, Racmesse-mi-Amūn, granted life eternally and forever, beloved of Amen-Rec, Ḥarakhte, Ptaḥ South-of-His-Wall, lord of Conkhtowe, Mut lady of Ishru and Khons-Neferhotpe, being arisen upon the Horus-throne of the Living like his father Ḥarakhte eternally and for evermore.

¹ The pronoun of the second person is also once employed, referring to Hattušili; see l. 32.

This introduction is almost pure cliché; Egyptian historical stelae regularly begin with a date and titles, these being followed by an indication of the momentary residence and occupation of the Pharaoh when the situation to be envisaged arose. The date of year 21 is, of course, important; Ramesses was, as usual, residing at his northern capital by the Pelusiac river-mouth, at or near Pelusium¹. The passage giving the names of the envoys is, unhappily, damaged beyond possibility of restoration. It would look as though two Egyptian military officers, perhaps commanders on the Egyptian frontier, accompanied the Hittite envoys into the presence of Pharaoh. The injured names of those envoys are a puzzle. From a passage below (l. 5) we learn that the tablet of silver was brought by the two envoys of the chief of Hatti Tartešub (T-r-t-s-b) and Ra'mōse—this last a purely Egyptian name. In the present passage the name of the first envoy² might indeed be emended to [T-r]-t-s-b (Tartešub), but that of the second was certainly not Ra'mōse, but a name ending with the characteristically Hittite termination -sil (Max Müller saw Y-?-s-r); between this and the epithet 'the messenger of Hatti' in front of it are some unintelligible foreign words ...n-l...?-y-m(?)-s regarded by Max Müller as a Semitic honorific title; Roeder (op. cit., p. 36) suggests '[Karke]mish' for the second word, a conjecture for which reference to the original is required.

Max Müller (op. cit., pp. 23-5) argues that the words dbh htpw 'to beg peace' here and below l. 5 have beguiled Egyptologists into a wrong view of the treaty as a whole; this is not a treaty of peace—one terminating a war—but a treaty of alliance. It is true that the phrase in question is a commonplace of Egyptian style³, and that every Egyptian scribe would naturally represent the foreigner as suing for peace; none the less it may in this case have corresponded roughly to the actual political situation (see below, pp. 201-5).

HEADING TO THE EGYPTIAN TRANSLATION OF THE TREATY.

Copy of the tablet of silver which the great chief of Hatti, Hattušili, caused to be brought to Pharaoh by the hand of his messenger (5) Tartešub (T-r-t-s-b) and his messenger $Ra^{\epsilon}m\bar{o}se$, in order to beg peace from the Majesty [of $Usima^{\epsilon}r\bar{e}^{\epsilon}-setpenr\bar{e}^{\epsilon}$], son of $R\bar{e}^{\epsilon}$, $Ra^{\epsilon}messe-mi-Am\bar{u}n$, bull of rulers, who makes his boundary where he will in every land.

The word 'copy' here, of course, means translation. On the 'tablet of silver' sent by the king of Hatti, see below. The Egyptian origin of this section is again betrayed by the use of the words 'to beg peace'; and the final epithets of Ramesses are essentially Egyptian.

§ 1. Preamble of the actual Treaty.

Hittite-Babylonian Text.

(1) [And so be it. Riamašeša-mai-] Amana, the great king, king [of Egypt, the strong], (2) [with Hattušili, the great king], king of the land Hatti, his brother, in order to give good peace, (3) [good brotherhood and to obtain] a mighty [king]dom(?) between them as long as we' [live] (and) [forever] (4) [a treaty] has made.

Egyptian Text.

The treaty⁵ which the great prince of Hatti, Hattušili, the strong, the son of Muršili, (6) the great chief of Hatti, the strong, the son of the son of Šubbi[luliuma, the great chief of Hatti, the str]ong, made upon a tablet of silver for Usima^crē^c-setpenrē^c, the great ruler of Egypt, the strong, the son of Menma^crē^c, the great ruler of Egypt, the strong, the son of the son of Menpeḥtirē^c, (7) the great ruler of Egypt, the strong: the good treaty of peace and brotherhood, giving peace [and brotherhood (?)...... between us by means of a treaty (?) of Hatti with Egypt]⁶ forever.

- ¹ See this Journal, Vol. v, p. 181, § 4.
- ² There is the additional difficulty that there is barely room for the words 'messenger of Hatti' before this first name; nor is the reason for the *prenomen* of Ramesses II that precedes at all apparent.
 - ³ E.g., Sethe, Urkunden, IV, 332, 333.
 - ⁴ The language of the Semitic texts from Boghazköi is remarkably inexact in its use of pronouns.
 - ⁵ Nt-^c; this Egyptian word means something like 'ordinance,' 'prescription,' 'arrangement.'
 - ⁶ The proposed restoration is based on the last words of the section in the Babylonian version.

Hittite-Babylonian Text.

Riamašeša-mai-Amana, the great king, king of Egypt, the strong in all lands, son [of] (5) Minmuaria, the great king, king of Egypt, the strong, son of the son of Minpahiritaria, the great king, (6) [king of Egy]pt, the strong, unto Hattušili, the great king, king of the land Hatti, the strong, the son of Muršili, the great king, (7) king of the land Hatti, the strong, son of the son of Šubbiluliuma, the great king, king of the land Hatti, the strong, behold now I give (8) [good] brotherhood, good peace between us forever, in order to give good peace, good brotherhood (9) by means of [a treaty(?)] of Egypt with Hatti forever. So it is.

Egyptian Text.

The two versions agree substantially in content, and there is a close correspondence in the phraseology. The main difference is that the cuneiform text reserves the filiation for a second sentence, this entailing the introduction of a second main verb with its adjuncts. In this place the Egyptian text alone speaks of a tablet of silver, see below, p. 189; but the cuneiform tablet has a similar reference in l. 14.

§ 2. THE TREATY IS THE RESUMPTION OF OLD PEACEFUL RELATIONS.

Hittite-Babylonian Text.

Behold, the policy of the great king, king of Egypt, (10) [and of the great king], king of Hatti since eternity—god did not permit the making of hostility between them, (11) [by means of a treaty] forever.

Egyptian Text.

Now aforetime, since eternity, as regards the policy of the great ruler of Egypt and the great chief of Hatti—the god did not permit hostility to be made between them, by means of a treaty.

But in the (8) time of Muwattalli, the great chief of Hatti, my brother, he fought with [Racmesse-mi-Amūn], the great ruler of Egypt.

Behold, Riamašeša-mai-Amana, the great king, king of Egypt, in order to make the policy (12) [which Śamaš and] Tešub made for Egypt with the land Hatti because of his policy which is from eternity, (13) wickedly (?) [will not become host] ile to make hostility between them unto everlasting and unto all (time)³.

But hereafter, beginning from this day, behold Ḥattušili, the great chief of Ḥatti, is [in?] a treaty for making permanent the policy which Prec made and Setekh made for the land of Egypt (9) with the land of Ḥatti, so as not to permit hostilities to be made between them forever.

The correspondence of the versions is again close, except for the addition of the historical reference in the Egyptian. The formulation of the last paragraph differs in the two cases, but the substance is identical.

- 1 Tēmu, properly 'counsel,' 'plan,' just like the Eg. translation shr. Since both words express the attitude adopted towards anything, 'policy' seems a suitable rendering.
 - ² Historical present. ³ Meissner explains kul as a Canaanitish word, Hebrew kôl.
 - ⁴ Literally translated from the Babylonian, see below, p. 189, n. 3.

Journ. of Egypt. Arch. vi.

§ 3. Declaration of the New Treaty.

Hittite-Babylonian Text.

(14) Riamašeša-mai-Amana, the great king, king of Egypt, has made himself in a treaty upon a silver tablet (15) with Hattu-šili, the great king, king of the land Hatti, his brother, from this day to give good peace and good brotherhood (16) between us forever; and he is a brother to me and at peace with me, and I am a brother to him and at peace with him (17) forever.

And we have made brotherhood, peace and goodwill more than the brotherhood and peace of former times, (18) which was between [Egypt and] Ḥatti.

Behold, Riamašeša-mai-Amana, the great king, king of Egypt, is in good peace and good brotherhood (19) with Hattušili, the great king, king of the land Hatti.

Behold, the sons of Riamašeša-mai-Amana, the king of Egypt, (20) are at peace (and) are bro[thers with] the sons of Hattušili, the great king, king of the land Hatti,

forever; and they are according to our policy (21) of [our] brotherhood [and] our peace.

And Egypt with the land Hatti—they are at peace, they are brothers like us forever.

Egyptian Text.

Behold, Hattušili, the great chief of Hatti, has made himself in a treaty with $Usima^{\zeta}r\bar{e}^{\zeta}$ -setpenr \bar{e}^{ζ} , the great ruler of Egypt,

beginning with this day, to cause to be made good peace and good brotherhood between us forever; (10) and he is in brotherhood with me and at peace with me, and I am in brotherhood with him and at peace with him forever.

And since Muwattalli, the great chief of Hatti, my brother, hastened after his fate², and Hattušili took his seat as (11) great chief of Hatti on the throne of his father; behold I have become with Racmesse-mi-Amūn, the great ruler of Egypt, we (?) being [together in?] our peace and our brotherhood; and it is better than the peace and the brotherhood of formerly, which was in the land³.

Behold, I, being the great chief of Hatti, am with (12) [Racmesse-mi-Amūn], the great ruler of Egypt, in good peace and good brotherhood.

And the children of the children [of] the great chief of Hatti shall be $(?)^5$ in brotherhood and at peace with the children of the children of Ra^{ϵ} messe-mi- $Am\bar{u}n$, the great ruler of Egypt;

they being in our policy of brotherhood and our policy (13) [of peace].

[And the land of Egypt?] with the land Hatti [shall be?] at peace and in brotherhood like us forever; and hostilities shall not be made between them forever.

- ¹ Note that the Egyptian translates the Babylonian reflexive quite literally.
- ² This utterly non-Egyptian phrase is a clear translation of a common Babylonian expression; for the entire sentence cf. KTB, I, No. 8, 16 ki-i-me-e Nir-gál šarru rabû [a-na] ši-im-ti-šu il-li-gu a-na-ku Ḥa-at-tu-ši-li ana iṣu-kussî a-bi-ja at-ta-šab 'When Nirgal (=etillu, the hero, title of Muwattalli), the great king, went to his fate, I, Ḥattušili, sat upon the throne of my father.' Further on, note that the change to the 1st person is characteristic of Babylonian.
- ³ On the strength of the Boghazköi text one is tempted to think that some words have been omitted here: 'which was in the land of Hatti with the land of Egypt'.'
- ⁴ It seems impossible to quote any exact parallel for this use of the m of definition; but in defence of our interpretation one may perhaps cite $kr \cdot f m \not Bt$ 'he said, namely the Vizier.'
 - ⁵ One expects ir at the beginning of the sentence as in ll. 15, 24, 32; but Sethe saw traces of ____.
- ⁶ Restore [ir p3 t3 n Kmt]? But Max Müller gives some puzzling traces at the end of the lacuna, which Sethe similarly saw and interpreted as n3.

The two versions here are closely parallel, except for the addition of the reference to the death of Muwattalli and the accession of Hattušili in the Egyptian text, following up the similar reference in § 2. The Babylonian version makes allusion to a tablet of silver sent by Ramesses to Hattušili, the counterpart of that named in earlier sections of the Egyptian version as sent by Hattušili to Ramesses.

§ 4. MUTUAL ASSURANCES WITH REGARD TO INVASION.

Hittite-Babylonian Text.

(22) And Riamašeša-mai-Amana, the great king, king of Egypt, shall not trespass¹ into the land Hatti to take aught (23) from therein [forever]; and Hattušili, the great king, king of the land Hatti, shall not trespass into Egypt (24) to take aught from therein [forever].

Egyptian Text.

And the great chief of Hatti shall not trespass into the land of Egypt forever to take aught from it; and Usima crec-setpenrec, the great ruler of Egypt, shall not trespass into the land (14) [of Hatti to take] (aught) from it forever.

Here there is complete correspondence, except for the omission of the specific name of Hattušili in the Egyptian.

§ 5. Formal Renewal of the former Treaty.

Hittite-Babylonian Text.

Behold, the decree of eternity which Śamaš and Tešub have made (25) for Egypt and the land Ḥatti [to make peace] and brotherhood in order not to give hostility between them³.

Egyptian Text.

As to the

regular⁴ treaty which there was in the time of Šubbiluliuma, the great chief of Hatti, and likewise the regular treaty which was in the time of Muwattalli (sic!), the great chief of Hatti, my father, I take hold of it. Behold, Ra^cmesse-mi-Amūn, the great ruler of Egypt, takes hold (15) [of the peace (?) which it (?)] makes⁵ together with us from this day;

and we

will act according to this regular policy.

- (26) And behold, Riamašeša-mai-A[mana, the great king], king of Egypt, takes hold of it to make peace from this day.
- (27) Behold, Egypt and Hatti [are at peace, and] they are brothers forever⁶.
- ¹ The Egyptian version has 'trespass,' confirming the connection of ukarra with the stem קרה 'attain,' in Arabic 'strive towards,' 'wander' from land to land. Note also in an astrological text, Jupiter ana kakkab narkabti lu ik-ri-im 'approached unto the Waggon-star.'
- ² Nkt was perhaps erroneously omitted from the Egyptian text, as there does not seem room for it in the lacuna.
- ³ a-na la-a na-da-a-ni nakrûta i-na be-ri-šu-nu is evidently the phrase that was translated r tm dit hpr hrwy r iwd-sn in Eg. l. 9.
- 4 Mty is not to be rendered with Breasted as 'former,' but rather as 'regular,' 'normal,' almost 'traditional.'
- ⁵ Sethe sees traces of iir f at the end of the lacuna; owing to $irm \cdot n$ following it would seem as though pi nt f must be the subject of the relative form.
 - ⁶ Cf. l. 21. Meissner restores differently.

The divergences here are considerable. While the Egyptian version, following its wont, harks back to earlier history, the Hittite-Babylonian substitutes, in the first paragraph, very nearly the same words as were read at the end of §2 in the Egyptian version (l. 9). Further on, the adhesion of the contracting parties to the treaty is expressed in the Babylonian by the graphic verb $\mathfrak{s}ab\mathfrak{d}tu$, 'grasp,' 'seize'; the Egyptian renders mechanically by $\mathfrak{m}k$ \mathfrak{m} , a metaphorical use not in accordance with Egyptian idiom¹. At the end, the Babylonian has a phrase encountered already in § 3, while the Egyptian differs.

The characteristically careless mistake made in l. 14 of the Egyptian version has escaped but few of the modern commentators; de Rougé² wished to correct 'my father' into 'my brother' (see above Eg. l. 10), but Max Müller and, more hesitatingly, Breasted have proposed to replace Muwattalli by Muršili. There can be hardly any doubt but that the latter alternative is right; Hattušili is referring to the old harmonious days before Muwattalli broke the peace with Egypt.

\S 6. Undertaking of a Defensive Alliance (cf. \S 8).

Hittite-Babylonian Text.

And if another enemy (28) come [against] the land Hatti, and Hattušili, [the great king of the land Hat]ti, send to me saying, 'Come unto me (29) for [my] help against him'; then Ri[amašeša-mai-Ama]na, the great king, king of Egypt (30) shall send his troops (and) his chariots and shall slay [his enemy and] he shall restore [con] fidence (?) to the land Hatti.

Egyptian Text.

And if another enemy come to the lands of Usima crēc-setpenrēc, the great ruler of Egypt, and he send to the great chief of Ḥatti saying, 'Come with me as help against him'; the great chief of Ḥatti shall (16) [come to him], the great chief of Ḥatti [shall] slay his enemy.

But if it be not the desire of the great chief of Hatti to come, he shall send his troops and his chariotry and shall slay his enemy.

A clause (§ 7) dealing with the common action to be taken against the rebellious subjects of one of the contracting parties intervenes before the reciprocal passage corresponding to § 6 is reached; and our § 9 again is reciprocal to our § 7. For this reason it might have been more strictly in accordance with the intention of the framers of the treaty to regard §§ 6–7 and §§ 8–9 each as a unity³. In § 6 and § 8 the Egyptian version expands so as to envisage the possibility that the allied king might not desire to come in person. Apart from this, there are hardly any differences in the phraseology to be noted.

\S 7. Common Action to be taken against Rebellious Subjects (cf. \S 9).

Hittite-Babylonian Text.

(31) And if Hattušili, the great king, king of the land Hatti, [become incensed] against servants of his [and they] sin against him, (32) and thou send to Riamašeša, the great king, king of [Egypt] concerning it;

Egyptian Text.

Or if Ra^cmesse-mi-Amūn,(17)[the great ruler of Egypt], become incensed against servants of his⁴, and they do another offence against him,

and he go to slay his enemy;

- ¹ Max Müller had brilliantly guessed the Babylonian original, see op. cit., p. 13.
- ² Oeuvres Diverses, Vol. IV, p. 13. This is further suggested by the word 'or' in Eg. l. 16.
- ⁴ The Eg. s'wy was long a crux interpretum until it was shown to be the personal pronoun third pers. sing. with emphatic meaning; see Zeitschr. f. üg. Sprache, Vol. L (1912), pp. 114-117. The Babylonian version now admirably confirms this discovery.
 - ⁵ That the apodosis does not begin here is shown by mtw Remssw-mi-Imn [h3b] in Eg. 1. 19 (§ 9).

Hittite-Babylonian Text.

Egyptian Text.

straight[way] Riamašeša-mai-Amana (33) his troops (and) his chariots shall send, and they shall destroy all [of them] against whom [thou art become incensed].

the great chief of Hatti shall act with him [to destroy] everyone [against whom] they shall be incensed.

Here it will be seen that the divergences of phraseology are considerable, while the sense is substantially identical in both versions.

§ 8. RECIPROCAL CLAUSE CORRESPONDING TO § 6.

Hittite-Babylonian Text.

Egyptian Text.

But [if] another enemy [come] against the great chief [of Ḥatti];

[And if] another enemy come (34) against Egypt, and Riamašeša-mai-Amana, the king of Egypt, thy brother, [send] to Hattu-šili, (35) king of the land Hatti, his brother, saying, '[Co]me for my help against him'; straightway then shall Ha[ttušili], king of the land Hatti, (36) send his troops (and) his [chariots]; he [shall slay] my enemy.

[then shall Usi]ma^c[re^c]-setpenre^c (18) [the great ruler of Egypt] come to him as help to slay his enemy.

Besides other minor variations, the Egyptian text contains the alternative already mentioned in § 6.

§ 9. RECIPROCAL CLAUSE CORRESPONDING TO § 6.

Hittite-Babylonian Text.

And if Riamašeša, [the great king, king] of Egypt, (37) become incensed against servants of his, and they commit sin against [him, and I send] (38) to Ḥattušili, king of the land Ḥatti, my brother, concerning [it];

then Hattušili, the great king, king of Egypt, (39) shall send his troops (and) his chariots and they shall destroy all [of them]; and I will......(?).

Egyptian Text.

But if servants of the great chief of Hatti trespass against him,

and	$Ra^{\epsilon}mes[se]$ - mi - $Am\bar{u}n$,	[the	great
ruler of H	[gypt,]		

Obviously the two versions here differed considerably, but the Egyptian text is too incomplete to make a close comparison. See the notes on § 10.

- ¹ The traces here seen by Sethe combine admirably with the Hittite-Babylonian version to produce an intelligible sense.
 - ² The word 'not' is carelessly omitted in the hieroglyphs.
- ³ Restored from l. 16, with the Babylonian text both in § 6 and in § 8. There is no means of restoring what precedes.

§ 10. A CLAUSE RELATING TO SUCCESSION (?).

Hittite-Babylonian Text.

(40) And behold the son of Hattušili, king of the land Hatti, [the treaty which] we (?) have
made(41) in the place of Hattušili, his father, after years
(42)of the land Hatti have committed sin(43)
chariots where (?) shall I return(44)in the land
Hatti(?)
(The text breaks off here.)
Egyptian Text.
the [land] of Hatti (and) the land (?) [of Egypt](20)the life. Supposing (?) I shall go after [my] fate ¹ , then (?) Ra ^c messe-mi-Amūn, the great ruler of Egypt,
living forever, shall act(?)coming(?) [to] the [land of Hat]ti
to cause to make (?)2(21)them (?) to make him for themselves to lord,
so as to cause $Usima^{\epsilon}r\bar{e}^{\epsilon}$ -setpen $[r\bar{e}^{\epsilon}]$, the great ruler of Egypt, to be silent with his mouth for-
ever. And afterthe land of Hatti and he return (?) to place (?) the great chief of Hatti
and similarly the

In both texts a passage is now reached so fragmentary that its contents are purely a matter of conjecture. Meissner (op. cit., p. 293) has suggested that the Babylonian text stipulated that Ramesses should recognize as Hattušili's successor the son chosen by that ruler during his lifetime: and he quotes a provision of this kind in the treaty between a Hittite king and Šunaššura, king of Kizuwadna (KTB, 1, 5, rev. 52 foll.). The Egyptian text, the crucial words of which have been misunderstood hitherto⁴, tends to confirm the general notion implied by this view, though it is clear that both versions differed greatly in their verbal expression. From the Egyptian fragments one may conjecture that Hattušili is considering the case that he should have died and Hatti should have selected a ruler not in accordance with his choice. Later on, there is question of some persons who apparently wish to annul or stultify the words or promise of Ramesses. The text is too defective for further discussion to be profitable.

§ 11. Extradition of Important Fugitives.

Egyptian Text.

[If any great man flee from the land of Egypt and he come to the lands of (?)]⁵ the great chief of Hatti; or a town (22) (or a district.....)⁶ [belong]ing to the lands of Ra^cmessemi-Amūn, the great ruler of Egypt, and they come to the great chief of Hatti: the great chief of Hatti shall not receive them. The great chief of Hatti shall cause them to be brought to Usima^crē^c-setpenrē^c, the great ruler of Egypt, their lord, [on accou]nt of it.

From this point onwards the Hittite-Babylonian text fails us, but the close resemblance to the hiero-glyphic version presented by it in previous paragraphs affords a solid basis for restoring its general drift. Corresponding provisions in other tablets from the Boghazköi archives will be quoted whenever occasion arises. The extradition clauses §§ 11–14 present the same kind of arrangement as the clauses relating to enemies and rebels above §§ 6–9, a clause (§ 12) dealing with fugitives of humble birth intervening before the reciprocal clauses (§§ 13–14) are reached. In the lost cuneiform counterpart, § 11 will naturally have

- ¹ Read iw-ir smt[m]sf [ps]y siy, see above, p. 188, n. 2, for this expression.

 ² Read r rdyt iry?
- ³ No Babylonian equivalent for this striking phrase appears to be forthcoming.
- 4 See above, note 1.
- ⁵ For the restoration see l. 23, where, however, there is but scanty room for '[to the lands of].' Roeder understands 'comes to' (the king of Hatti or Egypt) in the two passages; this is possible.
- ⁶ The words *r-pw w^ε k^εh r-pw.....* found in the parallel section 1. 23 should perhaps be restored here, but there is no room for them in the lacuna.

referred to the extradition of important fugitives belonging to Hatti. The supplementary clauses §§ 17,18 elaborate §§ 11–14, and should be read in connection with them.

§ 12. Extradition of Fugitives of Humble Birth. Egyptian Text.

Or if one man or two men who are unknown flee (23).....², and they come to the land of Hatti to be servants of another, they shall not be left in the land of Hatti, they shall be brought to Ra^{ϵ} messe-mi- $Am\bar{u}n$, the great ruler of Egypt.

There is a similar provision in the well-preserved copy of a treaty between Šubbiluliuma and Mattiuāza, king of Mittanni, KTB, No. 1, reverse, 9-13. Šum-ma amelumu-un-na-bi-du iš-tu mat alu Ḥa-at-ti in-[na-bit ù ana mat alu Mi-it-ta-an-ni il-la-ak mārê mat Mi-it-ta-an-ni] (10) ú-da-ar-ru šum-ma amelumu-un-nabi-id-du ša mat alu Mi-[it-ta-an-ni in-na-bit ù ana mat alu Ha-at-ti il-la-ak] (11) šar mat alu Ha-at-ti ul i-ṣa-bat-zu ul á-da-ar-šu ul par-zu ša ^{ilat}Šamaš ^{alu}A-ri-[in-na ina eli-šu l] (12) bit-tum ša Mat-ti-á-a-za mar šarri i-na mat alu Ha-at-ti i-ip-pu-uš amelumu-un-na-ab-ta......(13) a-na âli pan Mat-ti-u-a-za mar šarri u-še-iš-ša-ab-šu a-na mat alu Ha-at-ti-ma. 'If a fugitive flee from the land of the city Hatti [and come to the land of the city Mittanni, the sons of Mittanni] (10) shall return him. If a fugitive of the land of the city Mittanni flee and come unto the land of the city Hatti], (11) the king of the land of the city Hatti shall not seize him, neither shall he return him, the laws of the sun-goddess of the city Arinna [do not apply to him]. (12) A house (of refuge?) for Mattiuaza, son of the king, in the land of the city Hatti, he (Subbiluliuma) shall build. A fugitive.....(13) he shall cause to dwell in the land of the city Hatti in a city in the presence of Mattiuāza3.' The peculiarities of this clause are due to the fact that Mattiuāza, who had been placed on the throne of Mittanni by the Hittite king, ruled over an unstable country that had been at war with Hatti and had just been pillaged by the Assyrians. It is important to note that by the laws of the sungoddess of Arinna fugitives were bound to be restored to their native land.

§ 13. RECIPROCAL CLAUSE CORRESPONDING TO § 11. Egyptian Text.

Or if a great man flee from the land of Hatti, and [he come to the lands of $(?)^4$ Usi]ma $([r\bar{e}^{\zeta}]$ -setpenr(c, the [great] ruler of Egypt; or a town or a district or <math>(24).....

- ¹ Roeder and others have translated the first r-pw as 'either'; for this there seems to be no justification.
- ² Max Müller shows a lacuna, but it is not large enough for his restoration '[from the land of Egypt]'; the reciprocal clause l. 24 has 'flee' without any addition.
- ³ This passage, which was first translated by Böhl, *Theologische Tijdschrift*, 1916, p. 177 and first compared with the Egyptian treaty by Meissner, *Der Staatsvertrag*, p. 293, is defectively preserved and the restorations here given are not altogether certain.
 - ⁴ Doubtful; see above, p. 192, n. 6.

belonging to the land of Hatti, and they come to Ra^{ϵ} messe-mi- $Am\bar{u}n$, the great ruler of Egypt: $Usima^{\epsilon}r\bar{e}^{\epsilon}$ -setpenr \bar{e}^{ϵ} , the great ruler of Egypt, shall not receive them. Ra^{ϵ} messe-mi- $Am\bar{u}n$, the great ruler of Egypt, shall cause them to be brought to the chief.........¹ they shall not be left.

The same difficulty of interpretation occurs here as occurred in § 11, where it was fully discussed.

§ 14. RECIPROCAL CLAUSE CORRESPONDING TO § 12.

Egyptian Text.

Likewise², if one man or two men (25) who are [not] known flee to the land of Egypt to be subjects of others, $Usima^{\zeta}r\bar{e}^{\zeta}$ -setpenr \bar{e}^{ζ} , the great ruler of Egypt, shall not leave them; he shall cause them to be brought to the great chief of Hatti.

§ 15. THE GODS OF HATTI AND EGYPT ARE WITNESSES TO THE TREATY.

Egyptian Text.

As for these words of the treaty [made by (?)] the great chief of Hatti with Racmes[semi- $Am\bar{u}n$, the great ruler (26) [of Egypt, in] writing upon this tablet of silver³; as for these words, a thousand gods, male gods and female gods of those of the land of Hatti, together with a thousand gods, male gods and female gods of those of the land of Egypt they are with me as witnesses [hearing (?)]⁴ these words: $Pr\bar{e}^{\xi}$, the lord of the sky; $Pr\bar{e}^{\xi}$ of the town of Arinna ('I-r-n n); (27) Setekh, the lord of the sky; Setekh of Hatti; Setekh of the town of Arinna ('I-r-[n]-n); Setekh of the town of Zippalanda (D-p-i-r-n-d); Setekh of the town of Betiarik (P-?-r-k); Setekh of the town of Hissashapa (H-s-s-p); Setekh of the town of Sarissa (S-r-s); Setekh of the town of Halab (H-r-p); Setekh of the town of Lihzin, (R-h-s-n); Setekh (28) of the town of...r(?)...; Setekh [of the town of.....; Setekh of the town] of [S?]-m(?)-s; Setekh of the town of S-h-p-n; Astarte of the land of Hatti; the god of Zithariaš (D-1-t-hr-r-y); the god of Karziš (?) (K-r-d-nr?); the god of Hapanta[ri]aš (Hr-p-n-t-r-v-s); (29) the goddess of the town Karahna (K-?-h-n); the goddess of Tyre (D-r); the goddess of ?-w-k(?); the goddess of D-n-?; the god of P(?)-n-t; the god of ?-r; the god of H-?-b-t'; the queen of the sky; the gods lords of swearing's; this goddess, the mistress of the earth; the mistress of swearing Ishara ('I-s-h-r)⁹; the mistress of $\langle ... \rangle$; (30) $\langle the \rangle$ mountains and the rivers of the land of Hatti; the gods of the land of Kizuwadna (K-d-w-d-n); $Am\bar{u}n$; $Pr\bar{e}^{\zeta}$; $S\bar{e}tekh$; the male gods and the female gods; the mountains and the rivers of the land of Egypt; the sky; the earth; the great sea; the winds; the clouds.

- ¹ With the text as given in Sethe's collation it is not possible to restore 'the [great] chief [of Hatti].'
- ² The use of *m mitt* to begin the clause seems un-Egyptian and is perhaps due to over-literal translation of the cuneiform original. Neither here nor in l. 34 does it seem possible to construe *m mitt* as the end of the foregoing section.
- ³ Roeder, overlooking the demonstrative 'this,' translates 'they shall be written on a tablet of silver' and wrongly ends the clause here.

 ⁴ Perhaps restore sdmw 'hearing.'
 - 5 I.e. 'the Rec,' or 'the Sun'; $p\slash\!\!/\,, (p)$ is here the definite article.
 - ⁶ Written $\leftarrow n t r t$; the n is a mere sculptor's error for s, as Max Müller and others have recognized.
 - ⁷ H-[n]-b-t or H-[r]-b-t are both possible.
- ⁸ Max Müller has a wrong reading here, and Sethe's collation modifies several of the geographical names in the preceding lines, as will be seen from Pl. XVIII.
- ⁹ The first group is confirmed by a Berlin photograph quoted by Meissner, *Der Staatsvertrag*, p. 295.

To turn now to detailed comparisons; the translated Egyptian text is here printed in italics:

A thousand gods, male gods and female gods of those of the lund of Hatti]. The Hittite-Mittanni treaty has: 'The male gods, the female gods all of them of the land of the city Hatti, the male gods, the female gods all of them of the land of the city Kizuwadna³.' The Hittite-Nuḥašše treaty has: 'The male gods, the female gods all of them of the land of the city Hatti, the male gods, the female gods all of them of the land of the city Kizuwadna, the male gods, the female gods all of them of the land of Nuḥašše, the gods of eternity all of them.⁴'

Prēc (i.e. 'the Rēc,' 'the sun'), the lord of the sky]. In Hittite treaties the list of gods usually opens: itatSamši aluArinna ša ina mat aluḤatti šarrutta ù šarratutta uma'ar iluŠamaš bel šamē, 'The sun-goddess of Arinna who in the land of the city Ḥatti sends kingship and queenship, the sun-god, lord of the heavens⁵.'

Prēc of the town of 'I-r-n-n]. So too below, l. 38. See the last note. The solar deity of the important city of Arinna was apparently the patron divinity of the Hittite kings; Muršili, the father of Ḥattušili, appeals to her in battle just as the Assyrian kings appeal to Ishtar. This deity was clearly a goddess; note KTB, III, No. 4, 21-5, where she is called beltu 'queen,' and see F. Hrozny, Hethitische Texte, p. 170. The town of Arinna is regularly written alu PÚ-na in the Hittite tablets, see op. cit., pp. 46, 51 and passim. Sayce (Proc. Soc. Bibl. Arch., vol. XXIII (1901), p. 98) correctly identified Arinna with the city Arini in Kumanu (Comana), south of the Anti-Taurus and on the river Sarus in Cappadocia; captured by Tiglathpileser I about 1120 B.c., see King, Annals of the Kings of Assyria, 76-76. It fell to Shalmaneser I, who reigned not later than 1300 B.C., and who was apparently contemporary with Sethos I and Muwattalli, brother of Hattuśili, see Luckenbill, Amer. Journ. Sem. Lang., Vol. xxviii, p. 162 and p. 187, l. 6: Shalmaneser here claims that Arinna had been previously subject to Assyria and had revolted; that can only refer to the conquest of Mittanni and Muşru by Ašuruballit II (circa 1418—1370 B.C.), a contemporary of Šubbiluliuma and of Amenophis III and IV. When the Assyrians conquered the Mittanni region at the end of the Fifteenth and at the beginning of the Fourteenth Centuries they seem to have penetrated into Hittite country beyond the Taurus. Arinna occurs in the geographical list of Boghazköi, published by E. CHANTRE, Mission en Cappadoce, pp. 46-7, l. 14.

Sētekh, the lord of the sky]. Cf. in the Hittite treaties ilu Tešub bêl šamê û irşitim 'Tešub, lord of heaven and earth,' KTB, I, 7, 54=11, 30; or 'Tešub of heaven and earth,' 14, 23. For the identification of Hittite Tešub with Egyptian Sētekh, see above, p. 185.

Setekh of Hatti]. Cf. itu Tešub bei mat Hatti 'Tešub, lord of the land Hatti,' KTB, I, 11, 18, where the variant has atu Hatti 'the city Hatti,' I, 7, 40; Hrozný, Hethitische Texte, 236, 15.

Setekh of the town of 'I-r-[n]-n]. Apparently not yet found in the Hittite sources.

Sētekh of the town of D-p-i-r-n-d]. Cf. Tešub of the city Zippalanda, Hrozný, op. cit., 236, 15.

Setekh of the town of P-?-r-k]. Cf. iiu Tešub alu Be-te-ja-ri-ik, KTB, I, 7, 41; Be-it-ti-ja-ri-ik, I, 11, 19;

- ¹ This formula is to be found KTB, I, 7, 35-9: the formula ina libbi amāte occurs op. cit., 8, 58-9. The duplicate 11, 34 more correctly separates the invocation from the curse by a line. See also 14, 8.
 - ² KTB, 1, 21, 36-8.
- ³ KTB, I, 7, 51; see another Hittite-Mittanni treaty, op. cit., 14, 5. Both these Hittite treaties mention 'one thousand gods' in the curse, 8, 68; 14, 17 (li-im ilani).
 - ⁴ KTB, I, 21, 30–33. ⁵ KTB, I, 7, 40=11, 17 foll.
 - ⁶ See too Garstang in Liverpool Annals of Archaeology and Anthropology, Vol. vi, pp. 109—115.

Journ. of Egypt. Arch. vi.

[Be-te-]ia-ri-ik, I, 20, 7. Meissner, Staatsvertrag, p. 294, makes the same identification, although the substitution of four short strokes for the t in the Egyptian transcription is unexplained.

Sētekh of the town of H-s-s-p]. Cf. ilu Tešub alu Hiššašhapa, KTB, 1, 7, 43.

Sētekh of the town of S-r-s]. Cf. ilu Tešub alu Sa-ri-eš-ša, KTB, 1, 7, 42; 20, 8; 11, 20: hardly to be identified with Sareisa, Sarisa on the Tigris mentioned by Strabo, vi, i, 24.

Sētekh of the town of H-r-p]. I.e. Aleppo, cf. ilu Tešub alu Hal-ab, KTB, I, 7, 42.

Sētekh of the town of R-h-s-n]. Cf. ilu Tešub ilu Li-ih-zi-na, KTB, I, 7, 42.

Sētekh of the town of [S?]-m (?)-s]. Sētekh of the town of S-h-p-n]. Unidentified; for the latter perhaps of. ilu Tešub alu[Ša-ah-]bi-na (?), KTB, 1, 7, 43.

Astarte of the land of Hatti]. Both in the Amarna letters and on the Hittite tablets the name of the Assyrian Ištar and the West-Semitic $\$ Aštoreth is written with an ideogram, but the western pronunciation is probable in both cases. Tušratta, king of Mittanni, calls her 'my lady,' written $A\dot{S} + DAR$, the usual ideogram for the stellar deity, Knudtzon, El-Amarna, 146, 25. The same king writes her name NINNI with the ideogram usually employed for the mother-goddess, op. cit., 152, 15; 178, 13, where she is called Ištar of Nineveh. The ideogram $A\dot{S}$ -DAR is that employed in Hittite $i^{tat}A\dot{S} + DAR$ multarrihu 'Ištar the shining,' i.e. the goddess Venus, KTB, I, 7, 45; the variant has 'star Dilbat,' i.e. Venus, I, 11, 23. If Max Müller's correction of $\$ C-n-t-r-t to $\$ C-s-t-r-t be right (as it certainly is), it proves the astral character of the western Aštōreth.

The god of \underline{D} -i-t-hr-r-y]. The Hittite treaties have the god Zi-it-ha-ri-ia-as, the s being the nominative ending; see KTB, 1, 7, 44; 20, 11.

The god of K-r-d-nr?]. Cf. the god Karziš, KTB, 1, 7, 44.

The god of Hr-p-n-t-r-y-s]. Cf. the god Ha-pa-an-ta-[ri]-ia-aš, KTB, I, 7, 44.

The goddess of the town K-?-h-n]. Probably identical with Lamassat aluKa-ra-ah-[na.....], 'protecting genius of the city Karahna,' KTB, 1, 20, 12; so too Meissner.

The goddess of $\underline{\mathbf{D}}$ -r]. This new reading suggests Surri, i.e. Tyre, which is frequently so spelt in hieroglyphic (Burchardt, Frendworte, no. 1227). However, Aleppo is otherwise the southernmost place mentioned in the treaty.

The names of two goddesses and three gods follow, all unidentifiable.

The queen of the sky]. So in the Hittite treaties 'lat He-be bêlit šamê' 'Hebe, queen of heaven,' KTB, 1, 7, 6; šarrat šamê, 1, 20, 18\cdot .

This goddess, the mistress of the earth]. Undoubtedly identical with Ereškigal, queen of the netherworld, in the Hittite treaty KTB, I, 11, 28, where the variant I, 7, 51 has ilāni irṣiti 'gods of the earth'; ilat Ereškigal, I, 21, 29.

The mistress of swearing 'I-s-h-r]. Cf. ilat Ishara šarrat manîti 'Ishara, queen of the oath,' KTB, I, 20, 17; 7, 463. The position of the epithet before the name is quite contrary to Egyptian usage, and, but for the Hittite parallel, the name Ishara would have had to be taken with what follows, not with what precedes.

The mistress of $\langle ... \rangle$ (?), $\langle the \rangle$ mountains and the rivers of the land of Hatti]. The hieroglyphic text, as unemended, gives 'the mistress of mountains and the rivers' etc. It is obvious that the definite article must be restored before dww, and the parallelism with 'the mountains and the rivers of the land of Egypt' (l. 30) suggests a still greater corruption, a noun having been omitted after theta . See the last

- ¹ The Assyrian 'queen of heaven' has likewise both titles $b\hat{e}lit$ and $\hat{s}arrat$, see Langdon, Tammuz and Ishtar, p. 94.

 ² Meissner and Böhl wrongly $il\bar{a}ni$.
- ³ On Išhara bėlit tamîtum, see also Langdon, op. cit., p. 126. This deity was identified with the rivergoddess Ninâ, and first appears in Sumerian in the Ur dynasty. At that time (circa 2500 B.c.) the Hittites came into contact with Sumerian culture, and it is historically possible that she is by origin Hittite, as Ed. Meyer, Geschichte des Altertums 1², § 433, note, cited by Meissner, asserts. Her name may go back to a word ešhana, but in this case she is a Sumerian form of Ninâ and not an indigenous Hittite deity, see Langdon, op. cit., p. 46. She is mentioned with Damkina, consort of the water-god, KTB, I, 8, 58, and with Ninajakki, I, 14, 26. Meissner's statement (Staatsvertrag 295) that Išhara is a goddess of mountains, rivers, wells and of heaven is erroneous; the passage 1, 8, 58 invokes Išhara, the mountains and rivers, [the gods of heaven] and the gods of earth.
- ⁴ However, the Ramesseum copy (Sharpe, Egyptian Inscriptions, Vol. II, Pl. 50) has the same text as at Karnak.

note for the curious position of the epithet 'the mistress of swearing' before, instead of after, the name of Ishara. Probably the original cuneiform had as follows: 'the goddess, the mistress of the earth; Ishara, queen of the oath; the mountains and the rivers of the land of Hatti.'

The gods of the land of Kizuwadna]. These are often invoked in the Hittite treaties, see the note on 'a thousand gods,' etc. above, p. 195. Kizuwadna was a province on the shore of the Black Sea, north-east of Boghazköi.

Amūn; Prēć; Sētekh]. The Egyptian gods specified are those of Thebes, of Heliopolis and of the north-eastern Delta, all of whom were worshipped at Pi-Raćmesse.

The male gods and the female gods]. Namely 'of Egypt'; see the note on 'a thousand gods,' etc. above, p. 195.

The mountains and the rivers of the land of Egypt; the sky; the earth; the great sea; the winds; the clouds. Cf. in the Hittite treaties 'the mountains, the rivers, the great sea, the Euphrates, heaven and earth, the winds, the clouds, KTB, I, 7, 53=11, 29; 14, 7; 21, 36 (this last inserts 'fountains').

§ 16. Curses or Blessings on those who Violate or Keep the Treaty.

Egyptian Text.

As to these words (31) which are upon this tablet of silver of the land of Hatti and of the land of Egypt, as to him who shall not keep them, a thousand gods of the land of Hatti and a thousand gods of the land of Egypt shall destroy his house, his land and his servants. But he who shall keep these words which are on this tablet of silver, be they Hatti, or be they (32) Egyptians, and who do not neglect them (?), a thousand gods of the land of Hatti and a thousand gods of the land of Egypt will cause him to be healthy and to live, together with his houses and his \land\ and his \servants.

This section is usually more elaborate in the Hittite treaties. Cf. in the Hittite-Mittanni treaty: 'If thou Mattiuāza, son of the king, and [the sons of Ḥarri³] this treaty and oath keep, thou Mattiuāza together with thy wife, [the daughter of the great king, king of the land of the city] Ḥatti, his⁴ sons and his grandsons, and you, O sons of the city Ḥarri, together with your wives, your sons [and together with your land]; you may the gods protect. And the land of the city Mittanni unto old age unto its place may return⁵, may it be wide, may it be extended. And thou Mattiuāza, thy sons and thy grandsons, whom the daughter of the great king, king of the land of the city Ḥatti [bears thee], may rule the land of the city Ḥarri⁶ in kingship forever. The throne of thy father make old, the land of the city Mittanni make old.' KTB, I, 8, 70-5. A similar blessing will be found at the end of the treaty between Šubbiluliuma and Tetti, op. cit., I, 21, 45-9.

§ 17. Amnesty for Extradited Persons.

Egyptian Text.

If one man flee from the land of Egypt, or two, or three, and (33) they come to the great chief of Hatti, the great chief of Hatti shall seize them and shall cause them to be brought back to Usima re-setpenre, the great ruler of Egypt. But as for the man who shall be brought to Ra messe-mi-Amūn, the great ruler of Egypt, let not his crime be charged against him, let not (34) his house, his wives or his children be destroyed, [let him not] be [killed], let no injury be done to his eyes, to his ears, to his mouth or to his legs, let not any [crime be charged] against him.

This clause and the next clearly belong to the series §§ 11—14, and seem to represent an afterthought or addition to the finished treaty.

- 1 Note the confusion of pronouns characteristic of the Hittite texts.
- ² Read pryt (Sethe); for this plural cf. Harenhab decree, front, l. 36; Pap. Kahun, Pl. 39, l. 31.
- ³ Restored from KTB, 1, 14, 18. Harri is another name for Mittanni.
- ⁴ For 'thy'; such changes in the pronouns are inexplicable.
- ⁵ The Assyrian phrase for 'to be stable.' ⁶ Variant KTB, I, 14, 21 'land of the city Mittanni.'
- ⁷ Restored from 1. 35. ⁸ Restored from the Ramesseum duplicate as given by Sharpe.

§ 18. RECIPROCAL CLAUSE CORRESPONDING TO § 17.

Egyptian Text.

Likewise¹, if a man flee from the land of Hatti, be he one, be he two, or be he three, and they come to $Usima^{c}r\bar{e}^{c}$ -setpenre^c (35), the great ruler of Egypt, let Ra^{c} messe-mi- $Am\bar{u}n$, the [great] ruler [of Egypt, cause] them to be brought to the great chief of Hatti, and the great chief of Hatti shall not charge their crime against them², and they shall not destroy his house, his wives or his children, and they shall not kill him³, and they shall not do injury to his ears, (36) to his eyes, to his mouth or to his legs, and they shall not charge any crime against him.

§ 19. Description of the Silver Tablet.

Egyptian Text.

What is in the middle of the tablet of silver. On its front side: a relief (?) consisting of an image of Sētekh embracing an image of the great prince of Hatti, surrounded by a legend (?) saying: the seal of Sētekh, the ruler of the sky, the seal of the treaty made by Hattušili, the great chief (37) of Hatti, the strong, the son of Muršili, the great chief of Hatti, the strong. What is within the surrounding (frame) of the relief: the seal [of Sētekh, the ruler of the sky*]. [What is on] its other side: a relief (?) consisting of a female image of [the] goddess of Hatti embracing a female image of the chieftainess of Hatti, surrounded by a legend saying: the seal of (38) Prēc of the town of Arinna ('I-r-n-n), the lord of the land, the seal of Puduḥepa (P-t-ḥ-p), the chieftainess of the land of Hatti, the daughter of the land of Kizuwadna (K-d-w-d-n), the [priestess?] of [the town (?) of] Arinna, the lady of the land, the servant of the goddess. What is within the surrounding (frame) of the relief: the seal of Prēc of Arinna, the lord of every land.

It is not easy to reconstruct visually the appearance of the silver tablet here described by the Egyptian translator. The determinative of the hieroglyphic word used for 'tablet' depicts a rectangular object with a loop-like appendage at the top $\bigcap_{i=1}^{C} (1.4)$, $\bigcap_{i=1}^{C} (1.36)$. It is by no means certain that this determinative represents the actual shape of the tablet sent to Ramesses by Hattušili, though cuneiform metal tablets are always rectangular in shape, and do not imitate, as they might have been expected to do, the common clay tablets. We may, perhaps, think of the cuneiform text as covering the entire surface of both sides, except in the middle, which bore the imitation of a seal such as might have been stamped on a clay tablet for the purpose of authentication. We do not learn whether that seal was round or oblong; or whether the legends translated into hieroglyphic for our benefit were in the cuneiform character or in the Hittite pictographic script—this last is less probable. Scholars have rightly compared with the design on the obverse a sculpture at Vasily Kaya near Boghazköi, where a god, probably Tešub, is shown embracing the Hittite king. This design appears to have been enclosed within a band of writing, and within that band again was a shorter legend stating more briefly that the whole representation was the seal of Tešub (Sētekh). The reverse differed only in so far as here it was the queen, not the king, of Hatti who was

- ¹ See above, p. 194, n. 2.
- ² With the help of the Ramesseum duplicate restore mtw tm s^ch^c p³ wr-^c³ n Ht³ p³y-sn bt³ r-sn. The construction is unusual, but can be defended.
 - ³ Ramesseum variant: 'let him not be destroyed.'
 - ⁴ So the Ramesseum duplicate.
 - ⁵ It is doubtful whether there is room for the words 'the ruler of the sky.'
- ⁶ Sethe's collation makes it practically certain that ts ntrt was the reading, not only here, but also in the phrase rpyt n[ts] ntrt above, l. 37. In both cases the sun-goddess, in Babylonian $lat \S ama \S$, of Arinna is probably meant.

portrayed, and in so far as it was a goddess, not a god, who accorded protection and patronage¹. The Egyptian scribe has got into difficulties through the fact that in Egypt the term for sun $(r\bar{e}^{\zeta})$, as well as the sun-god $(R\bar{e}^{\zeta})$, was masculine, whereas the solar deity of Arinna was female (see above, p. 195). He is thus forced to employ the masculine definite article p_{i}^{ζ} , p (Prē $^{\zeta}$, 'the sun'), and this appears to have beguiled him further into writing 'the lord (not 'lady') of every land.' Sethe's collation shows that in the earlier words where the term rpyt 'female image' has had to be used, twt being employed only for male images, the translator has hedged and has written t^{γ} ntrt in place of Prē $^{\zeta}$. The reason that the sun-deity of Arinna is here named is doubtless that she was the patron-goddess of Hittite royalty, as already stated; and it is on this account, probably, that the Hittite queen was a priestess of that deity, not because she had been a princess of Arinna, as Garstang supposed².

III. THE RELATIONS BETWEEN THE TWO VERSIONS.

The comparison of the hieroglyphic and cuneiform versions of the treaty has proved an interesting task, but it also possesses no inconsiderable value as vindicating the success of the methods by which the languages of ancient Babylonia and Egypt have been slowly and painfully recovered Such, indeed, has proved the interest of the details, that they have obscured a further problem of some importance, namely the relation of the two versions, and the historical conclusions which emerge therefrom. Roeder is the only scholar who has faced these questions fairly and squarely, and our own consideration of them may well start at the point where he left off's. According to Roeder, the Boghazköi fragments preserve a Babylonian translation of the text on the original silver tablet which was sent (see the Babylonian version l. 14) by Ramesses II to Hattušili; this text, Roeder says, was doubtless composed in the Egyptian language and written in hieroglyphs. Conversely, the Karnak and Ramesseum stelae perpetuate renderings into Egyptian idiom and writing of the treaty as inscribed in cuneiform upon the silver tablet brought to Pi-Ratmesse by the Hittite ambassadors. 'Strange as it may seem to us, the treaty was not drawn up in precisely the same words in the languages of the two contracting parties, but each of the two, upon the strength of a common understanding of basic principles, gave to the terms the form desired by himself and despatched this to his adversary written in the sender's own language.'

To Roeder belongs the merit of propounding a coherent and intelligible explanation of the facts, and some part of his theory is undoubtedly correct. It is, indeed, an interesting and important observation that this most ancient of treaties differs from those of modern date in not being an impersonal and objective document of which both parties were signatories and each held a precisely identical copy. The Karnak text places Hattušili alone in the foreground; it is he, and not Ramesses with him, who there speaks in the first person, giving and demanding assurances; and a personal note is struck by his deprecatory allusions to his brother Muwattalli. In so far, the version of the treaty despatched by Ramesses II to Hattušili must obviously have differed; even without the evidence of the Boghazköi fragments we should necessarily have inferred that there Ramesses II would be using the pronoun of the first person. The reason for this difference

¹ Here we have a fresh exemplification of the old religious rule *similia similibus*: male deities are chiefly concerned with males, female deities with females. So in Egyptian curses: 'Osiris shall be after him, Isis shall be after his children,' Leps., *Denkm.*, Pt. III, Pl. 140, cf. *ibid*. Pl. 229.

² Liverpool Annals of Archaeology and Anthropology, Vol. vi, p. 110.

³ Op. cit., pp. 13—14, 37.

⁴ Egyptian text, ll. 3, 4, 6, 36.

between the treaty before us and those of more recent times lies in the fact that at this early stage in international relations the notion of a treaty was not yet clearly defined. In its wording, its division into paragraphs, and the alternation of like conditions both given and demanded (§§ 6, 8; 7, 9; 11, 13; 12, 14; 17, 18) the treaty already resembled a legal contract; in its use of the first person, its onesidedness, and its occasional personal allusions it failed to liberate itself from the epistolary form which it shared with other diplomatic communications.

This brings us to a matter where we must join issue with Roeder. maintains, as did Max Müller before him, that the Karnak text is a translation from the Babylonian. Our own investigations show that this holds good, not only for the portions common to that text and to the Boghazköi fragments, but also for certain passages (the allusions to Muwattalli) where the "tendencious" interference of the Egyptian translator has been wrongly suspected. But Roeder errs in making the symmetrical assumption that the copy of the treaty sent to Hattušili on a silver tablet by Ramesses was composed in Egyptian and written in hieroglyphic. The El-Amarna finds, no less than those from Boghazköi, had taught us that Egyptian diplomacy, in its relations with North and East, employed the Babylonian tongue or at least one of the tongues normally written in the cuneiform script; and that this rule applied in the case of the treaty might have been conjectured a priori. But further, the Boghazköi fragments afford indisputable testimony that Babylonian was the language that Ramesses used. So closely does the phraseology of the hieroglyphic and the cuneiform versions agree in a number of passages that one of the two must necessarily be the translation of the other—and it is already admitted that the hieroglyphic text had a Babylonian original; expressions like the epithet 'the strong' (karradu), to 'take hold of' the treaty, 'good peace and good brotherhood' are characteristic of the Hittite treaties, and quite alien to Egyptian idiom. We must therefore infer that the Boghazköi fragments either contain the original text from which the text underlying the hieroglyphic version was adapted, or else that the Babylonian text placing Hattušili in the foreground (the Karnak version) was the prototype whereon the Ramesses version in the Boghazköi fragments was subsequently based.

To account for the Boghazköi fragments three alternative hypotheses appear to offer themselves for consideration. It might be conjectured, in the first place, that these fragments represent a draft composed by the Babylonian scribes at the court of Pharaoh and later submitted to Hattušili for acceptance or rejection. But it seems unlikely that those scribes should have been sufficiently conversant with the style of Hittite treaties to have framed such a draft, unless indeed they had the earlier treaties with Šubbiluliuma and Muršili² to work upon; and again, why should a draft of this kind have been preserved in the Boghazköi archives after the treaty had once assumed its final form—the other documents in the archives are mostly treaties and original letters of the highest importance? The first objection (but not the second) is met by supposing that the fragments preserve a draft that was drawn up at Boghazköi in Ramesses' name, and despatched to him for approval. But is it probable that the Hittites would have ventured to dictate to Pharaoh what he should say or not say? Surely it would have been more natural to submit a draft of what Hattušili might be prepared to concede, leaving it to the Pharaoh to frame his own counterpart, making what alterations he would and replacing the name of Hattušili by

¹ Eg. text, ll. 7—8; 10—11; 14. See especially the footnote on ll. 10—11, above, p 188, n. 2.

² See § 5, Egyptian version, l. 14.

that of Ramesses. Far more plausible than either of these alternatives is the theory that the Boghazköi fragments really contain copies of the text sent by Ramesses II to Hattušili, and the sequence of events may possibly be reconstructed as follows. The treaty in its first form was drawn up at Boghazköi in consultation with the Egyptian ambassadors; when it had assumed a final shape it was inscribed upon a tablet of silver and brought to Egypt. Then Ramesses, having signified his approval, instructed his Babylonian scribes to draw up a counterpart in his own name; this naturally included most of the phrases in the Hittite original, only omitting the allusions to Muwattalli and making a few minor modifications. Finally the version compiled on behalf of Ramesses was, in its turn, engraved on a silver tablet, stamped with the seal of the Pharaoh, and forwarded to Hatti. There the original was deposited 'at the feet of Tešub¹,' while copies were written on clay for preservation in the royal archives. The last-named copies are those which were discovered by Winckler.

We present the hypothesis outlined above as the best available explanation of the cuneiform version; but it must remain a mere hypothesis. On the other hand there can be no shadow of doubt that the Karnak and Ramesseum stelae preserve the final version of the treaty as accepted by Ḥattušili. The two paragraphs (§§ 17, 18) that appear as an afterthought may or may not have stood on the silver tablet; and it is not clear whether they were due to the initiative of Ramesses or to that of Ḥattušili. Students have not hitherto drawn the correct inference from the passages referring to Muwattalli—passages which, as we have shown, stood in the Hittite original. They seem to contain an acknowledgment of Ḥatti aggression which, whether exacted by Ramesses or not, indicates a certain humility of attitude on the part of the Hittite king. There has been a tendency of late to assume that the Egyptians were the real losers in the war with Ḥattušili; our researches, if they suggest any conclusion on this point, suggest rather that Ḥattušili was the one who sued for peace and was ready to cry peccavi.

A characteristically Egyptian trait in the Karnak stele is its great inaccuracy, though Sethe's collation shows that it is not so inaccurate as Max Müller's copy implied. We have animadverted upon the substitution of the name Muwattalli for Muršili in l. 14. Once that most important of particles, the negative particle, is omitted (l. 18). In l. 32 the word for 'land' is passed over, and in ll. 11, 22 and 29 there are probably omissions. The word for 'sea' is wrongly written in l. 30, and the definite article is left out at the beginning of the same line. These errors are not necessarily to be attributed to the Egyptian translator, but rather to the sculptor who transferred the translation, written on papyrus in hieratic, to the stone. The Egyptians were always an inaccurate people, but such carelessnesses as those here recorded would scarcely have been permitted under the Tuthmosides.

IV. THE HISTORICAL SITUATION.

It was in the reign of Hattušili that the long period of warfare between Hatti and Egypt came to a close. Ramesses II waged his first Syrian campaign in the fourth year, and in the fifth fought his much-vaunted but indecisive battle at Kadesh on the Orontes, where Muwattalli appears to have been his opponent². Muwattalli was the son of Muršili,

¹ See below, p. 204.

This fact is based merely on the reference in the treaty, Eg. version, l. 8.

and seems, possibly after further conflicts with Ramesses, to have died a natural death; at all events the ordinary Babylonian expression for a natural death, namely 'went to his fate,' is applied to him in the Egyptian version of the treaty (l. 10) and also in the treaty made by Hattušili, his brother and successor, with the king of the Amorites². That Hattušili was at first on terms of hostility with Egypt is indicated by a reference in a long letter written by him to Kadašman-Enlil, Cassite king of Babylon³. In this letter Hattušili claims to have made an alliance with Kadašman-Turgu (1300—1284 B.C.), the father of Kadašman-Enlil:—'[Thy father] and I made an alliance and unto brotherhood we returned. For one day we returned not; have we not made brotherhood and alliance forever?' He then reminds the young Cassite king how, on his father's death, he wrote to the nobles of the court and insisted that he, Kadašman-Enlil, should be recognized as king. Undoubtedly this was done in fulfilment of a treaty-clause by which Kadašman-Turgu and Hattušili mutually pledged themselves to recognize one another's legitimate heir; the Mittanni-Kizuwadna treaty had such a clause and in the Egyptian treaty there appear to be the remains of a similar one (§ 10). The Hittite king next complains that the Assyrians and the Aramean tribe Ahlamû are interfering with the diplomatic connections between Babylonia and Hatti; and he censures Kadašman-Enlil for withholding messengers and for lukewarm friendship. Then comes an important reference to Egypt; the tablet is not well-preserved at this point:—"..... the messenger of the king of Egypt about whom my brother (i.e. Kadašman-Enlil) wrote, [and (?) the.....of the king (?)] of Egypt herewith I send to my brother. [Kadašman-Turqu thy father] and I made an alliance and unto brotherhood we returned. we conferred saying, 'We are brothers,' saying, 'With an enemy who is our common foe [verily we shall be hostile and] with our common friends verily we are at peace.' And after the king of Egypt and I became angry with each other, I wrote to thy father Kadašman-Turgu^e, [saying, 'The king of Egypt] is at war with me.' And so thy father therewith wrote, [saying, 'If the troops of the king (?)] of Egypt (?) come, then I will go with thee......will I come in the midst of soldiers and chariots.' Since to go with me [thy father was ready, so now, O my brother, thy warriors ask and they will say to thee, ['Let us go with warriors and chariots.' So verily have they spoken in favour of going with me,why has he taken? My foe who to another land......concerning Egypt went. When I wrote to him,then he, my enemy, caused it not to be brought. [I and the king of] Egypt were angry with each other and mutually [I and thy father] went to plunder m_{ij} enemy. [And now........ the messenger (?)] of the king of Egypt has cut off. And after thou,

¹ Meissner, Zur Geschichte des Chattireiches, p. 19, states on the evidence of KTB, I, 24, that Urhi Tešub was the son of Muwattalli, but there is no reason to warrant such an inference.

² See above, p. 188, n. 2.

³ KTB, I, 38, 7—8. Meissner, op. cit., p. 19, finds another reference of the kind KTB, I, No. 14, but this letter was not written to Ramesses but to the king of Babylon.

⁴ The word atterâtu 'alliance' comes from the root eteru 'to bind,' and appears to mean a written treaty, for which the proper word is riksu. Such is the meaning of atterâtu in the Hatti-Kizuwadna treaty KTB, I, 27, 36, and in the Hittite-Amorite treaty, I, 35, 18. The conclusion is of the utmost importance as it proves that Amenophis III made a treaty with Subbiluliuma, see below, p. 203, n. 5.

⁵ atterûtu, see above, last note.

⁶ This reference compels us to place the death of Muwattalli and the battle of Kadesh before the last year of Kadašman-Turgu, *i.e.* 1292 according to King, 1295 according to Thureau-Dangin, or 1284 according to Schnabel. The dates of Cassite kings formerly based on references in Nabonidus (1352 B.C. for the last year of Kadašman-Turgu) are more than half a century too high.

⁷ Restore 'the Assyrians' or 'the Ahlamû.'

This badly preserved passage is of the utmost importance for the synchronous history of Egypt, Babylonia and Hatti. It has been translated in such a manner as to refer to the treaty made by Hattušili with Egypt²; but the passage near the beginning of the last-quoted extract must be restored so as to refer, not to that treaty, but to the treaty concluded by Hattušili with Kadašman-Turgu. In fact this passage, like the similar one in a letter from Hattušili to Kadašman-Enlil³, refers to wars between Hattušili and Ramesses in the time of Kadašman-Turgu, who assisted the Hittite king in accordance with the terms of their alliance. When the letter here under consideration was written there was obviously peace between Hatti and Egypt, for Hattušili and Kadašman-Enlil are both enraged at some people who have cut the communications between Egypt and Babylonia. This is the reason why the Hittite king appeals to the king of Babylonia to honour the treaty by making common warfare upon the disturbers, i.e. upon the Assyrians or the Arameans. Now this position leads to two important conclusions:

- (1) Hattušili was at war with Ramesses before the death of Kadašman-Turgu.
- (2) He had declared peace with Ramesses before the death of Kadašman-Enlil.

If now we take the lowest possible Cassite dates and compare them with those currently accepted for the Egyptian kings, a discrepancy of a few years will be found to exist. At the lowest estimate Kadašman-Turgu reigned 1300—1284, and Kadašman-Enlil 1283—12784. Breasted dates the Hittite-Egyptian treaty (year 21 of Ramesses II) in 1271 B.C. against E. Meyer's 1279, and the battle of Kadesh in 1287 against E. Meyer's 1295. The Cassite dates cannot be brought much lower, and it appears, therefore, that the solution must be sought in a heightening of the Egyptian dates. Let us place the treaty in 1280, i.e. nine years earlier than Breasted; the battle of Kadesh then falls in 1296 and the accession of Ramesses II in 1301. These dates, which are very nearly those of E. Meyer, clear away most of the chronological difficulties. From the letter of Šubbiluliuma to Huria, i.e. Naphuria, i.e. Akhenaton (Amenophis IV) in the El-Amarna correspondence, we learn that this king made a treaty (atterûtu) with Amenophis III⁵. This permits us to reconstruct the chronological scheme with some assurance. See the table on the next page. From the scheme here given it is evident that the Pharaoh with whom Muršili made a treaty can only have been Haremhab.

A careful scrutiny of the cuneiform texts from Boghazköi has revealed no reference to the Egyptian treaty on the part of Hattušili. On the other hand, a letter from Ramesses to the king of Mirâ (a land otherwise unknown, perhaps the ancient Maer) begins as follows: 'Saying, Wašmuaria-šatepnaria (i.e. Usima crēc-setpenrēc, prenomen of Ramesses II), the great king, [king of Egypt], son of Šamaš, Riamašeša-mai-Amāna, unto the son [of a king], the king of Mirâ, say: Behold, unto me, [my wife] and my sons is peace. Unto my warriors is peace. Unto my horses is peace. Unto my chariots is peace. And unto the heart of all my lands mightily is there peace. To thee, O king of the land Mirâ, let be peace, and unto thy land let be peace. See now, I the great king of Egypt hear all the words.......to me and thee. Concerning

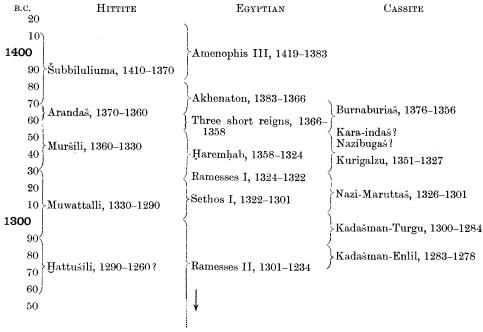
¹ KTB, 1, 39, 55—72.

² Meissner, op. cit., p. 24, and Orientalistische Litt.-Zeitung, 1917, cols. 225-8. ³ KTB, I, No. 14.

⁴ Weidner, Studien zur assyrisch-babylonischen Chronologie, dates this king 1282—1276.

⁵ Knudtzon, El Amarna Tafeln, no. 41, 9; misunderstood by Knudtzon and Weber.

the words of Urhi-Tešub ianu ul......which thou hast written about, for me and thee behold again......the good relation, which the great king of Egypt has made with the king of [the land Hatti, my brother]. In good brotherhood, in good peace, are Šamaš and [Tešub] the land Hatti, my brother; at the feet of the [god Tešub] it is laid. The great gods are witnesses (of the words). And behold the writing of the oath which the great king, [king of the land Hatti, made for me; at the feet of the god Šamaš it is laid. The great gods are witnesses of the words, I keep the oath and abandon it not. Not shalt thou [believe (?)] the false words which thou hast heard......not is there anything in it. Behold the good relation of [brotherhood] and peace in which I am with the great king, [king of the land Hatti], I truly in it [will live] forever.' The king of Mirâ had evidently received the report of an estrangement between the Egyptians and the Hittites; Ramesses declares this report to be false, and emphasizes his own adhesion to the treaty. From this document we learn the new fact that the copy of the treaty sent by Ramesses to Hattušili was 'laid at the feet of Tešub, while that sent by Hattušili to Ramesses was 'laid at the feet of Šamaš,' i.e. Rec; probably it was the custom to deposit such binding deeds in the temples of the gods whose sanction they invoked.



There is another reference to the treaty between Hatti and Egypt in a letter which Naptera, i.e. Nefreteri-beloved-of-Mut, the queen of Ramesses II, writes to the queen of Hatti:—'Saying, Naptera the queen of Egypt to Puduhepa, queen of the land Hatti, my sister, say: To me thy sister is peace, to my land is peace. To thee my sister be peace, to thy land be peace. Behold I hear that thou, my sister, hast written to me to

¹ Long lacuna.

inquire of my peace and that thou writest to me concerning the relation of good peace, concerning the relation of good brotherhood in which is the great king, king of Egypt, with the great king, king of the land Hatti, his brother. Samas and Tesub will lift up thy head and Samas will give peace to create goodness, and he will give good brotherhood of the great king, king of Egypt, with the great king, king of the land Hatti, his brother, forever?

From the evidence quoted it is clear that the treaty concluded between Ramesses II and Hattušili in year 21 terminated a period of hostility which, whether or not it was manifested in actual warfare, had persisted even after the battle of Kadesh. From the twenty-first year onwards peace prevailed between Hatti and Egypt, the good relations between the two countries culminating in the marriage between Ramesses and the daughter of the Hittite king as recorded in the Abu Simbel stele of the thirty-fourth year.

¹ The text has ši-i < ki-i, a case of palatization. ² KTB, I, No. 29; Meissner, op. cit., p. 25.

A PAINTED POTTERY MODEL OF A GRANARY

IN THE COLLECTION OF THE LATE JEREMIAH JAMES COLMAN, ESQ., OF CARROW HOUSE, NORWICH

BY AYLWARD M. BLACKMAN, D.LITT.

THE small but fine collection of Egyptian antiquities to which this model belongs was made by Mr J. J. Colman in Egypt during the winter 1896–7. At his death the collection passed into the hands of two of his daughters, the Misses Colman of Carrow House, who have most kindly permitted me to publish this and any other objects in their collection that might be of interest to readers of the *Journal*. To them I am also indebted for the excellent photographs which illustrate my article.

The model was bought at Luxor from the dealer Muḥammad Muḥassib, who informed Mr Colman that it came from the district of Salamîyeh, *i.e.* from near et-Tûd¹.

GENERAL DESCRIPTION.

Measurements at bottom: $11\frac{1}{2} \times 8\frac{1}{4}$ inches. Sides just over 6 inches high.

The granary here reproduced is in the form of an oblong enclosure or courtyard, to which admittance is gained by a door at one side (Plate XIX, top). Along the whole length of the enclosure wall to the right of the door is a low flat-roofed magazine with five windows looking out on to the yard. In the roof are five circular holes², each exactly behind one of the windows. The grain was poured into the magazine through the holes in the roof, and was taken out through the windows, which were furnished with shutters³.

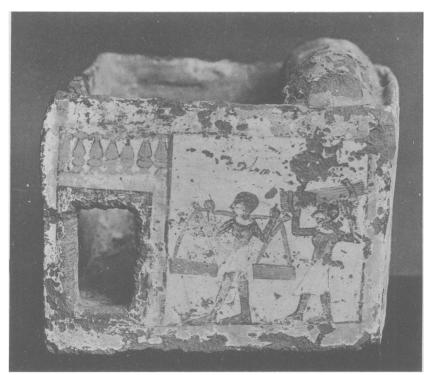
At the side of the yard opposite to the door a stairway leads up to the roof⁴. The first portion of the stairway runs parallel to the magazine, but it then turns round sharply at right angles to it.

Upon the roof of the magazine, built right up against the enclosure wall which rises above it, are five domed chambers, each with a hole in the top and with a window in front (see Plate XX). These five windows are directly in a line with the five corresponding holes in the flat roof below. For a somewhat similar two-storied granary, see Newberry, Beni Hasan, Vol. I, Plate XIII, left end of bottom register, where it will be noted that the window of the domed chamber is also furnished with a shutter.

The enclosure walls are painted yellow on the inside with a grey band at the top. The façade of the magazine is also yellow, with a band of grey above the windows. The stairway and the floor of the yard are likewise yellow. The roof of the magazine and the domed chambers upon it are painted grey, the windows of the latter having a red edging (Plate XX, below).

- ¹ Murray, Handbook for Egypt and the Sudan, 1907, p. 748.
- ² Cf. Garstang, Burial Customs of Ancient Egypt, p. 58, fig. 44; Erman, Life in Ancient Egypt, p. 434, fig.
 - ³ Erman, op. cit. pp. 433 foll.; cf. Newberry, Beni Hasan, Vol. I, Pl. XXIX.
 - 4 Cf. ERMAN, loc. cit.

⁵ Cf. Erman, op. cit., p. 433, upper fig.



Right Side



Left Side

POTTERY MODEL OF A GRANARY

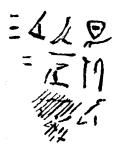
In the Collection of the late Jeremiah James Colman, Esq. of Carrow House, Norwich

The door in the side-wall (Plate XIX, top) is framed with red and grey, the *kheker*-ornament above it being yellow.

This model is particularly remarkable for the scenes painted on the exterior of the enclosure walls, such decoration occurring, so far as I know, on no other models of granaries. The scenes are painted on a white background and are framed with a band of grey. The other colours employed are black (for hair, eyes, etc.), red (for outlines and other details, and for the men's bodies), and yellow (for straw, grain, ropes, basket, wood, and for the women's bodies).

DESCRIPTION OF THE SCENES.

- (1) Side-wall with door (Plate XIX, top). Two men are represented as about to pass through the door into the yard. The foremost carries two baskets suspended from a yoke. Above him is written in hieratic: 'His son,...' (name obliterated). The other man bears on his head a bundle of corn. The legend above him is almost entirely obliterated, but perhaps we can still read 'His brother,...' $(sn \cdot f...)$; the name has disappeared except for the final three plural strokes $\overline{}$.
- (2) Back wall (Plate XX, top). Two men, either squatting on a low stool, play at draughts. A woman stands near them holding in one hand a vessel (containing beer?) and in the other a white feather fly-whisk¹, which she waves over the man on the left. This man, Intef by name, is doubtless, in view of the attentions paid him, the more important of the two players, and is therefore to be regarded as the owner of the granary. In front of him, in addition to his name, is written the following legend:



(see adjoining cut). These words, which doubtless constitute a remark of Intef to his opponent, who is about to move one of his pieces, are to me unintelligible. They must bear on the technicalities of the game, hmtyw being, one would suppose, a plural nisbe-form of hmt 'three,' while $sn\cdot nw$, if that is the correct reading (I feel very doubtful about the transcription of the sign or signs below the m in this word), means 'second'.' To the enigmatical observation of Intef, his opponent, who is labelled 'the boon-companion Meri,' replies: 'Very well, prince' $(iry\cdot y \ r \ hst\cdot k \ sr = lit$. "I am doing [it] so that thou praisest [it],

O prince").

(3) Side-wall opposite that containing door (Plate XIX, bottom). A scribe, lounging at ease on the top of a great heap of grain, makes entries in his note-book. His ink-palette, it will be observed, is leant against his left arm. A man takes corn from the heap in a wooden measure, evidently in order to fill the sacks held by the two men behind him. Every measure taken from the heap was of course entered by the scribe in his note-book. The scribe is labelled: 'His son (i.e. the son of the owner of the granary), the scribe Intef,' and

¹ Cf. NAVILLE, The XIth Dynasty Temple at Deir el-Bahari, Vol. t, Pl. XX, vi.

² For similar and equally unintelligible allusions to numbers in the remarks of players at draughts, see Erman, Reden, Rufe und Lieder auf Gräberbildern des alten Reiches, in Abhandlungen der preussischen Akademie der Wissenschaften, 1919, p. 59.

³ See Erman, op. cit., p. 7.

⁴ Cf. Erman, Life in Ancient Egypt, p. 432, fig.

the man with the corn-measure: 'The villain Khunes'.' Of the two men with sacks, the foremost, is 'the villain Gerḥi,' the hindmost 'the villain Khu.'

(3) 'Her daughter.'

According to Messrs Lythgoe and Mace (*The Tomb of Senebtisi*, pp. 114 foll.), most models of boats, granaries, kitchens, bakeries, etc. (which, by the way, are ordinarily made of wood, not of pottery), are to be assigned to what they term for convenience sake the Herakleopolitan Period, *i.e.* the period between the Sixth and Twelfth Dynasties, though, as these two authorities allow, such objects occur with burials of the Sixth³, and sometimes even with those of the Twelfth, Dynasty.

The ordinary wooden models of granaries contain figures, also wooden, of scribes and other employees, all performing their allotted tasks. Our pottery model, however, contains no such figures, their place being taken by the paintings on the outer faces of the walls. This feature looks like a later development, and perhaps, therefore, the model in question dates from the end of the Herakleopolitan Period—a view that finds further support in the characteristically Eleventh Dynasty name of the owner, Intef.

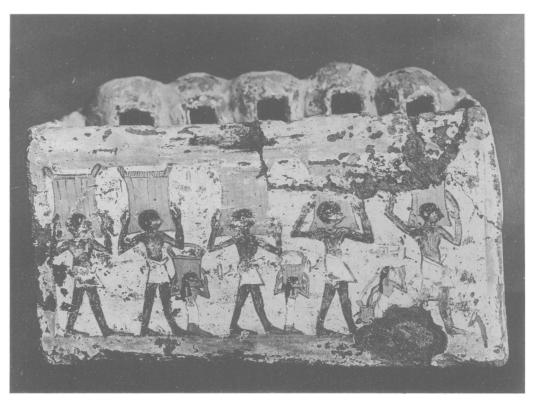
The paintings, it might be pointed out, are executed in much the same style as those on the well-known sarcophagus of Ḥenui from Gebelên⁴.

¹ Dr A. H. Gardiner has suggested to me that the group of signs after ny-dt should be transcribed not, as I had proposed to do, ⊖, but ⊖ = ↑ a good Old Kingdom name (see Hoffmann, Die theophoren Personennamen des älteren Ägyptens, p. 42). A second examination of the sign beside confirmed my reading of it as the upright stroke! The apparent curving tail is just a scratch in the white background.

- ² Cf. Newberry, Beni Hasan, pt. 1, Pl. XIII, left end of bottom register.
- ³ I found parts of wooden figures belonging to such models in the débris in the tomb-chapel of the youngest Pepi'onkh at Meir (see Blackman, *The Rock Tombs of Meir*, Pt I, p. 6).
- ⁴ STEINDORFF, Grabfunde des mittleren Reichs, Pt II, Pls. III—V; see also Jéquier, Recueil de Travaux, Vol. xxxvII, p. 14.



Back



Front

POTTERY MODEL OF A GRANARY

In the Collection of the late Jeremiah James Colman, Esq. of Carrow House, Norwich

STELA OF PERNESBASTET FROM HASSAÏA

By H. WINLOCK

The subject of this note is a small limestone stela which was procured in Egypt in the late 'eighties by Mr Waters S. Davis of Galveston, Texas, and which remained in his possession until a few years ago, when the salts in the stone began to flake the surface away. So evident was it that its complete disintegration was the matter of but a short time, that it was entrusted to a chemist who had had the good fortune to save some other stones in deplorable condition, but when he subjected this stela to the same treatment it literally melted away. The photograph shown on Plate XXI and the copy of the inscription below, made after replacement of the flakes missing in the photograph, are all that remain of it to-day.

Like thousands of other grave-stones which were made for the simpler folk of ancient Egypt, its execution, while adequate, is so summary that it can claim but a passing interest from an artistic point of view, and its stereotyped prayer for offerings acquaints us with an individual of only modest social position. However, the fact that it is now lost makes it advisable to place it on record, while the questions of its provenance, date and the offering formula give it a certain interest.

In 1888, about the time that Mr Davis was in Egypt, the cemetery of Hassaïa just south of Edfu yielded a number of stelae now in Cairo. Several of these¹, while of better workmanship and more ambitious design than the stela of Pernesbastet, are strongly suggestive of the same local school of art that produced hers. Further comparison shows that all of them present the adoration of the same gods, Ḥarakhte and Atum, with or without Isis and Nephthys, which suggests a local cult of the dead in the Edfu neighbourhood. It is true that up the river at Assuan, Ḥarakhte and Atum, sometimes with Kheperi and sometimes with Isis and Nephthys, were the pantheon of the dead, but when so shown they are usually seated in the solar barque and in any case the stelae are of a fabrication peculiar to the locality. Again further south at Dendereh and Akhmîm a rare stela may show Ḥarakhte and Tum, but always with Osiris and his cycle.

The choice of gods as well as the style of sculpture thus point to Hassaïa as the finding-place of this stela, and this conclusion is amply justified by the titles of the father and grandfather of Pernesbastet. The father of Pernesbastet, Menkhetamūn, and her mother's father, Nespakhrod, filled the office of Servitor of Har-nubti, the Horus of Edfu, written or this title, curiously enough, is borne by some member of every family mentioned on each of the Hassaïa stelae to which the stela of Pernesbastet is

¹ Kamal, Stèles ptolémaïques, 22002, 4, 24, 26 and 48. Two others of identical style (22010 and 71) are from Thebes. They are of the same craftsmanship, show the same gods, and are unquestionably of the same period and school of art as the Hassaïa stelae. As in the whole series catalogued by Ahmed Bey these two groups stand out with marked individuality they would seem to suggest an exchange of artisans between Edfu and Thebes.

related in style and in the gods portrayed¹, and, most important, appears on no other late stelae in the Cairo Catalogue. It would seem to have been a grade in a guild peculiar to Edfu and its immediate neighbourhood.

Short of actual testimony by a witness as to its finding, the evidence which can be adduced in favour of Hassaïa as the provenance of this stela is as satisfactory as much that we have to accept in archaeology. The material for dating it is, perhaps, not quite so dependable but still convincing.

At the time that they were found, Daressy dated the Hassaïa stelae from the Persian to the Roman Periods², and it is in the Ptolemaïc Period that they are catalogued by Ahmed Bey Kamal. A cursory glance at this stela, however, fails to reveal any of the characteristics we are wont to associate with the Ptolemaïc Period. There is none of that suave, softened, really degenerated touch, which is sometimes so cloying in Ptolemaïc relief. In fact the rather singular figure drawing in the stela of Pernesbastet, which is apparent even in the finer Hassaïa stelae of the same class, shows little influence even of the Saïte Period, and the woman's portrait in this present specimen is more reminiscent of Bubastite sculpture.

Judgement of style is always liable to be vitiated by the personal bias of the student, but there is evidence in the inscription as well which points to an earlier date than Ptolemaic for this stela.

The father of Pernesbastet was Menkhetamūn and we find Namankhetamūn and we find Namankhetamūn and we find Namankhetamūn borne by members of the families of the Priesthood of Montu in Thebes from the Twenty-Second to the Twenty-Sixth Dynasties. On other monuments of the same epoch Menkhetamūn of the appear.

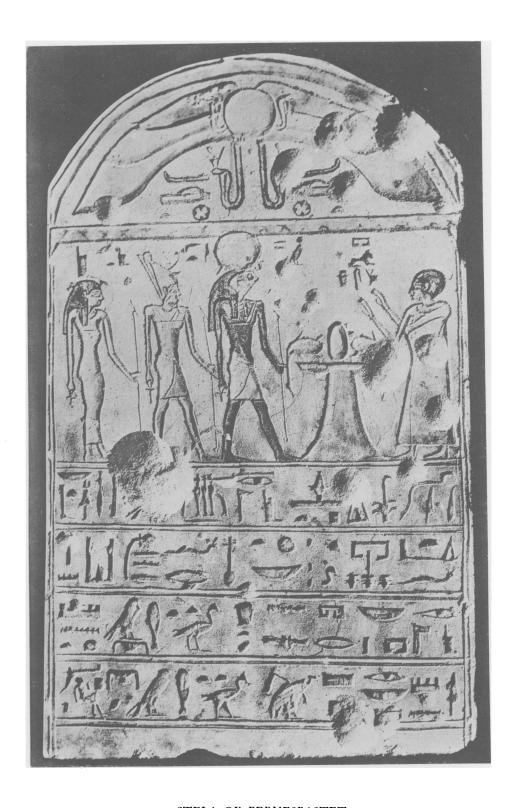
and Menkhetiset appear.

Her mother was Shapmūt, , and women's names compounded with are of course very common between the Twenty-Second and Twenty-Sixth Dynasties.

Finally her paternal grandfather was Nespekhrod \(\bigcap \mathbb{\beta} \), which again was a name current in the families of the Bubastite Priesthood of Montu, where it is found written in full \(\bigcap \bigcap \mathbb{\beta} \), while the related name Nespasefi \(\bigcap \mathbb{\beta} \) was equally popular.

To base a theory of dating on any single one of these names would be to show over much temerity, for any one of them might run over the limits of any given period. But with three names in one family, all current within one period, it would be too sceptical to refuse to accept the family as of that period. Pernesbastet and her family, we may conclude

- ¹ The five catalogued as from Hassaïa in the note p. 209, n. 1.
- ² Daressy in Recueil de Travaux, Vol. XI, p. 93.
- ³ Gauthier, Cercueils des Prêtres de Montu, 41065, and Moret, Sarcophages de l'Époque Bubastite à l'Époque Saïte, 41010.
- ⁴ LIEBLEIN, *Dict. des noms*, 1132, Menkhetamon son of Besmut, the latter a name known in the Montu Priesthood; 2316, Menkhetiset with Peduamon, the latter a name on a coffin earlier than the XXII Dynasty, re-used in the royal cache (DARESSY, *Cercueils des cachettes royales* 61011).
 - ⁵ Moret, op. cit., 41031, see page 323. It is misprinted on page 282.
 - ⁶ Wiedemann, Proc. Soc. Bibl. Arch., vol. XI, p. 69; Gauthier, op. cit., 41062; Moret, op. cit., 41016.



STELA OF PERNESBASTET

Formerly in the possession of Mr. Waters S. Davis, of Galveston, Texas

therefore, were inhabitants of the Edfū region in the Bubastite Period, or the early Saite Period at the latest. It is important to note that a study of the names on the Cairo stelae of the same class supply ample confirmation of this dating.

The interest of this point is largely in its being the basis for a justified criticism of our modern study of archaeology. If the stela of Pernesbastet is Bubastite in date, so must many of the Cairo stelae be as well. And the criticism cannot stop with any one museum. Innumerable antiquities which we all loosely term Ptolemaic or Graeco-Roman were actually fabricated long before that date in the dark period following the fall of the Theban Empire. Painstaking study is our present duty to retrieve a whole period of art and of archaeology.

The vignette on the stela shows Pernesbastet, with hands upraised before her face in the position of one who chants a psalm of praise, before a table of offerings behind which stand Harakhte, Atum and Isis.

The inscription on the stela is the usual invocation for offerings, in this case phrased



'Recitation: A boon which the king gives to Osiris dwelling among the Westerners, the Great God, Lord of Abydos; that he give an offering of flesh and fowl and all things good and pure (to) the ka of the Osiris, Dame Pernesbastet, daughter of the Servitor of Ḥar-nubti Menkhetamūn, born of the Dame Shapmūt, daughter of the Servitor of Ḥarnubti Nespekhrod.'

¹ DAVIES-GARDINER, Tomb of Amenemhet, pp. 79-93.

² Daressy, Cercueils des cachettes royales, 61005.

ANOTHER STATUE OF A MAN NAMED ROY AS WORSHIPPER OF THE SUN-GOD

By THE EDITOR.

Plate XXII represents a sandstone statuette, measuring $16 \times 7 \times 6$ inches, brought from Egypt by the well-known traveller G. A. Hoskins and now in the possession of Sir H. Rider Haggard. In sending photographs of the figure to the Editor, together with courteous permission to publish them, Sir Rider Haggard inquires whether the owner Roy may not be identical with the Roy of whom a somewhat similar statue is now preserved in the Metropolitan Museum of New York and was discussed by Mr H. Winlock in the last number but one of the Journal. The impossibility of this view cannot be demonstrated, as the titles of the two Roys are not dissimilar², and the periods at which the statuettes were made cannot be very far removed from one another. On the other side, however, it may be said that the name is a common one and that it is unlikely for one and the same man to have possessed two separate statuettes in the same posture, more especially since the gesture of adoration is handled in each case in a different manner. The treatment here is very unusual, and, since the stone core is left between the upraised hands in an ungraceful manner, one can see why a preference was usually given to the device whereby a stela recording the actual words deemed to be uttered by the worshipper was placed in front of the hands. Here the background against which Roy kneels is shaped so as to resemble such a stela.

The inscriptions are for the most part legible in the Plate. They present, as usual, one or two minor difficulties, but are, on the whole, intelligible and without great interest. On the back we read:

'Praise of Horus of the horizon. Homage to thee, O Re, lord of truth, lord of mankind, father of the gods, who dost what is beneficial to everyone. I extol thee, I give thee praise and worship, the love of thee is throughout the land³. (Uttered) by the noble and prince, the overseer of the estate, the overseer of the granary of Montu in Hermonthis, to the front over (?) Upper and Lower Egypt⁴.

The owner's titles are concluded in the single line on the side of the stela beside Roy's left arm:

- 'The scribe excellent of a very truth, Roy, justified with the great god, lord of eternity.'
- ¹ Vol. vi, pp. 1—3.
- 2 The New York Roy is not only a 'scribe' but also an 'overseer of the estate (gs-pr) of the Great Royal Wife.'
 - 3 Hardly 'I worship thy love throughout the land.'
 - 4 Read $\underbrace{\mathcal{E}^{11}}_{\text{inty }r}$; however no such title appears to be known.









STATUE IN THE COLLECTION OF SIR RIDER HAGGARD, K.B.E.

In the single line on the opposite side are the names of a brother and sister (or perhaps sister-in-law?) of Roy:

'His brother, the chief Royal son of Montu, $^{\epsilon}Akheperkar\bar{e}^{\epsilon_1}$, justified; his sister, Amenn \bar{u} fer, justified.'

In front is the name of Roy's mother, who appears to have dedicated the figure in her son's honour:

'It is his mother who made his name to live Sathumay ().'

The name of the brother 'Akheperkarē' is identical with the *prenomen* of Tuthmosis I, and it follows that Sir Rider Haggard's statue must be of that date or not long afterwards.

¹ As Mr Griffith pointed out in discussing this same statue a couple of years ago, a man named 'Akheperkarē' is associated with another called Roy on a stela in the Leyden Museum (Boeser, Denkmüler des Neuen Reiches, Abt. III, Pl. XI, No. 16); but there both are sculptors, and cannot be identical with the persons of the same name mentioned here.

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By MARCUS N. TOD, M.A.

EVEN the Great War, seriously as it has hampered most branches of scientific research, has not wholly stopped archaeological discovery and publication, and it seems worth while to attempt to summarize the work which has appeared during the five years 1915 to 1919 inclusive relative to the Greek inscriptions of Egypt¹. It must be borne in mind, however, that, as normal commercial relations with Germany and Austria have only recently been resumed, there must almost inevitably be some omissions in the following bibliography.

F. Preisigke has completed the first volume of his Sammelbuch Griechischer Urkunden aus Aegypten by the publication of two further instalments², bringing the number of Greek texts (from papyri, inscriptions, ostraca, etc.) up to 6000. Of the second volume, which is devoted to the indispensable indices and tables of concordance, the first half appeared in 1918, and it is greatly to be hoped that the publication of the remaining half will not be unduly delayed. A long series of corrections and restorations of documents contained in the Sammelbuch, principally in connection with Egyptian personal names, has been published by K. F. W. Schmidt. J. G. Milne has written a short but interesting account based upon literary and epigraphical evidence, of the Greek and Roman tourists who visited Egypt, their itinerary and their impressions. Of the work of M. SAN NICOLÒ on Egyptian clubs and societies in the Ptolemaic and Roman period, the materials for which, though primarily papyrological, include a number of inscriptions, the first part of volume II appeared in 1915, dealing with the formation and dissolution of societies, their officials and meetings, their property, income and expenditure. In an article rentitled L'arabarchès d'Égypte, J. LESQUIER reaches the conclusion that the term 'alabarches' is a younger form of 'arabarches' and that both titles denote one and the same office, the holder of which was not the governor of the eastern desert but a fiscal agent, le commandant en chef des douaniers, either for the whole of Egypt or for a single epistrategia. The same scholar publishes as an appendix to his great work on the Roman Army in Egypt⁸ a selection of forty-five inscriptions of the Roman period, which are of special interest for the history of the army but have not yet been included in easily accessible collections.

A few new inscriptions have been discovered in or near Alexandria. Of these E. Breccia publishes⁹ two epitaphs on Alexandrian monks, one dated 524 and the other 602 a.d., the later of which contains several new or rare words and phrases and has in consequence a greater interest than the majority of funerary inscriptions, six grave-inscriptions from Hadra and other sites, a fragment of an oinochoe from Shatbi bearing the name of Ptolemy IV Philopator, a number of painted inscriptions from Graeco-Egyptian tombs of the Roman period unearthed at Ramleh, and a granite base from Behera (Kom Tugala) containing a brief dedication to Bubastis¹⁰. The excavations conducted in 1916 by Col. A. H. Tubby and Lieut.-Col. H. E. R. James at Shatbi, Ibrahimieh and Hadra resulted in the discovery of one incised and three painted tomb-inscriptions from Ptolemaic graves at Ibrahimieh ¹¹, and an inscribed sepulchral hydria

- ¹ For previous bibliographies see J. E. A., 1, 140 foll. (1912–13), 11, 108 foll. (1914).
- ² Strassburg, K. J. Trübner: Hefte 4 and 5. Reviewed by P. Viereck, Berl. phil. Woch., xxxvi, 131 foll.
- ³ K. J. Trübner. ⁴ Berl. phil. Woch., xxxvIII, 477 foll., 906 foll., 1073 foll.
- ⁵ J. E. A., III, 76 foll.
- ⁶ Aegyptisches Vereinswesen zur Zeit der Ptolemäer und Römer, 11, 1. Munich, Beck. Reviewed by F. Poland, Berl. phil. Woch., xxxv1, 45 foll.
 - ⁷ Rev. Arch., vi (1917), 95 foll.
- 8 L'armée romaine d'Égypte d'Auguste à Dioclétien (Mémoires de l'Inst. français du Caire, XLI, Cairo, 1918), 491 foll.
 - ⁹ Bull. Soc. Arch. Alex., IV, 74 foll.

has been published by J. G. MILNE¹. S. DE RICCI has shown² that three fragments in the Alexandria Museum (Breccia's Catalogue, Nos. 67 and 169) form part of a single inscription, dated 24 September, 120 A.D., which reproduces the dossier of an *idiologus* of Alexandria relating to the guardianship of the cemeteries (μνηματοφυλακία) devolving upon, but apparently neglected by, the Lycian residents in the city. C. C. Edgar has made it probable that an inscription of the Augustan age in the Museum (Catalogue No. 170) records the dedication of a statuette to an Alexandrian women's club by certain of its officers³. A third inscription in the same collection (Catalogue No. 316), a metrical epitaph of the second century B.C., has been discussed and emended by B. Keil⁴. E. Breccia's Guide to Alexandria⁵ contains a good account of the Archaeological Museum and of its epigraphical collection.

In the collection of the Institut Français d'Archéologie Orientale at Cairo, published by H. Gauthier⁶, is a Greek text of about 200 B.C., in which a certain Ἐλεάζορος Νικολάου, who entitles himself ἡγεμών, dedicates in his own name and that of his wife Eirene "the sun-dial and the well." Near Demerdash Station, a few kilometres from Heliopolis on the Cairo-Heliopolis electric railway, a group of nine epitaphs was found in 1911 and has since been removed to the Cairo Museum. They are published by C. C. Edgar, who attributes them to the first century before or after Christ and calls attention to the curious mixture of Egyptian, Greek and Hebrew names which they contain. In view of the tradition that the Holy Family stayed for a time at Matarieh, on the outskirts of Heliopolis, it is interesting to find this epigraphical evidence for the existence of a Jewish settlement in the neighbourhood about the beginning of our era.

An inscribed vase-fragment discovered at Canopus (Abukir) is of no special interest⁸. Passing further eastwards we may note the inscriptions found by J. Clédat on the Isthmus of Suez⁹, three funeral stelae from the Greek necropolis of Pelusium called Dibban el-Makhzan, a fragment from Aenni (W. of Katieh), a mutilated text of Alexander Severus from El Arish, five Christian epitaphs from Wady er-Reheiba, probably the necropolis of the ancient Rehoboth in Syria, and an interesting portable gnomon from Kantara, upon which further light has been thrown by H. Sottas¹⁰ and C. Kuentz¹¹. On the sea-coast between El Arish and Rafah, Clédat has investigated the Roman remains of Sheikh Zouede, one of the line of forts constructed, perhaps under Hadrian, to secure Egypt against attack from Asia and abandoned apparently before 378 a.d. A large and perfectly preserved mosaic floor bears two epigrams, each consisting of two couplets, a reference to the $\phi i \lambda \delta \kappa a \lambda o s \kappa \tau i \sigma \tau \eta s$ Nestor, and titles ($1\pi \pi \delta \lambda v \tau o s$, $\phi \epsilon \delta \rho a$, $\kappa v v a \gamma o s$, etc.) identifying the figures represented in the mythological scenes portrayed. Elsewhere on or near the same site were found a fragment of a statue-base, a mosaic inscription from the thermae and a number of small inscribed objects in lead and clay, including about a score of amphora-handles.

K. Sethe devotes a long and interesting paper 13 to the famous "Rosetta Stone" and its trilingual inscription, of which this scholar has recently published a critical edition in G. Steindorff's Urkunden des ägyptischen Altertums 14. He first deals with the character and history of the stone and of certain other inscriptions which are of assistance in the reconstitution of the text, and then proceeds to examine this text in some detail, showing how the Greek and demotic versions serve to elucidate each other and making a number of interesting suggestions for the better restoration of the mutilated portions of the Greek text. The immense progress which the last century has witnessed in Egyptological study is strikingly illustrated by some documents of Sir William Gell, dated 1822 and recently presented to the Edwards Library of University College, London, in one of which a reading of the hieroglyphic text of the Rosetta Stone is attempted 15. Reference will be made below to the new edition of the Greek text of this notable monument by F. H. Marshall.

Ten fragmentary inscriptions from Siwa published ¹⁶ by O. Bates acquire a certain interest as the only material of the sort from the ancient Ammonium.

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<sup>1</sup> Bull. Soc. Arch. Alex., 31.
                                                                      <sup>2</sup> Comptes rendus Acad. Inscr., 1916, 165 foll.
<sup>3</sup> J. E. A., IV, 253 foll.
                                                                      <sup>4</sup> Hermes, L, 464 foll.
<sup>5</sup> Alexandrea ad Aegyptum. Bergamo, Istituto italiano d' arti grafiche, 1914, pp. 147 foll.
6 Bull. Inst. fr. Arch. Or., XII, 143 foll. Cf. E. J. PILCHER, Pal. Expl. Fund Q. S., 1916, 153 foll.
7 Bull. Soc. Arch. Alex., IV, 32 foll.
                                                                     8 Bull. Soc. Arch. Alex., IV, 58 foll.
                                                                     <sup>10</sup> Ibid., xxxvIII, 1 foll.
9 Recueil d. Travaux, xxxvII, 35 foll.
11 Ibid., 70 foll.
                                                                     12 Annales du Service, xv, 15 foll.
<sup>13</sup> Göttingische Nachrichten, Phil.-hist. Klasse, 1916, 275 foll.
                                                                     15 Ancient Egypt, 1917, 162 foll.
14 Abteilung 11, Heft 3.
16 Cairo Scientific Journal, VIII, 94. This reference I owe to Mr S. Gaselee.
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In the course of a long and detailed discussion of the Greek monuments of the dromos of the Serapeum at Memphis, U. Wilcken examines afresh the dedication (Preisigke, Sammelbuch, 1934), probably dating from the reign of Ptolemy I, of the $\lambda \nu \chi \nu \acute{a}\pi\tau \iota \sigma \nu$, which he interprets as the "Amtslokal der $\lambda \nu \chi \nu \acute{a}\pi\tau \iota \sigma \nu$." In an appendix (pp. 200 foll.) a curious and misunderstood monument is discussed anew in the light of F. Li. Griffith's article on "Apotheosis by Drowning" and is interpreted as a sanctuary erected to Asklepias, a girl of five years, who by drowning became Isis: if this view is correct, it would appear that the apotheosis of the drowned continued even into the Roman Imperial period. J. G. Milne examines a collection of leaden tokens from Memphis and concludes that they are examples of a token-currency of Roman times used locally at Memphis (with similar issues at Hermopolis and Oxyrhynchus) in the second and third centuries to supply the need of small change: some of them bear the legend MEMOIC or a date (L\Gamma, LA, EE, etc.).

E. Breccia's excavations at Theadelphia (Bath Hârît) have produced some valuable epigraphical finds. An inscription on the pylon of the Pneferos-temple shows that it was dedicated to Πνεφερῶς θεὸς μέγας μέγας on 6th September, 137 B.C., by a certain 'Αγαθόδωρος 'Αλεξανδρεὺς τῆς β' ἱππαρχίας and his wife and children ὑπὲρ βασιλέως Πτολεμαίου [Ptolemy Euergetes II] καὶ βασιλίσσης Κλεοπάτρας τῆς ἀδελφῆς καὶ βασιλίσσης Κλεοπάτρας τῆς ἀδελφῆς καὶ βασιλίσσης Κλεοπάτρας τῆς ἀδελφῆς καὶ βασιλίσσης Κλεοπάτρας τῆς γυναικὸς θεῶν εὐεργετῶν καὶ τῶν τέκνων αὐτῶν. In the same temple were found an inscription of 15th February, 102 B.C., marking the τόπος συνόδου χηνοβοσκῶν and a dedication to Pneferos of a θύρα and κλεῦθρον by the above-mentioned Agathodoros, ἱππάρχης ἐπ' ἀνδρῶν κατοίκων ἱππέων, together with his wife and children. Still more interesting is an inscription of, which bears a striking resemblance to one recently discovered at Euhemeria (cf. J. E. A. I, 141 and see below), recording the grant of ἀσυλία to the temples of Isis Eseremphis¹o and of Ἡρακλῆς θεὸς μέγας καλλίνικος. It is 53 lines in length and comprises (a) a title (l. 1), (b) a covering letter, dated 23rd September, 69 B.C., which the στρατηγός of the nome sends to the ἐπιστάτης together with copies of the two following documents (ll. 2—10), (c) the petition for the grant of ἀσυλία addressed to Ptolemy XIII Auletes and queen Cleopatra Tryphaena by Philippos, a Corinthian, τῶν α΄ φίλων καὶ χιλιάρχων (?) καὶ περὶ ὑμᾶς μαχαιροφόρων (ll. 11—52), and (d) the endorsement of the foregoing petition, dated 17th July, 69 B.C.

At Euhemeria (Kasr el-Banât) G. Lefèbure has discovered 11 the upper part of the stela of which the second and longer portion was published in 1900 by Grenfell and Hunt 12. The new fragment consists of eleven lines and after the heading (ἄσυλου κατὰ τὰ προστεταγμένα) records a letter addressed to Ptolemy XIII in 69/8 B.C. by an Athenian, Dionysodoros, asking permission to rebuild a ruined temple of Ammon and the σύνναοι θεοί at Euhemeria and to inscribe it with the king's name (ἐπιγράψαι ὑπὲρ σοῦ, δέσποτα βασιλεῦ). P. Roussel 13 has summarized and discussed the similar asylum-inscription from Euhemeria published in 1912, and has collected the evidence bearing upon the functions of the λεσώνης, who, he concludes, was probably a civil rather than a sacerdotal functionary. Lefèbure has also published 14 two fragments found at Crocodilopolis (Kimân Fâres) of a decree of Arsinoë passed after 212 A.D. in honour of an important personage, and a long inscription 15 of Ptolemais (Menchah), dated 138/7 B.C., in which a certain Paniskos, τῶν ἀρχισωματοψυλάκων καὶ ἱππάρχης ἐπ' ἀνδρῶν καὶ ἐπιμελητής, and 28 συνοδίται, whose names are recorded, dedicate a temple Θρίπιδι Κολάνθα Πανὶ θεοῖς συννάοις ὑπὲρ βασιλέως Πτολεμαίου κτλ. The phrase proceeds exactly as that of the Theadelphian dedication above noticed, save that τῶν τέκνων αὐτῶν

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<sup>1</sup> Jahrbuch d. Arch. Inst., XXXII, 158 foll.
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³ Zeitschr. ägypt. Sprache, XLVI, 132 foll.

⁵ Comptes rendus Acad. Inscr., 1916, 420 foll.

⁷ Annales du Service, xvi, 183 foll.

⁹ Ibid., 39 foll.

¹¹ Annales du Service, XIII, 221 foll.

¹³ Rev. Ét. Gr., XXIX, 173 foll.

² Egger, Rev. Arch., 1866, XIII, 103 foll.

⁴ Ancient Egypt, 1915, 107 foll.

⁶ Rev. Arch., 1911, xvIII, 256 foll.

⁸ Bull. Soc. Arch. Alex., IV, 106 foll.

For this epithet, cf. Oxyr. Papyri, xI, No. 1380, l. 46.
¹² Fayûm Towns and their Papyri, 47 foll.

¹⁴ Annales du Service, XIII, 224 foll. ¹⁵ Ibid., 215 foll.

is replaced by $\tau \hat{\omega} \nu \tau \hat{\omega} \tau \hat{\omega} \nu \tau \hat{\kappa} \nu \omega \nu$. The puzzling word $Ko\lambda \hat{\omega} \nu \theta a$ is taken by the editor, somewhat doubtfully, as an epithet of Thripis (Tryphis, the goddess of vegetation). The $\sigma \hat{\nu} \nu o \delta os$ appears to have been composed of the officers of the garrison of Ptolemais and their names show that among them were Greeks, Egyptians, Semites and Persians, but with a large preponderance of Greeks. In deference to the arguments advanced by Perdrizer and Wilcken, the editor has withdrawn his own conjectural alteration of $\kappa \nu \nu o \beta o \sigma \kappa \acute{o}s$ to $\chi \eta \nu o \beta o \sigma \kappa \acute{o}s$ in a dedication of Philadelphia has collection of Christian Greek inscriptions Lefebure has added sixteen epitaphs (Nos. 834—849), fourteen found during the excavation of Comte Jean de Beaucorps at Antinoë (Sheikh Abâdeh), one from Assiut and one from Deir el-Moharraq, bearing the date 11 December, 747 a.d. A small limestone stela with a bilingual inscription has been found by Ahmed Bey Kamal in a cemetery at Deir Dronka Lefebure 1.

A grey marble column from Tinnis, now in the Cairo Museum, bears the legend δ ἄγιος Προκόπιος: its editor, H. Munier, claims that this is the first mention in Egypt of Procopius of Caesarea, whose cult was widespread in the east. In a discussion of the Thracian name Dizazelmis, P. Perdrizet corrects to Διζάζελμις ἥκω a graffito of the Ptolemaic period from the temple of Sethos I at Abydos, wrongly read hitherto as Zάζελμις ἥκω. J. Maspero has published with a full commentary seven inscriptions from the great temple at Tentyra (Dendereh), two of which refer to the Emperor Hadrian and one, if correctly restored, to "Paulina sister of Carinus Caesar." Of greater importance is an honorary inscription of about 150 a.d. commemorating a certain Tullius Ptolemaeus, who had held a series of offices at Alexandria, including those of στρατηγὸς τῆς πόλεως, ἀρχιδικαστής and ἐπὶ τῆς εὐθηνίας τῶν ἐν τῶι Μουσείωι σιτουμένων ἀτελῶν.

A Christian lamp, found at Karnak and published by H. Munier, bears the inscription 'Αββᾶ Λούκιος καὶ ἀββᾶ 'Αρσένιος μάρτυρες; the editor points out that these names occur also, under varying forms, in literary sources, and he compares the lamp-inscriptions 'Αλεξάνδρου ἀρχιεπισκόπου (312—28 A.D.: found at Karnak), 'Ιουδᾶς καὶ 'Ιάκωβος ἀπόστολος (Thebes) and ὁ ἄγιος Μιχαήλ (Kom Ombo). A metrical epitaph from Thebes, probably of Hadrian's time, has been discussed and partially restored by T. Reinach¹⁰.

The inscriptions and other graffiti—prehistoric, Pharaonic, demotic, Greek and Arabic—from the quarries of Gebel Silsile have been published ¹¹ from Legrain's copies by F. Preisigke and W. Spiegelberg. Of the 306 graffiti here collected, 83 are wholly or partly in Greek, and of these only 20 had been previously published: the remaining 63 are published here for the first time, but though the editor has done his work well and carefully the records are lacking in any considerable importance.

Of eleven new texts from Upper Egypt published 12 by C. C. EDGAR one is a fragmentary dedication of the second or first century B.C. [to Isis] $\kappa a i \tau o i s \epsilon \nu \tau \omega i$ 'A[$\beta a \tau \omega i \theta \epsilon o i s$] at Philae, a second, discovered at Tell Timai, is inscribed on the base of a statue erected in 18 B.C. to a certain Leon who had been of "the city" (probably Thmouis) from 24/3 to 22/1 B.C., a third is a dedication by certain inhabitants of Koptos, and the remaining eight are grave-stelae, some of them dating from the first century B.C., from Terenouthis (Kom Abu Billu).

The famous Abu Simbel graffiti of the Greek mercenaries of Psammetichus II have been republished in the third edition of DITTENBERGER'S classic Sylloge Inscriptionum Graecarum (No. 1)¹³: in a review of this volume W. Bannier proposes ¹⁴ to read $\hat{\eta}_{\gamma\epsilon}$ instead of $\hat{\eta}_{\chi\epsilon}$. The same inscriptions are indexed on the concluding page of Collitz-Bechtel's Sammlung der griechischen Dialektinschriften ¹⁵. From the pylon of the temple of Bigeh, examined and described by A. M. Blackman ¹⁶, comes a mutilated graffito of the second or third century of our era, a $\pi \rho o \sigma \kappa \acute{\nu} \nu \eta \mu a$ addressed "I $\sigma i \delta \iota \kappa a \iota \tau o \iota s$ $\sigma \nu \nu \nu \acute{a} o \iota s$, which has been transcribed, translated and annotated by A. S. Hunt.

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1 Annales du Service, XIII, 226.
2 Ibid., 93 foll. Cf. J. E. A., I, 141.
3 Annales du Service, xv, 113 foll.
4 Ibid., xvI, 70.
5 Ibid., xvIII, 72 foll.
6 Rev. Ét. Anc., xvI, 399 foll.
7 The Osireion at Abydos, London, 1904, Pl. xxIII, p. 37.
8 Recueil d. Travaux, xxxvII, 93 foll.
9 Annales du Service, xvII, 160 foll.
10 Rev. Ét. Gr., xxvIII, 55 foll. Cf. A. Pallis, ibid., 375; W. Vollgraff, Mnemosyne, xlvII, 54.
11 Aegyptische u. griechische Inschriften u. Graffiti aus den Steinbrüchen des Gebel Silsile (Oberägypten),
Strassburg, Trübner, 1915.
12 Annales du Service, xv, 105 foll.
13 Leipzig, Hirzel. Vol. I, 1915.
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¹⁴ Berl. phil. Woch., xxxvi, 923 foll.
 ¹⁵ Iv, 4. 3, p. 1232.
 ¹⁶ Les temples immergés de la Nubie: The Temple of Bigeh.
 Cairo, Imprimerie de l'Inst. fr. d'Arch. Orient.,
 1915, p. 49.

The publication of the Ancient Greek Inscriptions in the British Museum was completed in 1916, forty-two years after the appearance of the first volume, by the issue of the second half of Volume IV, containing "supplementary and miscellaneous inscriptions," edited by F. H. MARSHALL. Section VIII comprises the inscriptions, thirty-three in number, of Egypt and the Sudan. Fifteen of these were found at Naucratis (Nos. 1080—93, 1091 a), two each at Abukir (1063, 1072) and Gizeh (1067—8) and one each at Rosetta (1065), Bubastis (1079 a), Memphis (1075), the Fayûm (1069), Antinoë (1076), Koptos (1074), Syene (1066), Philae (1078) and in the Sudan (1077), while in the case of five the exact provenance is unknown (1064, 1070—1, 1073, 1079). Although all these texts have been previously published, the present edition rests in all cases upon a careful revision of the originals and is accompanied by a full and useful commentary. Many of the inscriptions are of considerable interest and no fewer than six of them, including the famous Rosetta Stone (see above), are of sufficient importance to have secured places in DITTENBERGER'S Orientis Graeci Inscriptiones Selectae¹.

A group of Greek inscriptions from Egypt which are now in the Royal Ontario Museum at Toronto has recently been published by W. S. Fox. The most interesting² of these, which comes from the Fayûm, belongs probably to the period 300—270 B.c. and contains nine names, each followed by an ethnic; it is in all likelihood a dedication to some god or king, Ptolemy Soter or Philadelphos, made by a number of Greek soldiers or engineers. Of the remaining eight³, one is a Christian invocation of about the fifth century from Deir el-Bahari in the Thebaid, two are from the Fayûm and the precise provenance of five is not recorded. Of these last, two are votive inscriptions of the $\pi\rho\sigma\sigma\kappa\dot{\nu}\nu\eta\mu a$ -type, two are epitaphs, and one records the building of a $\pi\rho\sigma\sigma\epsilon\nu\chi\dot{\gamma}$ by a certain Papous.

H. G. EVELYN-WHITE has published a Christian epitaph of the seventh or early eighth century and the short inscription ΠΛΗΝΙΣ ΙΑΤΡΟΣ, both of which have recently been added to the Metropolitan Museum of Art, New York.

¹ Nos. 1063—67, 1078=0. G. I. S., 60, 86, 90, 168, 666, 719 respectively.

² Am. Journ. Arch., xix, 72 foll.; Am. Journ. Phil., xxxviii, 304 foll.

³ Am. Journ. Phil., xxxviii, 411 foll.

⁴ Bull. Metr. Mus. Art, xi, 48 foll.

NOTES AND NEWS

Mr Robert Mond took the chair at the Annual General Meeting held in the rooms of the Society on May 11th. In his opening address Mr Mond expressed his deep regret, shared by all members, at the resignation of Field-Marshal Lord Grenfell, who had been our President since the death of Lord Cromer in 1917. At the beginning of last winter Lord Grenfell wrote to say that owing to advancing years and absence from London it would be necessary for him to give up many of the honorary posts held by him in London, and among them the Presidency of our Society. We have to be grateful to him for consenting to remain at our head during the difficult period of reorganization.

We are fortunate in having secured as our new President General Sir John Maxwell, whom his long and intimate connection with Egypt, as well as a keen interest in the antiquities of that country, make eminently fitted to hold the post. Readers of the *Times* will remember the eloquent letter which, following up Sir Arthur Evans' appeal, he addressed to that paper in March, 1919, and in which he advocated the creation of a British Institute of Archaeology in Cairo. The need of such an Institute is greater than ever, and we can only hope that the Government, despite its desire to meet the popular demand for economy, will soon begin to recognize the fatuity of economizing in matters of Science and Art.

At the General Meeting the resignation of Dr Alan Gardiner as Honorary Secretary was also announced. Dr Gardiner finds it necessary to concentrate more of his time upon the Editorship of the *Journal* and upon his own researches. Captain H. R. Hall of the British Museum has kindly undertaken to hold the post that thus falls vacant.

In the Report of the Committee for the year plans for the coming winter were discussed, and the difficulties that had been encountered in negotiating for the site of El-Amarna were explained to members. The point over which the Society has found itself at variance with the Service of Antiquities concerns the division of antiquities, M. Lacau urging that we ought not to insist on taking a full half of the antiquities found in case that half should comprise objects of quite exceptional interest or importance. As the law stands, the excavator is entitled to a full half, and since, in the interests of education generally, the Egypt Exploration Society is strongly in favour of the distribution of antiquities, in so far as this does not conflict with the aims of scientific research, we are not inclined to abandon the very reasonable principle incorporated in the law. On the other hand, M. Lacau can rest assured that we should be the last to demand the cession of objects which obviously ought to find a home in the Cairo Museum. Our whole record, extending over a long series of years, proves that we have never made such demands, and that the conduct of our work has been dictated throughout by an impeccable regard for the best advantage of science. Happily, the difference between M. Lacau's standpoint and our own is rapidly approaching vanishing-point, and with the goodwill that already exists on both sides it ought not to be difficult to come to an agreement satisfactory to all concerned.

Should we undertake excavations at El-Amarna, this does not mean that we should abandon our work at Abydos, where we still have the remainder of the Osireion to excavate. So far from repudiating our obligations with regard to this site, we desire sooner or later to extend them by making a full photographic record of the temples of Sethos I and Journ. of Egypt. Arch. vi.

Ramesses II. This work, coupled with some further digging, ought to put us in a position to compile an adequate history of this ancient town, so important as a religious centre throughout Pharaonic times.

Negotiations are in progress with Dr Blackman for a continuation of his copying work at Mêr. There still remain several tombs of great interest to be recorded, as well as two more at the neighbouring site of Kuṣêr el-Amarna on the eastern bank of the Nile. The Committee of the Egypt Exploration Society is of opinion that the fullest advantage ought to be taken of Dr Blackman's well-proven skill as a copyist, and it is to be hoped that the coming season will find him industriously engaged once more in the completion of an enterprise so admirably begun.

The small excavation at Balabîsh, made at the instance of the American Committee of our Society in April and May of 1915, is treated by Mr G. A. Wainwright in a detailed and well-illustrated memoir, which is now in the hands of the printer and will appear in the autumn. Prof. Thos. Whittemore contributes the Preface. A preliminary account of the discoveries was published in this Journal, Vol. II, pp. 202-3. Their main interest centred in a small series of the rare "pan-graves" known from Professor Petrie's earlier excavations at Hu and Rîfeh; again at Balabîsh the population buried in this kind of grave was found to be markedly Southern in type, the objects discovered bearing strong resemblance to modern Nubian and Sudanese work. There was also an extensive cemetery of the New Kingdom, which was not completely dug, since it had been already worked over by the Government and also plundered by natives. Here a considerable amount of interesting pottery was unearthed, including several specimens of the Bügelkannen familiar from Greek sites of the Mycenean periods. The memoir on Balabîsh brings the scientific reports of excavations conducted by the Society practically up to date. The volume will be published at two guineas, the special price to Members being 28s. A notice will be sent to Members as soon as the book is ready for distribution.

A second volume of the *Theban Tombs Series* is nearly ready, and will be obtainable by Members at 28s., the published price being two guineas. This volume, of which the author is Mr N. de G. Davies, contains a complete record of the scenes and inscriptions in the tomb of Antefoker, the Vizier of Sesostris I of the Twelfth Dynasty. Not only is this tomb one of the oldest in Thebes, but also it possesses a particular interest as having provided the models for the paintings in various tomb-chapels of the nobles of the Eighteenth Dynasty. A large number of hieratic graffiti have been scribbled on the walls; these are edited by Dr Alan Gardiner, and record the visits of various scribes and artists of the early New Kingdom, who found the tomb "like heaven in its interior" and "exceeding pleasant in their hearts." The volume contains thirty-seven line and five collotype plates; also six coloured plates from facsimiles made by Mrs Nina de Garis Davies. It may here be mentioned that a limited number of copies of the first and introductory volume of the series, The Tomb of Amenemhēt, are available to Members at the price of 35s.

News is now available as to last winter's excavations in Egypt. A remarkable find has been made in the hill behind Sheikh 'Abd el-Kurneh (Thebes) by Messrs Winlock and Burton, working on behalf of the Metropolitan Museum at New York. In a small but tightly-packed chamber of an Eleventh Dynasty tomb was found a complete set of funerary models in admirable condition. These comprised models of gardens with pools, fruit-trees

and covered verandahs, of the nomarch inspecting his cattle, of slaughter-houses, carpenters' shops, weavers' yards, breweries, bakeries, of cattle being fattened in their stalls, and of the sports of fishing and harpooning, besides many boats and funerary figures. The mere enumeration conjures up the scenes habitually depicted upon the walls of Egyptian tombs, and furnishes the best proof that those scenes had a magical or, to use a less controversial term, an utilitarian intention; for no one doubts that the models buried with the dead, like his weapons and the pots containing offerings, were deposited with him with an eye to his practical advantage in the after-life.

Professor Petrie has published in the *Times* of May 11th an account of his excavations at El-Lahûn, from which we print a few extracts:

"The chief work was to make an entire clearance of the XIIth Dynasty pyramid and its surroundings, where the group of jewelry was discovered in 1914. In searching the rubbish in the pyramid, the gold serpent from the Royal crown of Senusert II was found, which had been detached and dropped by the destroyers. It is finely wrought with inlay of coloured stones, and a head of lazuli with garnet eyes. From this being in the pyramid, it is now certain that the king was buried there. In a tomb of a queen was discovered a remarkable alabaster jar, 22 in. high, with a magic inscription of a new type, stating that all that is produced on earth will be obtained from it....The foundations of a large building on the top of the hill by the pyramid were searched, and various fragments of scattered sculpture were collected, which point to this being the chapel of the apotheosis (sed-heb) of the king, like that which we discovered on the top of the mountain at Thebes. A great amount of clearance was made in search of entrances to the queen's pyramid and eight rock mastabas, but no opening was found; only a vast amount of rockboring can finally prove whether these were cenotaphs or tombs. The temple of the king at Lahun was further cleared and the plan of the foundations recovered.

"The general cemetery of the same age was exhaustively searched and planned. A remarkable tomb is that of the chief architect of Egypt, builder of the Lahun pyramid, named Anupy. He had a large mastaba on a hill top, like those of the VIth Dynasty, and in the side of the hill a chapel with colonnade front like the tombs of Beni Hasan of the XIIth Dynasty. A great surprise was finding a small untouched cemetery dating from the prehistoric age to the IVth Dynasty. A hundred burials here give every stage of form from the plain open grave to the deep tomb-shaft, nearly 30 different stages in all."

In the Tombs of the Kings at Thebes, to the south of the entrance to the tomb of Meneptah, Lord Carnarvon and Mr Carter found some important alabaster jars of large size and of a new type. They mostly bore the cartouche of Meneptah, but some belonged to the reign of Ramesses II. Upon several were inscriptions explaining the contents of the jars.

This season's very successful series of lectures was concluded on May 28th by one on "The Present Position of Papyrology" by Professor B. P. Grenfell. Since the last Notes and News were written lectures have been delivered by M. Jean Capart, of the Brussels Museum, on "The Study of Egyptian Art" (March 19th), and by Professor Peet on "Recreation in Ancient Egypt" (April 23rd).

As we go to Press, a cable from Cairo informs us that the concession of El-Amarna has been granted to us. The deep interest of this site is well known, and important finds may be anticipated. Professor Peet will be in charge of the work. It was at El-Amarna that Akhenaton, the heretic king who endeavoured to impose an exclusive solar monotheism on the people of Egypt, built his city; and it was here that the important diplomatic correspondence, written in cuneiform upon clay tablets, between the Pharaohs of the end of the Eighteenth Dynasty and the local dynasts of Syria and Asia Minor, was unearthed by natives in 1887. For the success of our excavations abundant financial help will be needful, and the Secretary of the Society will be glad to receive special donations for the purpose.

NOTICE OF RECENT PUBLICATION

L'Armée romaine d'Égypte d'Auguste à Dioclétien. Par M. Jean Lesquier. (Mémoires publiés par les membres de l'Institut Français d'Archéologie Orientale du Caire, tome 41.) Le Caire, Impr. de l'Inst. Français d'Arch. Or., 1918. Pp. xxxi+586. One map.

In 1911 M. Lesquier published his Institutions militaires de l'Égypte sous les Lagides, in which he dealt with the Ptolemaic army and the problems affecting it. The volume revealed a wide range of knowledge, careful and painstaking study of the evidence, and an acute and balanced judgement. The news, therefore, that the author proposed to follow it up with a similar work on the Roman army of Egypt was very welcome. The second task took longer than at first anticipated, and the war delayed printing; but by the end of 1918 the present magnificent volume, redeeming the promise made in 1911, was given to the world. A magnificent volume it is in every respect. Its format and general appearance are of a sumptuousness astonishing in view of the difficult conditions created by the war; and M. Lesquier's work is throughout of the highest order. The qualities revealed in his former volume are not less conspicuous here. The material, if often insufficient for any certain decision on disputed points, is at least far more abundant than for the army of the Ptolemies, and the problems raised are consequently more numerous, but all are treated by M. Lesquier with the same conscientious thoroughness; yet, despite the mass of detail, he manages to present a clear outline of the more important aspects of his subject. To review such a work with any approach to adequacy would require an erudition rivalling his own, to which I can lay no claim; and I must therefore content myself with sketching the main lines of his treatment, emphasizing certain general conclusions which emerge from it, and adding a few notes on points of detail.

After a very careful preliminary bibliography, in which he reviews the principal sources of information. the author begins his task with a sketch of the history of the Roman army in Egypt, so far as it can be recovered, from the expedition of Gabinius in B.c. 55 to the reign of Diocletian. This is followed by a detailed study of the evidence bearing on the history and activities, during their residence in Egypt, of the various units composing the army of occupation, legions, alae, auxiliary cohorts, ethnic corps, and fleet; and this leads to a review of the composition of the army and an attempt to estimate its total strength at various periods. After this he passes to a consideration of the method of command, from the prefect himself to the officers of the single units. As a preliminary to the study of the recruitment it is necessary to consider the difficult and much-disputed question of the $\epsilon \pi i \kappa \rho \iota \sigma \iota s$; and the chapter devoted to this subject is one of M. Lesquier's most admirable contributions to our knowledge. After dealing with recruitment he next passes to the actual conditions of service, a subject which he treats in all its aspects, the various functions performed by soldiers of various grades, the pay, the vexed questions concerning the marriage of soldiers, and the cults popular in the army. This is followed by a chapter on the veterans, their discharge. and the privileges and immunities accorded to them, and that by another on the supplies for the army. Finally, a detailed study is made of the territorial occupation, both in its general character and in detail, the various districts being taken in turn. In a concluding section the author briefly sums up the results obtained by him, giving an excellent conspectus of the preceding chapters. In appendices are republished various inscriptions, a Latin papyrus of the British Museum, and a Berlin papyrus. A discussion of the Geneva Latin papyrus (P. Gen. 4) follows, and in the two concluding appendices are given a list of the prefects amplifying by the help of the new material the well-known work of Cantarelli, and a prosopography of the Roman army of Egypt. Excellent indices and a map conclude the volume.

It will be seen that M. Lesquier casts his net widely and treats his subject with an exemplary thoroughness. It may seem ungrateful, where so much is given us, to ask for more; but I cannot but think that in two respects, despite his wide range, he has interpreted his subject somewhat too narrowly, and that in both directions. It is with the Roman army in *Egypt* that he is dealing; but it would have given additional value to his work had he more frequently passed beyond the boundaries of Egypt. In particular, more explanation of the military terms employed would have been welcome. The details of military

organization, familiar enough to M. Lesquier and perhaps also to the ordinary student of Roman history, are not always equally so to the specialist in papyrology, to whom the Roman army is but one among a multitude of subjects connected with the history of Graeco-Roman Egypt. And, secondly, though the theme of the volume is the *Roman* army and conditions were in many respects very different in Byzantine times, yet it would have been of advantage to compare, more frequently than is done, the military organization of later times with that of the Roman period; for certain of the problems to be solved continued unchanged and met with similar solutions, while even the differences observable are of both interest and utility to the student of the Roman army. In particular is this true in the case of the last chapter, that on the territorial occupation.

These are small points, however, and the value of M. Lesquier's work is sufficiently great to merit the whole-hearted gratitude of students in this field. It may be of interest to note one or two of the main impressions which remain with one after one has read through the volume, with its innumerable points of detail.

In the first place, M. Lesquier's researches have a value quite outside the field of papyrology itself. The papyrus evidence not infrequently throws light on questions which concern the army of the Empire generally; and thus the volume serves to reinforce a truth with which students of the papyri are well acquainted but which is too little recognized by others, that papyrology may furnish valuable material for the history of the Graeco-Roman world as a whole. In particular, M. Lesquier shows that Egyptian practice, as in the case of the castrenses, the methods of command, local conscription, and the gradual approximation of service in the auxilia to that in the legions, preceded, and indeed may be said to have been the model for, that in the other provinces of the Empire; we are in fact enabled to trace the development of these changes in the papyri better and at an earlier date than elsewhere. On the other hand, there are some strikingly individual features in the army of Egypt. One of these is, as M. Lesquier points out (e.g. pp. 478 f.), the unusually large proportion of light-armed troops to the total force. Another is that Egypt was not properly speaking a limes. The comparatively large force there stationed was intended, partly no doubt to defend the country from attacks by the nomadic tribes of the desert, chiefly towards the south, but largely to secure a province peculiarly valuable as the granary of Rome, and with a population notoriously unstable, to the Empire. It is interesting to note how much better defended was the Delta from the East than from the West, as M. Lesquier shows (p. 404).

I spoke just now of the comparatively large force stationed in Egypt. Absolutely the number was rather surprisingly small, except at certain periods; but this was a phenomenon common to all parts of the Empire; it is one of the wonders of history, and a striking testimony of the quality of the Roman army, that a frontier so extended and in many places so constantly threatened should have been held by forces so small.

I may conclude this notice with some notes on points of detail, though space will not permit of my doing more than select a few. In the first place, I should like to correct a misrepresentation due, indirectly, to myself. In a footnote on p. iv M. Lesquier quotes me for the statement that Stein in his Untersuchungen zur Gesch. und Verw. Aegyptens unter röm. Herrschaft holds "qu'Auguste aurait incorporé à son armée les derniers corps de troupes servant sous les Ptolémées, qui ne seraient devenus romains que de nom." As he states, I then knew Stein's book only through a review by Schubart. Having since had an opportunity of seeing Stein's own words I am convinced that his meaning was misapprehended by Schubart; that the latter did mean what I took him to mean seems certain. Stein does indeed (p. 118) say that "es sind also zunächst die unter den Ptolemäern dienenden Truppenkörper im wesentlichen geblieben, was sie waren, und nur dem Namen nach römisch geworden"; but as his reference to p. 113 shows, he is here speaking of the Roman troops left in Egypt by Julius Caesar, which may by the time of Augustus have been more Greek than Roman but were still units of the Roman army. Stein merely speaks of "eine lokale Konscription der Truppen" (p. 117). In both cases he probably goes too far; but he does not represent Augustus as taking over units of the Ptolemaic army.

On p. 26, in his sketch of the history of the Roman army in Egypt, M. Lesquier refers to the supposed Jewish rising in A.D. 136—137. It is therefore well to note that this event, hitherto accepted on the testimony of a single papyrus at Berlin, must now be struck out of Egyptian annals, since Wilcken has shown (*Hermes*, 54, pp. 111–2) that the date in the papyrus was misread and really corresponds to the year 116—117.

In connexion with what M. Lesquier says (p. 31) of Caracalla's atrocities at Alexandria it may be pointed out that, abominable as Caracalla's character undoubtedly was, it would perhaps be rash to accept

the testimony of Dion Cassius too confidently. The edicts of Caracalla in the well-known Giessen papyrus (P. Giss. 40) at least suggest the possibility of some exaggeration in Dion's account; and if it must be admitted that the language of edicts is not a safe guide to actual facts, yet the letter from Alexandria recently published by Schubart (Amtl. Ber. aus den Kön. Kunstsammlungen, 39, 1918, col. 141 ff.), with its picture of general festivities, seems (if, as is likely, the Emperor there referred to is really Caracalla) hardly consistent with the horrors depicted by Dion.

One of the most important chapters in the volume is that (chap. 4) devoted to the *epicrisis*. The subject has evoked an immense amount of discussion; it has indeed been one of the most difficult and controversial problems of papyrology; and M. Lesquier's handling of it is a most valuable contribution to knowledge. Discussing the matter in the light of the latest evidence and with great acuteness and critical judgement, he has probably decided once for all the main questions involved, though there is doubtless room for further elucidation of certain points of detail. His conclusions are (1) that *epicrisis* was always, in theory, conducted by the prefect, though he might delegate the actual execution to others, (2) that there was really only a single *epicrisis*; "les épithètes d'é π iκρισιs fiscale, éphébique, militaire doivent disparaître." There was, in effect, only one institution of this name, with one object: to determine status. This last point is emphasized, independently of Lesquier, by P. M. Meyer in his *Griechische Texte aus Ägypten*, p. 59.

Another important question towards the settlement of which M. Lesquier makes a substantial contribution, a question, in this case, which affects far more than the province of Egypt, is that of the marriage of soldiers. He shows how human nature, enforcing its rights against all official regulations, bore down at last the opposition of the Government; which, under Septimius Severus, probably in 197, withdrew, at least for Roman citizens, its veto on the marriage of soldiers serving with the colours.

In reference to the question of the choice of Antinoite citizenship by soldiers (pp. 326 f.) it may be remarked that in addition to the known advantages (exemption from liturgies, etc.) certain unpublished papyri in the British Museum reveal other very substantial privileges enjoyed by the citizens of that city.

M. Lesquier also discusses the vexed question of the title Arabarches or Alabarches (pp. 421–427); and here again his conclusion may certainly be accepted. It is that the Arabarches, who, as is known, was a financial official, was at no time a governor of the western desert. What he "governed" was not Arabia but Arabs; those Arabs, namely, who were employed, as the well-known title 'Αραβοτοξότηs indicates, in the service of the customs.

On another question discussed in the volume, particularly in section 5 of the ninth chapter, there has, since this chapter was written, been made public new evidence of value. I refer to the question of the status of the Dodecaschoenus, on which light is thrown by some ostraca published by Mr Evelyn White ("Graeco-Roman Ostraca from Dakka, Nubia," in Class. Rev., 34, 1919, pp. 49—53). The first of these mentions a σιτολόγος and a toparchy; and though this may not perhaps necessarily disprove M. Lesquier's statement (p. 459) that the Dodecaschoenus "ne parait pas...avoir jamais formé un nome," it certainly shows that it had (as indeed M. Lesquier remarks) a civil administration and that it was at least organized on the same lines as a nome. The remainder of the ostraca do not add very substantially to our knowledge, though they show, incidentally, that the correct form of the title borne by the military official who frequently occurs in the Pselkis ostraca was cibariator, not cibarator as Lesquier, following Wilcken, gives it; but the excavations carried out at Dakkah (Pselkis), which brought to light the ostraca, produced important archaeological results as regards the Roman fortress.

Two small points which may be noted in conclusion are that a new occurrence of the Legio II Trajana Fortis is to be found in PSI. v. 447, 4, and that, by a curious slip or a repeated misprint, the author on p. 366 several times uses the word συναγοριστικός for the correct form συναγοριστικός.

I cannot conclude without expressing the gratitude which all students of papyri and of Graeco-Roman Egypt, and, indeed, of the Roman army in general, must feel to M. Lesquier for his truly splendid work.

H. IDRIS BELL.

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