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Statue of Ahmes, son of Smendes.
Cairo Museum, No. 37075. Height 95 cm.

A STATUE FROM THE KARNAK CACHE

By H. W. FAIRMAN

With Plates i and ii.

Among the numerous statues which were found by Legrain at Karnak that which bears the excavation number 197, and the number 37075 in the *Journal d'Entrée*,[1] must be considered one of the finest and most interesting. It is in perfect condition (except for the fact that the tip of the nose is missing) and is that of a certain Ahmes, son of Smendes, who was a priest of "Nekht-Hor-heb, the divine". It would therefore appear that Nekht-Hor-heb was already dead when this statue was made, and we may reasonably date it to the beginning of the Ptolemaic period, or to the reign of Alexander the Great.

The material of the statue is schist, and its height is 95 cm. Ahmes is represented as a young man, standing upright with the left foot slightly advanced, and with his back against an obelisk-shaped support. He is clad only in the short *šndyt*-skirt, and his head is closely shaven. In appearance this is a typical statue of the early Ptolemaic period: the strength and character that distinguish so many Saitic statues have gone, and we are left with a somewhat formal portrait of a man, with a slight smirk on his lips, clumsy legs and rather heavy, over-developed shoulders, and a body of which the details are summarily treated.

This statue has not been published hitherto, though a mention of it was made and some extracts quoted by Legrain in *Bulletin de l'Institut français d'Archéologie orientale*, XII, 92. It is published here because it is very probable that in Ahmes we possess the earliest known priest of Buchis. At least, it is certain that his official duties brought him into close touch with Hermonthis (especially in the use of the title *ḥnk*, which is borne by other priests of Buchis), the bull of Medamûd, and Amenopet; and for these and other reasons it is not unreasonable to presume that he was connected with Buchis worship. This paper should therefore be considered as complementary to the chapter on the Hieroglyphic Inscriptions in the E.E.S. Memoir on the Bucheum and Baqaria which is now in the press, and the reader is referred to that work for a full discussion of many points which cannot be dealt with in detail in the course of a brief paper.

Inscriptions on the waist (Pl. ii, 2)

To the right: *Lives the divine father and prophet of Osiris, the embalmer*[a] *and divine purifier, Ahmes, justified.*

To the left: *Lives the divine father and prophet of Amūn in* 'Ipt-swt, ḥnk,[b] *embalmer and divine purifier, Ahmes, justified.*

[a] Here, and in the translations of all Buchis inscriptions, "embalmer" is used as the translation of *ḥri-sštȝ*; *cf. Journal*, XVII, 227. [b] For this title see the inscription on the right side of the support, note a.

Inscriptions on the obelisk-shaped support.

A. The back of the support: top (Pl. i, 1).

At the top, in the centre, is the winged disk, from which hang nine "Ankhs", in three rows of three. Below this Ahmes is shown worshipping Amūn and Osiris, who face right and left respectively.

[1] I am much obliged to Mr. Guy Brunton for obtaining the photographs for me.

Before Amūn: *Amen-Rēʿ, King of the Gods, primeval one of the Two Lands, with upraised arm.* And: *The servant who praises his lord, the divine father Ahmes, justified.*

Before Osiris: *Osiris, Onnophris.* And: *The follower of Osiris in* pr-štꜣt (?), *the divine father Ahmes, justified.*

B. The main inscription on the back (Pl. i, 1).

1. *The divine father and prophet of Amūn in* ʾIpt-swt, *Ahmes, justified, says: O Amen-Rēʿ, King of the Gods, primeval one of the Two Lands, self-created, I am thy servant, who follows thy Ka, a revered one who sees his lord. Grant me thy life in following thy majesty. May I not grow tired*[a] *of seeing thy face, well embalmed and adorned excellently in the Necropolis beside* ʾIꜣt-Ḏꜣmt.[b] *Mayest thou set my children*[c] *in thy city as those who have been appointed by the gods.*[d]

2. *The embalmer and divine purifier of Amūn, Ahmes, justified, says: O Nun the Old, who came into existence in the beginning, primeval one of the Two Lands, with upraised arm, my heart is loyal to thee. May I be in thy following, may I praise thy beauty in thy noble shrine, mayest thou establish my image within thy sacred place, may my name be uttered by thy servants, my children being in thy temple, and following*[e] *thy majesty every day without cease in*[f] *thy* ʾIpt-swt.

3. *The prophet of Amaunet, who is in* ʾIpt-swt, *Ahmes, justified, says: O Mut, who came into existence aforetime, I am thy child*[g] (?) *in thy court. I have not done evil* (??) *with my left hand against the Temple of Mut through fear* (lit. *trembling*) *of Khonsu* (?). *A great offering in his goodly festival of the New Year*[h] (?) *consisting of incense of Punt, that* (*my*) *reward from thee, O mistress of the gods and goddesses, may be a long life with good fortune. Mayest thou cause my dwelling*[i] *to endure in the portal of thy temple, mayest thou establish those who come after me therein.*

4. *The baron of the Memphite Nome, the governor of the Hare Nome, Ahmes, justified, says: I went to the Residence, I sailed up-stream to Hermopolis, a royal rescript being with me.*[j] *I bent my arms to the prophets and their priests. I did good to their citizens. The reward thereof was that Tenen and Thoth caused me to arrive at Thebes as an honoured one. May I complete my life*[k] *upon earth in the following of Amūn, as a divine purifier in his great place.*

5. *The prophet of Sokar-Osiris, Ahmes, justified, says: I am thy servant, O King of the Gods, in* (*thy* ?) *temple*[l] (?). *Thy censer is* (*extended*) *towards me. I am*[m] *an embalmer in* Pr-ʿnḫ-irw,[n] *who revivifies Osiris in the* Ḥt-nb. *Mayest thou put me among the excellent spirits who are in thy train, and the* sʿḥw *who are beside thee. May my Ba not perish, may my body not die, . . . again, may I come and go on earth every day, may I enter in to the god and not be repelled.*

6. *The prophet of Amenopet of* ꜣḫ-swt,[o] *Ahmes, justified, says: Praise to thy face, O phallus of the gods, Amenopet, bull with upraised arm, living image of Rēʿ in Hermonthis,*[p] *who grants provisions*[q] *to him who is in his favour. Mayest thou give them to me, O my great lord, for I am loyal to thy majesty. Grant*[r] *that I may see thy noble Ba when it sails* (*to*) *Ro-stau. May I live on the offerings which are made to thee.*

7. *The prophet of Khonsu Amenopet, Ahmes, justified, says: I inscribe the gateway*[s] *of Khonsu in Thebes, the noble* sḫm *in* Bnnt.[t] *I exalt his fear, I make great his majesty, I write upon the wall of his temple. May he make a reward for me by prolonging my life as a revered one, "one who has gone to his Ka".*[u] *May he grant that I should see his Majesty when he crosses the west of Thebes to receive* snw-*bread in his favour.*

[a] Read *bn g(r)ḥ·i*; *cf. Wb. d. aeg. Spr.*, v, 155. [b] *ʾIꜣt-Ḏꜣmt*: Medinet Habu; *cf.* Sethe, *Amun und die acht Urgötter von Hermopolis*, § 103. [c] Read *ṯꜣ·n·k prt·i*? [d] Read *m swḏ m-ḏr nṯrw*. [e] Read (*ḥr*) *šms ḥm·k*. [f] Reading *m* for *n*. [g] Probably we should read *imti·ṯ*; *cf. Wb. d. aeg. Spr.*, i, 78. [h] The exact

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Statue of Ahmes, son of Smendes.
Cairo Museum, No. 37075. Height 95 cm.

nature of the sign is not clear in the original. Possibly we should emend *wp-rnpt*. [i] *ʿft* is a late variant of *ʿfry*, "encampment"; *cf. Wb. d. aeg. Spr.*, I, 182. [j] Read *iw wḏ-niswt r-ḥnʿ-i*. For this writing of *iw cf. Wb. d. aeg. Spr.*, I, 42. [k] *Skm-i tp-tr-i*. [l] Read *m-ḫnt st(·k)*? [m] Emend *hꜥ-i m ḥri-sšts*. [n] *Pr-ʿnḫ-irw*: according to Gauthier, *Dict. géog.*, II, 63, this is a word for "tomb" or "necropolis". *Cf.* Bergmann, *Das Buch vom Durchwandeln der Ewigkeit*, 20, which, however, does not explain the nature of the building or place. [o] *ꜣḫ-swt*: the pyramid of Mentuhotep IV at Dêr el-Baḥri, and the cemetery attached to it; *cf.* Gauthier, *Dict. géog.*, I, 7; Sethe, *op. cit.*, § 7. The spelling which is given here is unusual and greatly abbreviated, but compare the variant in the inscription on the left side of the support. [p] For this title of Amenopet *cf.* Sethe, *op. cit.*, Taf. V = Theb. T. 96, b. It is used of Amenopet as the heir of the Eight Gods. It is very tempting to see in this phrase an equation between Amenopet and Buchis, who, as the Buchis stelae prove, was not merely the heir of the Eight Gods, but also their father, and the father of their fathers, as were Amūn and Mentu. Buchis also bears the epithet in one case (Buchis Inscription No. 6—a stela of Ptolemy IV). [q] Read *wḏ krw*? Some slight emendation of the original is obviously necessary. Possibly the fourth should be replaced by the normal determinative, or should be omitted altogether. [r] Read *imi mꜣr-i*. [s] *mꜣhdt*: probably the same word as , *Wb. d. aeg. Spr.*, II, 30. [t] *Bnnt*: the temple of Khonsu at Karnak; *cf.* Gauthier, *op. cit.*, II, 22; Sethe, *op. cit.*, § 50. [u] *sb n krꜣf*: an epithet of a dead person; *cf. Wb. d. aeg. Spr.*, III, 430.

C. The inscription on the right side of the support (Pl. ii, 1).

An offering which the king gives to Amen-Rēʿ, King of the gods, and to Osiris of Coptos, who dwells in the Ḥt-nb, *that he* [sic] *may give everything that comes forth on his altar in the course of every day to the divine father and prophet of Amen-Rēʿ in his temple, the* ḥnk *in Hermonthis*,[a] *the embalmer and divine purifier, who sails (to) the necropolis from* ʾIꜣt-Ṯꜣmt, *who sees the hidden Ba in his image, the prophet of Sobek, Lord of* Mrt, *prophet of Nekht-Hor-heb, the divine, the scribe and divine treasurer of Amūn of the second phylē, prophet of Khonsu Amenopet, Ahmes, justified, son of the* ḫri-tp-niswt, *Smendes, justified, born of the lady of the house and* iḥyt *of Amūn, Ti-nub, justified.*

[a] *ḥnk*: the title of a priest in Hermonthis (*Wb. d. aeg. Spr.*, III, 118). The *Wörterbuch* prefers the transliteration *ḥnk-nw-w*, "der den Nun schenkt", but *ḥnk*, "the offerer", seems equally possible: *cf.* the spelling of *ḥnkt*, "offering". It would now appear not merely does this title refer to a priest in Hermonthis, but that it was borne by priests of Buchis. In the course of the excavations at the Bucheum, and in the Cemetery 200 which lies close by and in which some of the priests of Buchis were probably buried, a number of offering tables or fragments of offering tables bearing this title were found (Buchis Inscriptions Nos. 28–32). It is significant that in every case the offering tables bore the titles "embalmer, divine purifier", in addition to *ḥnk*:—*ḥnk, ḥri-sšts, ʿbw nṯr*. It will be noticed, too, that in the three instances of *ḥnk* on this statue the other titles also occur. The evidence is hardly sufficient as yet to be absolutely conclusive, but it is exceedingly probable that in the Ptolemaic period at least *ḥnk* was one of the titles of the priests of Buchis.

D. Inscription on the left side of the support (Pl. i, 2).

An offering which the king gives to Amen-Rēʿ, the primeval one of the Two Lands, that he may give everything that is offered on his altar every day to the Ka of the divine father and prophet of Osiris, the embalmer and divine purifier, who enters the burial-place of the Bull which is in Medamûd,[a] *who sees the secret of the first primeval one, prophet of Amaunet, who is in* ʾIpt-swt, *prophet of Amenopet of* ꜣḫ-swt, *scribe of the fourth phylē of Amūn, Ahmes, justified, son of the* mꜣꜣ-ḏsr-ʿḥ,[b] *Smendes, justified, born of the dancer of Amen-Rēʿ, Kamephis, Ti-nub, justified.*

[a] The mention of the bull of Medamûd is of interest since Buchis, as a sacred bull like Apis and Mnevis, was already in existence. In the Bucheum Memoir it will be seen that there is strong reason for considering that Buchis was the embodiment of the four bull-forms of Mentu. The fact that, at a time when Buchis was worshipped, the bull of Medamûd was sometimes looked upon as a separate entity (at Medamûd itself, for instance, as the excavations of the French Institute have shown) in no way disproves this statement, for the same phenomenon can be observed in the case of the local bulls of Ṭûd and Hermonthis. Neither, it may be pointed out, does the mention of the burial place of the bull of Medamûd speak against this theory. No

trace of a cemetery for the bull has been found at Medamûd, and doubtless it never will. If the bull of Medamûd was merely one of the four forms of Mentu united in one, *i.e.* in Buchis, there is no contradiction in equating the *imntt* of the bull of Medamûd with the Bucheum, the burial-place of Buchis, of whose nature the bull of Medamûd formed a part. [b] *mỉ-ḏsr-ʿḥ*: for this title *cf.* Cairo 42211 (Legrain, *Statues et statuettes de rois et particuliers*, III, 28 ff.). Compare also *mỉ ḏsr m ʿḥ*: Cairo 41017 (Moret, *Sarcophages de l'époque bubastite à l'époque saïte*, 184), and Cairo 41062 (Gauthier, *Cercueils anthropoïdes des prêtres de Montou*, 391).

The statue is not absolutely free-standing, and a comparatively thin piece of stone connects it with its support. The available spaces in this stone are utilized for further inscriptions.

Right side (Pl. ii, 1). Ahmes' eldest son, Smendes, is shown standing up, clad in a long robe which reaches from his breast to below his knees. The text reads: *His eldest, beloved son, prophet of Osiris, Smendes, born of the lady of the house and* ỉhyt *of Amūn, T-sherit-Min, justified.* We thus possess the names of Ahmes' father and son, both of whom were called Smendes, his mother, Ti-nub, and his wife, T-sherit-Min. At present no further details seem to be known about these people, or about Ahmes himself, but it is not at all impossible that the final publication of the statues from the Karnak Cache may produce the desired information.

Left side (Pl. i, 2). Ahmes is shown kneeling and facing left, with hands raised in adoration. Above his head, and in front of him is a short inscription: *The* sỉ-st[a] *in "The Mistress of Cities",*[b] *the prophet of Osiris, Ahmes, justified.*

[a] A priestly title; *cf. Wb. d. aeg. Spr.*, III, 414. [b] One of the names of Thebes; *cf. op. cit.*, III, 108.

Below the figure of Ahmes is an inscription of sixteen lines:

The prophet of Amen-Rēʿ in his temple, Ahmes, justified, says: O ye ʿḏw-ntr[a] *and priests of the great Ba, ye embalmers of "The Eye of Rēʿ"*[b] *who enter "The Heaven upon Earth"*[c] *on their feet while performing their duties therein, stretch forth your arm(s) to me with an "offering-which-the-king-gives", stretch forth your arms to me saying,*[d] *"May he praise thee in peace, namely Amen-Rēʿ, the noble* sḫm, *chief of all the gods. May thy Ba live in heaven before Rēʿ; may thy Ka be divine before the gods; may thy body endure in the Underworld before Osiris; may thy mummy be glorious among the Shining Ones; may thy noble Ba go to Mendes and the Thinite Nome on the day of the festival of Sokar." O doer of good to whom good is done, who does not take vengeance* (?), *who spends the night in taking thought*[e] (?), *may thy real heart be pleasant to me*[f] (?), *(for) my heart is loyal to his majesty, my disposition is pure and far from evil, (I) hate wrong*[g] (??) . . . *my lord, my god, my father, my protector, who does not grow tired of protecting his servant, may my name be happily pronounced by those who are upon earth as (that of) a revered one in the favour of his god.*

[a] *ʿḏw-ntr*: a priestly title; *cf. Wb. d. aeg. Spr.*, I, 240. [b] *ỉrt Rʿ*: one of the names of Thebes; *cf.* Gauthier, *Dict. géog.*, I, 99. [c] *pt ḥr sỉ tỉ*: a name of Karnak; *cf. Wb. d. äg. Spr.*, I, 491. [d] Emend *m ḏd*? [e] I am not at all certain that I have grasped the real meaning of these phrases, which seem to contain an invocation to Amūn. The last clause (*sḏr mỉṯ·n·f*?) is reminiscent of the Cairo Hymn to Amūn: "who spends the night watching over mankind, who spends the night seeking good things for his cattle", *i.e.* for men (Cairo Hymn to Amūn, 7, 1 = Mariette, *Les Papyrus égyptiens du Musée de Boulaq*, II, Pl. 12). Compare also a somewhat similar passage in Thoth's letter on behalf of Rēʿ to Neith in Chester Beatty I, recto 2. 11.[1] [f] The translation which is given here necessitates the substitution of *ỉb·k* for *ỉnk*. Mr. R. O. Faulkner, however, suggests the following translation: "I am well-disposed (?), I am one true of heart, who is loyal to his majesty." [g] These words are somewhat obscure and may well need emendation. Possibly *wnḫ* is an error for or , and we should emend *msd(·i) wn*. The meaning of *nśnś*, or *nḫnḫ*, is unknown; it is apparently a verb of thinking or praising.

[1] I owe this reference to Mr. Faulkner.

ON THE EARLY USE OF COTTON IN THE NILE VALLEY

By F. Ll. Griffith and Mrs. G. M. Crowfoot

Herodotus (ii, 37, 81) and the ancient paintings agree in the Ancient Egyptian clothing having been of clean white linen, but with shawls or blankets of white wool thrown over for warmth. Wool, however, was not permitted inside temples or for burial. Cotton (*gossipion* or *xylon*) is first heard of as worn by the Egyptian priests in Pliny (lib. xviii). The plant at that time (in the first century A.D.) grew "in the upper part of Egypt towards Arabia". But Herodotus (iii, 47) in the fifth century B.C. already tells how King Amasis, who died in 525, dedicated in Samos and Lindos respectively two linen corselets in which were woven many figures of animals with a decoration added of wood-wool, *i.e.* cotton, so fine that three hundred and sixty strands could be counted forming each thread. Records of the occurrence of cotton among Egyptian remains, even of the latest periods, are very doubtful. Professor Hunt tells me that cotton is not mentioned in the Greek papyri from Egypt, and Mr. Crum that there is no genuinely Coptic name for the plant or its products. I have long been interested in the question of the early use of cotton. Unfortunately the extensive work of the Oxford Excavations at Faras in Lower Nubia, in 1910–12, did not bring to light any scrap of textile. In 1913 we found a charred roll of cloth in the "Treasury" at Sanam (presumably of "Ethiopian" age), which was carefully examined by Mr. Midgeley of Bolton and was pronounced to be of various qualities of linen, *i.e.* made from flax and not from cotton. Some years afterwards, however, some scraps of cloth discovered by Professor Reisner at Meroë, and dating from the Meroitic age (equivalent to the Roman period in Egypt) were diagnosed by experts as having been made of cotton fibre.[1] This important discovery encouraged me to inquire into the nature of the "linen" wrappings found abundantly with interments at Karanog ('Aniba) by Messrs. MacIver and Woolley, many specimens of which were preserved in the Museum of the Pennsylvania University at Philadelphia. It happened that Mr. Battiscombe Gunn had just been appointed to the curatorship of the Egyptian Department there, and he at once took up the quest warmly. I consulted the Department of Forestry in Oxford, where Dr. J. Burtt Davy was most helpful in indicating sources of expert knowledge, and in the end Mr. Gunn sent the most promising specimens (in which cotton had already been detected by the authority in Philadelphia) to the Shirley Institute of Cotton Research at Didsbury near Manchester, where they were examined by Dr. A. J. Turner, who had been responsible for the report on the textiles from the very ancient Indian site of Mohenjodaro.

The resulting report of the Research Laboratories of the British Cotton Industry Research Association at the Shirley Institute, Manchester, made by the Director of the Institute to Mr. Gunn and repeated to myself with permission to publish it, was as follows:

5th April 1933.

Dear Professor Gunn,

With reference to our letter of 16th March 1933, we are now able to report the result of our investigation of the samples of cotton cloth from Nubia. As I feared, the fragility of

[1] See Additional Notes at the end of this paper.

the samples has made the application of our ordinary methods impossible. We have, however, succeeded in making a few measurements on the cotton fibres from the best preserved of the samples, with results as follows:

Mean diameter of fibres: 19·7 thousandths of a millimetre;
Mean hair-weight per centimetre: 354 hundred-thousandths of a milligram.

Similar measurements on a sample of *Gossypium arboreum Soudanensis*, kindly sent by Mr. Hutchinson, gave results which closely resembled the above, viz.

Mean diameter of fibres: 20·1 thousandths of a millimetre;
Mean hair-weight per centimetre: 356 hundred-thousandths of a milligram.

The mean hair-weight of the Nubia sample can only be regarded as very approximate, seeing that the three individual values from which it has been derived are 367, 317, and 387. However, these results confirm the diameter measurement, and indicate that the cotton is certainly of a very coarse type, and similar to the wild types found in various parts of the world. But while these tests show that it is at any rate not impossible that these Nubian cloths may have been made from a native cotton similar to *Gossypium arboreum Soudanensis*, it would obviously not be safe to conclude, in the absence of other evidence, that they have actually been so made.

Yours sincerely,

The British Cotton Industry Research Association.

A supplementary letter to Mr. Gunn dated May 9, 1933, is as follows:

"I regret that in my letter of the 5th April I did not specify the particular Nubia sample on which our measurements were made. Sample No. 7511-A was actually used for this purpose, as this appeared to be the best preserved. All the samples have been examined under the microscope, and from the general examination it was evident that in all samples the mean fibre diameter was approximately the same. The measurements were therefore restricted to the best preserved sample, 7511-A, as the measurements on other samples would have been very laborious—and in some cases impossible—in view of their fragility."

Mr. Gunn adds that the piece 7511-A is shown in *Karanòg*, Pl. 108, fig. 1.

An objection having been raised in Philadelphia and communicated to Dr. Turner that the determination of weight was not trustworthy, since some at least of the cloths had been impregnated with resin or some other matter, a further communication was sent by the latter gentleman:

"In reply to your letter of April 25th, 1933, I may say that the Nubian sample (7511-A), on which the observations of hair-weight (and diameter) were made, did not have any appreciable quantity of foreign matter upon it; in fact, its comparative freedom from foreign matter was one reason for choosing it for examination. You may therefore take it that the measurements of hair-weight, though admittedly only approximate, have not been invalidated by the presence of foreign matter. In any case, we attribute decidedly more importance to the measurements of fibre diameters, and seeing that when these measurements were made it was clear that the fibres were both thick-walled and of large diameter, we are confident that the mean measurement of hair-weight is not far out."

It may be remarked that according to the great and splendid work of Sir George Watt, *The Wild and Cultivated Cotton Plants of the World* (Longmans, 1907), and his two short supplements *Gossypium* in the Kew *Bulletin of Miscellaneous Information*, No. 5, 1926, and

No. 8, 1927, the classification of species and varieties of the genus *Gossypium* is an exceedingly intricate and difficult task owing to the long cultivation of several species with endless hybridization and variation in all parts of the world. One must not lose sight of the possibility that the Red Sea trade, much developed in Roman times, might have introduced cotton from India to the Meroites; but the evidence is now strongly in favour of a Soudanese origin for the cotton used in Egypt and Nubia in early times.

The existence and importance of cotton supplies in Nubia in ancient times is attested by two further sources, both literary, one being the record by Aeizanes of his terrible raid from Axum by way of the Atbara and the Nile which seems to have extinguished finally the power of the Meroites: "I burned their settlements, both of walled houses and straw huts, and my people captured their corn, their bronze and iron and dried meat (?) and destroyed the figures of their gods and their provisions of corn and cotton, and cast them into the Seda-river", etc.[1] The name here used for cotton, *ṭûṭ*, is still current in Abyssinia. The date of this inscription is about A.D. 350.

Descending some eight centuries we reach the time of the famous Salaḥ-ed-dîn or Saladin, whose elder brother Shems ed-daula attacked and captured the strong Nubian fortress of Ibrîm in 1173 during the reign of El-'Âdid the last Fatimid caliph "under the government of the Ghuzz and Kurds". "He invaded this district with his troops who accompanied him, and with those who gathered together to him, and he collected the boats from the cataract. In this town were many provisions and ammunitions and arms; and when they had defeated the Nubians they left the town in ruins after conquering it; and they took the Nubians who were there prisoners to the number of seven hundred thousand men, women and children; and seven hundred pigs were found here. Shems ed-daula commanded that the cross on the church should be burnt, and that the call to prayer should be chanted by the muezzin from its summit. His troops plundered all that there was in this district, and pillaged the church throughout; and they killed the pigs. And a bishop was found in the city; so he was tortured; but nothing could be found that he could give to Shems ed-daula who made him prisoner with the rest, and he was cast with them into the fortress, which is on a high hill and is exceedingly strong. Shems ed-daula left in the town many horsemen, and placed with them the prisoners and the weapons and ammunition and tools. In the town a quantity of cotton was found, which he carried off to Ḳûṣ and sold for a large sum."[2]

This gives a vivid picture of the cruelty and fanaticism of a Moslem army, reinforced by wild men in search of loot. But the Nubian store of cotton is what interests our theme. One can do no more than guess whether it was amongst the military stores to be spun and woven into garments, or used for protective wadding, or merely held as a form of wealth derived from the soil of Nubia.

The narrative of Abû Ṣâliḥ entails the quotation of an interesting graffito amongst the rude Christian drawings in a tomb adjoining that of Khunas on the west bank opposite Aswan. My attention was first drawn to this graffito through a copy made by Nestor l'Hôte preserved amongst his MSS. in the Bibliothèque Nationale (Nouv. acquis. franç. 20396, fo. 51). Mr. Crum referred me to a publication by Bouriant in *Rec. trav.*, VII, 218, and another copy is to be found in de Morgan, *Catalogue*, I, 162. But in 1930 I had an opportunity of making a copy from the original, which was still in fair preservation, though many letters visible to Nestor l'Hôte (between 1830 and 1840) had been injured or altogether lost.

[1] Littmann in *Deutsche Aksum-expedition*, Bd. IV, p. 33 (*cf. Zeitschr. der Deutschen Morgenländischen Gesellschaft*, LXVII, p. 701).

[2] *Abû Ṣâliḥ*, ed. Evetts and Butler, fo. 96 a, b.

After a paraph, the text begins:

ϩⲣⲁⲓ ⲇⲉ ϩⲙⲡⲟⲟⲩ ⲛϩⲟⲟⲩ ⲥⲟⲩ ⲕ̄ⲃ̄
ⲛ̄ⲧⲱⲃⲉ ⲡⲟϩ ⲥⲟⲩⲁ̄ ☧ ⳨ ⲱ̄ⲡ̄ⲑ̄
ⲁⲥϣⲱⲡⲉ ⲇⲉ ϩⲛⲧ[ⲙ]ⲛⲧⲉⲣⲱ[ⲛ̄]ⲛ
ⲧⲟⲩⲣⲕⲟⲥ ϩⲣⲁⲓ ϩⲛⲧⲉⲭⲱⲣⲁ ⲧⲉ̄ⲣⲥ̄
ⲛⲧⲉⲙⲏ ⲉ̄ⲣⲉ ⲡ[ⲛ]ⲓ̈ⲱⲧ ⲁ[ⲃ]ⲃⲁ ⲙⲁⲣⲕⲟⲥ
ⲱ̄ ⲡⲁⲣⲭⲏⲉⲡⲓⲥⲕ ⲉ̄ⲧⲡⲟⲗⲓⲥ ⲁ[ⲗ]ⲉⲝⲁⲛⲇⲣⲓ̈ⲁ
ⲁⲩⲱ ϩⲛⲛⲉⲓϩⲟⲟⲩⲉ . . . ⲑⲉⲱⲇⲟⲣⲟⲥ ⲡⲉⲡⲓⲥⲕ
ⲛⲧ(ⲗ)ⲡ̄ ⲥⲟⲩⲁⲁⲛ ⲁⲩⲉⲣ[ϩⲱⲧ ?] ⲛϭ[ⲓⲛ] ⲧⲟⲩⲣⲕⲟⲥ
ⲁⲩⲃⲟⲕ ϣⲁ[ⲡ]ⲣⲓⲙ ⲁⲩ[ϭⲟⲡ ?] ⲙⲙⲟⲥ ϩⲛ ⲥⲟⲍ̄ⲛ
ⲧⲱⲃⲉ ⲁⲩϭⲟⲡ ⲟⲛ [ⲙⲡⲉ ?]ⲧⲡ̄ ϩⲩⲧⲥ
ⲁⲩⲱ̄ ⲁⲩⲧⲁⲩ ⲉⲃⲟⲗ ⲙⲙⲟⲥ

l. 7. I do not see how to fill the gap satisfactorily. ϩⲟⲟⲩⲉ as in Achm. is authorized by Crum. l. 8. Bouriant's restoration ⲁⲩ[ⲓ]ⲉⲣⲏⲥ ⲛ[ϭⲓⲛ] is not admissible. l. 9. The easiest reading would be ⲁⲩⲱⲛ (for ⲁⲩⲟⲩⲱⲛ) ⲙ̄ⲙⲟⲥ (*cf.* the Arabic use of فتح for capturing a city), but Crum insists on restoring ⲁⲩϭⲟⲛ.

"*Now on the precise day, the 22 of Tobe, the first day of the moon(?) 889 of the Christian Martyrs, it happened under the rule of the Turks over the whole land of Egypt, while our father Abba Marcus was archbishop of the city of Alexandria, and in these days* [*when*] *Theodorus was the Bishop of the city Swân, the Turks sailed(?), they went to Prim, they took it on the seventh(?) of Tobe, they seized also every person that was in it and sold (them).*"

The tomb looks out northward over the valley of the Nile, and the monk who wrote the graffito must have witnessed the swarming mass of men and boats gathering for the attack on the mighty fortress, and its triumphal return with slaves and every kind of booty. Abû Ṣâliḥ may indeed have gathered his information from this monk and others like him who had seen the departure and return of the expedition. It is even possible that the expedition went not without the blessings of the Christian community at Aswan, for Aswan too suffered from Nubian raids, and the Nubian Church was not free of heresy, leaning to the Byzantine "orthodox" persuasion while Christianity in Egypt was monophysite.

The date 889 of the Martyrs is the exact equivalent of A.D. 1173 (A.H. 568) in Abû Ṣâliḥ; 22 Tobe = Jan. 17 Julian. The patriarchate of Marcus is given as from 1166 to 1189 by Jean Maspero. So far all is well, but I do not understand the double date in the month (22 and 1) followed later by 7 in l. 9.

It is very satisfactory to find the true Coptic form of the name of the famous Nubian fortress Ibrim, in Greek and Latin known as *Πριμις*, Prima, *Πρημνις*, etc., especially as it is a key-word in Meroitic, where I have transcribed it as *Pereme*.[1] The Coptic form is preserved also in the well-known inscription of the Nubian king Silco,[2] although there *Πριμ* has generally been interpreted as a mere abbreviation of the Greek and wrongly expanded to *Πριμις*. We may surely consider ⲡⲣⲓⲙ as the genuine Nubian as well as Coptic form of the name.

I wish to record my special gratitude to Dr. Turner and the authorities of the Shirley Institute for the immense trouble they have taken in examining the specimens of textiles from Karanog, and for their permission to publish the result; also to Mr. Crum for his invaluable help with the Coptic text.

[1] *Meroitic Studies*, VI, in *Journal*, XV, 71. The Meroitic name, however, belongs to a different place, Primis Magna, above the Second Cataract.

[2] l. 16, ἀπὸ Πρίμ ἕως Τελήλεως.

Additional Notes

As early as 1911 Mr. J. W. Crowfoot suggested that one of the sources of wealth for the Meroitic Kingdom was trade in cotton;[1] in the season 1922–3 Professor Reisner excavated the Western Cemetery at Meroë, and in a brief report it is remarked that "in the later Meroitic graves from the same cemetery, say from 300 B.C. to A.D. 300, the discovery which will appeal most forcibly to those interested in the modern development in the Sudan is the extensive use of cotton in textile work at that period".[2] I have to thank Mrs. J. W. Crowfoot, who has a profound interest in and knowledge of native industries in the Sudan, for most interesting details regarding this find to add to my paper as well as bibliographical references. She writes:

"My husband and I visited the excavations that season and saw the textiles. They were deep black, carbonized, and highly friable. The suggestion was made that fragments should be put under the microscope, and I conveyed fragments back to Khartum for that purpose. Mr. Massey examined them at the Research Farm, Shambat, and found that they were cotton. With regard to the quality of the cotton he made the observation that the character of the fibre showed it to have been grown in a hot, dry country. This would point to its having been grown in the Sudan, though one could not exclude the possibility of some similar climatic area in India. The cotton traditionally used in the Sudan is the wild or sub-wild tree cotton, and this has characters, so Dr. Martin Leake told me, linking it with the Asiatic cotton, rather than the American ones—it may have been introduced from India, or may be indigenous."

Mr. Massey published a valuable *Note on the Early History of Cotton* in *Sudan Notes and Records*, VI (1923), 231–3, and sent some of the specimens from Meroë to England for examination.[3] As to the textiles, Mrs. Crowfoot continues, "they included plain weaves, some as in the illustration on p. 76 of *Kew Bulletin*, which can be interpreted either as warp covered by weft (tapestry), or, as I believe, weft covered by warp (this judgement was made only on one minute fragment in which I was able to observe the selvedge), and others in more open weave—one fragment had warp threads 56 to the inch, weft threads 80. The textiles varied much, some coarse, others very fine. One specimen (*Bulletin*, p. 77) showed a kind of diagonal weave.

"There were also large sheets of bath towelling; the loops are put in the weft—not as in modern bath towelling—I think I know how this was done, by analogy with a class of mat from Greek islands.

"Also some fine fringes on large sheets or 'tobs' of very fine weave—rather like drawn-thread work. These fringes resemble the fringe in *Karanòg*, IV, Pl. 108, fig. 5, and the bath towelling in fig. 1.

"It was the resemblance of these fabrics to the Meroë textiles that led me to suggest that the Karanog ones were also possibly cotton, and I asked Mr. Massey to put this in the note for the *Sudan Notes and Records* in the hope that it might stimulate some one to re-examine them.

"As far as I know, the bath towelling and fringe from Meroë have not been published. I have rough drawings of both."

By the kindness of Mrs. Crowfoot and of Dr. G. A. Reisner I am enabled to print here in full the notes made by the former together with her illustrative drawings.

[1] *The Island of Meroe* (Egypt Exploration Fund), 37.

[2] Gordon College *Report*, Nov. 1923.

[3] See a brief note, *Ancient Cotton Fabrics in the Sudan*, with sketches of fabric in *Kew Bulletin*, 1924, No. 2, pp. 76, 77.

Cotton Textiles from Meroë.

1. Textile with fringe (Fig. 1).

This textile is fine, rather open in texture, with about 56 warp threads and 80 weft threads to the inch; it has a little border of network with a fringe. Two other pieces were found with similar borders in a rather simpler design. The borders were so friable that no dissection could be made of them;[1] all that was possible was examination under a lens, and in this way the enlarged drawing of one of them was made. Such a network as is seen here can be made on the warp threads, like drawn-thread work, or can be made separately by needle, and sewn on to the edge of the material. Unfortunately it is not possible to be sure here whether the warp threads were used or not; one thing is certain, that threads were added to form the tassels, for they have many more threads in them than the corresponding piece of warp above. A kind of network, very similar in appearance, with tassels, is often seen on small cloths used in houses in the Sudan, especially in Dongola Province; it is worked by needle with a continuous thread. Part of the Meroë network, the finer mesh, is very comparable to this knotted network, but the larger mesh can be distinctly seen to have no knots, the foundation threads being wrapped round by other threads so that they cannot be seen. This is a peculiarity of the fringe on a textile from Karanog (MacIver, *Karanòg*, Pl. 108, fig. 5) and the general resemblance between the two is very marked; the Meroë fringe, however, is far the finer.

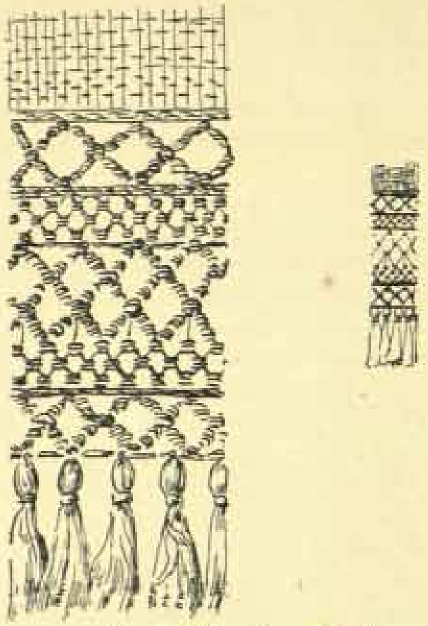


Fig. 1. Fringe from Meroë.
Scales 4 : 1 *and* 1 : 1.

2. Textile from W. 208. "Bath towelling" (Fig. 2).

This textile is made after the fashion of a Turkish towelling, with loops standing up, but on one surface only. It is somewhat similar to the towelling of the Coptic period in Egypt (which, so far as I know, is of linen) but differs in the size and length of the loops, which stand about 1·2 cm. above the surface and are very thick and close together, so that the general appearance is much coarser, thicker, and softer than the Coptic pieces.

Instead of being made with two warps, as is the usual practice with towelling, this textile is, I am sure, made with two wefts. One weft is the thick double strand used for the loops, the other a plain single weft used between the rows of loops, the warp is set up in "sisters", *i.e.* two threads together, not doubled. For the possible procedure in weaving I consulted the late Mrs. Alston, who had had experience in the making of many kinds of primitive textiles, including some with a pile set in the weft, without knots. She told me of a class of woollen textile used by Albanians and Mountain Greeks called Flocota, in appearance like a sheepskin rug, and appreciated for its warmth as a blanket or cape to sleep in. These are woven with two wefts, one spun in the ordinary way, the other very coarse and very lightly

[1] All the textiles found in these tombs were quite black, highly carbonized, and so tender that they would fall to dust at a touch.

spun. A pick is made with the thick weft, and it is then pulled out with the fingers into loops between the warps, as often as is desired—a very usual interval is a loop between every six warp threads. Then a metal rod is passed through the loops and they are pulled to an even length, after which some picks of the ordinary weft are made. When this is done and

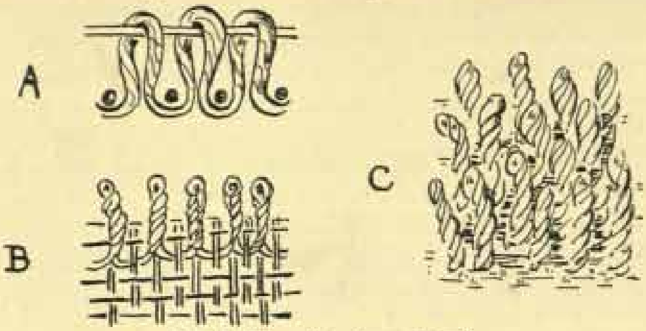


FIG. 2. Towelling from Meroë.

the loops are firm, the rod is removed and another pick of the thick weft made.[1] I suggest that the Meroë towelling may have been made after this simple fashion; the coarse doubled weft used for the loops could easily have been pulled through the warps with the fingers, evened with a rod, and beaten up with picks of plain weft, of which one to three are seen in the portions studied. When the rod was removed, each loop, being of closely doubled yarn, would curl up upon itself. This is shown in Fig. 2.

A shows one pick of the towelling weft with the loops pulled up and held by the rod.

B shows a row of loops released from the rod and curled up; below, three picks of single weft.

C attempts to show the appearance of the finished piece, in which the large thick loops conceal the surface.

Finally Mrs. Crowfoot sent a specimen of the charred cotton from Meroë to the Shirley Institute, and received the following reply:

Dear Mrs. Crowfoot,

We have been very interested in the sample from Meroë enclosed in your letter of October 22nd, but I am sorry to say that we have not been able to make anything of it, except to say that it *is* cotton.

The fragment, on examination under the microscope by Miss G. G. Clegg, who is in charge of the Fibre Testing Section of our Testing Department, was found to be black, very convoluted and resembling cotton except that it appeared finer than any cotton we have seen, including the finest Sea Islands; moreover, it was unlike ordinary cotton in not being doubly refractive with polarized light.

There is but little doubt that the small diameter and behaviour with polarized light are due to the fibre having been carbonized. Exactly the same effects are observed in charred doped fabrics, and in fabrics charred in the absence of air, the fibres in these cases also retaining the convoluted structure but showing a considerable decrease in diameter. For these reasons we have been unable to apply the diameter test which proved so useful with the Nubian samples, and, of course, it was also impossible to apply the hair-weight test.

Yours truly,

A. J. TURNER.

[1] Lastly, the loops in the rug technique are cut, thus giving the appearance of a sheepskin; those in the towelling were of course left as loops.

On this she comments as follows: "As I feared, the material was too friable for the measurement tests to be applied. Mr. Massey certainly did not apply any; his view about the fibre was based only on what he could observe by eye under the microscope. His view was that the fibre was like that of a cotton grown in a dry country such as the Sudan, but he added that he could not exclude the possibility of it having come from a dry part of India—given also the known imports of cotton goods mentioned in the Periplus.

"It is just a possibility that the cotton came from India with the pit treadle loom, in the wake of the piece goods. Certainly the same loom is found among hill tribesmen in India. The Sennâr Tree Cotton, which must be considered a descendant of these ancient cottons, I think, is believed by Dr. Martin Leake to belong to the group of Asiatic cottons.

"On the other hand, as you observed to me, this cotton is believed by some botanists to be indigenous to Africa. It certainly is not identical with the Tree Cotton of India.

"On the whole it looks as if one might think that the Meroë cotton was grown in the country—and woven there, then—of course."

TWO EMPLOYMENTS OF THE INDEPENDENT PRONOUNS

By ALAN H. GARDINER

The purpose of this article is to offer simple explanations of two constructions in which I shall assume the presence of the independent pronouns, *i.e.* the series of pronouns represented by , later , later , and so forth. At the outset, for fear of losing my clientele, I shall ignore a certain number of objections which might possibly be raised and the countering of which will involve my later pages in a turgid discussion. It is a sound principle of commerce to place the most attractive goods in the shop-window, and I see no reason why the same principle should not be introduced into dissertations on Egyptian grammar.

That and , besides meaning "thou" and "he" as subjects of sentences with nominal predicate (see my *Eg. Gramm.*, § 125), can also signify "to thee belong(s)", "to him belong(s)" when placed before a noun (*op. cit.*, § 114, 3) is too well known to need illustration. But how is the variation of meaning to be explained? Sethe declared it to be irrational ("an sich unsinnig", *Ä.Z.*, LIV, 49), but I for my part believe the contrary. In my view and , in both constructions, originally had only one meaning apiece. They were the independent pronouns for "thou" and "he" respectively, and until combined with other words they carried with them no implication either of identity or of possession. Which of these two notions was to be imported into the sense of the sentence depended on the nature of the nouns with which the pronouns were associated. If the noun following or referred to a person or a thing with which the person or thing indicated by the pronoun could be identified, then the sentence expressed identity. But if the noun after or referred to a person or a thing which could *not* be identical with the referent of the pronoun, then the sentence expressed possession.

This thesis will be better understood on examining concrete examples. The sentence , quite literally translated, yields "He Rēʿ". But since both words refer to a person, the interpreting mind would naturally construe the meaning as "He *is* Rēʿ"; or such at least is the English equivalent. When, however, the Egyptian said , "He gold", so unlikely was it that the speaker intended to identify the person meant by with the thing meant by , that the notion of possession would at once suggest itself to the listener's mind. In saying "He gold" the Egyptian intended to assert the gist of the English "To him belongs gold" or "Gold is his".

It is no unique or exceptional fact of language that two nouns, or a noun and pronoun, should be simply juxtaposed, leaving it to the common sense of the audience to determine the relation between them. We have no ground for supposing that the Egyptian language possessed a genitive case in the proper sense of the term, so that , which we render as "the king's house", would originally have represented to the Egyptian ear no more than "house-king", while , similarly representing only "king-Menkheperrēʿ", would, on account of the inherent meanings of the two words, naturally have implied, though without actually declaring, a relation not of possession but of identity. Similarly in French *le ministère Clemenceau* as compared with *le premier ministre Clemenceau*, *la rue Voltaire* as compared with *le dramaturge Voltaire*. In old French the use of juxtaposition in cases of genitival relation was not infrequent, *e.g. la cort le roi, li sans Saint Basilie*.[1] And the same phenomenon is common everywhere in compound nouns.

So much for my first thesis; my second is based upon it. One of the most admirable chapters in Gunn's highly original *Studies in Egyptian Syntax*[2] is entitled "An emphasizing construction in the future tense" and sets up the paradigm

Past , "It is I who did it".

Present , "It is I who do it".

Future , "It is I who shall do it".

Gunn's demonstration that the third of these patterns, thitherto regarded merely as a variant of the first, always referred to future time was conclusive and irrefutable. But he was at a loss for an explanation. In the present and past constructions the time-position was indicated by the use of the imperfective and perfective participles respectively, but in the future construction instead of the *sḏmty·fy* form, the usual equivalent of a future participle, an entirely new device was employed, namely the use of the *sḏm·f* form in place of a participle. Translating the three examples quite literally we obtain: past, "I a-(once)-doing-it"; present, "I a-continuing-to-do-it"; future, "I I-do-it". Now apply the principles enunciated in connexion with my first thesis. The participle is the name of a person or thing who performs an action, or, in the passive, upon whom an action is performed. In any case, it is the name of an entity with which the referent of the pronoun can be identified. Consequently the mind construes as "I (*am*) a-(once)-doing it". Similarly with . But the third member of the paradigm is different. Here we have, not the name of a person or thing performing an action, but the name of an action presented as being performed by a person. There can be no question of identity as between that action and the referent of the pronoun, so that another relation must be sought. Just as signifies "He (*has*) gold", not "he (*is*) gold", so too must be understood as "I (*have*) I-do-it", or as we may paraphrase it in progressively more idiomatic English, "I have that I do it", "I have that I should do it", "I have to do it". There is nothing in the least un-Egyptian about the construction as thus explained. A *sḏm·f* form can and is often employed without introduction as a virtual noun-clause, *e.g.* , "he gave I hear" for "he caused that I should hear" or "he caused me to hear". But what convinces me that my explanation of Gunn's construction is correct is, firstly that no other reason can be found for the choice of the *sḏm·f* form to express the future equivalent of the participial statement, and secondly that the analogies from other languages are too persuasive to be waved aside. I shall deal with the second point first. Here again French stands us in good stead. *Entendra* originated in *entendre a*, i.e. *intendere habet*, "has to hear". The underlying notion is obligation. When you have an action upon your hands, peace of mind is to be obtained only by performing it. Hence one can be pretty sure that you *will* perform it. This is the way the transition to a future tense comes about. The close affinity between future meaning and the possession of an action still to be performed may be seen in the form which may be taken by answers to questions like "What will John be doing this morning?" A frequent type of reply is "He has to go to Regent Street". The same notion reappears in new guise in old German and in English. Here the employment of *sollen*, properly "to owe", and of "shall" emphasizes the sense of "obligation". The action is still in the doer's possession, still on the credit side of the account. "I shall go" declares an entry on the debit side that will restore the balance.

[1] A. Sechehaye, *Structure logique de la phrase*, p. 69.

[2] Ch. v, p. 45.

Gunn notes (*op. cit.*, p. 58) that to render as "I am I do it" is nonsensical, but has not thought of "I *have* I do it" as a possible alternative. Accordingly the only suggestion he can make is that here stands in anticipatory emphasis ("I, I shall do it"), and that as active prospective *sḏm·f* has taken the place of a postulated prospective active participle "which indeed hardly survived except as the base" of that *sḏm·f* form. He has further to assume that this substitution took place "when the prospective active participle was going out of use, and before the *sḏmti·fi* was sufficiently common to replace it completely". The artificiality of these suppositions is obvious, and I can hardly doubt that if Gunn had envisaged the solution here offered he would have adopted it.

My explanation of , "It is I who shall do it", may be extended without difficulty to the corresponding passive construction. Of this Gunn quotes only three examples, the oldest being , *Pyr.* 1651, which we can suppose to have acquired future reference *viâ* the meaning "To them belongs that the *ḥtp-di-nišwt* should be given to them". The passive *sḏm·f* in virtual noun-clauses is not common, but by no means excluded.

I now turn to the difficulties alluded to in my first paragraph. The first concerns the form taken by Gunn's future construction when the subject is a noun. There is nothing abnormal about the equivalents with the participle, for (or) conforms exactly to the model of , "King Phiops is the son of the wild cow", *Pyr.* 1370 *a* quoted by Sethe, *Nominalsatz*, § 24, end. Here , as Sethe points out, is probably a mere particle of asseveration corresponding to Semitic إِنَّ, הִנֵּה, English "behold", "surely", "certainly". The habit of prefixing this to the grammatical subject of sentences with nominal predicate seems never to have been common, and to have died out early except in the "participial statement", as I have termed the construction seen in . It is impossible to quote any example of +noun in the sense of "N has . . ." corresponding to the pronominal , , "to thee, to him, belongs". Nevertheless, this absence of evidence can be met in two ways. Firstly the analogy of the constructions and would necessarily produce a conformity when the subject was a noun. And secondly, a rather different usage can be quoted where , literally "behold the god", acquires through position the value of "belonging to the god", "on the part of the god". It is well known that the agent after the infinitive is expressed alternatively by +noun, or by the series , , etc. Now , "going out on the part of the *sem*-priest", could be rendered without difference of sense "the *sem*-priest's going forth". Thus there is nothing un-Egyptian about the supposition that could imply possession.[1]

The one serious objection to the proposals made above lies in the word . Sethe has shown (*Ä.Z.*, LIV, 40; LVIII, 53) that the Coffin Texts distinguish between , "I", as subject and , "belongs to me"; and his discovery could not fail to throw doubt upon the identity of , , "belongs to thee", "to him" with the independent pronouns , "thou", , "he". When Erman first called attention to , , "belongs to thee", "to him" (*Ä.Z.*, XXXIV, 50), he regarded those words as combinations of the suffix-pronouns with an element signifying "possession", and quoted other compounds, *e.g.* , as containing the same element. Consequently he rendered as "Dein Besitz ist das Gold", evidently dissociating this and this from the independent pronouns. Evidence gradually came to light, however, pointing in the opposite direction. In *Ä.Z.*,

[1] Perhaps "behold the god" was originally parenthetic after the infinitive. The particle meaning "behold" seems to demand some such view. The conjunction of *in*+noun with *ntf*, etc., in this construction proves that the *in* must be the same *in* as occurs in the "participial statement"; see p. 17 top.

XLI, 135 I drew attention to some passages in the story of Wenamūn where and bore the meanings "belonging to thee" and "belonging to him" respectively, while also occurred signifying "belonging to me". The best example is Wenamūn, 2, 24 , "and his is the Lebanon of which thou sayest 'it is mine'". Here not only do we find in the Late-Egyptian writing characteristic of that independent pronoun, but also the first person puts out of court the derivation from a noun , "possession". I naturally did not omit to mention the use of in , "this scribe of mine", lit. "this scribe I", which again militated strongly in favour of taking , , "belongs to thee", "to him", as the independent pronouns. A further discovery greatly strengthened this position. In *Ä.Z.*, L, 114 I showed that for the second and third persons singular and were employed in both the uses just noted for the first person : an example of the use as predicate is , "His is Upper Egypt", and an example of the use as epithet is seen in , "a follower of thine". That these forms were connected with the Old Egyptian pronouns was clear, but I made the mistake of equating them with and instead of with and . The parallelism in use with and , the retention of the *-w*, and the fact that and never occur at the beginning of sentences, all point to the identity with and . My error was indicated to me orally by Sethe soon after the appearance of my article, and the correct view has now found expression in the Berlin dictionary (IV, 13; V, 241).

The harmony of these conclusions is disturbed, however, by Sethe's aforementioned discovery that the Coffin Texts spell , "belongs to me", differently from . The evidence is indisputable, one instance even showing the two words in close proximity: .... , "I am he who crossed the broad hall with his sandals . . . mine is the heaven and mine the earth", *Ḥarḥotpe*, 441–2 (old numbering 561–2). But if , "belongs to me", and , "I", are not identical, then the same might apply to and in their two employments, and a similar suspicion might arise even with regard to and . Sethe ventures two alternative explanations of , both of them definitely distinguishing it from the independent pronoun. His first suggestion is that the initial — is the preposition, the independent pronoun , *Pyr.* , being directly appended thereto. The unlikelihood that an independent pronoun could be employed in such a way is self-evident. Sethe's second suggestion is more in accord with Egyptian usage. It analyses into *n-i ink*, *i.e.* the preposition "to" + the suffix-pronoun 1st sing. + *ink* in apposition to this. For such an apposition Coptic supplies a parallel in **ⲛⲁⲓ̈ ⲁⲛⲟⲕ** and Arabic in لي انا. Thus would represent literally "To me myself (is) the earth". Sethe gets over the difficulty of the abnormal position of the adverbial predicate at the head of the sentence by quoting , "To thee belongs all", *Pyr.* 1489 *b*; sim. 942 *b*. Thus there is no inherent objection to this second explanation, and Till's proposal to take the initial — as the genitival adjective *ni* is unnecessary (*Ä.Z.*, LIX, 157). The real obstacle to accepting Sethe's view is that it upsets the symmetry of the group of constructions attributing a possessive use to the independent pronouns. Sethe takes what to me seems a highly unsatisfactory way of eluding the difficulty; he conjectures that the Late-Egyptian employments of , , etc., are "the direct continuation" of as explained by him. The expression is vague, but it seems to imply that the possessive uses of those words are secondary and based on false analogy. A very daring hypothesis to found upon the uncertain explanation of a single word.

For my own part I prefer (at the risk of seeming to cut the Gordian knot) to regard as indicating some specialized vocalization of the independent pronoun ; or if not a different vocalization, at least a sense of the difference of meaning. If one could be certain of the isolated example of in , "through my appearing to him strong", lit. perhaps "through (= *n*) the being-strong (infin.) on my part (*or* 'of mine') in his heart" which I quoted (*Eg. Gramm.*, § 300) from *Leyden*, V 88, this supposition would gain greatly in probability, since after the infinitive would have to link up with the independent pronouns and in the same position. That and after the infinitive cannot be taken otherwise than as the independent pronouns is shown by their alternation with +noun in the same use, an alternation which, as Sethe long ago showed (*Ä.Z.*, xxix, 121), identifies them with the and and +noun found in the "participial statement". And these last are definitely proved to be the independent pronouns by the fact that they replace the older form of the same construction, which employs and , *e.g.* , "it is he who built thee", *Pyr.*, 1589 *b*, and other examples quoted by Sethe, *Nominalsatz*, § 68.

Another reason why I cannot accept the hypothesis that the possessive use of , , etc., is the secondary outcome of *n-ỉ ỉnk* is the extreme improbability that such ancient pronouns as and would have been put to two entirely new usages in Late Egyptian. Admittedly we do not find examples exactly like and before the Nineteenth Dynasty, but it is unreasonable to demand that every use of the vernacular should find its way into the literary language, and the latent presence of the ancient and in these idioms seems sufficient guarantee of their early origin. Moreover, if the explanation given above of , "It is I who will do it" be sound, we have actual proof of the possessive use of and at the time of the Pyramid texts, since Gunn cites thence such examples as , "Whomso he may desire to live, he shall live", *Pyr.* 155 *d*, and , "Thou shalt slay him", *Pyr.* 944 *b*.

For these reasons I adhere to my view that the expression of a relation of possession is a genuine use of the Egyptian independent pronouns, and I have offered a psychological reason. It must, however, be recognized that no more can be expected of a genetic explanation such as I have given than that it should be along the right lines. Absolute historical accuracy is unobtainable when we cannot be sure of possessing all the facts, and when we are ignorant of the order in which the separate phenomena emerged. For example, the account given of as compared with may possibly not be true of the form itself, but only of the earlier which it replaced, taking over all its functions. By the time was evolved, may well have acquired a definite meaning "belong(s) to him", and this, in the Egyptian mind, may have been held apart from the commoner meaning "he". Again, we cannot know whether the Late-Egyptian construction belongs to an age when meant "I" and nothing else; if the sense of possession already attached to it there would be no need of comparing the construction with the direct genitive. Such problems as these are really insoluble, since the states of mind by which alone they could be decided are inaccessible to us.

RELIEFS SHOWING THE CORONATION OF RAMESSES II

By ALAN W. SHORTER

With Plate iii

THE inscribed block reproduced on Pl. iii is published here by kind permission of the Bath Royal Literary and Scientific Institution, in the museum of which it is preserved. The photographs I owe to the kindness of Major A. Gorham, of Limpley Stoke, a member of the Institution, who has also been to much trouble in order to procure for me from various records all the information available concerning this object. The following description has been made from the photographs only.

The reliefs and inscriptions are executed upon the sides and one end of a sandstone block[1] 6 ft. 1 in. (185·6 cm.) in length, rather more than 1 ft. 5 in. (43·2 cm.) in height and 1 ft. (30·6 cm.) in thickness, now fractured in the middle. Major Gorham informs me that from records it appears that the block has been in Bath for about 120 years; it stood for years in the garden of a Mr. Barratt, of Raby Place (formerly called Church Street), Bathwick, and was eventually presented to the Institution by Miss Emma Barratt in 1833. Its previous history is unknown.

The scenes apparently represent ceremonies during the coronation of Ramesses II, in which he is acknowledged as king by Atum of Heliopolis; and this was recognized by the Rev. Colin Campbell, D.D., of Dundee, who in 1927 wrote a description which has been exhibited with the block. Beginning at the left (Pl. iii, 2), we see the young king being led into the presence of Atum by Horus and another deity, now destroyed, but who must be either Set or Thoth. In the inscription above the king is called: *The Horus of Gold Rich in Years. King of Upper and Lower Egypt, the lord of offerings, Userma‘Rē‘-SetepenRē‘ Ramessu beloved of Amūn.* Horus is called *Horus in the temples*, and the scene is described as: *Conducting the King into the Great House in (the sanctuary)* Pr-nw.

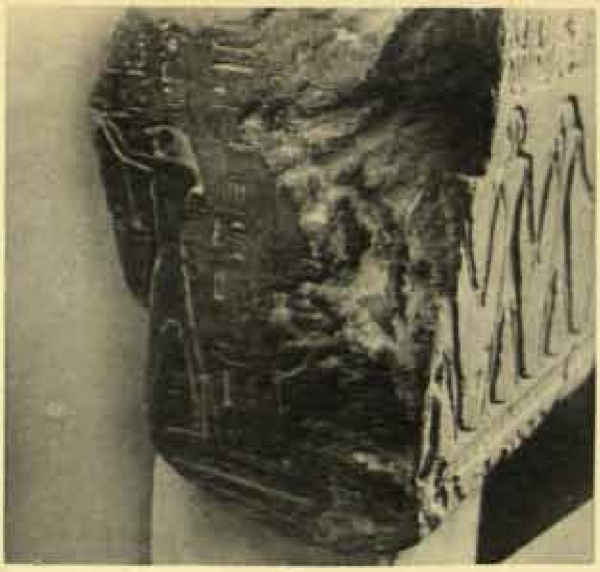
Next we see Ramesses standing, being embraced by Atum, who is enthroned. Above the king are his cartouches, while behind him stands his *ka*, depicted as a human figure, of somewhat shorter stature than its owner, bearing upon its head the king's Horus-name, *Victorious Bull beloved of Maat*, enclosed in the prescribed *srḫ* and surmounted by the hawk of Horus. In his right hand the *ka* grasps a standard-pole surmounted by an emblem in the form of the king's head. The accompanying inscription runs: *The ka of the king, the King of Upper and Lower Egypt, Userma‘Rē‘-SetepenRē‘, which is in the palace.*[2]

The inscription behind Atum reads: *Speech by the Great God, Lord of the Great House: I have given all life and well-being (?) and health to (my) beloved son the King of Upper and Lower Egypt, Userma‘Rē‘-SetepenRē‘, son of Rē‘, of his body, Rames[su], beloved of Amūn. . . .*

Continuing past the fracture (Pl. iii, 3) we see *Atum, Lord of the Great House*, enthroned within a shrine, holding Ramesses before him, while a *iwn-mwt·f*-priest, wearing sidelock and vestment of leopard-skin, pronounces the words: *An offering which Geb gives, an offering*

[1] It has been at some time coated over with a black substance, probably tar. The scene has apparently been detached from a larger block, and the stone shows a broken surface both above and below.

[2] *ḫnty ḏbꜣt*. For this title of the *ka* see *Wb. d. aeg. Spr.*, v., 561.



1

2

3

Block of Ramesses II in the Museum of the Royal Literary and Scientific Institute, Bath

which Horus gives, an offering which the Ennead gives. The Horus, the King of Upper and Lower Egypt, Userma‘Rēʿ-SetepenRēʿ, Lord of the Two Lands, appears upon the throne of Horus, endowed with life, stability, and well-being (?), *his heart being joyful like Rēʿ for ever.* Behind the *Iwn-mwt·f*, in two registers which are separated by the sign of heaven, the souls of Pe and Nekhen, with the heads of hawks and jackals respectively, kneel to make jubilation (*hnw*) in honour of the newly crowned monarch, the former giving him *all life and well-being* (?), the latter *all stability and well-being* (?). Below these scenes, along the entire lower edge, stretches an extended heaven-sign, covered with stars, and the upper part of a lower register of inscriptions and scenes. There are also traces of a line of stars along the upper edge of the block.

Returning to the corner end of the block (Pl. iii, 1) we find a fragmentary scene showing *Horus of Beḥdet,*[1] *rich in magic, dwelling in the Sanctuary of Upper Egypt*, performing some ceremony (probably sprinkling water) over the king, whose hands alone, grasping crook and whip, are preserved. Ramesses was evidently shown here wearing the cloak which the kings of Egypt wore both at coronations and *sed*-festivals.[2] Behind Horus is preserved a human arm grasping the pole of a standard.

The provenance of this sculptured block must remain unknown unless some scholar is able to throw light upon the subject. Professor Griffith, who has kindly looked at the photographs, suggests that it may come from Heliopolis, perhaps brought back from Alexandria, where so many Heliopolitan blocks were found.

[1] For Horus of Beḥdet in the coronation ceremony see Naville, *The Temple of Deir El Bahari* (Eighteenth Dynasty), III, Pl. lxiii.

[2] See *e.g. ibid.*, Pl. lxiv (coronation), and Naville, *Festival-Hall of Osorkon II*, Pl. xxiii (*sed*-festival).

TWO PAPYRI FROM OXYRHYNCHUS

By C. H. ROBERTS

The two documents printed below, P. Lond. Inv. 2554 and P. Lond. Inv. 2555, were presented to the British Museum in 1924 by the British School of Archaeology in Egypt; beyond this they have nothing in common except their place of origin. In the former, a well-preserved papyrus of the middle of the third century A.D., we have a new type of document which incidentally reveals the existence of a cult at Oxyrhynchus hitherto unknown; unfortunately its existence is all that can be stated with certainty. The second, a private letter of the Byzantine period, is a good specimen of the epistolary style of the age and, like its fellow, has the merit of being very nearly complete. Both provide some not uninteresting additions to our vocabulary of the Greek language.

I am greatly indebted to Mr. H. I. Bell for permission to publish them and for the use of his original transcripts; for much kindness and many profitable suggestions I have to thank both him and Mr. T. C. Skeat.

I

P. Lond. Inv. 2554. 11·5×33·5 cm. August 28, A.D. 249.

This request for cancellation of a deed of lien upon repayment of a loan, addressed to the Keepers of the Real Estate Registry at Oxyrhynchus, is, as far as I know, the first document of its kind to be published. In A.D. 245 Aurelius Thonis, Aurelius Didymus, Aurelius Pekusis, and a second Aurelius Thonis had borrowed the sum of 4,500 silver drachmai from a certain Pekusis; though the terms of the loan are not given, we may presume it was for a period of four years (or perhaps longer as the loan was dated in the month Thoth of the second year and the present document is dated on the last day of the sixth year) and that, as a safeguard against default, a general lien on the debtors' property was made without any specific security being given. The deed of loan was entered in the public registry of deeds at Oxyrhynchus and a request for the entry of the lien on the debtors' property (*ὑπόμνημα κατοχῆς*) was made by them (*cf.* P. Ryl. 174) to the officials of the Real Estate Registry. Shortly before the repayment of the capital fell due, Pekusis died, leaving as his heir his son Aurelius Thonios: the latter issued a receipt acknowledging the repayment of the loan, by which he invalidated the original deed of loan, the registration of the same in the public record office, and the deed of lien. (Our knowledge of this process depends largely on P. Ryl. 174, a receipt given on repayment of a loan, dated in A.D. 112; the creditor surrenders the relevant documents to the debtor for cancellation and admits the invalidity of the deed of lien.) On the strength of this receipt the former debtors apply to the Real Estate Registry to have the entry recording their liability annulled; the receipt itself is not included with the present document, but—if the restoration of the mutilated lines is correct—a copy of it is to be sent to the Registry. That the document before us is the original petition seems unlikely as it bears no mark of having been received or docketed by the officials of the Registry, although the top right-hand corner is torn, while the variety of the hands makes it unlikely that it was an official copy; perhaps each of the four petitioning parties kept a copy, in which case 2554 probably belonged to Thonis, son of Arsas, whose name appears on the verso.

Except where the papyrus is torn or worm-eaten or the surface is rubbed, there are few difficulties of decipherment.

Ἀυρηλιοις Ἀμμων[ίῳ . . . . . . καὶ ὡς χρημα-]
τ̣ίζε̣ι βουλευ̣τῇ τῆς Ὀξ̣[υρύγχων πόλεως]
καὶ Ἡλιοδώρῳ ἀ̣μ̣φοτέ̣ρ̣[οις βιβλιοφύλ]α̣ξ̣ι
παρὰ Αὐρηλίων Θ̣ώνιος Ἀ̣[ρσᾶτος μη]τρο̣ς
Ταοσαράπιος καὶ Διδύμου Θέωνο[ς μ]ητρὸς
Θ̣ατρῆτος καὶ Πεκύσιος Σ̣ε̣ουήρ̣[ου] μη-
τρο̣ς̣ Θαισᾶτος καὶ Θώνιος Διδύμου
μητρὸς Σοήριος τῶ[ν τ]εσσάρων ἀπ' Ὀξ̣υρύ[γ-]
χων πόλεως θεαγῶν Θοηρείου ἐξα-
γορείων καὶ ἑτέρου Σιντάνω λεγο-
μένου· δι' ἧς ἐ̣ξέδετο ἡμεῖν Α[ὐ]ρήλιο̣ς̣
Θώνιος Πεκύσιος μητρὸς Θατρῆτο̣ς̣
ἀπὸ τῆς αὐτῆς πόλεως συνθεαγὸς
τῶν αὐτῶν ἐξαγορε[ί]ων μετὰ κουρά-
τορος Αὐρηλίου Σαραπιακοῦ ἀπελευ-
θέρου Κ̣α̣νώπου καὶ Δημητρίου
ἀμφοτέρων ἀρχιερατ̣ευσάντων
τῆς αὐτῆς πόλεως διὰ [τ]ῆ̣ς ἐν τ̣ῇ αὐτῇ
πόλει κολλυβισ̣τικῆ̣ς̣ τραπ[έ]ζης
τῷ ὄντι μηνὶ ἀποχῆ[ς] ἧς μ[ον]αχὸν
ἐ̣φ̣' ὑ̣πογραφῇ ἐνεστη[κυ]ί̣α̣ σ̣τ[ελ]ούμε-
[ν]ο[ν ἐ]π̣ὶ [τ]ὴ̣ν̣ τ̣ρ̣ά̣πεζα̣ν̣ [παρέ]ξομεν
[ὑμεῖν] ὡ̣μ̣ο̣λ[όγησεν] ἡμ[ῖν ἐσ]χηκέναι
[παρ' ἡ]μῶν ἃς καὶ ἐδάνει[σ[ε]ν ὁ με-
τ̣η̣λ̣λ̣α̣χ̣[ὼς ἐ]π̣ὶ αὐτῷ κληρονόμῳ
πατὴ[ρ] α̣ὐ̣τ̣οῦ Πεκῦσις Θώνιος μη-
τρὸς Κρονοῦτος ἀπὸ τῆς αὐτῆς
πόλεως ὃς ἦν θεαγὸς τῶν αὐτῶν
ἐξαγορείων κατὰ χειρόγραφον γενό-
μενον τῷ Β (ἔτει) τῆς εὐτυχεστάτης ταύτη̣ς̣
βασιλείας μηνὶ Θὼθ κεφαλαίου ἀργυρίο̣υ̣
δραχμὰς τετρακισχειλίας πεντακοσί-
ας καὶ τοὺς λοιποὺς ὀφειλομένους δρα-
χμιαίους τόκους μ̣ε̣τὰ τοὺς ἐν[δέ]ο̣ν̣-
τας ἀποδ̣ε̣δόσθαι ὑφ' ἡμῶν [. . .] τ̣ῷ
πατρὶ αὐτοῦ ἡ̣ν̣ί̣κα περιῆ̣ν̣ [κα]τ̣ὰ
μέρ̣ο̣ς ὡς ἡ ἀποχὴ περιέχει δι' ἧς
ἠκύρωσεν τό γε δηλούμενον χει[ρ]ό-
γραφον καὶ τὴν γενομένην μ̣ο̣ν̣α-

χοῦ δ̣[η]μοσίωσιν ἀμετάδοτον μ̣ε̣μ̣ενηκυ̣ῖ̣[α]ν . . ε̣ι̣κ̣ο̣ς κ̣α̣ὶ̣ τ̣ὴ̣ν̣ [γ]ε̣ν̣ομ̣[έ]νην διὰ τοῦ ˋαὐτοῦˊ βιβλειοφυλακίου̣ κ̣α̣τοχὴν τῶν ὀν[ο]μ̣ά̣τ̣ω̣ν̣ ἡμῶν [πρ]ὸ̣ς τ̣ὸ χρέος· ἥνπερ βουλόμενοι ἀνεθῆναι ἐπ̣ι̣διδόμεν τὸ ὑπόμνημα ὡς κ̣αθήκε̣ι̣ καὶ ὀμνύομεν τὴν Μάρκων Ἰουλίων Φιλίππω(ν) Καισάρων τῶν κυρίων τύχην μὴ ἐψεῦσθαι. (Ἔτους) Αὐτοκρατόρων Καισάρων Μάρκων Ἰουλίων Φιλίππω(ν) Καρπικῶν Μεγίστων Γερμ̣α̣νικῶν Μ̣ε̣γ̣ίστων Εὐσεβῶν Εὐτυχῶν Σεβαστῶν. (2nd hand) *Μεσορὴ ἐ̣π̣α̣γομένωˋνˊ ε* (3rd hand) *Αὐρήλιοι Θῶνις Ἀρσᾶτος καὶ Δίδυμος Θώνιος καὶ Πεκῦσις Σεουήρου̣ καὶ Θῶνι[ς] Διδύμου οἱ δ̄· δι' ἐμοῦ Αὐρ̣ηˋλˊ(ιου) κ(αὶ) τὸ χαρτ̣ί̣διον ἐπιδέδωκα καὶ ὤμοσα τὸν ὅρ̣κον.*

Verso.

[Θ]ῶνις Ἀρσᾶτος.

l. 11. *ἡμῖν*. l. 21. There seems hardly enough room for the *κυ* of *ἐνεστηκυίᾳ*; but after the gap the papyrus is squeezed a little towards the left. *ἐνεστι̣ [δ]ιαστ[ελ]ούμενον* is possible palaeographically, though of doubtful sense. ll. 21–2. *στελλόμενον*. l. 32. *τετρακισχιλίας*. l. 34. The reading is uncertain; *κατά* might be read for *μετά*: perhaps *μετὰ ⟨τὸ⟩ τοὺς κ.τ.λ.* should be read. The last stroke of the *ν* is rubbed and *σ·* is possible. l. 35. Perhaps, as Bell suggests, *τῷ αὐτῷ*. l. 41. *ὡς* before *εἰκός* seems impossible, though the letters are confused by the intrusion of *αὐτοῦ* from the next line. l. 42. *βιβλιοφυλακίου*. l. 45. A thick vertical line has been drawn from the *υ* of *ὑπόμνημα* down to l. 53. Above the *υ* is a short horizontal stroke. l. 55. The *καί* is unnecessary and perhaps *[Α]κιο(υς)* should be read; there is apparently a linking stroke between the *η* and the *κ*, but the surface is rubbed and there may be room for an alpha. Above the top of the *ι* or *(αι)* is a dot which might represent an *ο*. A possible reading would be *⟨ὃς⟩ και κ.τ.λ.*

Translation

"*To Aurelius Ammonius son of . . . . . ., however he may be styled, councillor of Oxyrhynchus, and Aurelius Heliodorus, both Registrars, from Aurelius Thonis, son of Arsas and Taosorapis, Aurelius Didymus, son of Theon and Thatres, Aurelius Pekusis, son of Severus and Thaisas and Aurelius Thonis, son of Didymus and Soeris, all four being of Oxyrhynchus and theagoi at the temple of Thoeris of the Revealing gods and at another shrine of Thoeris called Sintano: Aurelius Thonios, son of Pekusis and Thatres, of the same city, a fellow theagos of the same Revealing gods, acting with his guardians, Aurelius Sarapiakus, freedman of Canopus, and Demetrius, both former high priests of the same city, in the receipt which he issued to us in the current month through the exchange bank in the same city, a single copy of which with signature attached, sent to the same bank, we will exhibit to you, acknowledged to us that he had received from us the capital sum of 4,500 silver drachmai which his father Pekusis, son of Thonis and*

Kronous, who died leaving him his heir, of the same city and theagos of the same Revealing gods, had lent us by a deed of hand executed in the month Thoth of the second year of the present most felicitous reign, also the remainder of the interest at 12 per cent. per annum that was owing (the balance of interest having been repaid by us in instalments to his father before his decease as the receipt specifies): by which receipt he annulled the aforementioned deed of hand, the publication of the single copy of the same which remained uncommunicated . . . . and the notification of our personal liability executed through the same Registry in respect of this debt. Desiring that this note of liability be cancelled, we duly present a petition to that effect and swear by the Fortune of Our Lords the Caesars Marci Julii Philippi that we have used no deceit. Dated in the sixth year of the Emperors and Caesars Marci Julii Philippi Carpici Maximi Germanici Maximi Pii Felices Augusti, in the month of Mesore, the fifth 'epagomene'. (Signatures.) Through me, Aurelius; I have given in the document and sworn the oath."

Verso.

"*Thonis, son of Arsas.*"

Notes

ll. 1–3. The name *Ἀμμώνιος* may now be restored in P. Oxy. 1268, a property return addressed to two Registrars, one whom is Heliodorus. It is dated in the sixth year of an unnamed emperor whom the editors suggest is Severus Alexander; on the evidence of this document we may place it in the reign of the Philippi.

That the *βιβλιοφύλακες* here addressed were the *βιβλιοφύλακες ἐγκτήσεων* is clear (apart from the identification with the Registrars of P. Oxy. 1268) from the parallel situation in P. Ryl. 174. In consequence, Preisigke's statement (*Girowesen*, p. 283[1]) that the use of *βιβλιοφύλακες* without further specification in Oxyrhynchus papyri before A.D. 131 indicates that up to that date there was only one Registry, the *βιβλιοθήκη δημοσίων λόγων*, must be regarded as doubtful: we might perhaps infer that both Registries were under the control of the same officials, as they were at Antinoe in A.D. 180–92 (P. Stras. 34, 2).

l. 5. *Ταοσοράπιος*. This form of the name appears to be new; it may be an error for *Ταοσέραπις* which occurs in P. Ryl. 220.

l. 9. *θεαγῶν Θοηρείου κ.τ.λ.* The temple of Athena-Thoeris in Oxyrhynchus was one of the largest in the city and the priests and pastophoroi attached to it formed a college together with those of Isis and Serapis (P. Oxy. 46, 8) and Osiris (P. Oxy. 241, 10), *cf.* Otto, *Priester und Tempel*, I, pp. 21, 98[4], 115. *θεαγοί* of Thoeris were already known at Tebtunis (P. Teb. I, 61*b*, 59), which possessed both a *μέγα* and a *μικρὸν Θοηρεῖον* (P. Teb. I, 243 and P. Mich. II, 121, R. iv, iv, i.): in Oxyrhynchus, probably in A.D. 249 (P. Oxy. 1268: for date see above), we hear of a *παστοφόρου Ἀθηνᾶς* [*τῆς καὶ Θοήριδος θεᾶς μεγ(ίστης)*]. The present document provides additional support for Otto's view (*op. cit.* I, p. 95[1]) that the *θεαγοί* are to be identified with the *παστοφόροι*. Side by side, however, with her great temple at Oxyrhynchus the goddess possessed smaller temples or shrines: we know, *e.g.* from P. Oxy. 43, verso iv, 12, that in A.D. 295 there was a *τετράστυλον Θοήριδος*, and in P. Oxy. 1188, 3 (A.D. 13) we hear of a *Θοηρεῖον Ὀσορφνᾶτος*. The editors note that in Osorphnas "a deified animal is probably to be recognized" and perhaps a parallel to the combination of another cult with that of Thoeris is to be seen in the present document. We should then translate "theagoi at the Thoereum of the *Ἑξαγόρειοι* and at another (Thoereum) called Sintano", the Thoerea in question being smaller temples dedicated to the goddess. But it is possible that they were theagoi primarily of the *Ἑξαγόρειοι*, not of Thoeris, and ll. 13–14 and l. 28 in which Thoeris is not mentioned support this view: the translation would then run "theagoi of the *Ἑξαγόρειοι* at the Thoereum and at another Thoereum called Sintano", in which case the former Thoereum may well be the great temple of that name.

The words *Θοηρείου ἐξαγορείων καὶ ἑτέρου Σιντάνω* occur in a mutilated form in P.S.I. 215, 6 (A.D 339), where the full description may now be restored, with the difference that the text gives [ἱερ]εύς where we should expect θεαγός and that λεγομένου is omitted. The word ἐξαγόρειος appears to be unknown to the lexica and it is the more unfortunate that in both these instances it is found in an oblique form. Although ἐξαγορεύω, with its derivatives, and its companion word ἐξομολογεῖσθαι occur frequently in the vocabulary of ancient religion, the precise meaning in this case is not easy to determine.

That from the genitive ἐξαγορείων we may infer a nominative ἐξαγόρειοι (*sc.* θεοί) is probable from ll. 13–14 (συνθεαγὸς τῶν αὐτῶν ἐξαγορείων) and l. 28 (ὃς ἦν θεαγὸς τῶν αὐτῶν ἐξαγορείων): moreover, this would accord with the common use of θεαγός which is generally followed by the name of the deity served in the genitive. (It is used absolutely—πλοίων θεαγῶν—in P. Ryl. 196, 13–14, a tax-receipt, and in B.G.U. 1023, 6, though here it is preceded in l. 4 by the full expression θεακῶν [*sic*] Σοκοπιχόνσεως: even if here it be taken in close connexion with Θοηρείου, the exception would be but nominal.[1])

ἐξαγορεύω is found once in Homer and in no specifically religious sense, although the book is *Odyssey*, XI (l. 234); and elsewhere it is used (*Hdt.*, IX, 89 and Lucian, *de Salt.*, 36, De Merc. Cond. 1.) in a purely secular context. Otherwise its meaning varies between:

(1) "to reveal a mystery" (*Hdt.*, II, 170) and so "to blab"—ἐξαγορεύοντα ταῖν θεαῖν τὰ ἀπόρρητα (Lucian, *Piscator*, 33).[2] ἐξαγορευτής in Ptolemaeus Mathematicus, *Tetr.*, p. 158 (Basel, ed. 1553), probably has a similar meaning as it is certainly used in a deprecatory sense, and Liddell and Scott's (new ed.) translation "one who confesses his sins" hardly suits the context.

(2) "to reveal to a god", so "to confess". So in the LXX and (contemptuously) in Plutarch, *Moralia*, 168*d*: κυλινδούμενος ἐξαγορεύει τὰς ἁμαρτίας. For such confession as an act of self-abasement before the god, *cf.* Philo, *de Somniis*, II, 299: ἐξαγορεῦσαι τὸ ἁμάρτημα, τόδ' ἐστὶ κακίσαι ἑαυτήν and Ptol., *Tetr.*, 153–4: μετὰ παραδειγματισμῶν καὶ ἐξαγορευσέων καὶ τῶν τοιούτων. In another passage of Ptolemy the meaning is more in doubt (*Tetr.*, p. 170): ὁ δὲ τοῦ ♀ (*sc.* συνέργει) πρὸς τὰς θεοφορίας καὶ ἐξαγορίας. E. Petersen (*Εἷς Θεός*, p. 201) would apparently connect both words with religious ecstasy (he also comments, on the passage of Philo quoted above, "In später Zeit ist dann ἐξαγόρευσις 'terminus technicus' für das freiwillige geständnis"); Nock suggests (in a letter) that by the former word is meant the processional carrying of the god, by the latter something like ἀρεταλογία, the recitation of the god's praises. *Cf.* also Ptol., *Tetr.*, p. 170: ἐνθουσιασμοῖς καὶ ἐξαγορίαις καὶ αἰκίαις.

[1] Mr. A. D. Nock saw these notes in draft (though not the document itself) and I am indebted to him for several valuable suggestions and references, although for any views expressed or errors committed he must not be held responsible. An alternative he suggested was that ἐξαγορείων agreed with θεαγῶν, not with implied θεῶν; it might then be (1) the equivalent of ἀρεταλόγος, well known at Memphis and Delos, or (2) a title of a religious official who carried an image which prophesied by nodding, and who interpreted the nods; *cf.* Nock, *Journal*, XI, 130 n.; A. M. Blackman, *Journal*, XI, 249–55; XII, 176–85; Wilcken, *U.P.Z.*, p. 19 (on the Apis cult at Memphis), *Sitzungsb. Preuss. Akad.*, 1928, 583–6; 1930, 172–5 (on the cult of Zeus-Ammon). But l. 28—θεαγὸς τῶν αὐτῶν ἐξαγορείων—and the usual construction of θεαγός make against this view: a further objection, granted the identity of παστοφόρος and θεαγός, is that it would be the function of a priest, not of a menial θεαγός, to interpret the divine nods. For the sharp distinction between the priests who carried the images of the gods and the παστοφόροι who merely carried the small shrines, barks, etc., *cf.* Schubart, *Ä.Z.*, LVI, 92–3; *Einf.* 349, 355.

[2] Considering how rare the word is in literary writers, Lucian uses it with surprising frequency; *cf.* D. Deor. XVI, 2 and De Merc. Cond. 4. In both passages the sense is that of revealing something secret, in the former associated with the idea of profanation.

Moreover, both *ἐξαγορεύω* and *ἐξομολογεῖσθαι* are used almost interchangeably in the Lydian inscriptions in the sense "to confess sins"; for the former word *cf.* Collitz, *Sammlung der Griechischen Dialektinschriften*, nn. 3527, 3540, and for the latter *ibid.* 3536 and W. H. Buckler, *Classical Review*, Feb. 1933. An interesting passage in Ovid (*Ex Ponto*, I. 1, 51) describes the behaviour of a penitent before the shrine of Isis:

> Vidi ego linigerae numen violasse fatentem
> Isidis Isiacos ante sedere focos,
> Alter, ob huic similem privatus lumine culpam,
> Clamabat media se meruisse via.

For this practice in the Graeco-Roman world *cf.* Nock, *Early Gentile Christianity*, pp. 72–5. But of such "confession" in Ptolemaic and Roman Egypt I have been unable to find any trace, and though it is tempting to connect it with the confessions of perjury found on some Theban tombstones of the Nineteenth Dynasty (*cf.* Peet, *A Comparative Study of the Literatures of Egypt, Palestine and Mesopotamia*, p. 89, and Breasted, *Development of Religion and Thought in Ancient Egypt*, pp. 307, 352–4) the resemblance is probably superficial.

It would be possible to hold that the present document provides us with evidence that the practice of confession, well vouched for in Asia Minor in Graeco-Roman times, extended also to Egypt. But not only in the cases quoted do there seem to have been no gods whose especial function it was to hear confessions, as, on this view *ἐξαγόρειοι θεοί* would imply, but in grammar as well as in meaning the emphasis falls on the active side of the practice, on the man who makes, not on the god who hears the confession. *ἐξαγόρειοι* might mean "gods of the *ἐξαγορεία*", "gods to whom confession is made" (*cf.* the use of *εὐκταῖος*, *e.g.* *εὐκταία θεός* Eur. Or. 214), but neither in the verb nor its derivatives is there any trace of such a passive sense. The more obvious translation, recalling the secular use of the word, would be "the revealing gods", which suggests a connexion with the oracular powers of Egyptian deities. Though *ἐξαγορεύω* does not appear in any of the questions to oracles that have survived on papyri, some of the words used by the petitioners are not unlike it, *e.g.* *ἐκφέρω* (B.G.U., I, 229), *φανερόω* (P. Oxy. 925, 4), *ὑποδείκνυμι* (Wilcken, *Chr.* 122).[1] But of the questions to oracles that have been found at Oxyrhynchus none can be associated with Thoeris or the Thoereum. It is perhaps worth noting that in modern Greek (according to Moulton and Milligan, *The Vocabulary of the Greek New Testament*, s.v. *ἐξομολογέω*) the word *ξομολογέω* means "to shrive, hear one's confession".

l. 10. *καὶ ἑτέρου Σιντάνω λεγομένου.* For the following note on *Σιντανω*, whose first appearance this seems to be, I am indebted to Dr. F. Ll. Griffith. The first three letters may well stand for the Coptic **ⲧⲥⲉⲛ** meaning "the seat, or place of", as Greek can ignore the initial **ⲧ** before **ⲥ**, as in the names beginning with *Σεν*-—for Tshen—"the child of"; *Τανω* (which occurs as a woman's name on a mummy ticket cited in Preisigke, SB. 3883) may be the equivalent of "T-ʿan-ḥo", "the fair of countenance". An alternative explanation would be to translate *Σι*- by "son", as in Harsiesi, "Horus, son of Isis", and *Τανω* would be a very appropriate epithet for an Egyptian deity, *e.g.* Isis or Thoeris.[2] But on the whole the former suits the context better and we can then translate "theagoi of another Thoereum called the place of Tano": *cf.* P. Oxy. 1028, 31–2 *ἀπογρα(ψάμενον) ἐπὶ Θοηρείου Θενέπλωι*, where, as the editors note, the second name defines the locality more exactly.

[1] On this Nock comments: "*ἐξαγορεύω* implies a little more explicitness of utterance than is usually ascribed to oracular gods."

[2] If there is a reference to Thoeris here, we should expect "daughter" rather than "son". On this Dr. Griffith writes: "*Σι*- might perhaps stand for 'daughter', the feminine of the well-known *Σι*-, but we know it in transcription only in the masculine."

l. 13. συνθεαγός. This compound appears to be new.

l. 15. In P. Oxy. 77 a declaration is directed to Aurelius Ammonius as γυμνασίαρχος ἔναρχος πρύτανις by the wife of an Aurelius Sarapiakus. It is dated in A.D. 223, but they may be the same Aurelius and Sarapiakus who figure in this document.

l. 30. εὐτυχεστάτης κτλ. *cf.* P. Oxy. 1257, 7, where the same phrase is used of the reign of Probus; a similar expression, ἡ εὐνομία τῶν εὐτυχεστάτων τούτων καιρῶν occurs in P. Oxy. 1559, 6 (A.D. 321).

l. 34. For this use of μετά with a verbal substantive in the sense of "besides that", "apart from the fact that", Preisigke cites no instance before the fifth century (P. Flor. 384, 107). In literary Greek *cf.* Luc. De Merc. Cond. 3.

l. 40. ἀμετάδοτος appears to be an addition to the legal vocabulary of Greek papyri and no instance of it is quoted in Preisigke. The single copy (μοναχήν) of the deed of loan which had been sent for registration (δημοσίωσις) to the record office remained "uncommunicated"; *i.e.* the notification of the publication of the document to the borrowers, effected at the request of the lender through the strategos (*cf.* the editors on P. Oxy. 719, introd., and P. Oxy. 906, 9; *cf.* also P. Oxy. 1473, 1561, 2134; and for publication of a loan P. Oxy. 1474, 1561), was not in this case carried out. The publication which would have been carried out as a safeguard by the lender was not dependent for its validity upon the notification; in certain cases, as here, no notification was necessary. The reason for this is made clear in P. Oxy. 1276, a sale of house property dated, as is the present document, in A.D. 249; there the vendor admits the right of the purchaser to effect the publication of the deed of sale through the καταλογεῖον and adds that any notification to her of the publication is unnecessary, διὰ τὸ ἐντεῦθεν εὐδοκεῖν ἡ[μ]ᾶς τῇ γεινομένῃ ὑπό σου δημοσιώσει. Presumably the procedure was the same here, and the agreement of the borrowers to the publication with the consequence that μετάδοσις was unnecessary was stated in the deed of loan; *cf.* Schwartz, *Öffentliche und Private Urkunde*, p. 28.

l. 42. τοῦ αὐτοῦ implies that the publication was effected locally and not at Alexandria (*cf.* P. Oxy. 1208 introd.).

ll. 42–3. The exact procedure involved in κατοχὴ τοῦ ὀνόματος is still uncertain. The interpretation *referre inter debitores fisci* (Eger, *Grundbuchwesen*, pp. 75–7, following Mitteis, *Privatrecht*, pp. 370 ff.) can now be seen to be too narrow, although it may well apply to the phrase as used in the Edict of Ti. Julius Alexander (Dittenberger, *Or. Gr. Inscr.*, II, 669, 21 ff.); here, as in P. Ryl. 174, there is no question of the fiscus being concerned, and the recording of such "deeds of lien", as of κατοχαί in general (*cf.* Meyer, *Juristische Papyri*, p. 217), was a function of the βιβλιοθήκη ἐγκτήσεων. In P. Ryl. 174, and most probably in this document also, the entry of the κατοχή was voluntary, whereas, as the editors of the former remark, it is significant that Ti. Julius Alexander orders it to be enforced. Preisigke's interpretation, based on his general view of the nature and purpose of the βιβλιοθήκη ἐγκτήσεων—"Sie (*i.e.* κατοχὴ τοῦ ὀνόματος) verhindert, dass der im Besitzamte nicht verbuchte Besitz notariell veräussert wird"—seems unlikely in itself and finds no support in these documents: moreover, if such κατοχή were only to apply to property not entered in the βιβλιοθήκη ἐγκτήσεων, we should hardly expect to find applications for the registration of such deeds directed thither. In the Edict of Ti. Julius Alexander a clear distinction is drawn between κατοχὴ τοῦ ὀνόματος and κατοχὴ τῶν ὑπαρχόντων, which establishes claims on a definite piece of property; the former (in the Edict clearly a less rigorous measure than the former) is probably no more than a verifiable admission of indebtedness affecting the estate as a whole, whereby presumably priority was given to the claim so registered. Yet a further difference of procedure is to be seen in P. Oxy. 1892 (A.D. 581), a deed of loan secured upon a specific plot of land which, however, is not described as mortgaged.

l. 44. *ἀνίημι* in the sense of "to remit" and so "to cancel" is not given in Preisigke.

l. 55. *χαρτίδιον* occurs twice in Sammelbuch 5224 for a sheet of papyrus; this is the first instance of it as "document" in papyri. *Cf.* Alciphron, II, 5 (Teubner ed.), *πρεσβύτην . . . . . χαρτίδια ἀρχαιά τινα . . . διὰ χειρὸς κατέχοντα.*

II

P. Lond. Inv. 2555.

The papyrus, a sheet measuring 15·1 cm. in width and 23·4 cm. in height, is complete but for a small tear in the top right-hand corner. In two or three places the fibres are disordered and the ink faded where the letter was folded; but apart from this and a slight discoloration, probably due to damp, on the right-hand side, there are no difficulties in the way of decipherment. It is written along the fibres in a large, regular and flowing hand, and in the absence of other criteria may be dated in the later fifth or early sixth century.

Argyrios writes to his "master" Hierakion requesting him to bring with him, perhaps from Oxyrhynchus to the latter's country estate, a few odds and ends for personal use—particularly a cushion. There is nothing to show the relationship of the two men, but Argyrios writes as though he was at once an employee of Hierakion's and a member of his household. The letter is a fair example of Byzantine epistolography with its contrast between the flowing, conventional style of the opening and closing sentences and the blunt, staccato clauses the writer employs when something of importance is at stake.

Recto.

Τῷ δεσπότῃ μου ὡς ἀληθῶς τιμιω[τάτῳ τὰ]
πάντα θαυμασιωτάτῳ ἀδελφῷ Ἱερακ[ί]ω̣ν̣ι̣
Ἀργύριος·
εὐκερίαν εὑρὼν διὰ τοῦ ἀδελφοῦ ἡμῶν
Ἀμμωνίου ἔσπευσα διὰ τῶνδε τῶν γραμ-
μάτων προφθέγξασθαί σου τὴν ἀρετήν·
καταξίωσων δὲ, δέσποτα, ταχέως ἐλθεῖν
πρὸς ὑμᾶς. πάνυ γὰρ ἐ̣π̣[ε]ζ̣η̣τ̣ήσαμέν σου
τὴν θαυμασιώτητα· καταξ̣ι̣ώ̣σ̣ω̣ν̣ ὑ̣π̣ο̣-
μνῆσε τὸν κύριόν μο[υ τ]ὸν θαυ[μά]σ̣ιον Φοι-
βάμμωνα τὸν ῥιπάριον ἵνα γωμώσῃ
τὸ προσκεφάλεον τὸ ἀποσταλὲν αὐτῷ παρ' ἐν
δ̣ιὰ̣ Καλ̣λ̣ι̣ν̣ίκου· καὶ φέρε τοῦτο ἐρχόμενος·
ἐρχόμενος δέ, δέσποτα, ἐν σίδλιν καὶ ἐν σαν-
τ̣ά̣λ̣ι̣ν̣ φέρε μοι· ἐρχώμενος μὴ ἀμελήσῃς,
δέσποτα, τὸ προσκεφάλεον ἐνέγκαι ⟨μ⟩οι
γωμωθέν· ταχέως ἀπάντησων ἵ̣ν̣α̣
σὺν θεῷ κοιιῶς τὴν πανήγυριν
ποιήσωμεν· (2nd hand) *ἐρρῶσ(θαί) σε εὔχομαι*
π̣ο̣λ̣λ̣οῖς χρόν̣ο̣ι̣ς̣,
δέσποτα.

Verso, along the fibres.

τῷ δεσπότῃ μου *Ἱερακίωνι Ἀργ̣ύ̣ρ̣ι̣ο̣ς̣*

Translation

Recto.

"To my master, truly and most highly honoured, in all respects most admirable, my brother Hierakion, Argyrios. I have lost no time to take the opportunity offered by my brother Ammonius and address myself to your Excellence in this letter. Condescend, my master, to come to us soon; for we have greatly missed your worship. Condescend to remind my lord, the worshipful Phoibammon, the riparius, to dispatch the cushion that was sent separately to him through Kallinikus, and when you come, bring it with you. When you come, master, bring one water-bucket and one sandal for me. When you come do not forget, master, to bring the cushion that has been dispatched to me. Come and join us soon that, God willing, we may keep the feast together. I pray that you may long be in good health, master."

Verso.

"To my master Hierakion, Argyrius."

Notes

l. 1. For *τῷ τὰ πάντα*, which might be expected, there is no room.

l. 4. *εὐκαιρίαν.*

l. 6. *προφθέγξασθαι.* This seems to be the first well-authenticated example of the use of this word in Greek. It is quoted in Liddell and Scott (8th ed.) from the 1573 Glossaria of Stephanus, but I have been unable to find it here. Nor does it occur in Loewe, Goetz and Schoell, *Corpus Glossariorum Latinorum*. Perhaps here we should read *προ⟨σ⟩φθέγξασθαι.*

l. 7. *καταξίωσον.*

l. 8. *ἡμᾶς.*

l. 9. *θαυμασιότητα. ὑπομνῆσαι.*

l. 10. Another example of the use of *θαυμάσιος* in the positive as a courtesy title is to be found in P. Genf. 210 (V. Martin, *Journal* xv).

l. 11. For the "riparii" *cf.* Rouillard, *L'Administration civile de l'Égypte Byzantine*, pp. 156, 163, and Hardy, *Large Estates in Byzantine Egypt*, pp. 20, 71.

γομώσῃ.

l. 12. *προσκεφάλαιον. Παρ' ἕν.* The exact meaning of this phrase is not obvious; perhaps it is an extension of the inclusive use of *παρά*, *cf. πάντες παρ' ἕνα.*

l. 14. *σιτλίον. σανδάλιον.* A request for a single shoe seems a little odd; it might alternatively on the strength of Alciphro, I, 7 be translated "turbot", in which case it might be taken in closer connexion with the water-bucket.

l. 15. *ἐρχόμενος.*

l. 17. For *γομῶ* in the unusual sense of "dispatch" *cf.* B.G.U., III, 996, 5. *ἀπάντησον.*

l. 20. The papyrus is faded here: it looks as if the words were rewritten over the second hand by the first in darker ink.

Verso. There are a few traces of ink before *Ἱερακίωνι*; possibly *τῷ* is to be read.

THE OCCURRENCE OF TIN AND COPPER NEAR BYBLOS

By G. A. WAINWRIGHT

One of the most elusive problems of archaeology is that of the source whence the ancients obtained their tin. This no doubt varied down the ages and with the people under consideration. The fact that the later Greeks and the Romans obtained theirs from Spain and the Cassiterides, *i.e.* Brittany and Cornwall,[1] is no argument that the ancient Egyptians did so some fifteen hundred years earlier. While tin rarely occurs on the scale required by modern commerce, there are numerous sites where the ancients might have obtained their small quantities. Lucas has published a great collection of such sites,[2] to which may be added that near Eski Shehr in Asia Minor, to which von Bissing has recently called attention.[3] But hitherto nothing has transpired to give any preference to any one of these as a site worked, or likely to have been worked, in Pharaonic times. However, among the sites referred to by Lucas one seems to stand apart from all the rest as a likely place whence the ancient Egyptians might have got their tin. This is the Kesrwan district of the Lebanon, about which researches have provided the following information.

In the first place there is the position. The map, Fig. 1, which is sketched from the French army map of 1: 100,000, shows that Kesrwan is the mountain mass behind Gubeil, the ancient Byblos. Then there is the statement in the *Engineering and Mining Journal*[4] that "Tin deposits in the Kesserwan district were examined and approved by Australian engineers, and licenses for the right of mining tin, copper and silver were applied for by Murr on behalf of the Australian company which they represented. The work was discontinued, however, upon the outbreak of war." Further, the British Acting Consul-General at Beyrut has been kind enough to make some inquiries for me, and these amplify the above somewhat bald statement. In his letter he says, "Mr. Diabis Murr, the well-known local advocate, has been good enough to give me the following information in response to inquiries which I made on receipt of your letter of the 16th May: In 1910 two Australian mining engineers, Messrs. Sams and Robinson, prospected in the Lebanon behind Jebeil, and satisfied themselves that silver and copper exist in commercial quantities. Prospecting licences were obtained, the necessary arrangements made with the Government and landowners, and samples procured. The prospectors then returned to Australia, and soon a certain Mr. Holmes returned as the representative of a Mining Exploration Company, specially formed for the purpose of handling the Lebanon deposits. With reference to your questions, Mr. Murr states that so far as he knows there are no signs of mining operations by the ancients in the Kesserwan district. The Nahr Ibrahim does, however, flow through the district, and so might have brought down ore into its bed. There is always a strong flow of water. On the other hand I am told that the water in the Wady Feidar rises up in summer. It also flows down from the ore-bearing district, and in considerable flood after heavy rains. Finally I understand that the tin and copper ore are found mixed together."

Several points emerge here that are important for the present inquiry. They are that the

[1] T. A. Rickard, *Man and Metals*, chap. VI; Lucas in *Journal*, XIV, 101, 102. [2] *Journal*, XIV, 97 ff.

[3] *Journ. Hellenic Studies*, LII, 119. It is on the railway between Brusa and Angora.

[4] CXII (1921), 851 (Toll, *The Mineral Resources of Syria*).

district is close to Byblos; that its rivers, the Phaedrus (Nahr Feidar) and Adonis (Nahr Ibrahim), flow through the ore-bearing region; that both tin and silver occur in the one district; as do tin and copper.

Byblos was the great port of the Levant in early days and the Egyptian trade with it was both ancient and continuous. Egyptian and Egyptianizing objects have been found at Byblos dating to the middle predynastic and protodynastic ages. A slate palette in the form of a

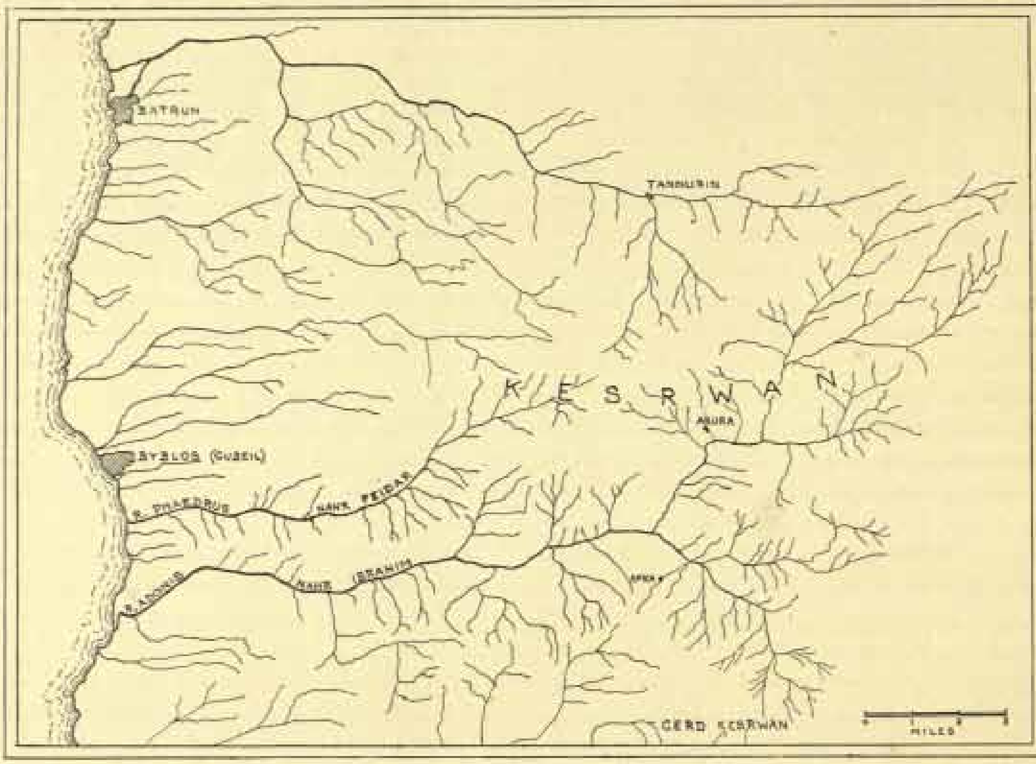


Fig. 1. Map of Byblos and the country behind it.

bird represents the predynastic age,[1] while objects of the protodynastic age are a squatting ape figure, a gold bead, two draughtsmen,[2] and an object with the name of Khasekhemui of the Second Dynasty.[3] Sir Flinders Petrie also reports an unpublished vase[4] which is of the same material and form as certain vases from Abydos belonging to this king. Of Old Kingdom date are the vases and other things bearing the names of Khufu, Meritits, Menkaurēʿ, Wenis, Teti, Pepi I, and Pepi II.[5] There is an adze of Sixth–Eleventh Dynasty shape,[6] and from the Twelfth Dynasty there are the famous obsidian objects, with the names of Amenemhat III and Amenemhat IV.[7] From farther inland and farther north there comes the sphinx of the Princess Ita, daughter of Amenemhat II. This was found at El-Mishrifé, the

[1] Montet, *Byblos et l'Égypte*, no. 171.

[2] *Op. cit.*, nos. 176, 256, 333, 334.

[3] *Op. cit.*, p. 271.

[4] Among the objects from the Byblos excavations now lying in the Beyrut Museum, where he tells me he examined it.

[5] *Op. cit.*, nos. 45–51, 56, 57, 62, 64, and p. 271. There is also the cylinder seal which is Sixth Dynasty, if not earlier, no. 42, p. 68.

[6] *Op. cit.*, no. 338, with which compare Petrie, *Tools and Weapons*, Pl. xvii, figs. 77–81, and p. 16.

[7] Montet, *op. cit.*, nos. 610, 611.

ancient Ḳatna.[1] The closeness of the intercourse of Syria with the Egypt of the New Kingdom is too well known to need recapitulation.

Not only did the Egyptians export manufactured articles to Byblos, but they also imported the natural products of the Lebanon. For instance, from predynastic times Egypt imported coniferous wood,[2] which does not grow nearer than the Syrian mountains. It is reasonable to suppose that she got it through the well-established port of Byblos. If so, the natives would have been exploiting the wealth of the mountains all round about here from the earliest times, and might easily have been led to a knowledge of the minerals which they contained. As tin existed in the neighbourhood of Byblos, there could be no more likely place whence the Egyptians should have obtained their supplies.

The fact that the two rivers of Byblos, the Phaedrus and Adonis, flow through the metalliferous area is important, for Lucas shows that the earliest tin ore collected would almost certainly have been alluvial. It would have been obtained in the form of heavy pebbles washed down by some stream, and would not have been mined in the mountain veins.[3] Hence, a flourishing prospecting industry of this sort could have existed and yet have left no traces behind it. The Adonis (Nahr Ibrahim) still has "a strong flow of water", and even to-day the Phaedrus (Nahr Feidar) comes down "in considerable flood after heavy rains". Originally it seems to have been a more important river, for Plutarch preserves a legend that it was dried up by Isis in her anger when she left Byblos with the relic of Osiris.[4] Such rivers could well have brought down the ore. Therefore the apparent absence of mining operations by the ancients in the Kesrwan mountains does not militate against the possibility that the tin first known to the Egyptians came from there. It would have been picked out of the river beds.

Another thing that may perhaps point to the hinterland of Byblos as the source whence the Egyptians got their tin is the presence there of silver. A mixture of these two metals is found to have been used for a finger ring of the late Eighteenth Dynasty.[5]

Lastly, the Kesrwan district fulfils perhaps the most important requirement in a site which claims to have been an early source of tin. It is that copper is found there as well as tin, for these are the ingredients of bronze, that all-important alloy of antiquity. Lucas has already shown the reason of this importance.[6] It is that the discovery of the advantages of combining the two metals must almost of necessity have been made in a district where the two ores occur side by side. This they do in Kesrwan just behind Byblos, where trade and commerce had been active from before the dawn of history.

So far as yet ascertained the history of bronze and tin in Egypt is as follows. Copper containing tin seems to have been used occasionally as early as the Third Dynasty,[7] but it is not until the Twelfth Dynasty that actual bronze is liable to appear.[8] By the Eighteenth Dynasty bronze had become the normal metal, and tin was even used by itself. There is the famous tin pilgrim-bottle from Abydos of the early Eighteenth Dynasty.[9] Later in the same dynasty there is one finger ring of this metal[10] and that other which has already been mentioned as being an alloy of silver with tin. At the same time oxide of tin was not only being

[1] Du Mesnil du Buisson in *Syria*, IX, pp. 10, 11, and Pl. xii. El-Mishrifé is north-east of Homs.

[2] Brunton and Caton Thompson, *The Badarian Civilisation*, p. 62. My memory is that the large baulks of timber built into the well of Sneferu's pyramid at Mêdûm are also of coniferous wood.

[3] *Journal*, XIV, 98.

[4] Plutarch, *De Iside et Osiride*, § 16.

[5] C. R. Williams, *Gold and Silver Jewelry and Related Objects*, p. 92, no. 27 and *cf.* p. 29.

[6] *Journal*, XIV, 106.

[7] A. Lucas, *Ancient Egyptian Materials*, 74–7, 235.

[8] Most of the Twelfth Dynasty metal from Kahun which Dr. Gladstone examined contained very little tin, *P.S.B.A.* XII, 227, 228.

[9] Ayrton, Currelly, and Weigall, *Abydos*, III, Pl. xvii, 20 and p. 50.

[10] Gladstone in *P.S.B.A.* XIV, 226 = Petrie, *Illahun, Kahun and Gurob*, Pl. xxii, 10 and p. 19.

used for colouring glass white,[1] but was actually being manufactured artificially.[2] An amulet of the seventh century B.C. proves to have been cut out of a sheet of pure tin,[3] and of the Roman age there are two finger rings from Nubia.[4] Several copper and bronze objects of this age which have been tinned have come from Nubia.[5]

Tin must have been of great importance all through the Bronze Age, for without it the then metal of everyday use could not have been manufactured. Yet the hieroglyphic name for it does not seem to be known. However, from the beginning of the Bronze Age in the Twelfth Dynasty a metal called *ḏḥty* was imported into Egypt.[6] By the Eighteenth Dynasty Tuthmosis III was obtaining great quantities of it in Syria. On the strength of the Coptic ⲧⲁϩⲧ the word *ḏḥty* appears to mean "lead," but as languages have not always sharply distinguished between the two metals, can *ḏḥty* also have included tin—the later known and rarer, but more important, metal?

Finally, let it be admitted that no single one of the above points, nor even their sum total, is *proof* that the ancient Egyptians got their tin from Byblos. On the other hand, there is here a great deal of presumptive evidence in favour of such a supposition. The conditions postulated as probably necessary for a primitive tin industry, and for the discovery of the art of bronze manufacturing, are both to be found at Byblos. The city also has a further claim to our notice in having been a famous trading centre from the dawn of civilization. Moreover, it was in the closest touch with Egypt. Byblos, or the Kesrwan district, thus stands apart from all those other possible sources which Lucas has collected. Farther away to the north tin deposits are said to exist near Sinous and Aleppo, but this statement is as yet unconfirmed.[7] If they should prove suitable, the Egyptians would no doubt be likely at some time or another to have made use of them also.

[1] References in *Journal*, XIV, 97.

[2] Lucas, in Howard Carter, *The Tomb of Tut-ankh-Amen*, III, 176.

[3] *The Chemical News*, XXXVI (1877), p. 168. The piece was 93 × 18 mm. and 0·3 mm. thick. Neither lead nor silver was detected.

[4] Woolley and MacIver, *Karanòg*, 67, nos. 8086, 8108.

[5] Liverpool *Annals*, XI, 163–5 and Pl. liii, nos. 1, 8, Pl. liv, no. 21. Woolley and MacIver, *op. cit.*, p. 67, nos. 7128, 7150, 7151.

[6] W. Max Müller, *Egyptological Researches*, I, Pl. i; on p. 6 he translates it "tin".

[7] *Journal*, XIV, 100.

A LEATHER MANUSCRIPT OF THE BOOK OF THE DEAD IN THE BRITISH MUSEUM

By ALAN W. SHORTER

With Plates iv–viii.

The manuscript reproduced on Plates iv–viii bears the number 10281 in the Museum collections. I am much indebted to the Trustees of the British Museum for permission to publish it, and to my colleague, Mr. S. R. K. Glanville, for many fruitful suggestions arising out of our discussions of the subject.

The manuscript was acquired from Signor Anastasi in 1839, and consists of sixteen separate fragments mounted on thirteen sheets of cardboard. The document is inscribed in hieratic, but the fact that the leather has, in the course of ages, darkened and partly decomposed, and has also been varnished in modern times, renders it impossible to read the black writing save in a very few places; the red rubrics, on the other hand, standing out brightly against the dark background. As has already been described by the Keeper in the *British Museum Quarterly*, VIII, 52, the experiment of photographing the document by the infra-red process was recently tried with astonishingly good results, the writing appearing, except in places where the surface of the leather has been damaged, almost as clear as when it was first executed. It will be noted, however, that these photographs tend to suppress the red rubrics, and it has been found that, if a photographic record of these also is required, the use of a red screen with ordinary negatives produces the required effect. With the aid of the infra-red photographs it has now been possible to make a full study of a manuscript which was formerly quite unusable.

Description of the manuscript

As will be seen from Plates iv–viii the sixteen separate fragments may be arranged in two sections, the first section containing six actual joins and providing varying amounts of seven pages of text, the second containing four actual joins and providing varying amounts of four pages of text. The joins have been indicated by the placing of the photographs, but it is impossible to secure anything like accurate alignment because the leather fragments are to-day too warped and distorted from their original shape. The content of the manuscript is a selection from the Book of the Dead, written in a fine, clear, hieratic hand, with titles of chapters and rubrics in red. The writing is arranged, according to the usual custom of hieratic, in "pages"[1] which proceed from right to left. Section I, pp. 1–7 (with gaps between 1 and 2, 2 and 3), contains a large portion of Chapter XVII, while Section II, pp. 8–11 (continuous), contains the latter part of Chapter XVIII, followed by Chapters XXII–XXVI, XXVIII, XXVII, XLIII, XXX A, and the title (alone preserved) of a "Chapter of repulsing the crocodile of flame".

The manuscript does not give any indication that Section II follows on Section I, but there is no reason for supposing that it did not so follow, in the natural order of the chapters. The name of the deceased person to whom the document belonged, , *Nb-i-ms*, has obviously been inserted as an afterthought, and found no place in the manuscript as

[1] One cannot help thinking that it would be desirable if this misleading word were finally abandoned in favour of the much more accurate "column".

originally copied out. In fact a close study makes it very probable that, as the text originally stood, no space at all was left for the insertion of the dead person's name, the chapter titles employing the impersonal word , "man", "person", instead of writing "Osiris" and leaving a blank. The scribe, therefore, who had the task of making over the document to Nebimose, went through the text inserting the name in the following ways:

1. He erased the pronoun of the first person singular and replaced it by the man's name. Examples: 5. 7, 10, 14; 6. 9, 11; 7. 4. Sometimes it was necessary to erase more than the pronoun, and the words lost are then added in the margin, *e.g.* in 6. 11–12, where the words at the end of 11 have been altered into , and the added in the margin at the beginning of 12. In 9. 16, where the text originally ran *wbn·n·ỉ m sw-*(17)*ḥt*, the scribe has forgotten to erase the pronominal suffix *-ỉ* of *wbn·n·ỉ* (thus destroying the sense), and has contented himself with replacing by the name Nebimose, adding again the erased signs *m sw-* outside in the margin.

2. He has inserted *Nb-ỉ-ms* after the name Osiris. In Chap. xviii he has done this in the addresses to Thoth (8. 3, 8, 12; 9. 3), either adding it above the line or writing it over the preposition *r*, making nonsense of the formula in every case, since it is the god and not the deceased who is here meant. In 11. 11 the insertions are happier and coincide with the sense.

3. He has erased the impersonal word and substituted *Nb-ỉ-ms*. This occurs in the titles of chapters. Examples: 10. 10, 13; 11. 5 (?), 10 (?), 12. If the word was preceded by the prepositional or genitival *n* and this latter has been erased also, it is written in again, being either included in the group with *Nb-ỉ-ms* (11. 10 (?), 12), or else added below the line (10. 13). In 10. 4 (Chap. xxiv) the name has apparently been substituted for in the formula *ḥr s nb nty-f ḥr-f*, making nonsense. In 9. 13 the name is inserted above the line, after , the latter word in all probability masking the pronominal suffix , converted by the scribe into ı ı ı, a simple process in hieratic.

The date of the manuscript

The number of Egyptian leather manuscripts preserved to-day is very small, and for this reason alone the example before us is of considerable interest. They are, however, so far as I am aware, all secular,[1] with the exception of the vellum section of the Papyrus of Nakht in the British Museum,[2] and some fragments of a Twenty-first Dynasty Book of the Dead (hieroglyphic) at Berlin.[3] That religious literature, however, was committed to leather rolls from an early period we know from the colophon of the late Papyrus Malcolm in the British Museum, which states that a portion of the compositions (Pyramid texts) there reproduced was originally found on a roll of leather in the library of Osiris (apparently at Abydos) during the reign of an uncertain king.[4] It might be suggested that leather was regarded as a more lasting material than papyrus, and may therefore have been more costly, but it seems more probable that the Egyptians discovered, in the course of their long history, that leather, at least in the form in which they were able to prepare it, was as inferior to papyrus as we now know it to have been. At any rate they would appear to have used it but seldom.[5]

The employment of the hieratic script in our document would seem, at first sight, a strong indication of its date. The Book of the Dead as we know it during the Eighteenth,

[1] See the list given by Möller in *Hieratische Paläographie*, ii, 4, note 1.

[2] *Journal*, xiii, 50 ff. Following the distinctions made by Glanville in this article (p. 50, note 8) it has been decided to designate the material of B.M. 10281 "leather".

[3] P. 3131.

[4] Birch, *Ä.Z.*, ix (1871), 104, and Le Page Renouf in *P.S.B.A.*, vii, 6, and *T.S.B.A.*, ix, 295 ff.

[5] The annals of Tuthmosis III were written upon a roll of leather preserved in the temple of Amūn (Sethe, *Urk. d. äg Altertums*, iv, 662). Perhaps the fact that leather could be handled so much more safely than papyrus commended it in cases where the document would be consulted frequently.

Nineteenth, and Twentieth Dynasties was invariably copied out in a modified form of the same script used for its ancestor, the Coffin Texts, during the Middle Kingdom—namely a cursive hieroglyphic which had its origin in the Old Kingdom, and which had become consecrated by the ages to funerary religious literature and to that alone.[1] Not until the Twentieth to Twenty-first Dynasties did the Egyptian scribes, overwhelmed no doubt by the much increased demand for Books of the Dead, at length abandon the laborious hieroglyphic and begin to transcribe the ancient texts into the rapid secular hieratic of their own day. A result of this change was that copies of the Book of the Dead took on a new form, and, instead of columns of hieroglyphics reading from left to right,[2] we have horizontal lines of hieratic arranged in "pages" and proceeding from right to left along the papyrus. The vignettes, too, are affected by the change and are frequently reduced to one picture, representing the deceased adoring Osiris or Rēʿ-Harakhte, which fills the whole height of the papyrus and is placed at the extreme right-hand end, where the document begins.

Given, therefore, a copy of the Book of the Dead in secular hieratic we should be inclined to assign it at once to the Late New Kingdom, on the obvious grounds that, so far as we know, secular hieratic was not employed for this class of literature until that date.[3] A closer examination, however, of the handwriting of B.M. 10281 produces a general impression of a much earlier hand, of a hand in fact which cannot be dated later than the Eighteenth Dynasty, and this impression is confirmed and amplified by a detailed examination of the forms of the hieratic signs. If these are studied in connexion with the dated series collected in Möller's *Paläographie*, we find that the forms occurring in B.M. 10281 may be divided into three classes:[4]

1. Those forms which may be assigned to a definite period:
   (*a*) *O.K. to XVIIIth Dyn.*: (11. 14).
   (*b*) *M.K.*: (7. 9).
   (*c*) *M.K. to Hyksos*: (2. 3; 5. 8, 10); (3. 9); (11. 13); (5. 8, 10).
   (*d*) *M.K. to early XVIIIth Dyn.*: (10. 3, 5, 7, 10); (5. 3); (11. 14); (6. 6; 7. 8); (7. 14); (11. 13); (9. 18) and *passim* (not later than Tuthmosis III); (10. 15); (8. 15); (6. 19: but no examples of later XVIIIth Dyn. are given by Möller).
   (*e*) *M.K. to XVIIIth Dyn.*: (8. 7); (5. 16; 9. 14); (8. 11) (not after Rollin, early XIXth).
   (*f*) *Hyksos to early XVIIIth Dyn.*: (7. 8); (two forms, 5. 12; 7. 8: but no examples of later XVIIIth Dyn. are given by Möller); (6. 5; 7. 15); (8. 9); (10. 15); (7. 11, if not confused with); (*pr* 6. 11; det. of *ḳmꜣ* 1. 8).
   (*g*) *Hyksos to XVIIIth Dyn.*: (3. 13); (10. 14).

2. Forms for which no complete parallel exists in Möller, but which approach nearest to pre-Eighteenth or Eighteenth Dynasty forms: (1. 9; pre-Eighteenth); (5. 4; 9. 15; pre-Eighteenth or early Eighteenth); (10. 16; 11. 7; pre-Eighteenth or Eighteenth).

3. Cases where it is hard to be very definite, but where the form of the sign points strongly to a pre-Eighteenth or Eighteenth Dynasty date: (4. 12; 6. 15); (5. 10; 7. 14); (5. 14); (7. 8; 9. 16); (8. 9); (9. 8); (8. 15); (10. 9); (11. 11).

[1] See Sethe, *Die Totenliteratur der alten Ägypter*, pp. 13, 15. Möller, *op. cit.*, I, 3.

[2] Facing, however, the wrong way, the so-called "rucklaufig" writing. See Sethe, *op. cit.*, pp. 7, 13, 15.

[3] One exception to this statement is known, belonging to the Middle Kingdom, which will be mentioned later.

[4] References are to page and line.

A perusal of the above evidence will show at once that, on the basis of the handwriting, the document cannot be dated later than the Eighteenth Dynasty; this testimony to early date is supported by the handwriting as a whole, as well as by the signs quoted. The evidence points definitely to a period beginning with the Rhind Mathematical Papyrus and ending with Papyrus Ebers, *i.e.* the period designated by Möller "Hyksos to Early Eighteenth

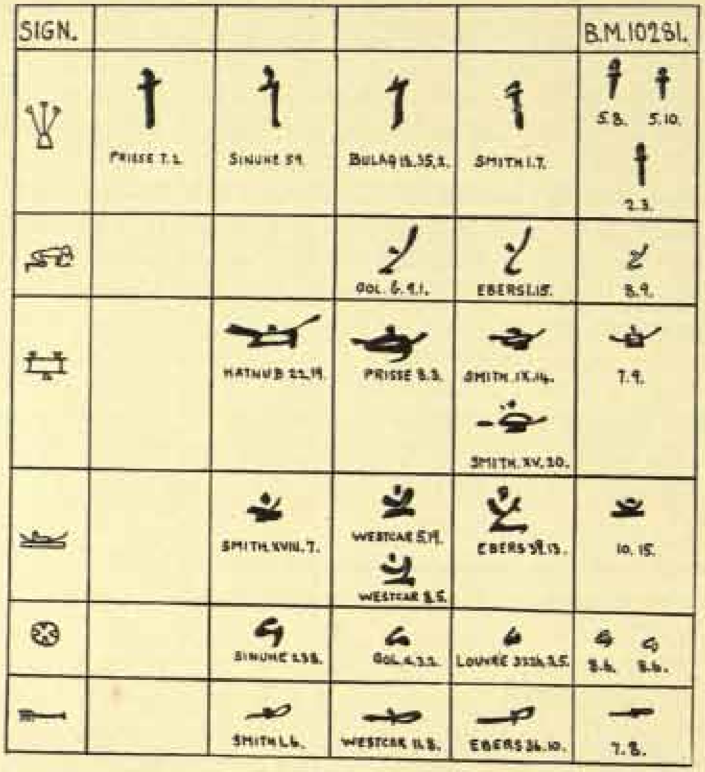


FIG. 1.

Dynasty". That funerary literature on very rare occasions was actually copied out in secular hieratic *before* the Late New Kingdom we already know from an example of the Middle Kingdom—the texts from the Book of the Dead inscribed on the coffin of an Eleventh Dynasty Queen copied by Wilkinson,[1] hence the assigning to the document under examination of a date considerably anterior to the Twenty-first Dynasty need cause no alarm. A careful consideration, however, of all the indications both palaeographical and orthographical is necessary before we can finally decide the chronological limits within which No. 10281 falls.[2]

The above classified list collects the evidence, and Figs. 1 and 2 show a few selected signs from B.M. 10281 compared with the forms which occur in papyri belonging to the period, Hyksos to early Eighteenth Dynasty. Furthermore, the general style of the handwriting resembles to a considerable extent the handwriting of Papyrus Edwin Smith, which itself

[1] The copy, preserved in the British Museum, is published by Budge in *Egyptian Hieratic Papyri in the British Museum* (1910), Pls. xxxix ff. The whereabouts of the coffin is at present unknown.

[2] To the above lists should be added new or variant hieratic forms: boat det. of *wis* (6. 11); (5. 14); (5. 15); (6. 14); (6. 14); (5. 8, 10); (frequently, *e.g.* 7. 9); (8. 10); det. of *ḫd* (7. 10). See Plates.

falls within this period.[1] Early hieratic forms are, as can be seen from the classified list, employed for common signs used throughout B.M. 10281; hence it cannot be urged that archaism, a factor dominating Egyptian religious texts in general, is responsible for their employment here. There is no evidence whatever that Egyptian copyists who wrote out

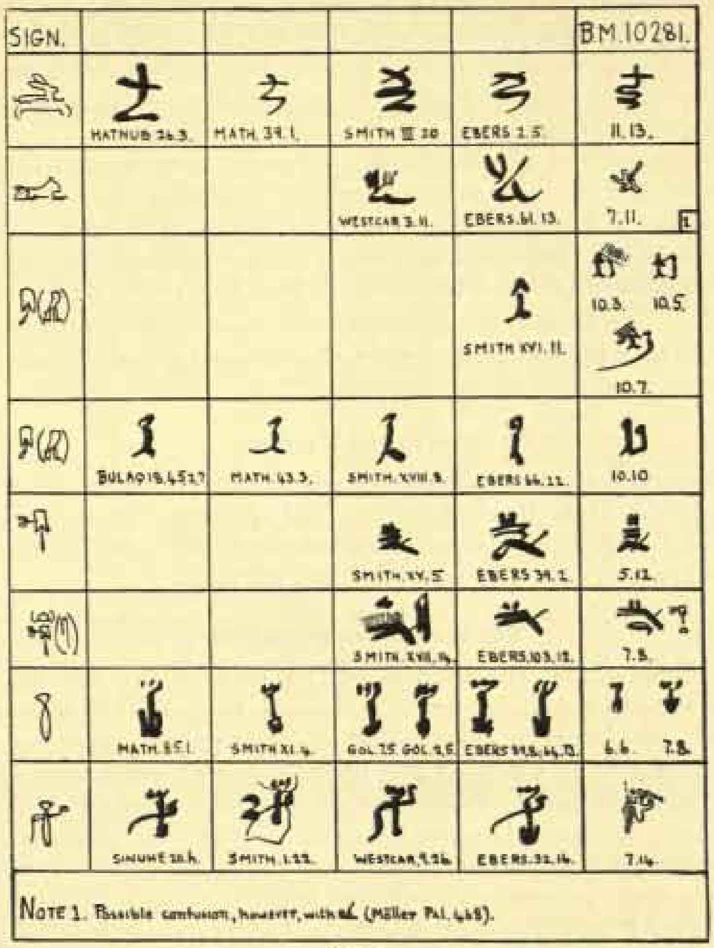


FIG. 2.

religious texts in secular hieratic endeavoured either to concoct a more ancient form of hieratic script than that which was in daily use at the time, or, if copying from a text written in hieratic of an earlier period, to reproduce the forms there used (although one may remark that literary handwriting was usually of a more precise and orderly nature than the hand employed for their contemporary letters and business documents).

There is, on the other hand, a custom to be observed in the hieratic Books of the Dead of the Late New Kingdom which has a bearing on the document which we are considering. When the cursive hieroglyphic script, which had been almost invariably employed for the Book of the Dead since the Old Kingdom, was abandoned during the Twenty-first Dynasty in favour of the more convenient hieratic of the time, the influence of the old hieroglyphic

[1] It is assigned by Prof. Breasted to the Hyksos period. Breasted, *The Edwin Smith Surgical Papyrus*, I. 28, 29.

signs was not entirely lost, and occasionally we find a sign employed which is not pure hieratic at all, but semi-hieroglyphic.[1] In the Papyrus of Nesikhonsu (Twenty-first Dynasty)[2] the scribe has actually employed, here and there, full and elaborate hieroglyphic signs, written with a different pen from that which he has used for the hieratic.[3] The same sort of practice seems to appear in the British Museum document, where we find two isolated examples of hieroglyphic signs amid the hieratic, in 5. 13 and in 10. 13.[4] Wherever else in the manuscript these signs occur the ordinary hieratic abbreviation is employed, and, in the case of , this is very frequent indeed, the scores of instances in which it occurs in our document employing the usual upright stroke with a tick over it.

Before leaving the subject of palaeography, we may observe that the handwriting of the scribe who inserted the owner's name and made the attendant alterations does not differ perceptibly from that of the manuscript itself.[5] He may, judging from the few signs of his which we have to examine, quite well have been the same person as the copyist of the document, although, judging from the liberties taken with the latter's text, this would appear to be improbable. It should also be mentioned here that some writing in palimpsest can be observed in the margins between pages 5 and 6, 6 and 7, and probably 9 and 10. A sign here and there, however, is all that can be recognized.

The owner's name

The name Nebimose gives no close indication of date. It occurs, according to Ranke, *Personennamen* 185, 8, in the Middle Kingdom, and also more frequently in the New. The abbreviation \ for is, however, characteristic of the early Eighteenth Dynasty. The vertical strokes under may possibly stand for .

The text, orthography, etc.

The text of Chapter XVII preserved in our document is the New Kingdom version, distinct from the Middle Kingdom version included in Grapow's well-known edition of the chapter. The text of the various chapters follows, with a few unimportant deviations, the texts given by Naville in his comparative edition, the only variants worth recording being given in Fig. 3. It may be said, on the whole, to present the readings of his basic manuscript, Nebseni. On several occasions, however, it agrees with all other manuscripts in giving a reading different from that in Nebseni.

The text is carefully written, and although it contains some of the mistakes usually found in copies of the Book of the Dead, may be said, on the whole, to be fairly correct. The general orthography is definitely that of the New Kingdom,[6] the most important indications being as follows:

1. On the two occasions on which the name of the god Atum occurs the old writing with is used, not the writing characteristic of the Late New Kingdom copies of the Book of the Dead.[7]

[1] See Möller, *op. cit.*, II, 2.

[2] Naville, *Le papyrus hiéroglyphique de Kamara et le papyrus hiératique de Nesikhonsu*, p. 23.

[3] Occasionally the hieroglyphics in the papyrus are employed to emphasize importance, *e.g.* in the writing of divine names, but apart from these instances their occurrence appears so haphazard as to suggest a whim on the part of the scribe. Magical reasons, however, probably underlie the practice.

[4] Compare, also, the naturalistic vulture hieroglyph (11.12).

[5] He uses, however, a tick or spot for , no doubt for the sake of speed and space.

[6] *E.g.* *ḫnty* (3. 16; 5. 5); *nrw* (6. 2); *Swty* (6. 10).

[7] See Naville, *Todtenbuch*, Einleitung 36; *Papyrus de Nesikhonsu*, 24.

NAVILLE	GRAPOW	B.M.10281.	
P.55. Col. 2.	P.42. ll. 10 ff.	P.3. l. 12.	
P.61. Col. 2.	P.57. l. 11.	P.5. l. 6.	
P.62. Col. 2.	P.61. l. 12.	P.5. l. 10.	nn ḥ3.t r
P.66. Col. 2.	P.75. l. 5.	P.6. l. 7.	imy Nn-nswt
P.68. Col. 1.	P.80. l. 11.	P.6. l. 13.	
P.68. Col. 2. after nn 'ḏ r tꜣw.sn.	P.80. ll. 14 ff.	P.6. ll. 14–15.	
P.74. Col. 2.	P.89. l. 2.	P.7. l. 13.	ꜥḥꜥ-n etc.
P.78. Col. 2.	P.120. l. 17.	P.8. l. 5.	
" " Col. 3.	P.121. l. 7.	" " l. 7.	
" " " "	" " l. 9.	" " l. 8.	
P.87. Cols. 2–3.		P.10. ll. 5–6.	twd
P.87. Col. 4.		P.10. ll. 7–8.	h3b r
P.87. Col. 5.		P.10. l. 10.	h3b r
P.88. Col. 2.		P.10. ll. 12–13.	
P.96. Col. 2.		P.11. l. 13.	etc. (a) or ?

FIG. 3.

2. as a writing of the name Osiris, characteristic of the hieratic Books of the Dead belonging to the Twenty-first Dynasty and later and occurring first, according to the *Wörterbuch*,[1] in papyri of the Nineteenth and Twentieth Dynasties, is employed, but only occasionally,[2] in our document, the more usual writing being the old .
3. (8. 14–15) resembles a Twenty-first Dynasty writing.[3]

Now if we weigh up this evidence we find that (1) speaks against a Late New Kingdom date, while (2) suggests a period anterior to that at which the writing became regular. The spelling of *iḥb* mentioned under (3) (obviously indicating to some extent the vocalization of the word) certainly suggests the later New Kingdom, but alone it cannot be taken as any strong evidence of date.

To sum up, the palaeographical evidence points unmistakably to a time between the beginning of the Hyksos period, about 1700 B.C., and the beginning of the reign of Tuthmosis III (about 1500 B.C.), certainly not later than his death. The textual and orthographical evidence suggests a period certainly not earlier than the Eighteenth Dynasty, and, although otherwise not providing any strong indication of date, may be said not to be in conflict with the palaeographical evidence. It seems then, that we cannot be far wrong in assigning our manuscript to the earlier part of the Eighteenth Dynasty, not later than the death of Tuthmosis III. It may be considered, therefore, to be the earliest New Kingdom copy of the Book of the Dead in hieratic at present known.

Additional Note

I find that the suggestion put forward above in note 5 on page 34, regarding the probable reason for the use of leather as a writing-material in certain cases, was made many years ago by R. Pietschmann in his useful essay *Leder und Holz als Schreibmaterialien bei den Aegyptern* (in *Beiträge zur Theorie und Praxis des Buch- und Bibliothekswesens*, Heft 2, p. 112). It seems to be at least a possibility that B.M. 10281 falls into this category, *i.e.* that it was used as a text from which scribes employed in writing out the Book of the Dead, whether on tomb-walls or on papyrus, made their copies, or from which (as was probably the practice) the texts were dictated to them. Alternatively the leather manuscript may have been used by mortuary priests as a service-book at funeral ceremonies. At any rate the originally impersonal application of the texts in B.M. 10281 (see above, p. 34) lends colour to these suggestions; the manuscript would have been adapted subsequently to the individual Nebimose.

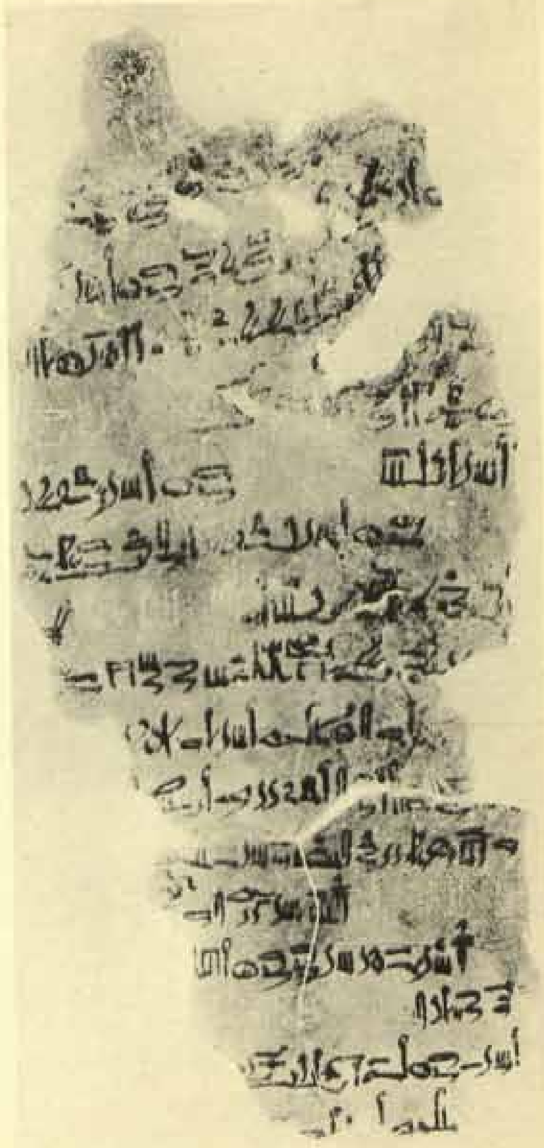
[1] See *Wb. d. aeg. Spr.*, I, 359. It appears, however, as early as Pap. Edwin Smith (XVIII, 2).

[2] *E.g.* 5. 8; 10. 15; 11. 11.

[3] See *Wb. d. aeg. Spr.*, I, 118.

Col. 3. *Scale* $\frac{1}{1}$.

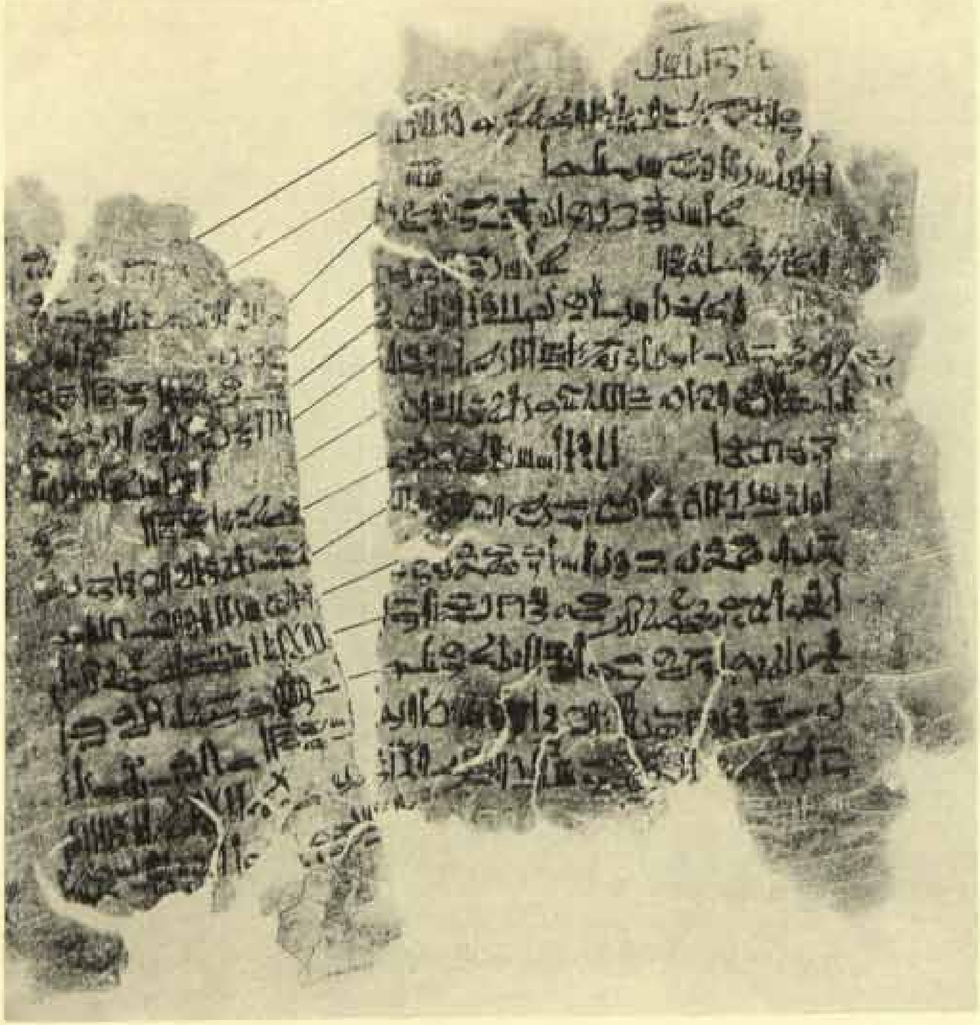
Col. 2. *Scale* $\frac{1}{1}$.



Col. 1. *Scale* $\frac{7}{10}$.

Leather Manuscript in the British Museum; No. 10281.

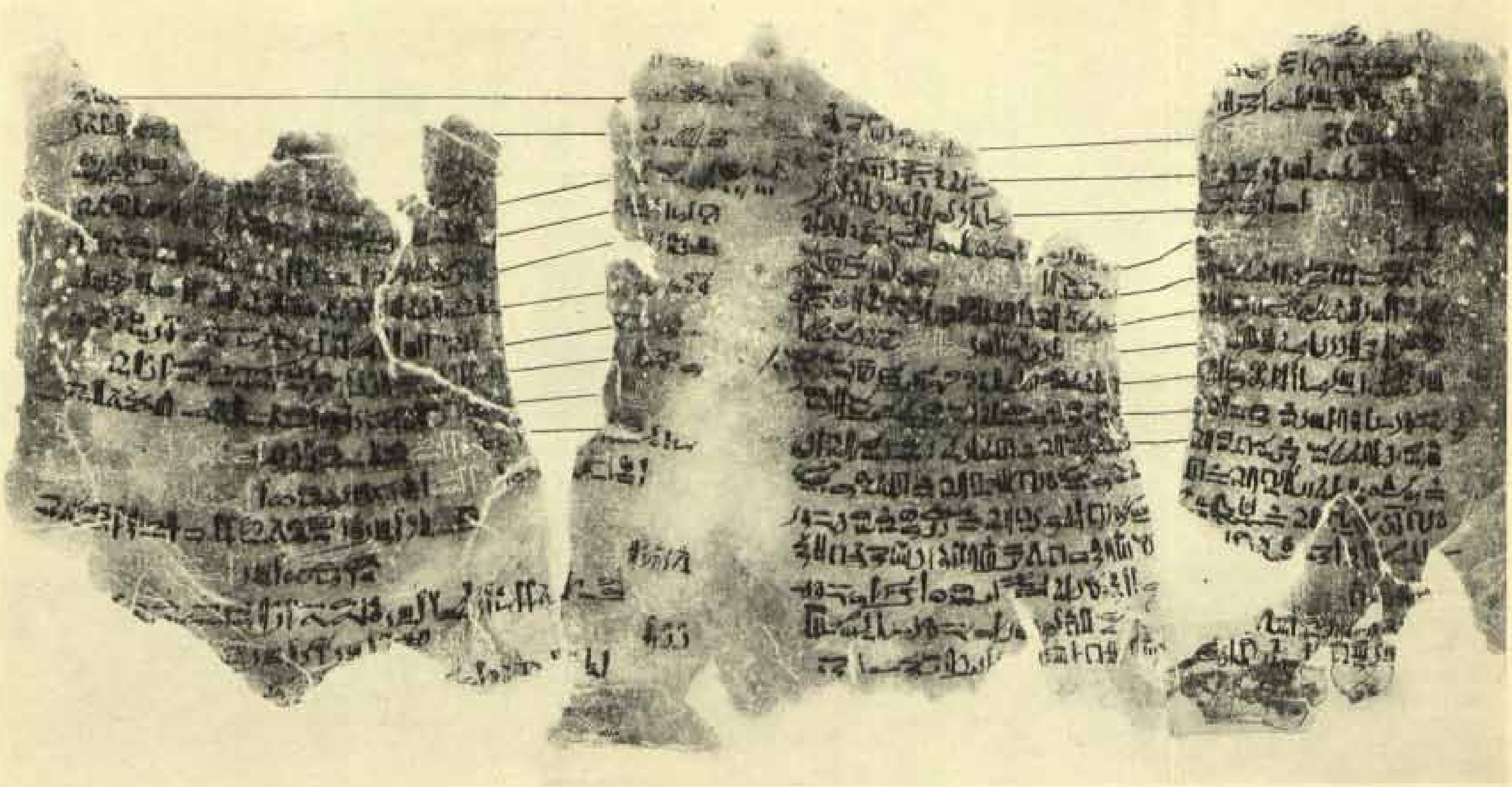
Columns 1—3.



Col. 5.

Col. 4.

Leather Manuscript in the British Museum ; No. 10281.
Columns 4 and 5. *Scale* $\frac{7}{10}$.



Col. 7 Col. 6

Leather Manuscript in the British Museum; No. 10281.
Columns 6 and 7. *Scale* [illegible].

Col. 9.

Col. 8.

Leather Manuscript in the British Museum; No. 10281.
Columns 8 and 9. *Scale* $\frac{7}{10}$.

Col. 11. Col. 10.

Leather Manuscript in the British Museum; No. 10281.
Columns 10 and 11. *Scale* [illegible].

STUDIES IN THE EGYPTIAN MEDICAL TEXTS—III

By WARREN R. DAWSON

(Continued from *Journal*, XIX, 133–7)

9. The herb

This plant has been identified with the lettuce, but its medicinal uses do not favour this equation, and, moreover, the Egyptian name of the lettuce is well known. In magic, it is a herb hostile to demons. In Pap. Berlin 3027, 2. 3–4, the magician thus addresses the demon: "I make a charm for him (*sc.* the baby whom he is protecting) against thee of the *ʿfı* which inflicts injury, of onions which destroy thee, and of honey which is sweet to the living and bitter to the dead." The medicinal uses of *ʿfı* are as follows:

External Uses

To stop pain in any part: H 3. 12 (42); B 14. 2 (157); B 14. 10 (162).
To stop pain in the abdomen E 13. 13 (40).
To stop pain in the legs: E 77. 8 (608); E 77. 11 (609).
For stiff joints and muscles: E 80. 11 (640); E 83. 14 (668); E 83. 17 (670).
For alopecia: E 66. 14 (467).
For a sore: E 71. 5 (530).
For earache: B verso, 2. 10 (201); B verso, 3. 6 (204).

Internal Uses

For cough: B 3. 11 (36); E 53. 16 (312).
For vermifuge: E 20. 2 (64); E 21. 3 (67).
For purging: E 23. 3 (86).
For *nsyt*: H 13. 15 (209) = E 89. 19 (751) which adds "of the eyes".

The principal uses of the plant are for assuaging pain, and as it is taken internally for coughs, some sweet, soothing herb must be intended. The μελίλωτος of Dioscorides (*De Mat. Med.*, III, 48) suits the requirements. Dioscorides states that the herb is good for soothing inflammations, pains in the stomach, and sores and pains in the head, eyes, and ears. The uses named by Pliny also agree (*Nat. Hist.*, XXI, 87).

The plant is a kind of clover which secretes much honey. It is mentioned in this connexion by Aristotle as one of the principal plants used by bees (*Hist. Anim.*, IX, 40 [627*a*]).

I therefore suggest the identification of *ʿfı* with the Melilot or Sweet Clover, *Melilotus officinalis*, L.

10. The plant

This plant, which is extremely common in Egyptian medical texts, is written with various determinatives (; ; ; ; etc.), the significance of which will presently appear. It has been identified with the Coptic ϭⲁⲣⲁⲧⲉ by Budge (*Eg. Dict.*, 899*b*, 900*a*); with ϫⲏⲣⲓ by V. Loret (*Flore Phar.*, 2nd ed., 145), and with ϫⲓⲉⲓⲣⲉ by Munier (*Ann. Serv.*, XVIII, 285). In the *Scala Magna* ϫⲏⲣⲓ = خرنوب, which Kircher translates *siliquae, glandes.*

ϫιειρε means a pod or siliqua. It is used of the acacia in the Coptic Medical Papyrus, ϫιειρε ⲙ̄ⲡϣⲟⲛⲧⲉ (II. 95, 167, 182, 414), but does not occur otherwise in that MS. The name of *ḏrt* is absent from the lists of cultivated plants in Pap. Harris, Anastasi IV, Lansing, Peasant, etc. In Pharaonic times at least *ḏrt* could not have been a general term for part of a plant, as there are abundant indications of its specific character.

In the medical texts, *ḏrt* most often appears simply, when the whole plant, or a decoction of its leaves or its fruit is usually intended. Sometimes, however, particular parts of it are specified: its "inside" ( ); its sap or juice ( ); its fruit ( ); its meal or powder ( ), or its shoots, buds, or fibres (?) ( ). It is also sometimes spoken of as green or fresh ( ).

The plant *ḏrt*, or a particular kind of it, came from the Oasis.

Loret identifies it with *Ceratonia siliqua*, the carob-bean. Against this, however, apart from the inappropriateness of its medicinal uses, is the absence of the word from the many lists of food-plants. On the other hand, it must be admitted that the word usually translated "carob", , is likewise absent from the lists. In any case, the words *ḏrt* and *wꜥḥ* are not synonymous, for both sometimes occur in the same prescriptions. Before discussing the plant further, its medicinal uses must be tabulated:

a. (det. , , or) simply

External Uses.

For breasts: B 2. 5 (18).

Burns: L 6. 3 (17); L 6. 8 (21); L 14. 2 (46); L 15. 7 (52); L 15. 11 (56) = E 69. 12 (504); E 67. 19 (482).

Contraceptive: E 93. 7 (783).

Eyes: E 56. 11 (338); E 56. 12 (339); E 56. 19 (343); E 57. 1 (344); E 57. 7 (348); E 57. 13 (353); E 57. 16 (355); E 58. 2 (358); E 58. 4 (359); E 61. 2 (386); E 61. 17 (395); E 62. 9 (408); E 63. 6 (420).

For "eating blood": E 87. 20 (723).

Hair, scalp, and eyebrows: E 64.19 (442); E 64. 21 (443); E 65. 7 (450); E 69. 8 (501).

Joints and muscles: H 16. 14 (249); E 79. 12 (631); E 79. 15 (632); E 79. 18 (633); E 80. 12 (640); E 82. 9 (660); E 83. 1 (663); E 83. 12 (667); E 83. 18 (671); E 83. 21 (673); E 84. 2 (675).

For "influence": E 46. 11 (242); of *ḏ*, Leiden 345, recto, I. 2. 8.

Polypus: E 88. 11 (732).

Pus: H 71. 11 (89); H 10. 18 (140) = E 73. 1 (557).

Rectum and anus: E 33. 8 (158); CB[1] 7. 10.

Sores and wounds: E 70. 5 (517); E 70. 9 (520); E 70. 22 (525); E 71. 6 (532); E. 71. 9 (534); E 71. 20 (542); E 72. 2 (544); E 106. 1 (862); Ed. S. 14. 7 (41); Ed. S. 16. 10 (46).

Teeth: E 89. 7 (742).

Tongue: E 85. 20 (702); E 86. 1 (703).

Toes: H 8. 17 (118); H 12. 11 (184); H 13. 1 (191); H 13. 5 (196); H 13. 9 (202).

For *šfwt*: E 9. 16 (139); H 15. 17 (236); E 73. 9 (563).

For *tmt*: L 4. 5 (10).

For *ršyt*: H 3. 9 (39) = E 71. 13 (537).

For *wḫdw* in any part: E 26.18 (116).

For *ḥnš*: E 86. 10 (709).

For ——?: H 1. 19 (10); B 3. 4 (28).

[1] Chester-Beatty Papyrus, No. VI.

Internal Uses.

For coughs: B 3. 12 (37); B 4. 5 (45); E 53. 1 (305); E 53. 2 (306); E 53. 4 (307); E 53. 9 (309); E 54. 17 (324).
Bladder and urine: E 3. 5 (10); E 11. 12 (44); E 15. 13 (47); E 16. 1 (48).
Breast: E 35. 15 (183); E 35. 19 (185).
Heart: H 4. 2 (48) = E 44. 6 (217); E 46. 7 (240).
"Influence": H 6. 17 (83) = E 45. 2 (225).
Belly, pain or other affections: H 2. 15 (29) = H 24. 10 (97); H 13. 16 (211); E 23. 18 (91); E 24. 10 (97); Purgative, E 5. 10 (17).
Rectum and anus: CB 8. 9; 8. 11.
Vermifuge: E 17. 11 (55) = B 1. 1 (2); E 22. 19 (84).
Epilepsy (?): E 90. 2 (755).
Mouth: E 27. 9 (122) = B 3. 9 (35).
Pain in sides (ribs): B 5. 9 (48).
Sharp pains (? neuritis): B 11. 7–8 (138).
Lungs: E 6. 19 (21); E 11. 21 (35); E 35. 19 (185).
Stomach: (cooked in fat or beer), E 39. 11 (197); E 40. 13 (201); E 43. 16 (212), *ḏ* of the Oasis.
For *dḥrt*: H 9. 10 (131) = E 52. 20 (302).
For —— ?: E 55. 10 (329); E 55. 13 (331).

b. "Inside", *i.e.* Pulp (or)

External Uses.

Scalp: H 6. 3 (76) = E 47. 10 (248).

Internal Uses.

Bladder: E 49. 12 (268).
Rectum: E 32. 16 (153).
Breast: E 35. 16 (184).
Pains generally: E 27. 20 (127).
For —— ?: B 19. 12 + 20. 2 (185).

c. Juice

External Uses.

Eyes: E 62. 1 (399).
Eyebrows: E 66. 3 (462).
Rectum and anus: B 18. 7 (173); B 18. 11 (176); B 19. 5 (182); E 31. 16 (143); E 93. 11 (785).
Vagina: E 96. 10 (823).

Internal Uses.

Cough: B 4. 4 (43).
Rectum and anus: E 31. 2 (135); 31. 2*b* (136); E 32. 9 (150); E 32. 10 (151); E 33. 9. (159).

d. Meal or Powder

External Uses.

Breasts: B 2. 1 (14); B 2. 2. (15).
Burns: L 15. 13 (60) = E 69. 14 (506).
Bones: H 14. 13 (217); H 14. 14 (218); H 15. 4 (226).

Eyes: E 60. 12 (384); E 62. 20 (415).
"Influence": B 8. 3 (92); E 46. 17 (243) = H 5. 8 (71).
Legs: B 10. 11 (122).
Toes: H 12. 13 (184); E 81. 4 (647).
Rectum and anus: E 32. 2 (155); E 33. 17 (163); E 33. 22 (164); CB 5. 5; 8. 2.
Sores and wounds: H 16. 11 (246); H 18. 1 (260); Ed. S. 14. 7 (41).
Scalp: E 64. 22 (444).
Sharp pains (? Neuritis): E 75. 10 (589); E 75. 16 (591).
For *šršt*: H 3. 8 (38).

Internal Uses.

Bladder and urine: E 2*b*. 14 (8).
Belly: E 24. 2 (93); E 24. 4 (94); E 25. 17 (107).
Rectum and anus: H. 1. 5 (6); E 33. 11 (160).
Vermifuge: B. 1. 1 (2) = E 17. 11 (55).
Muscles and joints: E 82. 3 (654) = H. 9. 2 (123).

e. Other Parts

: Muscles and joints: H 9. 2 (123) = E 82. 3 (654) which has .
: Toe-nails: H 13. 7.
: For burns: E. 69. 8–9 (501).

The use of the "inside" (*i.e.* pulp) and juice requires a large fleshy or juicy plant, and there are abundant indications that it is astringent and bitter. The occasional use of the det. ○ also indicates a globular fruit. The Colocynth, or Bitter Gourd (*Citrullus colocynthus*, L.) exactly suits the requirements of the case. When it is ripe, the fruit turns yellow, and is about as large as an orange. The unripe fruit is green (*cf.* , frequent in the above quoted prescriptions). The medicinal uses specified by Ibn al-Beithar (ed. Leclerc, vol. I, no. 714, p. 461) also closely correspond with the Egyptian uses. When taken in internal doses, its bitterness is generally mollified with honey, wine, or sweet ale.

The inside pulp rapidly dries and becomes a powder, and is a bitter, astringent, and powerful medicine. The colocynth is common throughout Palestine (H. B. Tristram, *Nat. Hist. of the Bible* (1868), 452), and it was used by the Assyrians in medicine (R. Campbell Thompson, *Assyr. Herbal*, 40). Its dust has been found amongst the embalming materials of mummies (R. R. Madden, *Travels*, II, 86).

11. The plant

This herb is somewhat rare in Egyptian medicine. Its occurrences are as follows, all external:

For fever: B 7. 8 (81); here its roots are used, and the choice of the herb is clearly due to its punning on , "fever".
For irrigating the rectum: CB 6. 7 (juice); CB 7. 8 (seeds crushed).
For a sore toe-nail: E 78. 18 (618); H 12. 16 (188).
For uterine contraction: E 96. 7 (821).

It is tempting to identify the plant with the Arabic *šmšm*, sesame, but the two can scarcely be identical, for sesame is constantly used for internal doses, whereas the Egyptian *šmšmt* never is. The word occurs in the Pyramid Texts (§ 514) with an elaborate determinative, and is spoken of as a plant from which ropes are made, which makes the equivalence with hemp, *Cannabis sativa*, much more likely. Hemp (قنّب) is stated by the Arabic medical writers to be unfit for internal use.

12. The plant

This plant, which rarely has the det. , is also written and in various other corrupt ways. In medicine, it is used either entire and without qualification or its roots, fruit, and "tails" (*sd*) are specified. The "tails" suggest long tapering tendrils. The rind (*mnt*) is also used. In the following list of medicinal uses, the letters R, F, T, and M, are added when the root, fruit, tendrils, or rind are specified.

External Uses

Fumigation for "influence": B 7. 1 (73); B 5. 11 (59) F.
Mouthwash: B 9. 4 (107); B 9. 5 (108) M; E 27. 8 (122) = B 3. 9 (35) F.
Ointment: for "influence", E 46. 12 (242); E. 47. 6 (247) = H 6. 16 (75) F; for *nsyt*, B 9. 6 (109).
Emollient for joints and muscles: E 77. 13 (610) F; E 81. 8 (649) = H 8. 9 (107) F = H 15. 7 (228) which omits F; E 82. 12 (657) = H 7. 15 (94) F; E 84. 16 (682) F; E 85. 11 (693) = H 9. 1 (121).
For ——?: B 2. 8 (22) *šk*.

Internal Uses

For belly: E 6. 6 (19) R; for *šfwt* of belly, E 13. 8 (39) F.
Stomach: E 37. 13 (191*b*); E 38. 13 (194*b*).
For urination: H. 4. 13 (62); E 49. 3 (263) R; E. 49. 16 (271) T.
Pain in right side: E 43. 5 (209) T.
Liver: E 67. 8 (477) F.

The presence of tendrils, as well as the uses of the plant, suggest bryony (*Bryonia dioica*, Jacq.). The plant is bitter and astringent, the stems being full of acrid and strong-smelling juice. The root is large and tuberous. The fruits are poisonous if taken alone. In the two cases above in which the berries are used internally, they are prescribed in very small quantities, mixed with sweetening and attenuating drugs.

A related species, *B. cretica*, is probably the ἄμπελος ἡ ἀγρία, "wild vine", of Theophrastus (*Hist. Plant.*, IX, 20, 3), who says that its root is heating and pungent, and is useful as a depilatory and for removing freckles, whilst the fruit is used for tanning leather—all indicating the acrid and astringent nature of the plant. See also Dioscorides, *De Mat. Med.*, IV, 183.

Ibn al-Beithar is probably referring to bryony under the name of كرم انبالس اغريا, *karm ambelos aghria* (ed. Leclerc, vol. III, no. 1905, p. 154), the Arabic name of which is a mere transcription of the Greek. He speaks of two kinds, one of which produces flowers, the other astringent fruits. This is a correct observation, for bryony is dioecious, *i.e.* the male and female flowers are on different plants.

13. The herb

This plant occurs but once in the medical papyri. In the Book of the Dead (xxxii) it is used to repel crocodiles. It is used in E 97. 16 (841) to rid a house of fleas, and was therefore a very powerfully scented herb. The κόνυζα of Dioscorides (*De Mat. Med.*, III, 136) is said to drive away reptiles and flies and to kill fleas. This plant is the κόνυζα ἡ θήλεια of Theophrastus

(*Hist. Plant.*, vi, 2, 5), which, he says, repels wild beasts by its powerful smell (*cf.* Pliny, *Nat. Hist.*, xxi, 32). Ibn al-Beithar (ed. Leclerc, vol. ii, no. 1448, p. 401) gives the Arabic name as طبّاق, *ṭubbak*. Can this be derived from the Egyptian name altered by metathesis of *b* and *t*? The Arabic translation of Dioscorides gives the herb the name of حشيشة البراغيث, "flea-plant".

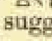
The plant described above is the *Inula graveolens* of botanists; the European *Pulicaria dysenterica*, "Fleabane", is closely allied.

14. The plant 

This plant, which occurs rarely in the medical texts, is always used externally.

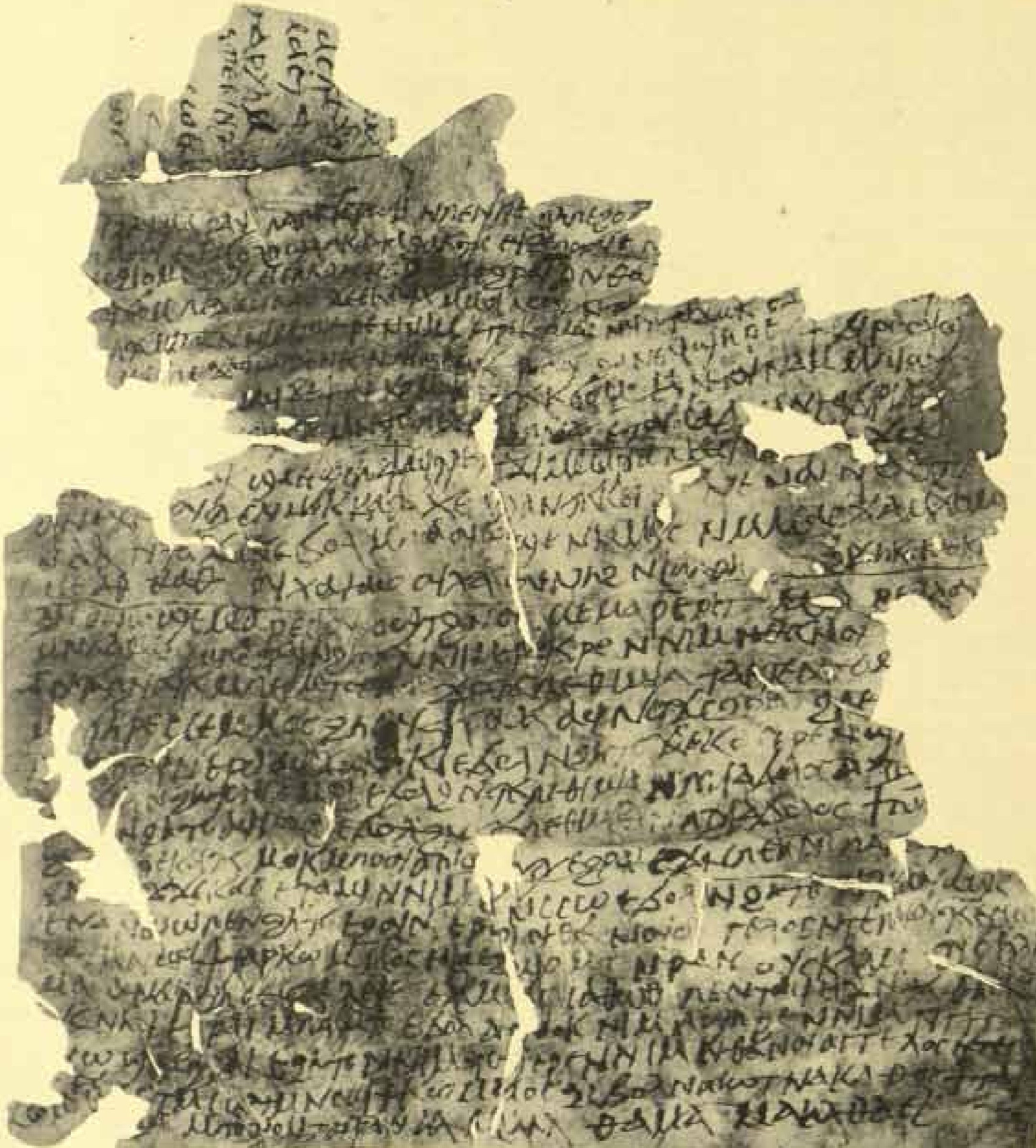
To bring a boil or gathering to a head, in a poultice applied hot, E 78. 6 (595); H 9. 12 (133), written  [*sic*].

Fumigation to banish "influence," or pain: B 5. 12 (60); B 7. 1 (72); B 7. 2. (74).

In the first of the Berlin passages the plant is called , "*k.* of the wall". This designation, taken in conjunction with the det.  suggests some kind of lichen. Lichen is aromatic when burnt, and is appropriate for fumigations, and Pliny (*Nat. Hist.*, xxvi, 10) speaks of it as good for skin diseases, tumours, etc. (*cf.* Dioscorides, *De Mat. Med.*, iv, 53).

A species of lichen, *Parmelia furfuracea*, dried, was sometimes used to stuff the body-cavities of mummies. The mummies of Siptah, Ramesses IV, and Zedptahefonkh were filled with this plant (G. Elliot Smith, *The Royal Mummies*, 73, 89, 113).

1



2

1. Fragment of an hieratic papyrus in the Museum of Natural History at Buenos Aires
2. Coptic magical text on leather. British Museum, Department of Oriental Antiq., 10376

A NEW DUPLICATE TEXT OF THE STORY OF SINUHE

By A. ROSENVASSER

With Plate ix, fig. 1

SINCE 1916, when Alan H. Gardiner published his *Notes on the Story of Sinuhe*, the text of the story has remained unchanged and had apparently attained its final form.[1] However, as so often occurs in the field of Egyptology, no sooner has Dr. Blackman finished his labour of preparing the complete version of the texts which make up the story (*Middle-Egyptian Stories, Part I: Bibliotheca Aegyptiaca*, II, 1932), than a new duplicate text appears.

The age and characteristics of this new papyrus, which is presented here, allow us to express the hope that the future will bring to light further fragments of a version as old as

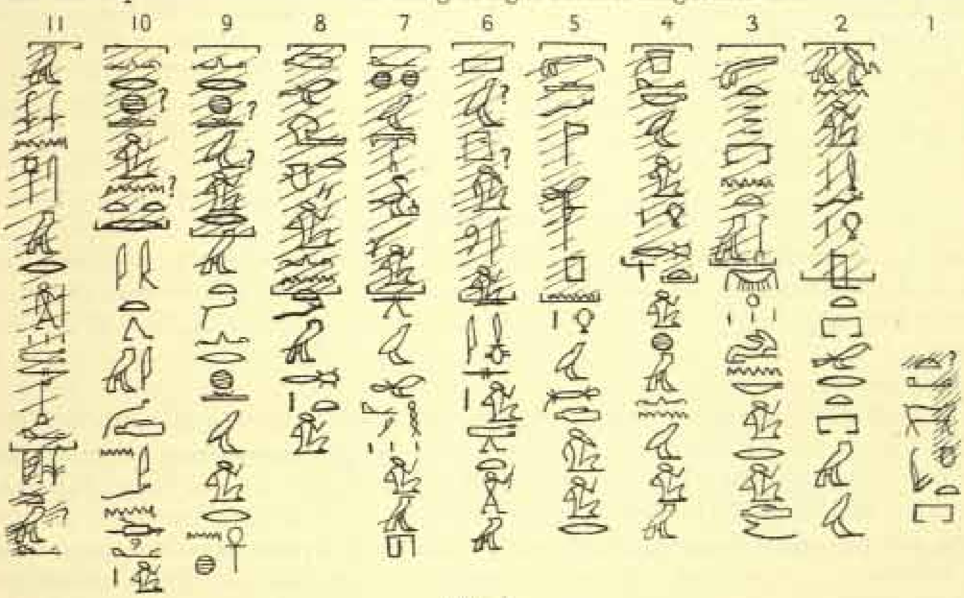


FIG. 1.

that of Sinuhe B and with interesting variants. With this thought in mind, I present the following data in connexion with the new duplicate.

This papyrus was found in the Museum of Natural History of Buenos Aires and came to me through a most fortunate coincidence.[2] The only data which I have been able to obtain regarding its origin is that it was given to the Museum together with various other Egyptian objects; but no information is available regarding the place of its origin in Egypt. The writing is clear and in vertical columns, reproducing parts of Sinuhe B, 251–6. The dimensions are approximately 10 cm. in height by 18 cm. in width, the first and last cols. being

[1] The ostracon published by Borchardt in 1930 (*Ä.Z.*, LXVI, 14) added no new variants to the passage R 1–11 to which it corresponds.

[2] I wish here to thank the authorities of the Museum for permitting and facilitating the examination and study of the papyrus.

almost totally obliterated, and cols. 5, 6, 7, and 8 varying from 9 to 8 cm. in height, although there is no reason to doubt that the sheet originally had the normal height of 16 cm. The forms of the letters are the same as those of Berlin papyri 3022 (Sin. B), 3023–5 (The Complaints of the Peasant), and 3024 (The Dispute with his Soul of One who is tired of Life and The Story of the Herdsman); consequently it may be classified as Middle Hieratic Script, *stricto sensu*, in accordance with Möller (*Hieratische Paläographie*, I, 3). Also, the fact of its being written in vertical columns is a further, and sufficient, demonstration of its date. Thus, the fragment is seen to be a papyrus of the second half of the Twelfth Dynasty or the beginning of the Thirteenth.[1] It is light yellowish in colour with greyish portions; in some parts there can be observed traces of previous writing, doubtless due to corrections made by the scribe himself, as in Sinuhe B. In one case only he has made his correction without having washed off the previous writing. Moreover, as in B, there will be noted a preference for the full forms of and .[2] Finally, between cols. 8 and 9 there are indications that a new sheet has been joined to the original one, which has determined the position of col. 8 in like manner to that of B 153.

In addition to the transcription of the actual writing on the existing portions of the papyrus, I have felt it necessary to offer a conjectural reconstruction of the lost parts of the sheet, which may be of interest until such time as further evidence is brought to light. At the same time, I wish to express my profound gratitude to Dr. Alan H. Gardiner for his aid in the study of the fragment as well as for authorization to use his invaluable observations on it in the preparation of the present article.

Notes and Commentary

Col. 1. The restoration of *ʿḫnwty* is certain. Above this word we can discern traces of a stroke which should be part of ; its position and form indicate that the word to which it pertained was , that is, the scribe wrote *ḥr wȝt nt ʿḫnwty* and not *ḥr wȝt ʿḫnwty* as in B.

is a correction over .

Col. 2. The end of this col. shows clearly that the scribe wrote *m wmt*. This shows that *m wmt* is not an interpolation borrowed from B 250 as was postulated by Sethe. Gardiner (*Notes on the Story of Sinuhe*, 96), taking into consideration Borchardt's objection "that it would be unnatural for the king to sit in the doorway", accepts as "extremely plausible" Sethe's suggestion, "the text running much better if we translate: 'the courtiers . . . showed me the way to the Privy Chamber, and I found his Majesty upon the golden throne'". The ostracon Petrie No. 59 (O.P. 3) had already indicated that *m wmt* was probably correct, but this text, being a late one (Nineteenth or Twentieth Dynasties), did not invalidate Sethe's argument. Consequently, in his *Erläuterungen*[3] he maintained it, believing the original word to be . But in the present text, which is probably as old as B, such interpolation must be discarded.

Col. 3. Our papyrus employs the expression *wn·kȝ r·ỉ* as against *wn·kȝ r·f* of B. Even if this does not show that it is older than B (since B 45 has *ḏd·kȝ r·ỉ*), it shows at least a preference for a form usual during the Twelfth Dynasty and not the Eighteenth, when only the form *r·f* was used.

[1] Alan H. Gardiner, *Notes on the Story of Sinuhe*, 2.

[2] See Gardiner, *Die Erzählung des Sinuhe und die Hirtengeschichte*, 4–5 (*Hieratische Papyrus aus den Kgl. Museen zu Berlin*, V.).

[3] K. Sethe, *Erläuterungen zu den Aegyptischen Lesestücken*, 14/9.

The signs show that our text used the form *dmꜣ ḥr ḫt*,[1] as in *Shipwrecked Sailor*, 137–8, instead of *dwn ḥr ḫt*.

Col. 4. The thick stroke | at the beginning of the col. shows that in was ligatured. (Möller, *Hierat. Paläogr.*, I, No. LIII.)

Cols. 5–6. The at the end of col. 5 makes us suspect that the word used was *rśw*, not *ḫnmw*, but there is no precedent for such an adverbial use of *rśw*. Gardiner suggests that the form used may have been *r ḫnmw*: if so, we must postulate an abstract substantive *ḫnmw* with the sense of "friendship" (Gardiner, *Eg. Gramm.*, § 205, 3).

Col. 6. The participle *iṯ(w)* without *w* could be explained by the immediate presence of a preposition in accord with the rule established by Gardiner (*Eg. Gramm.*, § 361), although he has only found examples of the preposition *n* in the formulae *ir n* and *ms n*. Sethe (*Erläuterungen*, 14/12) takes *iṯw* as Old Perfective (Zustandsatz statt Relativsatz), in which case the omission of the *w* would conform to the use. Nevertheless, we must doubt whether, in point of fact, this is so. The comparison which the preposition *mi* makes necessary is expressed adequately in Egyptian by means of the participle (Gardiner, *Eg. Gramm.*, § 398). In order to obtain the same meaning through the use of the Old Perfective, the form would have to be that of § 328. It appears that here, as in other cases, we must assume that the scribes did not preoccupy themselves unduly with exactness of verbal forms.

Col. 7. The copyist used the form *sḥd(w)* and not *sd(w)* as in B, thus confirming Gardiner's hypothesis (*Sinuhe*, 38–9) that the correct form is the one used in R 63.

Col. 9. This is the most interesting variant of the text. Gardiner had already noted that B would be clearer when emended by putting before *rḫ·i* so as to give the meaning "I did not know whether I was alive or dead". The absence of *n* obliges him to connect this clause with the previous one as a verbal clause of result, translating it thus: ". . . my heart was not in my body that I should know life from death" (*op. cit.*, 255–6). Erman[2] translates it ". . . and I wist not whether I was alive or dead", accepting the correction suggested by Gardiner. The present text confirms this hypothesis beyond doubt, although here the negative clause takes a new form. I had suggested that the text read *mr·i mwt n rḫ·i wi r ꜥnḫ*—"I desired death; I did not know myself concerning life", although I felt that *mr·i mwt* would not fill the vacant space in this line. The restoration given in the plate is that suggested by Gardiner, the sense then being "I did not know myself as regards death, I did not know myself as regards life", *i.e.*, "I did not know whether I was to die or would be allowed to live". The context obliges us to translate *n rḫ·(i) wi r ꜥnḫ* as we have done, though I can quote no examples of this idiom. Furthermore, it will be noted that this construction is parallel to the affirmative form *ḥm·n·(i) wi* of col. 4.

Col. 10. I have adopted the reconstruction suggested by Gardiner, which, reading "I did not know what would happen (come about) there", fits the preceding context well; nevertheless this triple repetition of *n rḫ·i* seems to me a little harsh, though it is difficult to see what could be substituted for it.

The text reads *ḏd·in·f* as against the *ḏd·in ḥm·f* of B.

Col. 11. is clear, but is not justified by the oblique stroke visible at the left; neither is the following *imi* quite clear, a fact which we must attribute to an apparent confusion on the part of the scribe.

To sum up, the papyrus may be said to confirm in general the text of B. In one case (*sḥdw*) it is even more exact, and corrects B, and in another (*m wmt*) it shows us once again

[1] The transcription in the figure is as indicated by Gardiner. See also A. Erman, *Ägyptische Grammatik, Ergänzungsband*, 40, note f.

[2] Erman-Blackman, *The Literature of the Ancient Egyptians*, 26.

the caution with which we must accept any correction of the scribe's. Further, we may mention among its points of interest that of offering a new reading (*n rḫ·(i) wi r ʿnḫ*) whose exact value we are unfortunately not able to judge owing to the mutilated state in which the papyrus has come to us, unless Egyptologists may be able to supply the evidence necessary to support it. However, this very mutilation of the papyrus makes it a most fertile field for hypothesis and conjecture, until such time as good fortune produces its missing portions.[1]

[1] I wish to express my sincere thanks to Mr. Charles J. H. Ferguson of Buenos Aires for his assistance in the translation of this article.

MAGICAL TEXTS IN COPTIC—I

By W. E. Crum

With Plate ix, fig. 2.

The manuscript here published (British Museum, Dept. of Oriental Antiq. 10376) is one of a group acquired from Robert Hay in 1868. It measures $16 \times 9\frac{1}{2}$ inches. Until Fr. Kropp edited the longest of them in his recent book,[1] they had lain unnoticed. All are of leather and some have, with years, grown so black that hardly a letter can now be discerned. Photography, however, using the new infra-red process, has worked marvels, as may be seen from our plate,[2] the actual appearance of the written surface being as dark and illegible as in the case of the other leather documents similarly photographed and described elsewhere.[3] The scribe is clearly he who wrote—much more formally—Fr. Kropp's text; the peculiarities of several letters and ligatures[4] are unmistakably the same in both. The language is an untainted, though sometimes careless, Sa'idic. The provenance may be Thebes, the date perhaps sixth or seventh century. The ends of ll. 1–5 are upon a detached fragment, now appended to MS. no. 10414, those of ll. 13–20 upon one at present attached to the top of our manuscript (see Plate).

The text is an incantation, for use by a man, to compel the presence and complacence of a woman. It is, as usual in such cases, drawn without proper names, ⲛⲓⲙ or δεῖνα taking their place; so that it could be used by any one repeating it. It deserves a fuller commentary than I can offer.

Other texts of the same series will, I hope, be edited later.

[..]ⲉⲓⲍⲩⲙⲁⲣⲁⲍ ⲡⲁⲡⲉϭⲉⲣⲱⲃ ⲛ̄ⲡⲉⲛⲓ̣ⲡⲉ ⲡⲁⲡⲉϩⲟ ⲛ̣[...]ⲡⲉⲙ.ⲛ̄ϫⲟⲉⲓⲥ ϫⲉⲙ-
[..]ⲡⲙⲉⲟⲩ ⲉⲧⲙⲟⲗϩ ϣⲁⲡⲕⲁⲧⲁϩ(ⲣ)ⲁⲕⲧⲏⲥ ⲉⲩϩⲉⲡⲟⲧⲁⲥⲉ ⲛⲁϥ ⲛ̄ϭⲓ̣ ⲛ̄ⲥⲱⲛⲧ ⲧⲏⲣϥ ⲛ̄-
[ⲧⲉ] ⲛⲉϩⲓⲟⲙⲉ ϩⲱⲥ ⲉⲓⲉⲡ̣ⲕⲟⲛ ⲛⲁⲣ̣. ⲉⲓ ⲉϩⲣⲁⲓ ϩⲛ̄ⲑⲁⲗⲗⲁ(ⲥⲥⲁ) ⲛ̄ⲑⲉ ⲛⲟⲩⲃ̣ⲱ ⲛ̄ϩⲁⲓ̣ⲃ̣[
[ϩⲛ̄ⲧ]ⲉϥϭⲟⲙ ⲡⲉϫⲁϥ ⲛⲁⲓ ϫⲉⲉⲕⲱⲡ̣ ⲙ̄ⲙⲟⲓ ⲛ̄ⲥⲟ̣ⲛ ⲛ̄ⲧⲁ[.]ⲁϥ ⲛⲁⲕ ⲡⲉϫⲁⲓ ⲛⲁϥ ϫⲉⲉ-
[...]ⲛⲧⲉ ⲙ̄ⲙⲟⲕ ⲛ̄ⲛⲓⲙ ⲧϣⲉⲣⲉ ⲛ̄ⲛⲓⲙ ⲉⲧⲣⲉⲕⲧⲁⲁ̣ⲥ ⲛⲁⲓ ⲛ̄ⲧⲁϫⲱⲕ ⲉⲃⲟⲗ ⲙ̄ⲡⲁⲟ̣ⲩⲱ̣ϣ̣
[ⲛⲙ̄]ⲙ̣ⲁ̣ⲥ̣ ⲡⲉϫⲁϥ ⲛⲁⲓ ϫⲉⲛ̄ⲑⲉ ⲛⲟⲩⲓⲱⲧ ⲉϥϥⲓ̣ ⲣⲟⲟⲩϣ ϩⲁⲡⲉϥϣⲏⲣⲉ ϯϥⲓ ⲣⲟⲟⲩϣ
[ϩⲁⲣⲟⲕ ⲡⲉϫⲁⲓ] ⲛⲁϥ ϫⲉϯⲧⲁⲣⲕⲟ (ⲙ̄)ⲙⲟⲕ ⲙ̄ⲡ̣ⲧⲉⲕϭⲟⲙ ⲙ̄ⲛⲧⲟⲩⲛⲁⲙ ⲙ̄ⲡⲓⲱⲧ ⲙ̄]ⲡ̣ϣⲏⲣⲉ ⲙ̄ⲛⲧⲁⲡⲉ ⲛ̣ⲡ̣ⲉⲡⲛ̄ⲁ ⲉⲧⲟⲩⲁⲁⲃ ⲙ̄ⲛⲅⲁⲃⲣⲓⲏⲗ
ⲃ]ⲱⲕ ϣⲁⲉⲓⲱⲥⲏⲫ ⲁϥⲧⲣⲉϥϫⲓ ⲙ̄ⲙⲁⲣⲓⲁ ⲛⲁϥ [ⲛ̄ⲥϩⲓⲙ]ⲉ ϫⲉⲛⲛⲉⲕ-
ⲁⲛⲉⲭⲉ ⲟⲩⲇⲉ ⲛ̣ⲛⲉⲕⲕⲁⲧⲉⲭⲉ ϣⲁⲛⲧⲉⲕⲉⲓ (gap)ⲛⲉ ⲛⲁⲓ ⲛⲁⲁ ⲧϣ[ⲉⲣⲉ]
ⲛⲁⲁ ⲛ̄ⲧⲁϫⲱⲕ ⲉⲃⲟⲗ ⲙ̄ⲡⲁⲟⲩⲱϣⲉ ⲛ̄ⲙⲙⲁⲥ ⲛ̄ⲙⲙⲁⲥ (*sic*) ⲭⲁⲙⲭⲟⲙ[.]

[1] *Ausgewählte Koptische Zaubertexte* (1931), i, 55 ff., ii, 40 ff.

[2] I owe the photograph, and indeed the suggestion that the texts should be published, to Mr. Sidney Smith, who refers to these manuscripts in the *British Museum Quarterly*, viii, 53.

[3] See *ibid.* and *The Times*, May 17th, 1933. Similar treatment would doubtless do much for the leather deeds, Br. Mus. *Catal.*, nos. 447–56.

[4] Especially that for ⲧⲉ (*e.g.* in ll. 5, 15; *cf.* Kropp, Taf. iii, ll. 97, 98).

ⲙⲉ ⲁⲑ ⲑⲁⲑ ⲟⲩⲭⲁⲭ ⲁⲱ ⲟⲩⲭⲁ ⲁⲛⲛⲏϩ ⲛⲁⲗⲑⲏ(gap)ϩⲓϫⲏⲕⲕⲟⲕⲏ[. .]

ϩⲛ(ⲟⲩ)ⲟⲩⲱϣⲉ ⲙⲁⲣⲉⲥⲟⲩⲟϣⲧ ϩⲛⲟⲩⲙⲉ ⲙⲁⲣⲉ(ⲥⲙⲉ)ⲣⲓⲧ ⲙⲁⲣⲉⲡⲁⲟⲩ[ⲱϣⲉ]
ⲙⲛⲡⲁⲙⲉ ϣⲱⲡⲉ ϩⲣⲁⲓ ⲛϩⲏⲧⲥ ⲛⲛⲓⲙ ⲧϣⲉⲣⲉ ⲛⲛⲓⲙ ⲛⲑⲉ ⲛⲟⲩⲁⲅⲅⲉⲗⲟ-
ⲥ ⲛⲧⲉ ⲡⲛⲟⲩⲧⲉ ⲙⲡⲉⲥⲙⲧⲟ ⲉⲃⲟⲗ ϫⲉⲧⲉⲡⲉⲑⲩⲙⲓⲁ ⲧⲁ[ⲓ] ⲉⲧⲉⲛⲧⲁⲙⲁⲥⲧⲉ-
ⲙⲁ ϭⲏⲣⲉⲥⲥⲉ ⲙⲙⲟⲥ ϩⲛⲟⲩ.ⲕⲁⲕ ⲁϥⲛⲟϫ ϩⲣⲁⲓ ϩⲛⲧⲁⲣⲭⲏ ⲙ-
ⲡ[ⲉϥ]ⲧⲟⲟⲩ ⲛ(ⲓ)ⲉⲣⲟ ⲁϥϫⲟⲟⲕⲁⲕⲓ ⲉⲃⲟⲗ ⲛϩⲏⲧⲥ ϫⲉⲕⲁⲥ ⲉⲣⲉⲛϣⲏⲣⲉ ⲛⲣⲱⲙⲉ
[ⲥⲱ ⲉ]ⲃⲟⲗ ⲛϩⲏⲧⲥ ⲛⲥⲉⲙⲟϩ ⲉⲃⲟⲗ ϩⲛⲧⲉⲡⲓⲑⲩⲙⲓⲁ ⲛⲡⲇⲓⲁⲃⲟⲗⲟⲥ ⲁⲗⲗⲁ ⲥⲱ ⲉⲃ-
[ⲟⲗ] ⲛϩⲏⲧⲥ ⲁϥⲙⲟϩ ⲉⲃⲟⲗ ϩⲛⲧⲉⲡⲉⲑⲩⲙⲓⲁ ⲛⲡⲇⲓⲁⲃⲟⲗⲟⲥ ϯⲛ[ⲟⲩ ⲇ]ⲉ
ϩⲉ[. ⲉ]ⲡⲉⲕⲁⲗⲉ (ⲙ)ⲙⲟⲕ ⲙⲡⲟⲟⲩ ⲁⲛⲟⲕ ⲇⲇ ⲉϩⲣⲁⲓ ⲉϫⲙⲡⲉⲕⲣⲡ ⲡⲁⲓ ⲉⲧϣⲱⲡ
ϩⲛ[ⲧⲁϭⲓ]ϫ ϫⲉⲕⲁⲥ ⲉⲧⲁⲁϥ ⲛⲛⲓⲙ ⲉⲛⲉⲥⲥⲱ ⲉⲃⲟⲗ ⲛϩⲏⲧⲥ ⲛⲧⲉ(ⲟⲩ)ⲟⲩⲱϣⲉ
ⲉⲛⲁⲛⲟ[ⲩϥ] ϣⲱⲡⲉ ⲛϩⲏⲧⲥ ⲉϩⲟⲩⲛ ⲉⲣⲟⲓ ⲛⲑⲉ ⲛⲟⲩⲁⲅⲅⲉⲗⲟⲥ ⲛⲧⲉ ⲡⲛⲟⲩⲧⲉ ⲉⲥⲥⲱ-
sic ⲥⲱⲧⲙ ⲛⲥⲱⲓ ϯⲧⲁⲣⲕⲱ ⲙⲙⲟⲕ ⲛⲡⲉϣⲟⲙⲧ ⲛⲣⲁⲛ ⲟⲩⲥⲕⲗⲏⲙ ⲟⲩⲥⲕⲗⲏ-
ⲙⲁ ⲁⲛⲁⲣϣⲏⲥⲉϥ ⲉⲗⲱⲉ ⲉⲗⲉⲙⲁⲥ ⲓⲁⲑⲱⲑ ⲡⲉⲛⲧⲁϥⲉⲓ (ⲉ)ϫⲛⲧⲉⲑⲏⲥⲓⲁ
[ⲛ]ⲕⲛⲏⲩ ⲉϩⲣⲁⲓ ⲙⲡⲁⲙⲧⲟ ⲉⲃⲟⲗ ⲁⲛⲟⲕ ⲛⲓⲙ ⲡϣⲏⲣⲉ ⲛⲛⲓⲙ ⲛⲥϯ ⲡⲁ-
[ⲟ]ⲩⲱϣⲉ ⲉϩⲣⲁⲓ ⲉϩⲏⲧⲥ ⲛⲛⲓⲙ ⲧϣⲉⲣⲉ ⲛⲛⲓⲙ ⲛⲑⲉ ⲛⲟⲩⲁⲅⲅⲉⲗⲟⲥ ⲛⲧⲉ ⲡⲛ-
[ⲟⲩ]ⲧⲉ ⲉⲥⲉⲧⲙⲥⲱⲧⲙ ⲛⲥⲱⲓ ϯⲕⲱ ⲙⲙⲟⲥ ϩⲓⲃⲟⲗ ⲛⲡⲓⲱⲧ ⲡⲁⲕⲁⲑⲟⲥ ϯⲧⲁⲣ-
ⲕⲱ ⲙⲙⲟⲥ ⲙⲡⲉϣⲟⲙⲧ ⲛⲣⲁⲛ ⲓⲁⲙⲁⲗⲏⲗ ⲑⲁⲙⲁⲙⲁⲏⲗ ⲑⲁⲉⲗ

[blank]

Translation

. . . . . marax,[1] *he of the iron staff, he of the . . . . . face . . . . . lord, from the salt water*[2] *to the Cataract* (καταράκτης),[3] *whom the whole female creation obeyeth* (ὑποτάσσειν), *as* (ὡς)[4] . . . . . *cometh up from out the sea* (θάλασσα), *like to a*[5] . . . . . [*in*] *his might. He said unto me, "If thou deemest me a brother, I will* [*do?*][6] *it for thee." I said unto him,* "(5) . . . . . *thee unto So-and-so, the daughter of So-and-so, that thou give her*[7] *unto me, that I may fulfil my will* [*with*] *her." He said unto me, "As a father taketh thought for his children,* (*so*) *take I thought* [*for thee." I said*] *unto him, "I adjure thee and* (?)[8] *thy might and the right hand of the Father* [*and . . . . . of*] *the Son and the head of the Holy Ghost* (πνεῦμα) *and Gabriel,* [*that*] *went to Joseph and caused him to take Mary to wife, that thou neither* (10) *delay* (ἀνέχειν) *nor tarry* (κατέχειν)[9], *till thou bring me So-and-so* (δεῖνα), *the daughter of So-and-so* (δ.), *that I may fulfil my will with her.* Chamchomme Aththath Ouchach aô ouchaannêh (?) nialthê hijêkkokê[. .] [10].

With desire may she desire me, with love may she love me. Let desire and love of me be in the breast[11] *of So-and-so, the daughter of So-and-so, as it were an angel* (ἀγ.) (15) *of God before her.*[12] *For this longing* (ἐπιθυμία) *is that which Mastema*[13] *proclaimed* (κηρύσσειν) *in* . . . . .[14] *and*

[1] The ⲝ is exactly like that in Kropp, l. 40 (not distinguishable on his Taf. II).

[1] Nothing (?) lost in l. 2.

[2] The contrast is either between sea water and rain floods, or the sea and the Nile cataract. Is the word κατ. applied to the latter?

[4] Or ? ὡσεί.

[5] Letters as printed suggest "a shady tree", but they are quite uncertain.

[6] Can conjunctive bear this construction?

[7] Altered and quite doubtful.

[8] ⲙⲛ uncertain. If ⲛ, then "adjure thee by".

[9] *Cf.* Kropp C 7.

[10] Separation into names merely guessed. The middle part looks like ⲟⲩϩⲁϩ ⲁⲩ(ⲱ) ⲟⲩϣⲁⲁⲛⲏϩ.

[11] Lit. "belly".

[12] *I.e.*, "let her receive me as, etc." (*cf.* Gal. IV, 14).

[13] On this name for the Devil see *P.S.B.A.*, XIX, 214; also Budge, *Misc.* 340, *Miss.* IV, 776; Kropp, III, 96; Charles, *Apocr. and Pseudop.* II, 28, and references there.

[14] This and the perhaps related word in next line are unintelligible to me. ϣⲕⲁⲕ cannot be read.

threw down into the source (ἀρχή) *of the four streams*[1] *and did . . . . . thence, that the children of men should* [*drink*] *thereof and be filled with devilish longing* (διάβολος, ἐπιθ.). *So-and-so* (δ.) *hath drunk thereof and hath been filled with devilish longing* (δ., ἐ.). *So* (δέ) *now* [*I*] (20) *too* (?)[2] *invoke* (ἐπικαλεῖν) *thee this day, I So-and-so* (δ.), *over this wine,*[3] *that is in my hand, to give it*[4] *unto So-and-so, that she drink thereof and that a pleasant* (?)[5] *desire arise within her toward me, as it were an angel* (ἀγ.) *of God, and that she obey me. I adjure thee by these three names:* Ousklêm ousklêmaan Arshêsef Elôe Elemas Iathôth,[6] *he that came* (*up* ?) *upon the offering* (θυσία),[7] (25) *that* (?) *thou come up before me, me So-and-so, the son of So-and-so, like an angel* (ἀγ.) *of God. If she obey me not, I expel her*[8] *from the* (*presence of the*) *good* (ἀγαθός) *Father. I adjure her by these three names:* Iamalêl (?), Thamamaêl Thae."[9]

[1] *Cf.* Gen. II, 10 *τέσσαρας ἀρχάς*. This refers evidently to the legend related in the "Questions of Bartholomew" (*ed.* Vassiliev, *Anecdota Gr. Byz.*, 20, and Bonwetsch, *Göttinger Nachr.* 1897, 26) where Satan tells of his revenge on man: *ἔλαβον φιάλην . . . ἔξυσα τὸν ἱδρότα τοῦ στήθους κ. τ. μαλλῶν μου κ. ἐνιψάμην . . . ὅθεν οἱ τέσσαρες ποταμοὶ ῥέουσιν κ. πιοῦσα ἡ Εὔα ἔτυχην τῆς ἐπιθυμίας.* The "heads" of the rivers recur in the Apocalypse of Paul, § 41.

[2] Assuming ϩⲱ, though what is visible does not suggest it.

[3] Read thus *B.K.U.*, no. 4, 4.

[4] ϫⲉⲕⲁⲥ ⲉ-, a scarcely permissible construction. Perhaps *l.* ϫ. ⲉⲓⲉ.

[5] Scarcely space for ⲩϥ and half of ϣ, but I see no alternative.

[6] *Elôe* (altered) and *Elemas* are familiar; *Iathôth* may contain the god's name.

[7] *Cf.* Kropp M 9, *B.K.U.*, no. 3, 34.

[8] Lit. "set her outside", the word used for excommunication. In such clauses future more usual, *e.g.* *B.K.U.*, no. 3, 15, 26.

[9] The last might be ⲑⲁⲉ, "the end", *finis*. The sign following it is comparable with that terminating *B.K.U.*, no. 1.

A NOTE ON SOME SCENES OF LAND-MEASUREMENT

By SUZANNE BERGER

With Plate x

In the tomb of Khaemhat at Shêkh ʿAbd el-Ḳurnah, and in the first room to the right of the entrance (A′), is a detailed representation of the agricultural life of Ancient Egypt. The upper register shows a scene which is very important but very rarely depicted, the measuring up of the crops. The purpose of this was to determine the amount of income-tax to be paid by the various owners, and it was done by the ministry of finance. This ministry had already been established as early as the Second Dynasty,[1] but although the legal texts often mention the work of the survey department, it is not until the Eighteenth Dynasty that we find, on the walls of a few Theban tombs, representations of surveyors at work. We find them in that of Khaemhat (No. 57), that of Menna (No. 69), that of Zeserkarasonb (No. 38), and that of Amenhotepsasi (No. 75); they must also have existed in a destroyed tomb a fragment of which exists in the British Museum (No. 37982). See Pl. x.

These scenes are well known and often mentioned, but there is one detail in them to which I believe no one has drawn attention and which struck me in the course of a close study of the tomb of Khaemhat. I refer to the man who walks in front of the surveyors and places a *wꜣś*-sceptre over a stela. His appearance does not differ from that of his companions except that he wears no wig. The top of his head is shaven. Wrinkles at the back of the neck seem to indicate that he is an old man, as Wreszinski has noted in his description of the scene.[2] In the tomb of Menna we find him represented as an old man leaning with one hand on the head of a young child. In neither of these tombs does an inscription give any explanation of the scene.

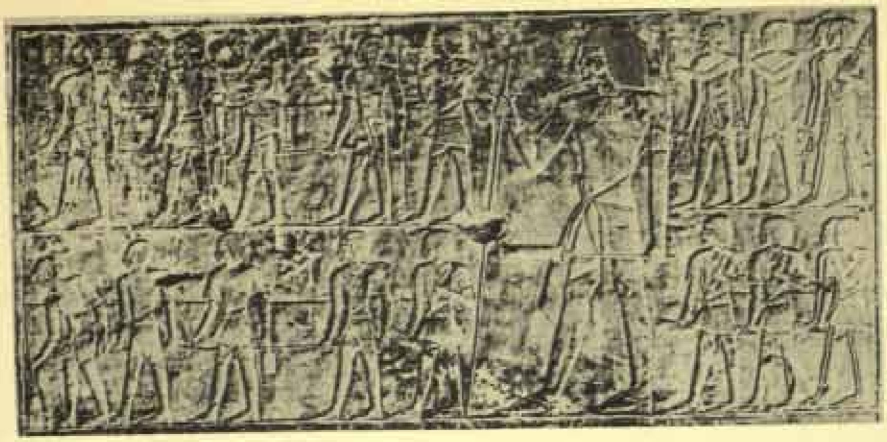
It is to the British Museum fragment that we must look for enlightenment.[3] Here we again find on the left the edge of a cornfield, with a stela. Before the latter a man with partly shaven head is bending; in his left hand he holds the *wꜣś*-sceptre, and his right hand is raised towards his face. What is particularly interesting is the inscription arranged above him in four vertical columns. He is pronouncing an oath, affirming by the great god who is in heaven that the "witness-stela" is standing in its place:  . The formula of the oath he employs is that used in the Eighteenth Dynasty.[4] This oath and the sceptre in his hand show us that he is a sworn official deputed by the survey department to verify the work of the surveyors in order to make sure that the taxes shall come in in full. We may assume that it was the oldest of the guild of surveyors who was allotted this office of trust, and received the sceptre on such occasions as a symbol of his mission. The *wꜣś*-sceptre was closely connected with divinity, and the mere

[1] Pirenne, J., *Histoire des institutions et du droit privé de l'Égypte ancienne* (Bruxelles, 1932), 123.

[2] *Atlas zur altägyptischen Kulturgeschichte*, Pl. 191.

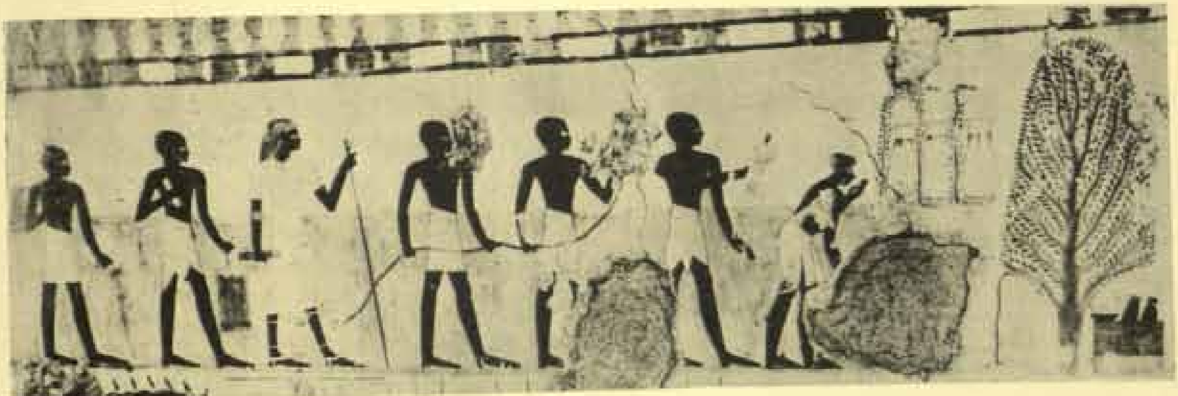
[3] Budge, W., *Wall decorations of Egyptian tombs illustrated from examples in the British Museum* (London, 1914), Pl. 7.

[4] Spiegelberg, W., *Studien und Materialien zum Rechtswesen des Pharaonenreiches der Dynast. XVIII–XXI* (Hannover, 1892), 73.



1

2



3

4

1. Scene from the tomb of Khaemhat at Thebes
2. Fragment of a tomb-painting, Brit. Mus. 37982
3. Scene from the tomb of Zeserkarasonb at Thebes
4. Scene from the tomb of Menna at Thebes

fact of possessing it conveyed power.[1] It was at the same time the sign of stability, and in many religious scenes it is actually represented as holding up the sky. Now we know that the texts frequently speak of the setting up of boundary stelae "like the sky". Such stelae bore the names of the owner of the domain and of the king, a record of the extent of the land, etc. We have evidence of this in a stela now in the Cairo Museum given by Tuthmosis IV to a priest of Amūn.[2] These stelae were sealed and registered at the survey department, as the vizier Rekhmerēʿ informs us in his account of the numerous duties which occupied his day: "He it is who divides all the land into fields. When a petitioner comes and says 'Our boundary stelae have been removed' he must see what is recorded under the seal of the responsible official, and so cause to be given back what has been taken away by the committee which has had the stelae removed."[3] Registration was necessary to meet cases of dispute, whether the removal was due to the inundation, or whether there had been an abuse of authority, or whether again it was a case of malicious interference by an interested neighbour. This last was evidently a grave offence, to which the didactic writers do not fail to allude. Amenhotpe the son of Kanakht solemnly mentions it at the beginning of chapter vi of his *Teachings*: "Remove not the boundary stones of the cornland and change not the position of the measuring-tape."[4]

Now I said at the outset of this study that this episode had passed almost unnoticed. There have, however, been attempts to explain it which must be mentioned. The British Museum fragment is published in the Museum Guide[5] under the title "Inspecting the farm"; and we are told that the man with the sceptre is the inspector of the domain examining the harvest and tasting the grain to see whether it is ripe. In the publication of the frescoes in the Museum Budge describes him (with a query, however) as an official drinking water.[6] But it is the interpretation of the scene in the tomb of Zeserkarasonb which stands most in need of correction in accordance with what we have seen above. The first mistake was made by V. Scheil in his publication of it.[7] His Plate iv is accurate—it is, indeed, a photograph—but his text gives a surprising explanation, for he interprets the scene as the adoration of the sycomore tree: "C'est le sycomore de Nouit au pied duquel sont placées à droite sur une banquette ou coffre, de la vaisselle et à gauche une grande jarre. De la base de cette jarre s'élève une tige végétale jusqu'au-dessus de l'ouverture. Plus loin, dans le champ du registre, sont disposés trois vases semblables. Devant l'arbre symbolique un personnage fait une révérence en levant une main à hauteur de la bouche et baissant l'autre à niveau du genou. Ses fonctions semblent être réglementées par un maître de cérémonies qui suit et qui lève un bâton court, insigne de sa charge." A piece of plaster has unfortunately dropped out exactly at the point where the stela should be. There can be no doubt that it was once there, for a comparison with the British Museum fragment shows that the attitude and gesture of the figure of the man are identical. Scheil must have been confusing scenes of private life with funerary scenes in which the sacred sycomore often appears. In these latter, however, the goddess Nut is seen among the branches holding out a tray of food, and pouring out cold water for the deceased and his spirit.[8] With this piece of symbolism the country scene in the tomb of Zeserkarasonb has nothing to do. The sycomore

[1] Jéquier, G., *Frises d'objets des sarcophages du Moyen-Empire*, dans *Mémoires publiés par les membres de l'Inst. Franç. d'Arch. Or. au Caire*, XLVII (Le Caire, 1921), 177.

[2] Mariette, A., *Monuments divers recueillis en Égypte et en Nubie* (Paris, 1889), 14 and Pl. 47.

[3] Farina, G., *Le funzioni del vizir faraonico sotto la XVIII dinastia* (Roma, 1917), 24.

[4] *Journal*, XII, 204.

[5] *A Guide to the Fourth, Fifth and Sixth Egyptian Rooms* (1922), p. 81, no. 6.

[6] *Op. cit.*, Pl. 7.

[7] *Mém. Miss. Arch. Franç.*, V (Paris, 1894), 578-9.

[8] *Mém. de l'Inst. Franç. Arch. Orient.* LVII (1932), p. 37, fig. 19.

is simply a tree in whose shade the workmen intend to spend the midday rest; the offerings are nothing more than the men's food, and if the jars are covered with leaves it is merely to keep the water as cool as possible. What Scheil took for the staff of a master of ceremonies is simply the palette of the attendant scribe. This picturesque detail of country life occurs in almost all agricultural scenes; we can find it in this very tomb, in the top register of this same wall, where we also see the wine-skin hung from the branches. Sycomores were no doubt planted on the edge of the fields, along the roads, as we see from the tombs of Khaemhat and Nakht, where the woodcutters chop them down without ceremony.

Scheil's mistake was repeated by Maspero,[1] relying on a false drawing by Faucher-Gudin, who took Scheil's publication as his basis, but restored the missing part, adding a basket of fruit, and placing the man so close to the tree that he seems to be bowing before it.

This incident, not without its value as a warning, shows the danger of making restorations without using reliable parallels. What is more, it shows the advisability of having recourse as often as possible to the original scene, or, where this is not possible, to good photographs which reproduce faithfully what is there. By carefully studying these and by making reasonable comparisons we can in many cases bring fresh light to bear upon an archaeological problem.

[1] Maspero, G., *Histoire ancienne des peuples de l'Orient classique*, I (Paris, 1895), 121.

THE SKY-GODDESS NUT AND THE NIGHT JOURNEY OF THE SUN

By ALEXANDER PIANKOFF

AMONG Egyptian myths that of the sky-goddess Nut played an important part in the formation of the cosmogony of the Nile Valley. According to this conception the sun-god Rēʿ was the son of the earth-god Geb and the sky-goddess Nut, who was supposed to give him birth every morning and to swallow him up every evening.[1] Representations and texts which make allusion to these conceptions are to be met with throughout Egyptian history, especially in connexion with the celestial hereafter of the dead. It was believed that a man could identify himself with the sun-god, and like him, after having disappeared in the west, the region of death, and having passed through the body of the sky-goddess, rise again in the east. Thus Nut, the goddess of the sky, became the protector of the dead, the personification of the coffin;[2] and just like the sun, who was during the night in the body of the sky-goddess Nut, the dead man in his coffin was being conceived again for a new and more glorious existence. These ideas were clearly expressed in the pictures and texts of the royal tombs of the Nineteenth and of the Twentieth Dynasties. In the tomb of Ramesses IV, as well as in the Osireion of Sethos I, the text on the figure of Nut who is about to swallow the solar disk begins with *ʿḳ ḥm n nṯr pn m r·ś*, "The majesty of this god enters her mouth".

On the leg of Nut in the tomb of Ramesses IV is a short passage alluding to the birth of the sun-god in the morning: "... He opens the thighs of his mother Nut; he rises towards the sky." And lower down on the leg of the goddess we read: "He moves towards earth, rising and being born."[3] The daily birth of the sun, according to these conceptions, is described in the following text: "He (Rēʿ) who comes out of the Dewat and who rests in the barque *Mʿnḏt*, who sails upon the Nun until the hour of Rēʿ (called) 'The One who sees her master', who becomes Khepri, and moves towards the horizon, who enters the mouth and who comes out of the vulva, who shines forth in the opening of the door of the horizon at the hour (called) 'She who causes the beauty of Rēʿ to appear' to cause the people to live."[4]

The ideas thus expressed in later times are already met with in the texts of the Pyramids; but here the moment of death, the swallowing by the sky-goddess, is seldom alluded to.

This cosmogony has come down to us owing to the belief of the ancient Egyptians that the dead man (in the texts of the Pyramids the king), after being buried in the west, would reach the sky, and that, once there, his lot would be like that of the celestial bodies. Probably the most ancient belief in the second birth in the sky was that according to which the dead appeared as a star (*Pyr.* § 820–1):

> "The sky has conceived thee together with Orion,
> Dewat has given birth to thee and Orion,
> Thou risest with Orion in the eastern side of the sky,
> Thou goest down with Orion in the western side of the sky."

[1] Maspero, *Études de mythologie et d'archéologie égyptiennes*, II, 218; Sethe, *Urgeschichte*, § 71.

[2] A. Rusch, *Die Entwicklung der Himmelsgöttin Nut zu einer Totengottheit*, Leipzig, 1922.

[3] H. Brugsch, *Thesaurus: Astron. und Astrol. Inschr.*, p. 174. So, too, in the Osireion; H. Frankfort, *The Cenotaph of Seti I at Abydos*, Pl. lxxxi.

[4] Champollion, *Not.*, II, 636, 684, and Sethe, *Altaegyptische Vorstellungen vom Lauf der Sonne*, 8–9. On

In another passage (§ 883) it is the goddess Nut herself who appears as the mother of the dead: "Nut has given thee birth, O N." Other passages (*e.g.* § 919) identify the fate of the dead with that of the sun-god Rēʿ:

> "Rēʿ rises in the east, and he finds N. there,
> Rēʿ goes towards the west, he finds N. there (living and enduring),
> To whatsoever beautiful place Rēʿ goes, he finds N. there."

The identification of the dead man with Rēʿ is complete in the following passage (§ 888): "N. shines in the east like Rēʿ, he passes towards the west like Khepri", or (§ 1688): "For thou art Rēʿ, who came out of Nut, who gives birth to Rēʿ every day; this N. is born like Rēʿ every day." This conception takes place at night (§ 698) in the body of the sky-goddess: "This N. is this eye of Rēʿ, who passes the night in being conceived and who is being born every day."

Although the part of the legend where the sun is swallowed up by Nut is only once mentioned in the Pyramid Texts (§ 1417), the journey of the sun at night-time is described in many passages (*e.g.* § 1679). Thus the dead man goes to the west of the sky; [*ḥtp.f*] *m ʿnḫ m ỉmnt mm šmsw Rʿ ỉsʿrw ḥrt n ʿnḏ*. "He rests alive in the west, among the followers of Rēʿ who present the road to the light." The determinative of the last word clearly indicates that the "light" in question was believed to be above the firmament. According to another passage Nut takes hold of the deceased in the west and puts him on the celestial road leading to the east, where he joins Rēʿ (§ 756): "Thou goest up towards thy mother Nut who seizes thy arm, she gives thee the roads (leading) towards the horizon, towards the place where is Rēʿ" (*ḫr Rʿ*). (Compare § 2171, and note the determination of *šḏḥd*.)

This passage is like another in the Hymn to the Setting Sun in the *Book of the Dead* (chap. lxxxvii): "Thy mother Nut embraces thee, thou settest in beauty." It is clear that according to these conceptions the sun, after having disappeared behind the western mountain, was taken by the goddess of the sky Nut and placed on the roads leading towards the eastern region of the sky. These roads were either in the body of the sky-goddess herself or somewhere above the vault of heaven. In § 351 of the Pyramid texts we find a clear indication that the journey of the sun at night took place in the sky: "The two floats of the sky are placed for Rēʿ that he may cross therewith to the horizon (*ꜣḫt*), to Horus of the Horizon (*Ḥr ꜣḫt*)." In this primitive way the dead sun was conveyed on the waters above the firmament to *ꜣḫt*, the country of the morning.

During the early period of Egyptian history when the texts of the Pyramids were composed, people were afraid to speak of death and therefore avoided describing this moment of disappearance, although it was believed to be a passing one. It was only much later, in the royal tombs of the Nineteenth and of the Twentieth Dynasties, that the "west" began to be spoken of with a certain amount of detail; it became then the symbol of new life, the pledge of a new and more glorious existence. Let us try now to sum up the different stages of the journey of the deceased as they are indicated in the texts of the Pyramids:

"Earth opens for him (*i.e.* the dead comes out of his tomb) . . . Lo, she comes to meet thee, the beautiful (female) of the west, to meet thee with her beautiful locks, saying, 'Thou to whom I have given birth, come'" (§ 281–2). This is evidently the moment of the reception of the dead by the goddess of the sky in the west.

Then follows the night journey, before the second birth takes place in the east (§ 802–5):

the inside of the lid of the coffin of Ankhnas-Neferibrēʿ is the following text: "I am thy mother Nut, I spread myself over thee in my name 'sky'; thou enterest my mouth, thou comest out of my thighs like Rēʿ every day." Rusch, *op. cit.*, 14, also *Rec. de trav.*, XVIII, 197.

"Thou crossest the lotus lake in the north of Nut, like the star which crosses the sea on the body of Nut, the Dewat takes thee by the hand to the place where Orion is . . ." "He places thee as the morning star in the Fields of Rushes."

The deceased after having crossed the two regions of heaven which are so frequently represented in the royal tombs—the northern part, and the southern one of Orion (§ 959) —approached the country of the morning. In the Dewat he became *ꜣḫ*, a glorious one, and was ready to be born again in the east (§ 1172): "Thou receivest the tribute of the evening barque, thou becomest a glorious one in the Dewat. Thou livest this sweet life which the lord of the horizon lives."

The Dewat being part of the sky in the Pyramid texts is used as a parallel to it (§ 820):[1]

"Conceived by the sky, born by the Dewat, O N. . . .
The sky conceived thee with Orion,
The Dewat gives birth to thee and Orion."

In certain passages of the Pyramid texts the Dewat appears as the land of the morning (§§ 1152–5): "N. crosses the sky . . . he purified himself in the lakes of the Dewat . . . to him comes *Dwnꜥw* in jubilation. . . ." According to this passage the Dewat is situated in the eastern part of the sky, somewhere near the *ꜣḫt*, the land of the morning.[2] It was also there, next to the *ꜣḫt*, that the Fields of Rushes were situated, and the morning star made its appearance (§ 1719):

"He (Horus) places thee (the deceased) as morning star in the midst of the Field of Rushes." The location of the Field of Gifts (*sḫt ḥtp*) and of the Field of Rushes in the sky has been preserved in the text relating the destruction of the human race: when the sun-god Rēꜥ had left the earth on the back of the sky-goddess in the shape of a cow—"The majesty of this god looked into her (*m ḫnw·st*) . . . and the majesty of this god L. H. S. said: 'The field is peaceful here'—and the Field of Peace (or the Field of Gifts—*sḫt ḥtp*) appeared." In the same way were created in the sky the Field of Rushes and the stars.[3]

The morning ablutions of the dead were performed there, together with the new-born morning star (§ 1104): "The doors of the sky were opened and the doors of the *ḳbḥ* are opened for Horus of the Dewat at the beginning of the day when he comes down and purifies himself in the Field of Rushes." The sun-god Rēꜥ washes there too (§ 519): "N. has purified (himself) with Rēꜥ in the lake of Rushes." In the texts of the later period, at the end of the last hour of the night, a new creation of the world was enacted every day: the sun-god was represented coming out of the primeval waters of Nun, while the gods of Hermopolis assisted at his birth.

After having been born, *i.e.* having emerged from the body of the sky-goddess, the morning star and the sun-god had to cross a land of lakes, called the *ꜣḫt*, before their actual appearance on the visible horizon. The journey is described as "sailing upon the Nun" in the text mentioned above (p. 57): the Sun is described as having come out of the Dewat, taken its seat in the morning barque, and sailing in its shape of Khepri upon the Nun towards the door of the horizon. This moment is illustrated in texts of the New Kingdom: the god Nun is seen lifting up the sun-barque with the sacred beetle inside.[4] In the Osireion and on the sarcophagus of Sethos I this representation is placed after the twelfth division of the

[1] For the Dewat in the sky see *Pyr.*, §§ 257, 306, 1152, 1432, 1717.

[2] *Bull. Inst. fr. d'Arch. Or.*, XVII, 121–90. In the texts of the Middle Kingdom it was this part of the Dewat that received the special denomination "The Lower Dewat".

[3] Lefébvre, *Les Hypogées royaux de Thèbes*, II, 1 division, Part IV, Pl. 16.

[4] The list of representations will be found in Sethe, *Altaegyptische Vorstellungen*, 6 (4).

Dewat and corresponds therefore to the space which in the texts of the Pyramids was believed to be between the vulva of Nut and the doors leading to the horizon. This was the country of streams, where the sun performed his morning ablutions. In the representations of Nut in the tomb of Ramesses IV and in the Osireion this locality is situated close to the feet of the goddess and is marked by a much damaged inscription which begins with the words: "He purifies in . . .". On the other hand the conception of a god Nun helping the dead to reach the sky is a familiar one in the texts of the Pyramids (§ 1517): "Nun lifts up the arm of N. towards the sky . . . (to let him) ascend and rise to the sky, and to be a guard of Rēʿ."

It would seem that the representations of the god Nun lifting the sun-barque in the Osireion, and on the sarcophagus of Sethos I in the Soane Museum, was meant as a symbolic image of the diurnal course of the sun from its birth out of the primeval waters of Nun to the moment when Nut—the sky—took him into her arms, and placed him on the waters above the firmament. The lower part of this representation with the god Nun would indicate the morning; the rectangular space above the sun-barque the diurnal journey of the sun; the upper part the evening, the moment when the goddess of the sky "takes the arm" of the sun-god and gives him "the road to the horizon" (p. 58).[1] In the papyrus of Anhai the goddess Nut is actually represented standing, head downwards, on a blue band having the shape of the sky-hieroglyph.[2] "The roads to the horizon" are symbolized by the figure of Osiris, with his body bent round in a circle, with the inscription: "This is Osiris encircling the Dewat"; the shape of the god indicates the eternal movement of the sun and his return from the realm of death.[3]

The scene in the Osireion and on the sarcophagus of Sethos I is framed above and below by two bands, which represent respectively the Mountain of the East and that of the West. On the sarcophagus these bands are dotted to indicate sand. The mountains are guarded by Isis and Nephthys in the shape of two serpents.[4] On one side, opposite the door of the twelfth division of the Dewat, the two bands are connected by a curved band rather like the sky-hieroglyph with the solar disk in the midst; this was to represent the vaulting of the firmament above the whole picture.[5] It seems clear that this representation is closely connected with the myth of Nut.

Thus the legend of the daily birth of the sun, a legend older than the theology of Heliopolis, according to which the sun-god was proclaimed the first principle and the creator of the world,[6] has been preserved almost intact in the texts of the Pyramids as part of the belief in the celestial hereafter of the dead Pharaoh. These conceptions reappear with a great richness of detail in the royal tombs of the New Kingdom. During this period, as well as during the time of the pyramid-builders, the hereafter of the dead king was mainly a celestial one; the representations of Nut in the royal tombs and the constellations on the ceilings indicate it quite clearly. At a later period, when general democratization set in, the celestial hereafter was usurped by commoners along with other royal prerogatives, and went into the

[1] The same arrangement as in the Osireion and on the sarcophagus of Sethos I appears in a vignette reproduced by Sethe, *op. cit.*, 20: below—the morning; centre—the day; above—the evening; the solar barque sailing above the sky (?).

[2] Budge, *Papyrus of Anhai.*

[3] *Cf. Pyr.*, § 802, where Osiris is called "the Lord of the Dewat", and § 1523 where he is "Lord of the sky".

[4] Isis, the goddess of the west: tomb of Ramesses X in Schäfer, *Weltgebäude der alten Aegypter*, 89, fig. 4.

[5] It seems to me that the solar disk on the curved band represents the sun at its zenith, and not, as Sethe has suggested, the dead sun; it is towards this point that Nun lifts the solar barque. On the sarcophagus of Sethos I the curved band is not dotted, and does not represent the earth; *cf.* Budge, *Egyptian Heaven and Hell*, II, 303.

[6] Sethe, *Urgeschichte*, § 71.

mould of late Egyptian religion. Nevertheless, at all epochs reminiscences of the conception that the sun passed through the body of the sky-goddess at night, and above the visible vault of heaven, were preserved.

Strange as it may seem, other nations have had the same ideas as to the movements of the sun at night above the firmament: thus, in the Baraita Pesahim (94*b*), a Jewish composition,[1] we read: "The learned of Israel say, 'The sun moves by day beneath the firmament, and by night above the firmament'; the learned of the nations say 'the sun moves by day beneath the firmament, and by night beneath the earth'."

[1] *Jewish Encyclopedia*, "Astronomy", p. 248.

THE PURPLE GOLD OF TUTʿANKHAMŪN

By R. W. WOOD

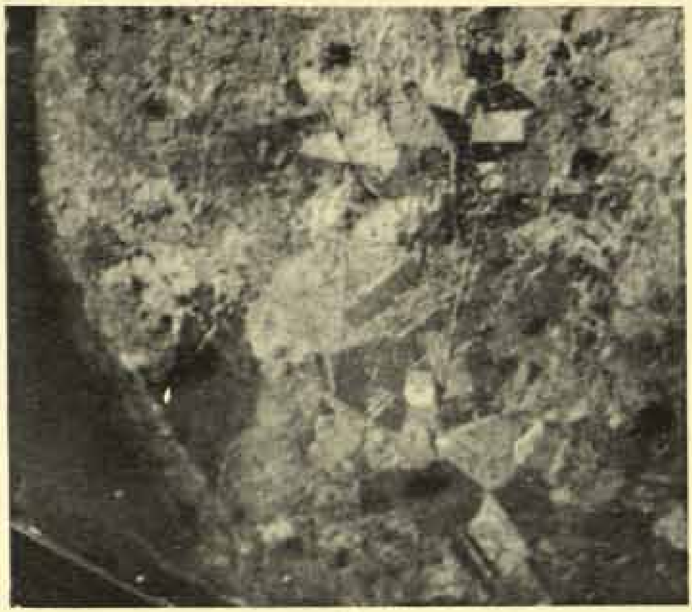
With Plate xi

MANY of the smaller gold ornaments from the tomb of Tutʿankhamūn are covered with a rose-purple film, quite unlike anything that has ever been observed on gold either ancient or modern. These objects have given rise to considerable discussion, some holding that the colour was produced intentionally by the Egyptian goldsmith, while others have attributed it to some accidental chemical change resulting from their long burial. My attention was attracted to the problem by the resemblance of the colours to those of certain gold films which I had prepared many years ago when engaged in the study of the optical properties of very finely divided metallic granules, and I felt sure that they had been produced at the time of manufacture, for on one of the king's slippers small purple gold rosettes and yellow gold bars had been sewn in alternation, making a colour pattern. There was, of course, the possibility that the rosettes and bars had been made by different goldsmiths, with metal from different localities, one sample containing an impurity which slowly oxidized during the centuries, forming the purple film.

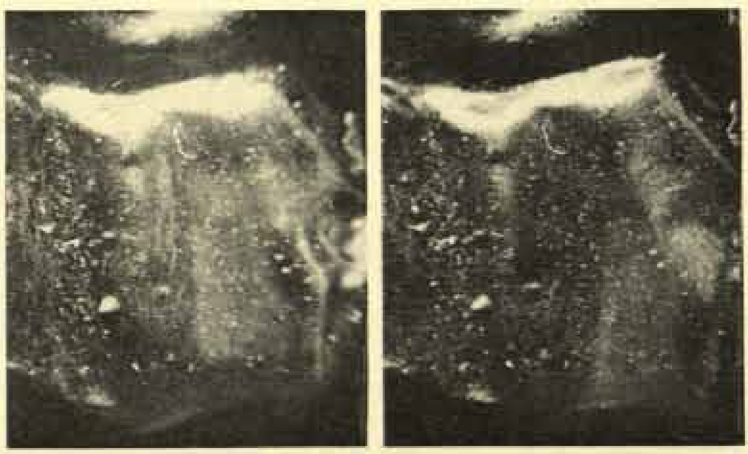
The objects on which the coloured film appears are small ornaments exclusively, sequins, some in the form of flowers from 1·5 to 2 cm. in diameter, and others circular concave disks, which ornamented the ceremonial robe of the king, and a number of pendants and other head ornaments, on some of which the colours were extremely brilliant, ranging from a rich red to purple and violet. All of these colours I have succeeded in reproducing by a simple technique such as could have been employed by the ancient Egyptians.

I made a fairly careful examination of the gold ornaments from other tombs displayed in the Cairo museum, but found nothing resembling the Tutʿankhamūn gold with the exception of a queen's crown from the next dynasty, which was decorated with gold flowers showing the purple film in many places. This made it seem possible that the secret of the colouring process had been handed down from father to son, but had finally been lost.

Mr. A. Lucas, chemist of the Department of Antiquities, Egypt, turned over to me for experimental purposes a few small circular sequins, a small part of a number which had been given to him for analysis and study. My first interest was to ascertain whether the colours were simple "interference" effects of thin films (soap-bubble colours), or due to some "resonance" action of minute particles covering the gold surface. This was purely a problem in physical optics. Since interference requires the co-operation of two streams of light reflected from the opposed surfaces of a thin film, the first step in the study appeared to be to destroy the reflection from the outer surface by covering it with a transparent varnish. This experiment I tried in Cairo, employing a finger-nail polish, the only available material of the desired nature. The colour was not destroyed, as it would have been in the case of an interference colour, and after the celluloid film had become dry, I found that it could be peeled off, carrying the film with it and leaving the underlying gold bright yellow. The film, however, now showed no colour, either by transmitted or reflected light. This was as far as I could go at the time, but on my return to my laboratory I deposited metallic gold on the back of the film by cathodic sputtering and found that the purple reflection was restored.



1



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1. Microphotograph of part of a gold sequin from Tut'ankhamūn's tomb, after removal of the purple film.
2. Stereoscopic microphotograph of part of an untouched sequin.

3 and 4. Microphotograph of a plate of gold and arsenic alloy.

These two experiments appear to show conclusively that we are dealing with something more complicated than simple thin film interference.

The next step was to ascertain the nature of the film. This was done by placing a bit of the celluloid film carrying the film from the sequin between two electrodes of pure gold and photographing the spectrum of a very brief spark discharge. Iron lines were found in the spectrum. A purple sequin was then hung on a very fine glass thread between the poles of an electro-magnet, and on turning on the current it was drawn to one of the pole pieces. One of the yellow bars from the slipper was thrown out of the magnetic field, showing that it contained no iron, while one of the small purple rosettes was attracted. These two specimens were returned to the museum, as they were needed for the reconstruction of the slipper. They had served their purpose, however, in showing that the purple rosettes contained iron, while the yellow bars were free from it. It was now necessary to find out how the film, presumably iron oxide, had been formed, and whether it was intentionally produced, or was an accidental "patina" resulting from time.

I prepared an alloy of pure gold and a very small fraction of 1 per cent. of iron, hammered the bead into the form of a disk, and heated it over a very minute flame. At a temperature a little below a dull red heat a beautiful purple film formed, matching the colour of the sequins almost exactly. As I could not ascertain the effect of 3,000 years of exposure to the air on one of my alloy plates, I was obliged to look for other evidence that the colour was produced by the heat process. I removed the purple film from a small piece of one of the sequins by nitro-muriatic acid and examined the gold with the microscope. The surface had been etched by the acid and showed a very marked crystalline structure, a photograph of which is reproduced in Pl. xi, fig. 1. A similar treatment of one of my replicas revealed the same crystalline structure, which was not shown by specimens which had not been heated to a high temperature after the hammering process. Pure gold rolled into a thin plate between steel rollers shows only very minute crystals when etched, but if heated shows crystals of exactly the same size and character as those found in the Egyptian sequins. This was proof number one that the sequins had been heated after their manufacture. Proof number two came as a result of an investigation of another surface characteristic of the sequins, the invariable presence of minute metal globules of gold which stood up in high relief on both sides of the sequins. A stereoscopic microphotograph of a portion of one of the sequins showing a large globule is reproduced in Pl. xi, fig. 2.[1] Obviously these must have been formed after the ornaments had been hammered or rolled into shape. They were very firmly attached, and my first theory was that a paste containing small specks of a gold alloy had been spread over the sequins, and had fused to the surface during the subsequent firing. There were one or two, however, which had the form of minute mushroom buds, a globule supported on a short stem. This suggested that they had been exuded or excreted by the metal, by a process similar to that which occurs when a silver bead is heated on charcoal by the blow-pipe flame, the phenomenon referred to as the "spitting of silver". It results from the liberation of dissolved gas at the moment of solidification of the globule. I was unable to find any allusion to a similar performance by gold and for some time was unable to produce the globules on my replicas.

The solution of the problem came in a rather fantastic way. I had made spark spectra of the purple sequins and found practically no lines save those of gold and iron, the latter being quite strong. A more careful scrutiny revealed a few very faint lines which could not

[1] The pictures can be combined into a stereoscopic relief without the aid of a stereoscope by holding the picture at a convenient distance and fixing the eyes on a spot on the floor, then sliding the picture into the field of view, keeping the eyes adjusted for floor distance.

be attributed to either metal, and two of these I attributed to arsenic. I next heated a small fragment of one of the sequins in a small tube of fused quartz to a temperature considerably above the melting-point of the gold in a very slow stream of hydrogen, and found a deposit on the wall of the tube beyond the heated portion, a yellow and a black ring, the latter on the side away from the gold. I therefore suspected the presence of sulphur and arsenic, and native sulphide of arsenic (the yellow pigment orpiment) was imported into Egypt during the Eighteenth Dynasty and used in tomb decorations. This suggested that the royal goldsmith had perhaps tried the experiment of fusing gold with the yellow pigment with the idea of improving the colour or of getting more gold. I wrote to Mr. Lucas asking for a few minute scrapings of this material, and he sent me some small lumps which had been found in a cloth bag in the tomb of Tutʿankhamūn. I fused a small speck of this substance wrapped up in a pellet of thin gold plate, and as the fused globule solidified it "spit" out a small globule exactly as silver does. But a thin plate hammered from this globule and then heated showed no trace of further "spitting".

It was now obvious that the gold and orpiment would have to be melted together and solidified under pressure to obtain a specimen that would "spit" after being fashioned into a plate by hammering or rolling. I accordingly heated the two in a small sealed tube of fused quartz, melting the gold down to a round globule. Some of the sulphur and arsenic was liberated as vapour under pressure and glowed bright red in the non-luminous tube (for quartz radiates practically no light even at very high temperatures). After cooling the tube was opened and a plate hammered and rolled from the globule. This when heated to a dull red heat grew a marvellous crop of metal mushrooms, microphotographs of which are reproduced in Pl. xi, figs. 3 and 4 (the gold whitened by magnesium smoke in the latter case).

This suggested that the necessary pressure required for keeping sufficient arsenic and sulphur in the gold to produce "spitting" may have resulted from the fusion of a considerable mass in a crucible, for we know from the bas-reliefs at Saḳḳârah that the Egyptian used furnaces operated by air blasts from human lungs. But there was another and more probable alternative, namely that the sequins had been fashioned from native gold nuggets, which contained a trace of iron as an impurity. These having been originally formed deep in the earth and under pressure, might easily contain sulphides, arsenates, or similar gas-producing compounds in sufficient quantity to produce the small amount of "spitting" shown by the sequins.

A number of plates were therefore hammered from small nuggets of native gold from various localities, and most of them showed the excretion of minute globules when heated to a dull red. None of these showed any trace of the purple film, however, and I wrote to Mr. Lucas asking for specimens of native Egyptian gold. The single specimen which he sent gave globules, but no purple film. This gold was, however, embedded in quartz, and unsuitable for immediate fashioning into ornaments. Alluvial gold may very probably have been imported from Abyssinia, where the placer deposits are still worked, and it will be extremely interesting to see whether the purple colour will appear on plates hammered from nuggets from this or from other possible sources of ancient Egyptian gold. On the whole, I favour the theory that the sequins were hammered from nuggets of native gold containing a trace of iron, one of which was accidentally dropped into a fire, or perhaps heated for annealing, with the resulting discovery of the purple colour.

The theory that orpiment and iron (perhaps in the form of yellow ochre) were introduced into the gold, which was then hammered into shape and subsequently heated seems less probable, as two novel treatments are involved instead of one, unless annealing by heat was customarily employed by the Egyptians.

Some light can perhaps be thrown on this question by a close search for excreted gold globules on ancient Egyptian gold of the Eighteenth and later Dynasties, though it is probable that in most cases hammering subsequent to the annealing process would have destroyed all trace of any globules. Moreover, it seems unlikely that globules would be found on any ornaments, except those hammered from alluvial nuggets, as furnace fusion would probably have driven off the volatile material contained in the gold, except perhaps in the case of the fusion of a considerable mass of the material.

On my discussing these results with Daniel V. Thompson of the Department of Fine Arts of Yale University, he showed me a translation which he had made of a Latin manuscript of the third century, giving methods of altering the colour of gold. One of these directed that the gold be fused with orpiment and other materials.

A complete survey of the gold deposits of Abyssinia is now under way, and I have already received from Mr. E. A. Colson of Addis Ababa small nuggets from five different localities. All yield globules, but none the purple film. Should a sample be found containing iron it might prove to be a valuable clue in locating the rich deposits worked in ancient times.

THOMAS ERIC PEET

WITHIN the short interval of three weeks British Egyptology has sustained the grievous loss of two of its ablest scholars. It is upon the University of Oxford that the blow has fallen in each case. Never before had the prospects of our science at the University shone with greater radiance than at the opening of the present year. F. Ll. Griffith, the Professor Emeritus, had settled down in his beautiful new home on Boar's Hill to what promised to be the opening of an era of fruitful endeavour, and was busy with the publication of his important Nubian excavations and of his great collection of the demotic graffiti at Philae, not to speak of other more remote enterprises or of those in which he merely lent a helping hand. In the University itself Peet was about to enter upon his second term as Reader and prospective Professor of Egyptology, and had already won golden opinions and formed new ties and delivered his Inaugural Lecture. Before three months had elapsed both had passed away, the younger scholar on February 22nd after an operation, and the elder quite suddenly on March 14. In the small circle of our specialism all workers know one another, and scientific and personal relations are closely intertwined. Here were two men admired as much for their splendid characters as for very exceptional talents. The loss alike to those who knew them and to those who merely studied their books is simply incalculable. It is all the more calamitous since we looked to both for continued inspiration and assistance throughout many a long year to come. In simple gratitude to them it behoves us to redouble our efforts so that our work may remain at the high level which it had attained during their lifetime and to no small extent as the result of their labours.

Thomas Eric Peet[1] was born on August 12, 1882, the eldest son of a Liverpool corn-merchant. In his early years he showed signs of that breadth of interests which became ever more conspicuous as life proceeded. His mother was very widely read and played a large part in developing his tastes, helping him to mount his microscope slides and encouraging him with his music—he played successfully at a concert at a very youthful age. In 1893 he went to the Merchant Taylors' School at Crosby, where he at once took a prominent place and began to form valuable friendships which were to last him the rest of his life. Professor Grensted, writing in the *Oxford Magazine* for March 1 last, paints a lively picture of these early years. To Mr. C. R. Fay, whose cousin Eric later married, I am indebted for a detailed account of their schooldays in common, and from this account I make considerable quotations: "It was a day-school, and we usually did our home-work together. He made a habit of getting full marks and a special prize for arithmetic. Very soon he obtained a Harrison Scholarship, which meant a free education, except for Greek, which was an extra. He was strong in classics as well as mathematics, though the latter was his forte. I remember his introduction to archaeology. He and I went to Liverpool University College about 1899–1900 to a lecture on the discoveries at Crete, given by Hogarth or Evans—I forget which. He took elaborate notes, and had to present it as an essay. He drew charming pictures of pots, vases, &c., which I faithfully copied.

"He was not naturally an athlete, but made himself so by sheer enthusiasm and patience. He was an excellent bowler, became cricket captain in 1900–1, and under him the school

[1] In addition to the names mentioned in the text I owe valuable information to Mr. G. Muir Matthews, Professor Newberry, and his brother Mr. M. Dudley Peet.

Lafayette, Ltd.

THOMAS ERIC PEET
1882–1934

again won the Challenge Shield for the district. He was to the front at the annual tennis tournament, and was in the school XV for two years, a keen hard-working forward.

"From the first he was famed in our circle as one who could play Gilbert and Sullivan by ear. When Sullivan died, he said: 'It is a national tragedy'; and was as distressed as if it had been a loss in his own family.

"There was in his nature a strain of quiet fun, which to me was a magnet of attraction. We dressed up once as tramps and called on our neighbours, offering to shovel their snow for *4d.*—and so on. But he was often solemn. When we ragged him, he became still more solemn, and so we stopped it.

"He was immensely patriotic to the school. He has often told me that the great year in his life was in 1901, when, his scholarship gained, he devoted himself to running the school and its cricket. Even I was amazed to see him do no work for days on end.

"He won our leaving scholarship, the Great Crosby (£40 a year for three years) several years before he left. Then he went to try at Oxford; and I remember our thrill and joy when I got his telegram announcing that he was elected to the Jodrell Scholarship for mathematics at the Queen's College. This was a great load off his mind, because he had to live on his scholarship and prizes whilst at the University."

As soon as Eric left school, the family found it necessary to move to a small house in Seacombe, and here the conditions of life can have made study none too easy. But difficulties were for him merely things to be overcome, and deferring to his College tutor's wishes that he should read for honours in Classical and mathematical Moderations, he obtained a second class in both. Two years later he was placed in the same class in the school of Literae Humaniores. He took his degree in 1905, after a most happy and fruitful University career.

It was in his last year as an undergraduate that Peet made the acquaintance of the friend whose enthusiasm and active help enabled him to adopt archaeology as a profession. David Randall-MacIver was at that time Laycock Student of Archaeology at Worcester College, and used to dine at Queen's about once a week. It so chanced that Peet had been invited to the high table one evening when MacIver was there, and the elder man had to use all his natural perseverance and kindliness to break down his younger neighbour's exceptional reserve. The feat was at last accomplished, and a close friendship ensued. At this point MacIver himself shall take up the tale: "Every now and again we would go for a walk together, and, wondering a little what he might be thinking of doing for the future, I used to talk to him of archaeology. For years I had been interested in the Italian prehistoric, and I remember one day, as we were walking over Shotover, waxing eloquent on the extraordinary attractiveness of it, and on the fact that though all the material was lying ready no one had written it up. He told me years afterwards that on that afternoon he said to himself, 'I am going to be the man to do that job'. In the summer he took his schools and then the question of his next move became pressing. He decided that he *would* tackle Italian early archaeology. I directed him to some books, gave him a little elementary instruction in Italian, and he went at it tooth and nail. Then, or very soon afterwards, I introduced him to John Myres, who at once began to take the kindliest interest in him, talked to him and advised him and encouraged him to go forward. I went up to London for two or three months and Peet took lodgings so as to be near, and I gave him a little advice and help from time to time. He did not need anything but to be set on the way. I did not try to teach him or coach him, in fact I really gave him very little time, but he was a cormorant for work and he just devoured it. After a month or two he was so far forward that John Myres thought it practical to make an application for a tiny grant from the Craven Fund which enabled him to go to Italy and make a preliminary reconnaissance of a few weeks. I well remember Peet's joy at this. He came back full of the utmost enthusiasm and having used his short time to such advantage that he was already remarkably well founded, and he then stood for the Craven Fellowship and romped in over any or all other competitors, surprising the examiners by his knowledge." This was in 1906, and before Peet finally turned his face towards Italy he had spent a term as assistant master at a school at Walsall. It has already been described how greatly he had enjoyed his own schooldays, and his interest in education never waned. Later on, when he returned to Liverpool as a Professor, he became a governor of his old school at Crosby and devoted much thought to its concerns.

"The next two years," David Randall-MacIver writes, "were probably among the happiest he ever spent. He was brimful of life, energy, and interest. He travelled far and wide over Italy, sometimes into quite remote places on the Adriatic side, made the acquaintance of every Italian archaeologist of note and formed cordial and intimate friendships. Older men like Pignorini and Ridola and Orsi were delighted with him, told him everything they knew and held him in the highest esteem. Sometimes in later years, before I was myself so well known to them, it has been my most effective introduction to an Italian scholar that I was a friend of Peet's. So he collected and put together the material for his book on *The Stone and Bronze Ages in Italy*, which was welcomed in Italy and all over Europe. It was published in 1909 and is a perfectly mature work. It still holds the field after twenty-six years, and though owing to recent discoveries it needs a little supplementing it will continue to be the leading work for another thirty or forty years. Every archaeologist has it on his shelves."

It soon became obvious, however, that Italian archaeology held out no prospect of a permanent livelihood, and Peet now turned his thoughts to Egypt. With this possibility in mind he called on Percy E. Newberry, the Professor of Egyptology in Liverpool, and through his instrumentality was dispatched to work under John Garstang in the latter's excavations at Abydos on behalf of the Liverpool Institute of Archaeology. Later on in the spring of 1909 he joined Newberry in Cairo for some work in the Delta. In the autumn he transferred his services to the Egypt Exploration Fund. It must have been about this time that I first met him. He had been directed to the Library of the Cairo Museum to seek some Egyptologist unknown to him, and we talked for several minutes at cross-purposes until he discovered who I was, whereupon he at once asked me whether I could help him to learn Egyptian. To this suggestion I gladly consented, proposing that he should come to study with me the following May at Oxford, where I had succeeded MacIver in the Laycock Studentship. The plan proved impracticable in 1910, but found its fulfilment in 1911. By this time Peet was no longer a novice in hieroglyphics, and, with that singular capacity he had for self-instruction, had acquired a good working knowledge of Middle Egyptian. I therefore restricted myself to starting him in Late Egyptian, and together we worked through the Abbott papyrus, which was subsequently to form the starting-point for his admirable publications *The Mayer Papyri* (1920) and *The Great Tomb-Robberies of the Twentieth Dynasty* (1930). Apart from these few weeks with me, so far as I know, he never had any tuition in Egyptian philology. And yet before he died he had even acquired a sound knowledge of Coptic, and had worked through all the more important demotic texts. He was particularly interested in hieratic, and nearly all his publications of texts turned upon writings in that script.

For the next four seasons (1909–13) Peet was engaged in excavation at Abydos, at first under the direction of Professor Naville, and later independently. It is not surprising that this co-operation, though conducted throughout with perfect amity, was not wholly congenial to either scholar. Peet came equipped with the experience and standards of classical archaeology, and the less rigorous methods to which he had to conform could not fail to gall him. Nor could he approve of the re-excavation of the early dynastic Royal Tombs at Umm el-Ga'âb, an undertaking which in fact proved singularly sterile. In course of time it was arranged that his work should be more or less independent of Naville's. While Naville was disinterring the Osireion, Peet was engaged on the cemeteries, and his results were finally set forth in those three admirable memoirs entitled *Cemeteries of Abydos*, I, II, and III, in only the first of which Naville shared the authorship.

In the autumn of 1910, before starting on his work with the Egypt Exploration Fund, Eric Peet had married, his bride being Mary Florence Lawton, the daughter of Richard Johnson Lawton of Chiswick. Friends who knew the facts only superficially, shook their heads over the imprudence of the young man who, with such slender resources, embarked on matrimony with seemingly so light a heart. They judged wrongly. It was an old attachment, and in taking this step Peet acted with the wisdom and accurate foresight which prompted all the decisive actions of his career. The edge was taken off the monotony of camp-life by the presence of his young wife, who adapted herself perfectly to the requirements of the situation. The harmony thus achieved was never broken, except through the cruel separations necessitated by the war or other circumstances. Those of us who, in later years, have had the privilege of being guests in the Peet home at Waterloo, Liverpool, cannot fail to have been struck with the perfect unity of father, mother, and daughter which prevailed there. And that notwithstanding domestic difficulties and periods of ill health which few could have withstood so gallantly. No account of Eric would be complete without, at the risk of indiscretion, thus far uncovering what was the very corner-stone of his existence.

After four seasons in Egypt a winter at home was a welcome change, and Peet was glad to return to his philological studies, which became more and more his principal interest. The materials brought back from Sinai by Sir Flinders Petrie in 1906 still remained to be worked up, and it was arranged that we should co-operate in this. It was an arduous task, for the copies of inscriptions proved to be insufficiently labelled, and we had the greatest possible difficulty in identifying the relationships of this mass of paper sheets. Peet undertook to make facsimiles of all the old squeezes in the British Museum, and as a consequence *Inscriptions of Sinai*, Part I (London, 1917) is a fairly complete corpus of hieroglyphic inscriptions from Sinai. The explanatory text, upon which Eric subsequently expended much time and trouble, has never been published, largely because I felt that fresh collations on the spot were urgently needed. Here is a task that would be a fitting tribute to his memory.

With the claims of his family upon him (both his mother and his mother-in-law were living in his house) Peet continued his Egyptian work until the autumn of 1915, when the inner call to military service became too insistent to keep him at home any longer. Obtaining a commission in the Army Service Corps, he was detailed for service in the Mediterranean, where his knowledge of Italian, modern Greek, and Arabic was bound to serve him in good stead. David Randall-MacIver writes: "Probably none of his friends except myself knows what an exceptionally able officer he proved himself at Salonica in 1916–17. He and one other man supervised the whole of the landing of supplies at the quays. He was only a lieutenant, and his work never received any special official notice, but those who could judge told me that it was extraordinary for ability and tact. Merely for the purposes of this work he perfected his Greek and learned to speak it with rare command and exactness." Still, as Eric wrote to me from France in July 1918, having temporarily given up all that he cared for, his keenest wish was "to be in the real thing, and that of course is the western front". He was now in the 14th Battalion of the King's Liverpool Regiment and rejoiced to belong "to a unit with real *esprit de corps*, and to deal with men instead of languages". Still, he longed to return to his home and his studies, and it was with feelings of thankfulness that he found himself unscathed and free of the army soon after the beginning of 1919.

It was Newberry who secured his early demobilization, and who shortly afterwards resigned the Brunner Professorship of Egyptology at Liverpool in his favour. The Egypt Exploration Society (the name "Fund" had been discarded) was anxious to recommence excavations, and looked to Peet as the obvious director of its field operations. This was in accordance neither with his own desires nor with the obligations of his new post as he conceived them. None the less, sooner than disappoint those who looked to him for support, he eventually agreed to resume work in Egypt, and it was he who with Newton started the Society's work at El-Amarna, the results of which were published, together with those of the next season, when the directorship had passed into the hands of Leonard Woolley, in the volume *City of Akhenaten I*. This, apart from a short stay in 1929, when Peet delivered a course of lectures at the University of Cairo, was his last sight of Egypt. By that time, indeed, the outwardly eventful stages of his life had come to a close, except for the move to Oxford and the election to a Fellowship at his old College, which were the culmination of his ambitions. Apart from some visits to Italy or France to study papyri, or to Germany for a holiday, his life flowed along steadily at Liverpool, well filled by his investigations and academic duties. These were diversified with lawn tennis and music, house-painting and paper-hanging, construction of his own wireless outfit, an occasional walking tour with friends at the Lakes, and an all too rare visit to myself. It is not intended to rehearse the various appointments he held outside Liverpool, or to enumerate his contributions to our science. His books are too well known to need mention here, where we are concerned rather to depict the man, before that shortness of memory which comes so easily has dimmed the recollection of him. However, in the *Journal* which he edited with such conspicuous success from 1923 onwards, it would be inappropriate to omit reference to the immense amount of labour he expended upon it—labour all the more remarkable since he combined with it the editorship of the *Liverpool Annals of Art and Archaeology*.

These pages must conclude on a more personal note. How do we remember him? As one intensely alive and vital, a normal human being in the very best sense. In social intercourse he could be glum, nay almost sepulchral in appearance, until a random remark caught his fancy, when his whole face would light up with mirth and humour. After this he would take part in the talking like the rest of us. He seldom chose the topic of conversation (at least in my society) and was reserved upon intimate themes. In correspondence he was more communicative, and indeed very downright in the expression of his opinions. His versatility was extraordinary, it being a necessity of life with him to develop himself in all directions. From early youth sheer need had made him something of a jack-of-all-trades, and this characteristic stuck to him throughout life. Possibly it prevented him from attaining the very highest level in any one direction, but how could it have been otherwise? Intellectual dishonesty and slipshod methods of research were his bug-bear, and in his censure of them he did not mince his words. His own scientific work was fundamentally solid, the expression of his conclusions crystal-clear. Perhaps he was slightly lacking in imagination, but he saw reality through and through. He loved the society of his fellows, and had as devoted a set of men-friends as any one could wish for. No one ever found him shirking a responsibility, and his unobtrusive kindnesses were innumerable. He never wholly took leave of the schoolboy, yet was essentially a man. And not only a man, but one of whom we can faithfully declare that he was "true and just in all his dealings".

ALAN H. GARDINER.

Plate XIII

FRANCIS LLEWELLYN GRIFFITH
1862–1934

FRANCIS LLEWELLYN GRIFFITH

The death of Professor Griffith, occurring less than three weeks after that of Eric Peet, was a shattering blow to Oxford, to our Society, and to Egyptology generally. It came without warning, the result of a heart attack. There had been nothing to suggest the imminence of such a catastrophe. Up to the last he had taken part in games as strenuous as net-ball and hockey, and only recently he had outlined to me a full programme of work which there seemed every likelihood of his living to carry out. His tall, upright figure showed no signs of old age, and his mind and memory were as efficient as ever. With his departure one of the chief focuses of Egyptological work in the world has been deprived of the light to which it owed most of its brilliance. We who remain have a hard task before us to maintain the high standard of scholarship set by his outstanding genius.

Francis Llewellyn Griffith[1] was born on May 27, 1862, the youngest son of the Rev. John Griffith, LL.D., Head Master of Brighton College. His father was a distinguished mathematician, and the nine children all in their several ways inherited his intellectual interests. A cultured home early set its mark on the future Egyptologist, and to the end of his days none could meet him without noting the congenital refinement inbred in him. Several of his brothers had a keen taste for natural history, which they passed on in due course to Frank. His next eldest brother, Arthur, with whom he was particularly intimate both in childhood and subsequently, was also interested in British Archaeology, and while an undergraduate excavated Saxon graves near Cambridge and elsewhere. I have before me a letter written by Frank to his Aunt, Miss Sophy Foster, when he was only ten, which is so prophetic of his future cast of mind that I cannot refrain from quoting it in its entirety:

"We have had two pretty long walks, one to Hatfield, 9 or 10 miles there and back, and another to St. Albans to see the Abbey Church. When we went to Hatfield we went through Hatfield Park and saw a nuthatch and saw some sort of deer—I don't write any particular name for it as there is a division of opinion about it—and saw the river Lea. When we went to St. Albans we saw the shrine of St. Alban, which has just been discovered and is being restored by Sir Gilbert Scott. It is such an enormous church. We have been doing the moths and butterflies, and we have got more than half-way through them. I remain, Your affectionate nephew."

This letter must have been written soon after his father's retirement from his head-mastership, when he accepted a living at Sandridge Vicarage, Herts. Before leaving Brighton, Dr. Griffith had insisted on Frank's becoming a pupil at the College for one week only, so that he might be able to style himself an old Brightonian. At Sandridge his father made himself responsible for the boy's tuition in mathematics and classics until he went to school. Much earlier than this Frank must have acquired some knowledge of the classics, for it is recorded that at the age of eight he recited the Lord's Prayer in Greek to his godfather the Rev. John Ward, a performance which so much pleased the latter that he presented him with a Greek Testament. In course of time one of the masters at Brighton College, Mr. Heppenstall, a personal friend of Dr. Griffith's, was appointed head master of Sedbergh, and took with him a number of selected pupils, to whose number Frank Griffith was added. At that school he shared a study with a boy later to become Archdeacon Cory, and their

[1] For some of the material upon which this memoir is based I am indebted to Mrs. Griffith, Mrs. C. H. W. Johns, as well as to O. M. Dalton and others.

common interest in various branches of natural history drew the two all the closer together. The Archdeacon well remembers his invariable good temper and the enthusiasm with which he gave his whole mind to anything which he undertook. Fossils were then his particular hobby, and his keenness made him completely oblivious to the agony caused to others by the squeaking of his pocket-knife as he scraped away the superfluous stone around his treasures.

The over-robust atmosphere of Sedbergh was, however, not wholly suited to a boy of Frank Griffith's sensitive temperament, and after eighteen months there he was removed to Highgate, where one of his brothers, the Rev. C. H. Griffith, was a master. It was here, apparently through the influence of one of his teachers, that he first acquired that interest for Egyptology which was to become the prevailing passion of his life. In childhood he had read Belzoni, and two of his elder brothers, one after another, travelled in Egypt. In 1879 he gained an open scholarship at the Queen's College, Oxford,[1] but on arriving there as an undergraduate, obstinately refused to read for honours, much to the disappointment of his family, who had anticipated high academic distinction for him. The example thus set is certainly not one to be copied by budding Egyptologists nowadays. In Griffith's case it not only was justified by events, but also was probably a necessary and practical decision. He may well have realized that now was his only chance of acquiring serious knowledge of the science upon which he had set his heart, since no opening in Egyptology was discernible and he would be bound to earn his living after taking his degree. Moreover, the acquisition of the Egyptian language was in those days a much more difficult achievement than it is at present. In comparison with then our present-day initiates of hieroglyphic are spoon-fed. At that time there were only the inadequate grammars of de Rougé and Renouf, in which the different phases of the language were not distinguished from one another. Erman's *Neuägyptische Grammatik* and Stern's *Koptische Grammatik* were to be issued only in the following year. Every student had to make his own hieroglyphic vocabulary, since those of Brugsch and Pierret were insufficient. Good editions of hieroglyphic texts were rare. Moreover, the gateway to Egyptian and Coptic was through French and German, and those modern tongues had to be mastered. At Oxford itself there was no teaching in Egyptology, and indeed very little sympathy for it, though at Queen's Griffith had the great good fortune to enjoy the friendship and encouragement of Professor Sayce.

It is a striking testimony to Griffith's exceptional intellectual gifts and extraordinary independence of mind that no one has ever detected any evil consequences of his refusal to take the ordinary classical curriculum. As a Demotic scholar he was frequently under the necessity of quoting Greek, and more than once he has lectured on the second book of Herodotus. No one, so far as I am aware, has ever caught him out over an error in Greek or Latin. Indeed, he would sometimes complain (in the mildest possible fashion, for he could do no other) of the deplorable ignorance of the classics shown by younger colleagues reputed to be classical scholars. The fact is that Griffith, with his amazing memory and innately critical mind, was a man who taught himself better than any one else could have done. But I repeat, his example is not one to be imitated by lesser men.

On leaving the University at Midsummer 1882 (he took his B.A. degree in 1884) he was articled to a solicitor brother. It can well be imagined how little to his liking this occupation was. None the less, he derived from it a knowledge of affairs which later stood him in good stead. Some who knew him intimately would be surprised to learn how successful he was in his financial operations. When in his forties he was lucky enough, as we shall see, to inherit

[1] He himself attributed his success to the subject set for English Essay, which involved a considerable knowledge of natural history.

a very considerable fortune. But it was his own acumen in money matters which, before he died, very largely increased his capital. No material interests could, however, quench his thirst for Oriental research, and after twelve months of the law his family, and in particular Arthur Griffith (invariably sympathetic to his younger brother's tastes), set about finding him a place in connexion with Egyptology.

How exactly his introduction to the Egypt Exploration Fund came about I have been unable to elicit, but at the second Annual Meeting in October 1884, Miss Amelia B. Edwards announced the discovery of that rare being, a young English student capable of reading an Egyptian inscription, and Flinders Petrie was able to report the valuable help afforded him by Frank Griffith, "the student of the Egypt Exploration Fund", during the previous season at Naukratis. Generous assistance from Mr. Henry Willett, an old friend of the family at Brighton, and from his aunt, Miss Foster, had rendered possible this fulfilment of Griffith's aspirations. For the next four winters he was regularly employed in Egypt, mainly as an assistant to Petrie, but once at least under Naville, and on several occasions in sole charge of the work or making enterprising journeys of his own. The excavations of the Society were at that time wholly confined to the Delta, and Griffith thus acquired a knowledge of that part of Egypt which few other Egyptologists have possessed. It was at Tanis that he had his first glimpse of Pharaonic ruins. Though inscriptions were his main interest, he flung himself whole-heartedly into the archaeological side of the work, and was warmly commended by his chiefs. At Gemayemi he discovered a glass-factory. His letters at this period show that the old interest in natural history was still very much alive, for they are full of remarks about birds seen in the course of his ramblings. Before 1886 he had already prepared his edition of the two late hieroglyphic papyri from Tanis, though the book appeared only in 1889. Many of the early memoirs of the Fund testify to his diligence and contain translations of hieroglyphic inscriptions found by him. One expedition which afforded him particular pleasure, and to which he often alluded in later days, was that across the desert of northern Sinai to the Wady el-Arish, where Sayce had discovered a long and interesting mythological inscription. Of this inscription Griffith published an excellent copy and translation in the seventh memoir of the Fund.

At the end of 1886 Flinders Petrie, having parted company with the Fund, seized the opportunity to see more of Upper Egypt than had been possible previously, and invited Griffith to accompany him. A small boat was hired at Minieh, and the two friends spent six weeks wandering up to Assuan, walking most of the way and copying inscriptions as they went. The harvest was very great, and Petrie published the graffiti in his volume *A Season in Egypt*, while Griffith edited the tomb-inscriptions in the *Proceedings of the Society of Biblical Archaeology*. The most important result of this tour, however, was Griffith's book on the *Inscriptions of Siût and Dêr Rîfeh*, an undertaking which led directly to the formation of our Society's Archaeological Survey of Egypt. The inscriptions of the Siût tombs proved to be of the utmost importance, containing the only extant records of the Herakleopolitan kings of the Ninth and Tenth Dynasties. Further visits in the next two years, together with some study at the British Museum, were needed for the completion of this volume, which was published in 1889. On a leaf before the Introduction, Griffith caused to be printed one of the most momentous utterances of his life, the first two paragraphs running as follows:

"*If a small portion of the sums of money that*, in the name of scientific research, *have been spent in Egypt on treasure-hunting for antiquities, on uncovering monuments and exposing them to destruction*, on unwatched *excavations from which the limestone sculptures have gone straight to the kiln or to the village stone-mason—if a small portion of this had been utilized in securing systematically throughout the country accurate and exhaustive copies of the* *inscriptions above ground and in danger, the most important part of all the evidence of her past that Egypt has handed down to our day would have been gathered intact, instead of mutilated beyond recovery.*

"*If the remainder of those sums had been devoted to watching, and taking proper measures to preserve, the monuments of Egypt, the present century would not have been destined above all other periods to the maledictions of posterity on account of the searching and unrelenting damage done to these records, that had weathered so many centuries with hardly an injury, and that should have delighted mankind for so many ages to come.*"

Great interest was aroused by a paper on the inscriptions of Siût read at the annual meeting of the Fund in November 1889. This paper was prefaced by a plea for recording the monuments above ground similar to that reprinted in the quotation above. The project of an Archaeological Survey was taken up with enthusiasm, and Griffith was appointed Editor of the series. It is needless to expatiate on the importance of this branch of our Society's work, which now counts twenty-five volumes and embodies the labours of such distinguished scholars as P. E. Newberry, N. de G. Davies, and A. M. Blackman. Many of the translations incorporated in these volumes are wholly or in part due to Griffith, whose wise guidance has ensured the high standard maintained throughout.

Griffith's work in Egypt came to an end in 1888, and there being no vacancy in the Egyptian Department of the British Museum, a place was found for him in the Department of British and Medieval Antiquities. Such was the reputation which he had already made for himself, that the Trustees admitted him to the British Museum without examination, a most unusual course. It soon became obvious, however, that Griffith was neither happy in, nor suited to, his new duties. Although performing his allotted task with scrupulous conscientiousness, it was plain to all how eagerly he resorted to his beloved inscriptions and papyri at every possible occasion, often neglecting his lunch in favour of hieroglyphics. His chief, Sir A. Wollaston Franks, fortunately took a very broadminded view of the situation, and he was allowed to go his own way. Personally he was a great favourite in the department, though no little fun was poked at his absent-minded manner and absorption in his own pursuits. During the first part of the eight years spent in the service of the Museum he lodged in Torrington Square with Flinders Petrie, who, after Miss Amelia B. Edwards' death in 1892, became Edwards Professor of Egyptology at University College, Gower Street. Griffith was appointed Assistant Professor in the same year, and taught hieroglyphics at the College at such times as his official work permitted. The strenuous life entailed by this double occupation was not altogether favourable to his health, and it was a change for the better when his sister Agnes (later Mrs. C. H. W. Johns) arranged to share a flat with him in Ridgemount Gardens.

With the inauguration of the Archaeological Survey the activities of our Society were broadening out, and the Committee considered it desirable to provide the members with a popular account of each season's work, to appear annually. Griffith was appointed editor of these *Archaeological Reports*, which in his hands became not merely a review of the year's excavations by whomsoever made, but also a bibliography of recent publications. This most useful but exacting work was carried on by him for twenty successive years (1892–1912), after which it was superseded by the present *Journal*. Meanwhile the bibliographies (for which Griffith had the help of Crum and Kenyon in their own special domains) had increased greatly in bulk and had come to be among the most valuable undertakings of the Fund. What labour such bibliographical work entails nowadays may be gathered from the Graeco-Roman section published in the present issue of the *Journal*. Griffith self-sacrificingly continued his bibliography of the subjects covered by his own studies down to 1926. Since then the survey of the Pharaonic period has regrettably lapsed, apart from two occasions on which it was undertaken by Capart. Here is a task definitely owed to Griffith's memory, and it is much to be hoped that some younger scholar will be found ready to shoulder the burden.

In 1896 Griffith took a step which was to alter the whole current of his life. He married, retired from his post at the British Museum, and went to live at his father-in-law's home at Riversvale, Ashton-under-Lyne. His first wife was Miss Kate Bradbury, who had been a close friend of Miss Amelia B. Edwards, and was a highly cultured woman some years his senior, with a keen zest for archaeology. At Ashton-under-Lyne Griffith won the warm affection of his wife's father, a wealthy cotton-spinner. Griffith was now free to indulge his taste for Egyptology untrammelled, and from this date onwards his contributions to the language, which since his return from Egypt had been confined to articles in periodicals and single chapters in the works of others, were able to take shape in stately tomes bearing his own name. The first-fruits of his freedom were the two volumes on *The Petrie Papyri* (1898), containing transcriptions and translations of the hieratic papyri discovered by Flinders Petrie at Kahun. The importance of this achievement can scarcely be over-estimated. Here, for the first time, were truly cursive texts of the Middle Kingdom, written in a script of which the numerous ligatures distort the component signs almost out of recognition. It needed not only a profound knowledge of the language, but also a special talent for palaeography, to decipher these formidable letters and business documents. Every one knows how well Griffith acquitted himself of the task. This work is among the acknowledged masterpieces of Egyptian philology, and needs little correction even at the present day.

After only six years of married life Mrs. Griffith died. By her express wish, her husband continued to live at Riversvale. There his sister joined him, on the kindly suggestion of Mr. Bradbury, and the trio formed a very happy household. It was in the foregoing years that Griffith began to take an intensive interest in Demotic, the province of Egyptian philology wherein he was destined to reach a pinnacle above all his contemporaries. He had turned his attention to this latest and most difficult style of Egyptian writing at least as early as 1895, but his first important publication on the subject is dated 1900. This was the work entitled *Stories of the High Priests of Memphis* and contained not only a new treatment of the well-known story of Setne Khamuas, but also the *editio princeps* of a new and much later story relating to the same man on the *verso* of a Greek papyrus in the British Museum. The appearance of this work made it clear to those competent to judge that in Griffith's hands Demotic studies were to attain an altogether higher plane of scientific accuracy, an opinion confirmed by the publication in 1904 of *The Demotic Magical Papyrus of London and Leiden*, where he had Sir Herbert Thompson as a collaborator. It was only in 1909, however, that appeared the large and epoch-making *Catalogue of the Demotic Papyri in the John Rylands Library*, which the late Professor Spiegelberg used to term the Demotist's Bible. Here Griffith was fortunate enough to be concerned with a long narrative papyrus dating from the reign of Darius I. The earlier stages of Demotic had always presented special difficulty, and Griffith's pioneering feat of deciphering the Petition of Peteese proclaimed him the unrivalled master in this field.

Meanwhile, the externals of Griffith's life had passed into a new phase. In 1901 he accepted a two-term Readership in Egyptology at Oxford, which necessitated his dividing his time between the University and Ashton-under-Lyne. When in Oxford he lived first at rooms in Headington and then with his sister in Norham Road. On the death of Mr. Bradbury in 1907 Griffith found himself heir to a very considerable fortune, which enabled him to take a large house in Norham Gardens affording ample space for his ever-growing library.

The affluence that had fallen to his lot was characteristically employed for the good of Egyptology. He presented a sum of £8,000 to the University of Oxford "for the encouragement of Egyptological study", and it is from this Fund that the expenses of the Oxford Excavations in Nubia and the indispensable Bibliography by Miss Porter and Miss Moss have been defrayed. In 1909 Griffith married again, his second wife being Miss Nora C. C. Macdonald, the daughter of Surgeon-Major James Macdonald, of Aberdeen. In her he found a helpmate only too ready to play her part in all his projects, for which her admirable intellect and skill in draughtmanship pre-eminently fitted her. Also in another respect Griffith profited greatly by this union. From his earliest years he had been shy of large gatherings, had avoided dinner parties as far as possible, and never went to the theatre. By gradual degrees all this was altered. In his later days Griffith became thoroughly sociable, took part in many outdoor sports, and developed sides of his personality which had hitherto lain dormant. None could fail to detect the influence at the back of these healthy changes.

It is not to be inferred from my last paragraph that Griffith was at any time in his career averse from physical exercise, or indeed that he was ineffectual in anything he undertook. As a pedestrian he was almost terrifying, and more than one Egyptologist, after trotting at his side for a dozen miles or so, has returned home ripe for bed. He was at his best during those walks, pointing out the birds and the flowers encountered, drawing from his experience interesting memories of Egypt, or divulging some recent philological discovery of his own. On one occasion he saved a person from drowning. It was in 1905 that one day he saw a man who had thrown himself into the Bardsley Canal. Divesting himself of his heavier clothing, he gave these, together with his gold watch, into the keeping of a passing tramp. He was not a strong swimmer, so he prepared his plan of action carefully. Waiting till the man was past struggling, he then plunged in and succeeded in bringing him to the other side. Then he ran for help. On his return he was delighted to find the tramp still there with his belongings.

Nevertheless, it was in the realm of intellectual adventure that Griffith was boldest and most insatiable. In 1900–1 Old Coptic, the documents for which are very scanty served him as the goal of a minor excursion. In 1907 he began to turn his thoughts towards Meroitic, "hoping to find some connexion with Egyptian Demotic on the one hand and with Christian Nubian (as deciphered by Heinrich Schäfer) on the other".[1] This new departure was encouraged by the discoveries of fresh material by Randall-MacIver and by Garstang, both excavators gladly entrusting to him the publication of their finds. A decisive step in the decipherment was taken when Griffith found in Berlin a funerary text in Meroite hieroglyphic parallel to those in the cursive writing. This gave several exact equations, letter for letter, between the two scripts. Three separate monographs and a number of articles were consecrated by him to this topic, in which he sustained his interest up to the very end. A related and equally remote theme was the early Nubian written in Coptic characters. Here, as indicated above, Schäfer had been the pioneer. In 1908, however, a complete manuscript in that language had come into the possession of the British Museum, and was published in photographic facsimile by Sir Ernest Budge. Into the study of this manuscript Griffith plunged with that voracious appetite which manifested itself when anything new and undeciphered came to light. His translation and vocabularies, published in the *Abhandlungen* of the Berlin Academy (1913), were warmly applauded by the rare scholars in a position to judge of them.

The interest in Nubia which had thus awoken in Griffith led him to a resumption of the

[1] See the Preface to Griffith's volume entitled *Karanog*, being Vol. VI of the Eckley B. Coxe Junior Expedition to Nubia.

field-work upon which he had turned his back in 1888. In 1910 and the following seasons, Mrs. Griffith and he carried on excavations first at Faras and then at Napata. The war put a stop to these activities, and during it Griffith, with characteristic devotion, worked in the hospitals of Oxford, no menial job being too humble for him. It was only in 1921 that he could begin to publish the meticulously careful report on his excavations, which continued through several volumes of the Liverpool *Annals of Archaeology and Anthropology*. In 1923–4 he dug for our Society at El-Amarna, and in 1930 the Oxford Excavations in Nubia were resumed with great success at Kawa, nearly opposite Dongola, where Amenophis III had placed a colony and built a temple called Gem-Aten. Many important inscriptions of different periods were discovered, and still remain to be published.

This incomplete and inadequate account of an extraordinarily active and fruitful life has made considerable demands upon the space of the *Journal*, leaving little room for the personal recollections upon which I would so gladly have dwelt.[1] Our association was of forty years' standing, for it was in my schooldays that he already took an interest in my Egyptological aspirations, which he never failed to encourage and assist to the full extent of his power. How many there are that can tell the same tale! His mild unvarying friendship was extended to all Egyptologists, at whose service he ungrudgingly placed the vast stores of his learning. Though his self-criticism was of the severest, I sometimes thought his judgements of others too lenient. If ever he saw a spark of originality, his enthusiasm would be kindled. The fact is that this gentle and lovable man could neither think nor speak unkindly of any one. Those who had offended against him he easily forgave. Reserved and shy, he remained somewhat inscrutable, even to those who had known him for years. His nature would spring surprises upon us. I had been totally unaware of his talent for music, though I feel sure I must sometimes have spoken to him of the pleasure I took in listening to it. One evening not long ago, whilst I was staying with him, I heard some one playing the piano with a delightful touch and was astonished to learn that it was he. A trait which I learned only a week ago was his love for children and young people and his joy in their company.

Such a personality does not die. His example and influence will continue to guide and inspire our work. Important results of his own remain to be published, among which the vast collection of Demotic Graffiti accumulated in Nubia is actually in the press. It is an open secret that his unsurpassed library and entire fortune are ultimately to become the possession of Oxford University. His achievement has been such that Academies and scholars all over the world have delighted to honour him, a fact to which the fine volume of *Studies* presented to him on his seventieth birthday bears eloquent witness.

ALAN H. GARDINER

[1] Some will be found in a notice of Griffith which I wrote for the *Oxford Magazine* of April 26, 1934.

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A. PAPYRI (1932–1933)

The work is again divided as follows:

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§ 2. Religion, Magic, Astrology (including texts). A. D. Nock, Harvard University, Cambridge, Mass., U.S.A.

§ 3. Publications of non-literary texts. C. C. Edgar, Vauréal, Doctors' Commons Road, Berkhamsted.

§ 4. Political History, Biography, Administration, Topography and Chronology. J. G. Milne, 20 Bardwell Road, Oxford (Ptolemaic and Graeco-Roman Periods), and N. H. Baynes, Fitzwalters, Northwood, Middlesex (Byzantine and Arab Periods).

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§ 6. Law. F. de Zulueta, 37 Norham Road, Oxford.

§ 7. Palaeography and Diplomatic. Miss M. E. Dicker, St. Mary's Convent, Wantage, Berkshire.

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§ 9. General Works, Bibliography, General Notes on Papyrus Texts. Miss M. E. Dicker.

§ 10. Miscellaneous, Excavations, Personal. Miss M. E. Dicker.

The authors wish jointly to express their gratitude to all those scholars who have sent them off-prints of their articles, a kindness which has greatly facilitated the work of compiling this bibliography.

The following abbreviations have been used in quoting periodicals:

A.J.A. = *American Journal of Archaeology.*
Am. Hist. Rev. = *American Historical Review.*
Am. Journ. Arch. = *American Journal of Archaeology.*
Am. Journ. Phil. = *American Journal of Philology.*
Anc. Egypt = *Ancient Egypt.*
Ann. Serv. = *Annales du Service des Antiquités de l'Égypte.*
Arch. f. Rel. = *Archiv für Religionswissenschaft.*
Arch. Giurid. = *Archivio giuridico.*
Archiv = *Archiv für Papyrusforschung.*
Arch. R. u. W. = *Archiv für Rechts- und Wirtschaftsphilosophie.*
Ä.Z. = *Zeitschrift für ägyptische Sprache und Altertumskunde.*
B.C.H. = *Bulletin de correspondance hellénique.*
Boll. fil. class. = *Bollettino di filologia classica.*
Bull. bibl. et péd. = *Bulletin bibliographique et pédagogique du Musée Belge.*
Bull. Ist. Dir. Rom. = *Bulletino del Istituto di diritto romano.*
Bull. Soc. Arch. d'Alex. = *Bulletin de la Société Royale d'Archéologie d'Alexandrie.*
Bursian = *Jahresbericht über die Fortschritte der klassischen Altertumswissenschaft.*
B.Z. = *Byzantinische Zeitschrift.*
Chron. d'Ég. = *Chronique d'Égypte.*
Cl. Phil. = *Classical Philology.*
Cl. Quart. = *Classical Quarterly.*
Cl. Rev. = *Classical Review.*
Cl. Weekly = *Classical Weekly.*
C.-R. Ac. Inscr. et B.-L. = *Comptes-Rendus de l'Académie des Inscriptions et Belles-Lettres.*
D. Lit.-Z. = *Deutsche Literaturzeitung.*
G.G.A. = *Göttingische Gelehrte Anzeigen.*
Griffith Studies = *Studies presented to F. Ll. Griffith*, Egypt Exploration Society, 1932.
Hist. Z. = *Historische Zeitschrift.*
Jahrb. f. Lit. = *Jahrbuch für Liturgiewissenschaft.*
J.H.S. = *Journal of Hellenic Studies.*
Journal = *Journal of Egyptian Archaeology.*
Journ. Sav. = *Journal des Savants.*
J.R.S. = *Journal of Roman Studies.*
K.V.G.R. = *Kritische Vierteljahresschrift für Gesetzgebung und Rechtswissenschaft.*
L.Q.R. = *Law Quarterly Review.*
N.G.G. = *Nachrichten der Gesellschaft der Wissenschaften zu Göttingen.*
O.L.Z. = *Orientalistische Literaturzeitung.*
Phil. Woch. = *Philologische Wochenschrift.*
Rech. sc. relig. = *Recherches de science religieuse.*
Rev. arch. = *Revue archéologique.*
Rev. belge = *Revue belge de philologie et d'histoire.*
Rev. de phil. = *Revue de philologie.*

Rev. d'hist. eccl. = *Revue d'histoire ecclésiastique.*
Rev. ét. anc. = *Revue des études anciennes.*
Rev. ét. gr. = *Revue des études grecques.*
Rev. hist. dr. = *Revue historique de droit français et étranger.*
Rev. hist. rel. = *Revue de l'histoire des religions.*
Rhein. Mus. = *Rheinisches Museum für Philologie.*
Riv. di fil. = *Rivista di filologia classica.*
Riv. Stor. Dir. Ital. = *Rivista di storia del diritto italiano.*
Sitzungsb. . . . = *Sitzungsberichte . . .*
Symb. Oslo. = *Symbolae Osloenses.*
Theol. Lit.-Z. = *Theologische Literaturzeitung.*
Z.f.Kirchengesch. = *Zeitschrift für Kirchengeschichte.*
Z. f. Numism. = *Zeitschrift für Numismatik.*
Z. f. vergleich. Rechtsw. = *Zeitschrift für vergleichende Rechtswissenschaft.*
Z. neut. Wiss. = *Zeitschrift für neutestamentliche Wissenschaft.*
Z. Sav. = *Zeitschrift der Savigny-Stiftung (Romanistische Abteilung).*

1. Literary Texts.

General. Interest is largely centred on the novelties from Oxyrhynchus which the Italians continue to issue with commendable promptness. In *Bull. Soc. Arch. d'Alex.*, 28, 123–42, Norsa and Vitelli publish: (1) Scholia to the *Aitia*, important as fixing the first lines of the Prelude and the two succeeding Aitia; (2) Philosophic Dialogue; (3) Romance, with names of Staphylos, Dryas, Hippotis; (4) Comedy, perhaps the *Prospaltioi* of Eupolis. *Ibid.*, 29, 249–56, N. and V. publish fragments from the *Ploutoi* of Cratinus, with plate. Again, in *Stud. Ital. di Filol. Class.*, x (1933), 119–24, N. and V. edit 19 lines from a Mime of Sophron, ταὶ γυναῖκες αἵ τὰν θεόν φαντι ἐξελᾶν, the original of the Pharmakeutriai of Theocritus, and *ibid.*, 247–53, further fragments. In *Atene e Roma*, 1933, 3–8, the same editors publish fragments of Archilochus, choliambic epodes.

Hunt has issued *Tebtunis Papyri*, iii, pt. i, including Hesiodic Catalogue relating to Minos, Lyric extracts, *Inachus* of Sophocles, Comedy, Treatise on Music, List of Tragedians (three unknown), *Od.* i, iv, v, all third to second centuries B.C.

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Epic, Elegiac, and Iambus. A. Wifstrand has published an important work, *Von Kallimachos zu Nonnos: Metrisch-stilistische Untersuchungen zur späteren griech. Epik und zu verwandten Gedichtsgattungen.* Lund, 1933.

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M. N. Tod edits in *J.H.S.*, liii (1933), 54–6, "An Unpublished Epigram in Oxford", and H. T. Wade-Gery writes *ibid.*, 71–104, on "Classical Epigrams and Epitaphs".

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E. Kalinka writes on the fragments of the Lock of Berenice in *Anzeiger der Ak. der Wiss. in Wien*, 1932, 204–10.

V. Bartoletti writes on the *Iambi* in *Stud. Ital.*, x, 177–9, 223–9.

In *Bodl. Quart. Rec.*, vii (1933), 233, Lobel places fragments of P. Oxy. 1011 (*Iambi*).

The new *Archilochus* is claimed for Callimachus by Pfeiffer in *Philologus*, xlii (1933), 265–71, who refers to an article by Pasquali, "Archiloco o Callimaco?", in *Stud. Ital.*, x, 169–75. Coppola discusses "the new Archilochus and the first law of Knox" in *Stud. Ital.*, x, 165–8.

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MILNE proposes restorations in P.S.I. 1181 (Bacchylides ?) in *Cl. Rev.*, XLVII, 62.

Restorations in Sappho, Bk. I, are proposed by MILNE in "A Prayer for Charaxus" in *Aegyptus*, XIII, 176–8, and in "Sappho's Ode to Gongyla" in *Hermes*, LXVIII, 475–6. Further, in the Anactoria ode l. 9 read [ἐς Πάρον] σέβας Τροΐα[ς π]λέοι[σα = "Setting sail (metaphorically) for P", and in the ode to Arignota (Lobel, p. 45) κῆρ ἄσᾳ βόρηται = "Eats her heart out with weariness", *cf.* θυμοβόρος and *Prom. Vinct.* συννοίᾳ δάπτομαι κέαρ.

F. DORNSEIFF writes on "Alkmans Mädchenlied für Orthia", in *Die Antike*, IX (1933), 121–9.

Drama. The new fragments of the *Niobe* and *Diktyoulkoi* have produced a crop of articles, among which may be mentioned K. LATTE in *N.G.G.*, 1933, 22–9, I. CAZZANIGA in *Rendiconti Istituto Lombardo*, LXVI, 843–52, P. MAAS in *Gnomon*, IX, 289–92, A. KÖRTE in *Hermes*, LXVIII, 249–74. VITELLI sums up the result of these in "I nuovi frammenti di Eschilo" in *Bull. Soc. Arch. d'Alex.*, XXIX, 229–48, adding a new fragment of the second play.

R. PFEIFFER identifies P. Oxy. 2077 as from the *Skyrioi* of Sophocles in *Philologus*, XLII (1933), 1–15.

GALLAVOTTI publishes in *Riv. di fil.*, XI, 177–88, hypotheses to the *Rhesus*, *Rhadamanthys*, and *Skyrioi* of Euripides from a second-century papyrus. The first was already known.

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History. The alleged "Diadochushistoriker" (P. Vindob. 31954) is identified as Pseudo-Callisthenes by SEGRÈ in *Riv. di fil.*, XI, 225–6, and by H. FUHRMANN in *Archiv*, XI (1933), 107–9, correcting DE SANCTIS, "La Capitolazione di Olimpiade", in *Mélanges Glotz*, I (1932), 315–18.

MIRANDA SERVI writes on "Alcibiade e le 'Elleniche di Oxyrhynchos'" in *Atene e Roma*, 1932, 180–96.

Oratory. G. M. LATTANZI writes on "La Figura di Favorino e due orazioni contestate a Dione Crisostomo" in *Riv. di fil.*, XI, 44–57.

Philosophy. VOGLIANO publishes *I frammenti del XIV° libro del περὶ φύσεως di Epicuro*, in ser. iii, vol. VI, of the *Rendiconti Accad. Bologna* (1931–2).

BIGNONE discusses readings in Epicurus in *Atene e Roma*, 1933, 110–13, and *Stud. Ital.*, 1933, 72–118.

CH. JENSEN edits "Ein neuer Brief Epikurs", from Philodemus περὶ κακιῶν in *Abh. Ges. Wiss. Göttingen*, 1933, no. 5.

Romance. *Bursian*, 1933, 63–94, publishes a report on "Die Literatur zur griech. und römischen Fabel, 1925–32", by W. PORT.

In *Archiv*, XI, 114–16, Zimmermann writes on P. Berol. 7927, the Metiochos-Parthenope Romance, and in *Aegyptus*, XIII, 53–61, publishes from P. Berol. 9588 a new fragment from the same tale.

In *Aegyptus*, XIII, 51–2, C. F. KUMANIECKI comments on Pap. Ross.-Georg. 18 under the title "De Aesopi Vita supplenda".

Ibid., 11–20, A. DEISSMANN and P. MAAS publish a literary papyrus of eleventh to twelfth century, a leaf containing a "volkstümliche Mönchsgeschichte".

Ibid., 203–7, CAMPBELL-BONNER edits a romantic fragment from P. Mich. 3378, with the name Seueris.

Miscellaneous. GERSTINGER publishes a seventh to eighth century list of books from P. Vindob. 26015 in *Wiener Studien*, L (1932), 185–92. Reviewed by F. Z(UCKER) in *B.Z.*, XXXIII, 414.

WIFSTRAND correctly reads the metrical colophon in P. Brit. Mus. Lit., 11, and discusses an unusual syntactical point, in *Hermes*, LXVIII, 468–72.

2. RELIGION, MAGIC, ASTROLOGY.

(Including Texts.)

General. E. BICKERMANN, *Chronologie* (GERCKE-NORDEN, *Einleitung in die Altertumswissenschaft*, III, 5, 1933. Teubner, Leipzig. Pp. 43), gives a clear and helpful account for Egypt, *cf.* pp. 13–16.

R. P. DE VAUX, *Sur quelques rapports entre Adonis et Osiris* (*Rev. bibl.*, XLII (1933), 31–56), discusses the early relations of the two cults and casts considerable doubt on Glotz's interpretation of the Fayyûm papyrus; important. For the background of the Adonis cult, *cf.* J. A. Montgomery, *Notes on the mythological texts from Ras Shamra* (*J. Amer. Orient. Soc.*, LIII, 97–123); for an instructive point of contrast between Greek and Oriental art, C. T. Seltman, *Attic Vase Painting* (Harv. Univ. Pr., 1933), 13.

Wilamowitz, *Glaube der Hellenen*, II, is reviewed by I. M. Linforth, *Am. Journ. Phil.*, LIV (1933), 184–7. For one phase of Hellenistic conditions, *cf.* K. Latte's review of *I.G.* IX, i in *Gnomon*, IX (1933), 401–14.

W. W. Tarn, *Alexander the Great and the unity of mankind* (*Proc. Brit. Acad.*, XIX (1933), pp. 46), after a wonderful demonstration of the origin in Alexander's mind of the cosmopolitan idea, has an appendix dating Euemerus after 303 but early enough for him to have been the friend of Cassander. In this context, we may note J. Stroux, *Die stoische Beurteilung Alexanders des Grossen* (*Philol.*, LXXXVIII (1933), 222–40; *ibid.*, 239–40, on the idea of repentance).

O. Weinreich, *Fabel, Aretalogie, Novelle. Beiträge zu Phädrus, Petron, Martial und Apuleius* (*Sitzungs. Heidelberg*, 1930–1, VII, pub. 1931. Winter, Heidelberg. Pp. 70) studies certain forms of Kleinliteratur of great importance for popular religion in Hellenistic and Roman times; note also pp. 20 f. on a figure in a wall-painting at Pompeii interpreted as Isis-Epona and on domestic chapels. In his note *Σωτὴρ τῆς οἰκουμένης* (*Jahrb. f. Liturgiewiss.*, X, 142) he treats instances of the phrase from Ceos and Epidaurus, with threefold repetition for emphasis, which is of interest in view of the existence of similar forms in Christian liturgies.

L. Bieler, *Psyches dritte und vierte Arbeit bei Apuleius* (*Arch. f. Rel.*, XXX (1933), 240–70), studies well the literary alterations to which the folk-tale was subjected.

K. Kerényi, ΑΝΟΔΟΣ-*Darstellung in Brindisi mit einem Zodiakus von* 11 *Zeichen* (*ibid.*, 271–307), discusses a curious disk showing the ascent of a man and a woman in a chariot driven by Eros and led by Hermes; it is set in the framework of an eleven-sign zodiac. He suggests that Graeco-Roman and Oriental *motifs* have met in this idea of ascension; *cf.* the Orphic text handled by Nock, *Cl. Rev.*, XLI (1927), 169 ff., XLIII (1929), 60–1.

J. Kroll, *Gott und Hölle, Der Mythos des Descensuskampfs* (*Studien der Bibliothek Warburg*, XX. Teubner, Leipzig, 1932. Pp. ix+569) is the first volume of a comprehensive work of very great importance, handling the history of this idea, which he treats as a Pathosformel in the ancient East, in Greece and Rome, and in Christianity. A very instructive review by K. Kerényi, *Gnomon*, IX (1933), 363–71.

Martin P. Nilsson, *Sonnenkalender und Sonnenreligion* (*Arch. f. Rel.*, XXX (1933), 141–73), shows that there cannot be a religion in which the sun is pre-eminent without a solar calendar and studies this in Egypt, with reference to the celebrations on Dec. 25 and Jan. 6; he further proves the late emergence of the sun's predominance in Syria, and has important remarks on the effects of the introduction of the Julian Calendar and on popular astrology. Here we may note B. Botte, *Les origines du Noël et de l'Épiphanie* (*Textes et études liturgiques*, ed. B. Capelle, I (1932). Abbaye du Mont César, Louvain. Pp. 107), as giving an excellent account of the present state of the question and adducing new evidence; reviewed by P. B., *Ricerche religiose*, IX (1933), 286–7.

E. Peterson, *Herkunft und Bedeutung der* ΜΟΝΟΣ ΠΡΟΣ ΜΟΝΟΝ-*Formel bei Plotin* (*Philol.*, LXXXVIII (1933), 30–41), studies the metaphysical and mystical application of what is in substance an old Greek turn of speech; he argues powerfully that there can be no question of a borrowing from Egyptian religion.

Proclus, the elements of theology, edited by E. R. Dodds (Clarendon Press, Oxford, 1933. Pp. lii+340. 30s.), is a work of rare scholarship. In effect an *editio princeps*, it includes illuminating remarks on the relations between mysticism and mysteries and, p. xx, on theurgy.

M. Rostovtzeff, *Hadad and Atargatis at Palmyra* (*A.J.A.*, XXXVII (1933), 58–63), in the course of a discussion of tesserae has something to say on the appearance of gods, including Egyptian gods, in Hellenistic military uniforms.

J. Stroux, *Die Constitutio Antoniniana* (*Philol.*, LXXXVIII (1933), 272–95), disposes of the idea that Caracalla was concerned with the promotion of the worship of Roman gods by non-Romans.

A. Vogliano and Franz Cumont, *La grande iscrizione bacchica del Metropolitan Museum* (*A.J.A.*, XXXVII (1933), 215–63, 7 plates), publish a most significant inscription, set on the base of a statue of Pompeia Agrippinilla, wife of the consul in A.D. 150, dedicated by a group of initiates, more than 300 in number, mostly coming from Asia Minor, the islands, and Greece, all but two described by their cognomina alone; they are arranged according to their categories in the organization. The document throws a flood of new light on the nature of such confraternities, and the commentary is beyond praise (thus on p. 262 there is a point of interest for the development of Greek liturgy). Cumont, *Adoration des Mages*, is reviewed by J. C., *Rev. hist. rel.*, CVII (1933), 201–4.

Material of use will be found in L. Radermacher, *Theokrits Elpides* (*Wien. Stud.*, L, 182–4; for dreams and saviour-deities); W. Kroll, *Neues zum vierten Ekloge* (*Pädagogisches Zentralblatt*, 1932, 444–6), and *Die Kultur der Ciceronischer Zeit*, II (*Das Erbe der Alten, zweite Reihe*, XXIII; Dieterich, Leipzig, 1933. Pp. 193, 4 plates; gives an admirable survey of religious conditions in the West); W. Weber, *Zu der Inschrift des Iulius Quadratus* (*Abh. Berlin*, 1932, no. 5, pp. 57–95, important for the new *Reichsaristokratie* formed from the Flavian period onwards, a social fact which had consequences in our field); A. Wilhelm, *Griechische Grabinschriften aus Kleinasien* (*Sitzungsb. Berlin*, 1932, 792–865; specially valuable for Christian terminology), and *Zu neuen Inschriften aus Pergamon* (*ibid.*, 1933, 836–59; includes restoration of a hymn on the deliverance by Asklepios of Caracalla from peril by sea); *Tertullien De Spectaculis suivi de Pseudo-Cyprien De Spectaculis*, ed. André Boulanger (*Publ. fac. lettres Strasbourg*, I, 1933; Les Belles Lettres, Paris, pp. 115; penetrating introduction); A. B. Hulen, *Porphyry's work against the Christians; an interpretation* (*Yale Studies in Religion*, I, Mennonite Press, Scottdale, Pa., pp. 56, 1933; obtainable from author, 80 Howe Street, New Haven, Conn.; convenient survey); reviews of Fr. Saxl, *Mithras*, by M. P. Nilsson, *D. Lit.-Z.*, 1933, 250–4, and A. D. Nock, *J.R.S.*, XXII (1933), 243; reviews of G. Kittel, *Die Religionsgeschichte und das Urchristentum*, by G. Bertram, *Theol. Lit.-Z.*, LVIII (1933), 309–11, and L(agrange), *Rev. Bibl.*, XLII (1933), 130–2.

A. D. Nock, *Conversion: the old and the new in religion from Alexander the Great to Augustine of Hippo* (Oxford, at the Clarendon Press, 1933. Pp. xii+309. 15*s*.), studies the nature of religious frontiers in antiquity and the ways and implications of adhesion to new cults, and seeks to set the piety of the mysteries in relation to the general picture of ancient belief and practice and to show Christianity as it may have appeared to pagans. In this context we may mention W. H. Buckler, *A Pagan Recantation* (*Cl. Rev.*, XLVII (1933), 7–8), a text from the sanctuary of Apollo Lairbenos in the Maeander gorge, including *ἐποίστρεφο ἰς Νεῖδας Τῆν* (?), which he interprets as "I perverted in regard to the Naiads Te (?)", *i.e.* sapped her faith; the argument is neat, but perhaps the puzzling phrase covers rather a reference to some sexual transgression. Apropos of my *Cremation and Burial in the Roman Empire* (*Harv. Theol. Rev.*, XXV (1932), 321–59) I here add that Plutarch, *Isis and Osiris*, 3, p. 352 B—a reference to the adorning of dead Isiaci with certain symbola—and *C.I.L.*, XI, 574—foundation of a cemetery for a priest and his telestini by a woman described as sacror. Isidis—unfortunately escaped my attention. These data concern the conduct of initiates only.

Cults of Graeco-Roman Egypt. Karanis: the temples, coin-hoards, botanical and zoological reports. Seasons 1924–31. Edited by Arthur E. R. Boak (*University of Michigan Studies, Humanistic Series*, Vol. XXX. University of Michigan Press, Ann Arbor, 1933. Pp. xii+93, with 37 plates, 16 plans, and 4 diagrams. $2.50). This handsome volume includes a description by A. E. R. Boak of the North temple, with Egyptian ground-plan, various altars (one with a hidden chamber), etc.; it was probably dedicated to a mixed Graeco-Egyptian deity, provisionally identified as Zeus Ammon Sarapis Helios; Soknopaios and Isis were possibly also worshipped here; the temple was probably deserted in a period of economic depression, *c.* A.D. 235–50. E. E. Peterson publishes, pp. 19 ff., the temple of Pnepheros and Petesuchos, making incidentally the suggestion that oracles were given from within the altar.

Papyri from Tebtunis, Part I, by Arthur E. R. Boak (*Michigan Papyri*, II: same series, XXVIII, 1933. Pp. xvi+259, 4 plates. $3.50), includes an interesting series of documents from the grapheion; p. 23 f., Agrippineios = Phamenoth; p. 82, oath in name of Emperor (A.D. 49) without divine titles; pp. 182, 194, references to synodoi; p. 174 f., pteraphoros hired to write contracts in demotic; p. 167, Nemeseion. The commentary is throughout illuminating.

P. Tebt., III, i, includes no. 699 (decree of Euergetes II, 135–134 B.C., guaranteeing offices of prophet or scribe which have been bought, and referring to asylum rights); 700 (affecting property of associations); 721 (192 B.C.; payment of fishers to Onnophris the priest on regular day in Phaophi); 729 (priestly *hagneusis*); 737 (*c.* 136 B.C.; priests of Peteseph and Teietis; possibly deified men); 774 (taking of sanctuary in great Serapieon at Memphis); 781 (damage done to temple by soldiers of Antiochus in 169–168 and by rebels of Dionysios between then and 164 B.C.; oaths; references to Jews (800, 818). There is nothing about religion in the instructions to the dioiketes (703).

S. R. K. Glanville, *The admission of a priest of Soknebtynis in the second century B.C. Merton Demotic Papyri*, I (*Journal*, XIX (1933), 34–41), gives interesting information on the governing body of the temple; apparently the candidate had applied for election.

M. F. M. MacGregor, *Eponymous priests under the Ptolemies* (*Cl. Phil.*, XXVIII (1933), 131), confirms from new evidence a conclusion of H. Thompson. P.S.I. 1162 is handled by A. Momigliano, *Giuramento di Σαραπιασταί? Contributo alla storia del sincretismo ellenistico* (*Aegyptus*, XIII (1933), 179–86), and Franz

CUMONT, *Un fragment de ritual d'initiation aux mystères* (*Harv. Theol. Rev.*, XXVI (1933), 151–60); Cumont makes it certain that it contains the oath of some initiates, and very probable that it contains the oath of Mithraic initiates.

P. JOUGUET, *Les Grands Dieux de la pierre sainte* (*Mélanges Glotz*, II (1932), 493–500), treats some difficult graffiti.

H. HEVRE, *Petites recherches sur le directeur des cultes dans l'Égypte romaine* (Mélanges N. Jorga; Gamber, Paris, 1933, 435–64), I have not seen.

H. R. SCHWYZER, *Chaeremon* (Diss. Bonn., 1932; Harrassowitz, Leipzig) is reviewed by B. A. VAN GRONINGEN, *Museum*, XL (1933), 229–30.

E. S. G. ROBINSON, *Greek coins acquired by the British Museum* (*Num. Chron.*, 5th ser., XI (1932), 199–214), publishes a coin of the Libyan nome, of the time of Antoninus Pius; the reverse may represent Ammon.

C. T. SELTMAN, *Greek Coins* (Methuen, London, 1933. Pp. xix+311, 64 plates, 13 maps. 25*s*.), discusses, pp. 240–5, the religious and other significance of Ptolemaic coinage.

Graeco-Egyptian cults outside Egypt. JOSEPH BERRETH, *Studien zum Isisbuch in Apuleius' Metamorphoses* (Diss. Tübingen, 1931. Druck der Schwabenverlag A.G., Zweigniederlassung. Ellwangen a/J. Pp. 119, 1 plate), applies the new archaeological and papyrological material to the interpretation of Apuleius XI. It is the commentary which we have long needed upon the religious content of this central text. *Inter alia*, he makes the point, which has commonly been overlooked, that the prayer of Lucius at the beginning of the book is not directed to Isis; she reveals herself. The dissertation deserves high praise.

W. S. FERGUSON, *Athenian tribal cycles in the Hellenistic age* (Harvard Historical Monographs, I. Harvard Univ. Pr. 1932. Pp. xv+197. $1.50), a contribution of the first order to Hellenistic history, handles, pp. 155 ff., the relation of the list of priests of Sarapis on Delos to Athenian tribal cycles.

A. EUANGELIDES, *'Επιγραφαὶ ἐκ Χίου* (*'Αρχαιολογικὸν Δελτίον*, XI (1927–8), pub. 1930, *παράρτημα*, 23–9), includes, p. 27, no. 10, a thank offering to Sarapis; in *'Επιγραφαὶ ἐκ Σάμου*, 29–33, we have, p. 31, no. 2, *'Ωρος Φάωνος Κανωπίτης 'Απόλλωνι εὐχήν*, a dedication by a resident or visiting Egyptian, and p. 31, no. 4, *'Αρσινόης Φιλαδέλφου*.

C. C. McCOWN, *New inscription from Jerash* (*Bull. Amer. Sch. Orient. Research*, no. 49, Feb. 1933, 3–8), remarks that in 300 inscriptions (22 funerary, 53 religious) there is one mention of Isis, two of Sarapis, both in syncretistic texts, and no word of any other mystery deity; *ibid.*, p. 5, on a local Pakeidas. Zeus predominates, then Artemis. *Cf.* R. O. FINN, *J.R.S.*, XXII (1933), 109–24.

Sardis. Publ. of the Amer. Soc. for the Excavation of Sardis, vol. VII; *Greek and Latin Inscriptions*, Part I, by W. H. BUCKLER and DAVID M. ROBINSON (late E. J. Brill, Leiden. 1932. Pp. 198, with 13 plates) is a superb work in which every text is accompanied by translation, comment, and facsimile. I note here the name Isidoros, as that of the father of the honorific ambassador to Augustus in 5 B.C. (pp. 16 ff., no. 8), and Isigonos, gymnasiarch, *c.* A.D. 96 (p. 62, no. 46), also Sarapion the son of Sarapion (1st cent. B.C.; p. 120, no. 134). No dedication to Isis. Review by MASON HAMMOND, *Amer. Journ. Phil.*, LIV (1933), 387–9.

M. DELLA CORTE, *I Lorei Tiburtini di Pompeii* (*Società Storia ed Arte di Tivoli*), describes the house of a family of Lorei who came to Pompeii from Tivoli, two of whom, two generations apart, held a priesthood of Isis, and publishes various religious objects found within their house, arguing that the oecus was a chapel of Isis.

C. DAICOVICIU, *Contribuții la syncretismul religios in Sarmizegetusa* (*Universitatea Regele Ferdinand I din Cluj. Publicațiile Institutului de studii clasice. Anuarul pe anii 1928–32. Cartea Românească. Cluj*, I (1932), 81–8; French summary, II (1933), 67–8), publishes an altar *Inuicto deo Serapidi*, dedicated by an Imperial procurator, another by a woman *θεῷ ὑψίστῳ ἐπηκόῳ*, another *Deae Caelesti sacrum*.

Ruler-worship. O. WEINREICH, *Menekrates Zeus und Salmoneus. Religionsgeschichtliche Studien zur Psychopathologie des Gottmenschentums in Antike und Neuzeit* (*Tübinger Beiträge zur Altertumswissenschaft*, hrsg. von J. MEWALDT, W. SCHMID, O. WEINREICH, XVIII (1933). Pp. 130. 12 marks), discusses the story of the fourth-century Syracusan doctor who pretended to be Zeus, dressed his patients, among whom were men of rank, as other gods, and entered into correspondence with the notables of the time; then the early Greek legend of Salmoneus. This monograph is of uncommon importance as bringing new and well-digested material to bear on the origins of deification. Weinreich shows that many strange claims of ancient individuals can be paralleled not only in general but also in detail from modern psychiatric records, to which he has given careful study. He illustrates an approximation to this mentality in the stories told of Parrhasios. The book deserves to be widely read. Recent study of the origins of deification have emphasized its political importance, a point on which a valuable addition is made by C. F. EDSON, Jr., *Legitimus Honor, a note on Hellenistic ruler-worship* (*Harv. Theol. Rev.*, XXVI (1933), 324–5), and the desire of the ruled to offer in worship what was the supreme form of homage.[1] We need to be reminded of the occasional factor of megalomania on the part of rulers who desired such honours. Weinreich's material is further evidence against the view that the phenomenon is not to be understood without invoking the hypothesis of Oriental influences.

S. EITREM, *Zur Apotheose*, IV, V (*Symb. Oslo.*, XI (1932), 11–34; to be cont.), gives valuable material bearing on Caligula's supposed marriage with the moon and belief in his inherently divine blood; for Caligula the Hellenistic background is of special importance.

G. GIANNELLI, *Storia Greca* (*Perioda ellenistica*; 336–330 B.C.; 1923–30) (*Aevum*, VII (1933), 65–123), discusses Alexander and divine monarchy, pp. 95–104, and deification, p. 123.

L. R. TAYLOR, *The divinity of the Roman Emperor*, is reviewed by M. P. CHARLESWORTH, *Cl. Rev.*, XLVI (1932), 225–7; *cf.* his article, *The tradition about Caligula*, *Camb. Hist. Journ.*, IV (1933), 105–19, and P. B., *Ricerche religiose*, IX (1933), 87–8; a survey of the facts is afforded by MASON HAMMOND, *The Augustan Principate in theory and practice during the Julio-Claudian period* (Harv. Univ. Pr. 1933. Pp. 341. $3.50), 103–9. C. DAICOVICI, *Fouilles de Sarmizegetusa; deuxième compte-rendu* (*Dacia*, III–IV (1932), 516–61), describes an *aedes Augustalium* there found. An altar with the rare Διὸς Σεβαστοῦ on Chios is reported in Ἀρχ. Δελτ. XI, παρ., 29, no. 16; a dedication of Drusus as νέον θεὸν Ἄρη at Athens by N. KYPARISSOS, *ibid.*, p. 51, no. 160. Also relevant are L. R. TAYLOR, *The Asiarchs* (JACKSON and LAKE, *Beginnings of Christianity*, V, 256–62); S. P. THOMAS, *Hermeneutica*, XI (*Sym. Oslo.*, XII (1933), 75–9), on Horace, *Odes*, III, 3, 12; E. PETERSON, *Kaiser Augustus im Urteil des antiken Christentums* (*Hochland*, XXX Jahrg., zehntes Heft, 1932–3, 289–99); K. SCOTT, *The elder and younger Pliny on Emperor worship* (*Trans. Amer. Phil. Ass.*, LXIII (1932), 156–65); *Statius' adulation of Domitian* (*Amer. Journ. Phil.*, LIV (1933), 247–59); FR. SOLMSEN, *Die Theorie der Staatsformen bei Cicero de re publ.*, I (*Philol.*, LXXXVIII (1933), 326–41); E. UNGER, *Altorientalische Könige als Kulturbringer* (*Forschungen und Fortschritte*, IX (1933), 245–6); A. JIRKU, *Kanaanaische Psalmenfragmente in der vorisraelitische Zeit Palästinas und Syriens* (*J. Bibl. Lit.*, LII (1933), 108–20; application to Amenophis III and IV by city rulers in Syria and Palestine of phrases originally meant for gods); review of H. HORST, *Proskynein*, by H. SEESEMANN, *Theol. Lit.-Z.*, LVIII (1933), 69–70.

Judaism. For the Septuagint we may note O. J. BAAB, *A theory of two translations from the Greek Genesis* (*J. Bibl. Lit.*, LII (1933), 249–53), and J. M. RIFE, *The mechanics of translation Greek* (*ibid.*, 244–52).

E. BICKERMANN, *Ein jüdischer Festbrief vom Jahre 124 v. Chr.* (*Z. neut. Wiss.*, XXXII (1933), 233–54), well explains Macc. ii. 1–9, as a Chanukka letter from the Jews of Jerusalem to those of Egypt, like later Paschal letters, and detects in it a reference to the temple at Onias. (Note also pp. 237–8, on modes of citation in ancient texts.)

H. LEWY, *Neue Philontexte in der Überlieferung des Ambrosius, mit einem Anhang; Neugefundene griechische Philonfragmente* (*Sitzungsb. Berlin*, 1932, 23–84), produces much new material for the recovery of the *Quaestiones in Genesim et Exodum*, for which we have depended in the main on Armenian versions; he has obtained not a little by a skilful study of the stylistic habits of Ambrose; the new fragments in Greek come from the *Sacra Parallela* and other sources. Reviewed by R. DÉVREESSE, *Rev. bibl.*, XLII (1933), 136–7.

R. MARCUS, *Divine names and attributes*, is reviewed by A. B., *Rev. bibl.*, XLII (1933), 454; MARCUS has now published *An Armenian-Greek Index to Philo's Quaestiones and De Vita Contemplativa*, which will be valuable for reconstruction of the Greek that is lost (*J. Amer. Orient. Soc.*, LIII (1933), 251–82).

E. R. GOODENOUGH, *The education of Philo* (*J. Religion*, XIII (1933), 93–5), is concerned with I. HEINEMANN, *Philons griechische und jüdische Bildung*, reviewed also by H. PREISKER, *Theol. Lit.-Z.*, LVIII (1933), 46–7. P. B., *Ricerche religiose*, IX (1933), 471–2, reviews FR. GEIGER, *Philon von Alexandreia als sozialer Denker*, and J. LEBRETON, *Bulletin d'histoire des origines chrétiennes* (*Rech. sc. rel.*, XXIII (1933), 331–83), has something to say on recent studies of Philo.

E. R. GOODENOUGH, *Philo's exposition of the Law and his De Vita Mosis* (*Harv. Theol. Rev.*, XXVII (1933), 109–25), argues that both treatises were meant for Gentiles; an interesting article. The relation of the two affords a parallel to the relation of Luke and Acts.

Magic. P. TRESSON, *Un curieux cas d'exorcisme dans l'antiquité. La Stèle égyptienne de Bakhtra* (*Rev. bibl.*, XLII (1933), 57–78), treats an instructive text in which Khonsu is sent to relieve the distress of the queen's sister, who lived outside Egypt; the spirit confessed the power of Khonsu and asked for an invitation to a festival.

G. VON MANTEUFFEL, *Vorläufiger Bericht aus der Warschauer Papyrussammlung* (*Eos*, XXXIV (1932–3),

[1] *Cf.* the occasional putting of the names of Emperors in the dative on milestones, as in C. DAICOVICIU, *Un nou "Miliarium" din Dacia* (*Anuarul Cluj*, 1928–32, II, 48–53, 72), and O. HIRSCHFELD, *Kleine Schriften*, 718–19.

195–204), mentions, p. 199, n. 4, a fragment from a magical recipe (4th cent. A.D.); possibly from a medical work and, p. 203, n. 26, a Christian letter (4th–5th cent.); he refers to them also in *Diplomatische Beiträge zum Pap. Varsoviensis*, no. 10 (*La Pologne au VII^e Congrès international des Sciences historiques*. Varsovie. Société polonaise d'Histoire, 1933, pp. 1–9).

H. LIETZMANN, *Ein christliches Amulett auf Papyrus* (*Aegyptus*, XIII (1933), 225–8), publishes P. Berl. 11858 (free reminiscences of Matt. xiv. 28–31, Peter walking on waters—a scene portrayed in the frescoes of the Dura church—and a glorification of God which perhaps calls for further study).

Id., *Gnosis und Magie* (*Forsch. u. Fortschr.*, IX (1933), 154–5), indicates that the Seminar for Christian Archaeology in Berlin is collecting impressions of Gnostic gems and has some very interesting remarks on the Abraxas type (suspecting Pergamene influences).

P. COLLART, *Un papyrus Reinach inédit; Psaume 140 sur une amulette* (*Aegyptus*, XIII (1933), 208–12), publishes a text of the seventh century giving 'une suite de mots incohérents empruntés au *Psaume* 140' and classifies amulets which quote from the Psalms.

A. PROCOPÉ-WALTER, *Iao und Set* (*Zu den Figurae magicae in der Zauberpapyri*) (*Arch. f. Rel.*, XXX (1933), 34–69; 15 figs.), discusses at length the figure in P. Oslo, 1, col. 1, who is clearly Set, and various identifications of Set with other gods, often of quite different character. It is much to be hoped that he will be able to publish other works of the same type to which he refers.

K. PREISENDANZ, *Die griechische und lateinische Zaubertafeln* (*Archiv*, XI (1933), 153–69), is a very valuable survey of scattered material.

R. MOUTERDE, *La Glaive de Dardanos*, is reviewed by DU MESNIL DU BUISSON, *Rev. hist. rel.*, CVI (1932), 605–9, publishing a new gem; PREISENDANZ, *Pap. gr. mag.*, II, by M. ENGERS, *Museum*, XL (1933), 120–2; A. DELATTE, *La Catoptromancie grecque et ses dérivés* by K. H. DE JONG, *ibid.*, 188–9, and FR. PFISTER, *B.Z.*, XXXIII (1933), 108–10 (important), R. DUSSAUD, *Rev. hist. rel.*, CVII (1933), 89–92; BELL, NOCK, THOMPSON, *Magical Texts* by K. PREISENDANZ, *Phil. Woch.*, LIII (1933), 1029–37 (important; many useful suggestions in detail, *e.g.* that verso A 33 means that the name is to be engraved on the ring), and *Gnomon*, IX (1933), 509–10; F. LL. GRIFFITH, *Journal*, XIX (1933), 106–7; E. B(UONAIUTI), *Ric. rel.*, VIII (1932), 379–80. Apropos of the last work G. MEAUTIS has written *L'Origine égyptienne de l'idée de la transsubstantiation*, *Rev. Hist. Rel.*, CVII (1933), 5–7: "elle a bien changé en chemin".

In the house of the priests at Dura there is a figure drawn on the wall with the inscription θνησκη εν τη γη, which is the equivalent of envoûtement (C. B. WELLES, *Dura-Europos, Fourth Report*, 166, fig. 10.) For this section we may note also S. EITREM, *Sophron und Theokrit* (*Symb. Oslo.*, XII (1933), 10–38, with excursus on Horace, *Ep.* 5 and 17), which arises out of the new fragment also handled by A. S. F. GOW, *Sophron and Theocritus* (*Cl. Rev.*, XLVII (1933), 113–15, 168–9), and K. LATTE, *Zu dem neuen Sophronfragment* (*Philol.*, LXXXVIII (1933), 259–64); L. DEUBNER, *Die Bedeutung des Kranzes im klassischen Altertum* (*Arch. f. Rel.*, XXX (1933), 70–104); H. LEWY, *Zur Zauberkraft der Erde* (*ibid.*, 207–8); HERBERT MEYER, *Hymnische Stilelemente in der frühgriechischen Dichtung* (Verlag Konrad Triltsch, Würzburg, 1933, pp. 81, p. 3, n. 16, on the magic of the name; the whole is relevant in view of the conservatism of hymn style); review of K. KEYSSNER, *Gottesvorstellung und Lebensauffassung im griechischen Hymnus*, by G. BREITHAUPT, *Theol. Lit.-Z.*, LVIII (1933), 113–15; of L. BRUN, *Segen und Fluch in Urchristentum*, by H. SEESEMANN, *ibid.*, 308–9; H. J. ROSE, *Folklore and the classicist* (*Folklore*, 1933, 13–31), and *The folklore of the Geoponica* (*ibid.*, 57–90); remarks on mythical exempla and magic in FR. DORNSEIFF, *Gnomon*, IX (1933), 269–73; S. EITREM, *Das Ende Didos in Vergils Aeneis* (*Festskrift til Halvdan Koht*, Oslo, 1933, 29–41; notes on the pretence that there is a special foreign magic; suggestion that Statius, *Theb.* IV, 573 f., polemizes against the crude narrative of Lucan); CAMPBELL BONNER, *Witchcraft in the Lecture room of Libanius* (*Trans. Am. Phil. Ass.*, LXIII (1933), 34–44); CLYDE PHARR, *The interdiction of magic in Roman law* (*ibid.*, 269–95); A. D. NOCK, *Paul and the Magus* (in FOAKES JACKSON and K. LAKE, *Beginnings of Christianity*, V, 174–88); CH. JUSSERAND, *Les Symboles pythagoriciennes de Collenucio* (*L'Antiquité classique*, I (1932), 145–71; this interesting set of taboos rests upon ancient and trustworthy source); BR. OLSSON, *Die verschlungene Buchrolle* (*Z. neut. Wiss.*, XXXII (1933), 90–1; compares with Apoc. x. 9, custom of licking or washing nomina off leaf or papyrus in order that by swallowing the result one may remember what was written); A. PERETTI, *Una iscrizione magica sopra un vaso Bosporano* (*Studi ital.*, X (1933), 213–21; a supposed magic text not such); remarks of F. GRANGER, *J. Theol. Stud.*, XXXIV (1933), 157–61, on career of Julius Africanus.

Astrology. F. CUMONT, *Les Présages lunaires de Virgile et les Selenodromia* (*Antiquité classique*, II (1933), 259–70), produces very illuminating parallels for *Georg.*, I, 276 ff.; in their present form they have additions referring to the Old Testament, but they are probably Graeco-Egyptian in origin.

C. B. WELLES, in *Dura-Europos*, IV, publishes various copies of a horoscope, pp. 95–6 and 105–19, with full comment (note also p. 150, on the north wall of the palace of the redoubt, εἷς θεός; p. 157, θεὸς ὁ νεός).

Biblical Texts. The centre of interest is the Chester Beatty find. SIR FREDERIC KENYON, *The Chester Beatty Biblical Papyri*, fasc. 1, 2 (Walker, London, 1933), and *Recent developments in the textual criticism of the Greek Bible* are reviewed by E. VON DOBSCHÜTZ, *Theol. Lit.-Z.*, LVIII (1933), 409–12; and discussed by C. SCHMIDT, *Die Evangelienhandschrift der Chester Beatty-Sammlung* (*Z. neut. Wiss.*, XXXII (1933), 225–32), H. L(IETZMANN), *ibid.*, 313, and E. VON DOBSCHÜTZ, *Zur Liste der NTlichen Handschriften*, IV (*ibid.*, 185–206), F. C. BURKITT, *The Chester Beatty Papyri* (*J. Theol. Stud*, XXXIV (1933), 363–8), F. G. KENYON, *Nomina Sacra in the Chester Beatty Papyri* (*Aegyptus*, XIII (1933), 5–10), H. GERSTINGER, *Ein Fragment des Chester Beatty-Evangelienkodex in der Papyrussammlung der Nationalbibliothek in Wien* (Pap. graec. Vindob. 419741) (*ibid.*, 67–72). For N.T. criticism we may note also HENRY A. SANDERS, *The Egyptian Text of the four Gospels and Acts* (*Harv. Theol. Rev.*, XXVI (1933), 77–98; supremacy of Western text in third century); W. H. P. HATCH, *Six Coptic fragments of the New Testament from Nitria* (*ibid.*, 99–108); B. H. STREETER, *The Primitive text of the Acts* (*J. Theol. Stud.*, XXXIV (1933), 232–41); reviews of A. C. CLARK, *Acts of the Apostles*, by J. M. CREED, *Cl. Rev.*, XLVII (1933), 194–6, and E. B(UONAIUTI), *Ric. rel.*, IX (1933), 372–3. M. J. LAGRANGE, *Rev. bibl.*, XLII (1933), 425–7 (*ibid.*, 402–4, *Un nouveau papyrus évangélique*, on the Chester Beatty texts, and 124 on Biblical fragments in P.S.I., X; also [A.], 433–4 on H. THOMPSON, *Coptic version of Acts and Pauline Epistles*). On the Michigan fragment of Acts *cf.* S. NEW in JACKSON and LAKE, *Beginnings*, V, 262–8.

G. KITTEL, *Theologisches Wörterbuch*, noticed in *Journal*, XIX (1933), 70, has gone ahead steadily and reached the second instalment of volume II (διαθήκη); I have had it in daily use and can testify that it is one of the most useful works of reference ever produced for workers in the Hellenistic field. Favourable reviews by LAGRANGE, *Rev. bibl.*, XLI (1932), 626, XLII (1933), 120–2, 606–8; E. B(UONAIUTI), *Ric. rel.*, VIII (1932), 375–6, IX. (1933), 183, 370–1; P.B., *ibid.*, 570; D. W. RIDDLE, *J. Relig.*, XIII (1933), 95–6; GUIGNEBERT, *Rev. hist. rel.*, CVII (1933), 96–7; A. M. VITTI, *Biblica*, XIV (1933), 115–18; C. H. DODD, *J. Theol. Stud.*, XXXIV (1933), 280–5; E. FASCHER, *Theol. Lit.-Z.*, LVIII (1933), 4–8. A. D. NOCK, *The vocabulary of the New Testament* (*J. Bibl. Lit.*, LII (1933), 131–9), is concerned with the general character of N.T. Greek and with the weakness of the case for a technical Hellenistic language of cult. E. PETERSON, Ἀγάπη (*Bibl. Zeitschr.*, XX (1932), 378–82), shows that supposed pagan parallels for this word usage are illusory, and in P. Oxy. 1380, 28, conjectures ἀγαπητήν, approving in 109 Manteuffel's ἀγαθὴν ἄθολον, which he interprets as an identification of Isis with Bona Dea.

Manichaeism. CARL SCHMIDT and H. J. POLOTSKY, *Ein Mani-Fund in Ägypten. Originalschriften des Mani und seiner Schüler* (*Sitzungsb. Berlin*, 1933, 4–90), is the first substantial announcement and specimen of what may well prove to be the most important single literary find which Egypt has given us for the time after Alexander. It consists of 1,200–1,500 pages, in the upper Egyptian dialect of the region of Assiut (the ancient Lycopolis), although it was found at Medinet Mādi in the Fayyûm. Like many Buddhist texts, it represents translation made in the interests of propaganda. The Berlin part of the find includes (1) the Kephalaia of Mani (of the contents of which some account is given, with specimens); (2) a collection of his epistles; (3) a work of historical character with stories of Mani, of his imprisonment, of the charges made against him by the Magousaioi or fire-priests, and of the later fortunes of his followers; (4) a collection of so-called logoi of different disciples. The Chester Beatty part of the find contains a collection of Manichee psalms (at least 230), another of homilies (from the book of which part is in Berlin), a third work connected with the "living gospel" of Mani, and another book which has not yet been studied.

This is no less than a Manichee bible, fragmentary of course, but opening new vistas of history. SCHMIDT and POLOTSKY have given us an admirable first report, with a most illuminating treatment of the relation of the find to what was previously known of Manichaeism in Egypt and elsewhere. Among the many reviews, etc., which have followed the appearance of their monograph, that of H. H. SCHAEDER, *Gnomon*, IX (1933), 337–62, is notable; he emphasizes that we have here classic Manichaeism, as contrasted with the special forms which it took in central Asia, raises the question of a possible connexion between the spread of Manichaeism in Egypt and the rise of asceticism (as does also F. CUMONT, *La Bibliothèque d'un manichéen découverte en Égypte*, *Rev. hist. rel.*, CVII (1933), 150–9), and makes valuable comments on supposed Indian influences on Mani, and on the Acts of Thomas. See also F. C. BURKITT, *The new Manichee documents* (*J. Theol. Stud.*, XXXIV (1933), 266–7; W. SESTON, *La découverte des Écritures manichéennes* (*Rev. d'hist. et de phil. rel.*, XIII (1933), 250–62; a good clear survey); [B.C.], *Rev. bibl.*, XLII (1933), 618–21; E. B(UONAIUTI), *Ric. rel.*, IX (1933), 376–7.

Another publication of major importance is ERNST WALDSCHMIDT and WOLFGANG LENTZ, *Manichäische Dogmatik aus chinesischen und iranischen Texten* (*Sitzungsb. Berlin*, 1933, 480–607). The authors here publish a long dogmatic hymn by a teacher Mo-yeh and two shorter hymns from the London Chinese Manichee hymn-roll, together with parallel texts in the Berlin collection of Iranian texts from Turfan. This new material is marked by a notable schematism; mythological and theological concepts have hardened into dogmatic phrases in a way which helps us to understand the power of survival which Manichaeism showed. The commentary is most illuminating and thorough. Continued work from this end, by these two scholars, should enable us to form ultimately a far more concrete idea of Eastern Manichaeism than has been possible heretofore.

A brief note on this material has appeared from W. E(LTESTER), *Z. neut. Wiss.*, XXXII (1933), 221; we may note also W. HENNING, *Neue Quellen zum Studium des Manichaismus* (*Forsch. u. Fortschr.*, IX (1933), 250–1), on a posthumous publication of ANDREAS, and E. HENNECKE's review, *Theol. Lit.-Z.*, LVIII (1933), 341–3, of G. BORNKAMM, *Mythos u. Legende in den apokryphen Thomasakten*.

Christian. G. KRÜGER, *A decade of research in early Christian literature*, 1921–30 (*Harv. Theol. Rev.*, XXVI (1933), 173–321), gives an admirable survey.

A. BLUDAU, *Die ägyptischen Libelli u. die Christenverfolgung des Kaisers Decius*, is reviewed by H. KOCH, *Zeits. Kirchengesch.*, LI (1932), 559–61.

G. GHEDINI, *Due presunti documenti della persecuzione di Diocleziano* (*La Scuola Cattolica*, LXI (1933), 382–5), doubts the relevance of P. Goth. 11 and P. Grenf. 1173.

E. PETERSON, ἐπακούειν = *respondieren* (*Jahrb. f. Liturg.*, XI, 131), defends ἐπ. against the change to ὑπ. in a liturgical fragment, P. Heidelb. gr. 2.

W. THEILER, *Porphyrios u. Augustin* (*Schr. d. Königsberger gelehrten Gesellschaft*, X (1933, Geisteswiss. Kl., Heft 1, pp. 74), argues with great force that Augustine had not read Plotinus and identifies much material from Porphyry in his works.

F. F. HALLOCK, *Coptic Apocrypha* (*J. Bibl. Lit.*, LII (1933), 163–74), treats the character of this literature, its homiletic use, its survival, and its possible relation to earlier Egyptian belief. J. MUNCK, *Untersuchungen über Klemens von Alexandria*, is reviewed by E. BUONAIUTI, *Ric. rel.*, IX (1933), 563–4; N. H. BAYNES, *Constantine the Great and the Christian Church*, by H. I. BELL, *Journal*, XIX (1933), 110, A. D. NOCK, *Am. Journ. Phil.*, LIV (1933), 197–8; P. CASEY, *Sarapion of Thmuis*, by G. DIX, *Cl. Rev.*, XLVI (1932), 236. W. HENGSTENBERG, *B.Z.*, XXXIII (1933), 121–2, E. BUONAIUTI, *Ric. rel.*, VIII (1932), 365, with high praise; BOON-LEFORT, *Pachomiana Latina*, by A. SOUTER, *J. Theol. Stud.*, XXXIV (1933), 433–4; P. RESCH, *La doctrine ascétique des premiers maîtres Égyptiens du quatrième siècle*, by H. DÖRRIES, *Theol. Lit.-Z.*, LVIII (1933), 101–2; P. OPPENHEIM, *Symbolik u. religiöse Wertung des Mönchskleides im christlichen Altertum*, by id., *ibid.*, 52–3, and *Das Mönchskleid im christlichen Altertum*, 141–2; FR. HALKIN, *Sancti Pachomii Vitae graecae*, by H. KOCH, *ibid.*, 375–8, L. TH. LEFORT, *Rev. d'hist. eccl.*, XXIX (1933), 424–8, A. LEROY-MOLINGHEN, *Byzantion*, VIII (1933), 359–62; TH. LEFORT, *S. Athanase sur la Virginité*, by H. KOCH, *Z.K.G.*, LI (1932), 317–19 (raising possibility that Athanasius wrote in Coptic); H. KOCH, *Quellen z. Gesch. d. Askese u. d. Mönchtums*, etc., by L. TH. LEFORT, *Rev. d'hist. eccl.*, XXIX (1933), 984–6; EVELYN WHITE, *Wâdi 'n Natrûn*, II, by F. C. BURKITT, *J. Theol. Stud.*, XXXIV (1933), 188–92, J. LEIPOLDT, *Theol. Lit.-Z.*, LVIII (1933), 313; H. I. BELL, *A Christian stele*, by F. Z(UCKER), *B.Z.*, XXXIII (1933), 231–2; J. GOLEGA, *Stud. ü. d. Evangeliendichtung d. Nonnos v. Panopolis*, DÖLGER, *Antike u. Christentium*, II, 4–III, 3, M. RUDWIN, *The Devil in legend and literature*, H. P. COOKE, *Osiris*, F. C. BURKITT, *Church and Gnosis*, by A. D. NOCK, *J. Theol. Stud.*, XXXIV (1933), 195–200; BURKITT also by W. BAUER, *Theol. Lit.-Z.*, LVIII (1933), 333–4.

E. PETERSON, *Zu griechischen Asketikern*, III, *Scholien zu Johannes Klimax* (*Byz. neugr. Jahrb.*, IX, 45–54), *Irrige Zuweisungen asketischer Texte* (*Zeit. f. kath. Theol.*, LVII (1933), 271–4), and *Die Philippus-Akten im armenischen Synaxar* (*Theol. Quartalschr.*, 1932, 289–98) show his usual mastery; E. SCHWARTZ, *Zweisprachigkeit in den Konzilsakten* (*Philol.*, LXXXVIII (1933), 245–53), matters to students of general cultural history as well as to specialists in the councils; R. R. CASEY, *The Apocalypse of Paul* (*J. Theol. Stud.*, XXXIV (1933), 1–32), is a thorough and useful study of this text in its various forms (with the complaints of the elements, p. 6 f., *cf. Kore Kosmou* in Stobaeus, I, pp. 403 ff., Wachsmuth); his *An Armenian version of Athanasius' Letter to Epictetus* (*Harv. Theol. Rev.*, XXVI (1933), 127–50), gives this new evidence and a collation with the Greek. A. DEISSMANN and P. MAAS, *Ein literarischer Papyrus des 11/12 Jhrdhts. n. Chr.* (*Aegyptus*, XIII (1933), 11–20, 2 plates), publish a fragment of a monastic tale.

The first volume of *Annuaire de l'Institut de philologie et d'histoire orientale. Université libre de Bruxelles* (1932–3. 104 Rue Camille Lemonnier, Brussels. Pp. 111, 39 plates) is very welcome as the literary vehicle of the admirable school of HENRI GRÉGOIRE. It includes J. D. STEFĂNESCU, *L'Illustration des liturgies dans l'art de Byzance et de l'Orient* (pp. 21–77, with 36 plates; to be cont.), with valuable material illustrating the penetration of thought by Biblical symbolism, and H. GRÉGOIRE, *Diplômes de Mazara* (79–107). *Ricerche Religiose*, edited by E. BUONAIUTI, and often quoted in these pages, particularly for its thoughtful book reviews, is taking the title *Religio* from 1934 onwards.

3. PUBLICATIONS OF NON-LITERARY TEXTS.

(N.B. *Notes on and corrections of miscellaneous documents previously published are referred to in* § 9. *Notes on single documents will be found here; so too all reviews, when sufficiently important for mention.*)

General. It will be noticed that an unusually large number of the items recorded below come from the latest issue of *Aegyptus*, two fascicules of which are being devoted by the editor, A. CALDERINI, to a *Festschrift* in commemoration of U. Wilcken's seventieth birthday; and it is pleasing to add that several of these tributes have been already reviewed by the recipient of them with his unrivalled talent for appreciating the value of new material. At the time of writing the second fascicule had not yet appeared.

Though the chief aim of J. G. WINTER's *Life and Letters in the Papyri* (see § 9) is to interest readers who are not specialists in this field, it contains much new matter in the shape of translations from unpublished texts in the Michigan collection and many original comments on texts already published.

K. KALBFLEISCH, *Aus den Giessener Papyrussammlungen*, in the *Nachrichten der Giessener Hochschulgesellschaft*, IX, pt. 3, 5–17, gives an account of some interesting pieces in the Giessen University Library, both literary and non-literary, which have either been published or are being prepared for publication, devoting a large part of his article to BÜTTNER's *Griechische Privatbriefe*.

G. VON MANTEUFFEL, *Vorläufiger Bericht aus der Warschauer Papyrussammlung*, in *Eos*, XXXIV (1933–4), 195–204, describes a small collection in Warsaw, consisting of 69 fragmentary papyri and 4 ostraca.

Sammelbuch, IV, has been reviewed by N. J. REICH (*Mizraim*, I (1933), 195) and M. HOMBERT (*Rev. belge*, XI (1932), 140).

P. Oslo., II (*Journal*, XVIII, 83) has been reviewed by P. COLLART (*Rev. de phil.*, VII (1932), 328–9) and by F. ZUCKER (*Gnomon*, IX (1933), 653–7).

BÜTTNER's *Griechische Privatbriefe* (*Journal*, XVIII, 84) has received further reviews: by P. COLLART (*Rev. de phil.*, VII (1932), 100–1); by H. I. BELL (*Cl. Rev.*, XLVII (1933), 41); by V. DE FALCO (*Riv. di fil.*, XI (1933), 425–7).

HUNT and EDGAR's *Select Papyri*, I (*Journal*, XIX, 74) is reviewed by K. FR. W. SCHMIDT (*Phil. Woch.*, 1933, 1317–18); anonymously in the *Durham University Journal*, XXVIII (1933), 324–6; together with WADDELL's *Lighter Side of the Greek Papyri* (*Journal*, XIX, 91) by P. SHOREY (*Cl. Phil.*, XXVIII (1933), 236); and by W. M. CALDER (*Cl. Rev.*, XLVII (1933), 242).

L. AMUNDSEN's publication of 28 ostraca in Norwegian collections is remarkable for the fullness and thoroughness of the commentaries. The texts are mainly receipts of already known types, but include a noteworthy Ptolemaic letter referring to the caravan traffic between the Nile valley and the Red Sea. *Ostraca Oslöensia: Greek Ostraca in Norwegian Collections.* Oslo: I Kommisjon hos Jacob Dybwad, 1933. Pp. viii+88, 4 plates. Reviewed by J. G. MILNE (*J.H.S.*, LIII (1933), 318–19); and noticed by WILCKEN (*Archiv*, XI, 139).

P. VIERECK, *Neue Texte aus Aegypten*, in *Aegyptus*, XIII (1933), 45–50, publishes three ostraca, one being Ptolemaic and two Roman, and two papyri. The latter are: (1) a return of unwatered land of A.D. 70; (2) a difficult private letter in which Wilcken finds points of connexion with the Heroninus correspondence. Reviewed by WILCKEN (*Archiv*, XI, 134–6).

Ptolemaic. The outstanding event of the past year has been the publication of the first part of *Tebtunis Papyri*, III. While the documents published in vol. I, which came from the mummified crocodiles, belonged almost entirely to the later Ptolemaic period, the contents of the new volume, derived from the cartonnage of the human mummies, range from the middle of the third century to the end of the second, and the earlier texts are not only plentiful but unusually interesting. All this material has been deciphered and presented with the mastery which one expects from two such editors as A. S. HUNT and J. G. SMYLY. The piece which will no doubt attract most attention is no. 703, a manual of instructions from a dioecetes to a newly appointed subordinate in the χώρα, dating from the reign of either Euergetes or Philopator; the long and excellent commentary on this is primarily the work of M. ROSTOVTZEFF. Another important text of the earlier period is no. 701, a record of orders written and of business transacted in the office of a provincial administrator, perhaps an oeconomus. No. 709, of 159 B.C., is an interesting order to the officials of a village to protect the contractor for the retail of papyrus, which was the object of a government monopoly, against illicit dealers. No. 746, of 243 B.C., discloses the "surprising fact" that the state retained certain rights over one-half of the holding of each cleruch. Contrary to the hitherto accepted view no. 778 seems to prove the existence of an epistrategus in Middle Egypt as early as 178 B.C.; it would not therefore be surprising to find that the function, if not the name, existed still earlier. From no. 781 we learn incidentally that a detachment of the troops of Antiochus IV had penetrated into the Fayum and done some damage to a temple of Ammon. But it would take too much space even to mention the many points of interest contained in these documents and brought out in the editors' illuminating commentaries. Let us hope that Part 2, which will contain the indexes for the whole volume, will be as full of good matter as Part 1. *The Tebtunis Papyri*, vol. III, pt. 1. Joint publication of the University of California (Graeco-Roman Archaeology, vol. III) and of the Egypt Exploration Society (Graeco-Roman Memoirs, XXIII). London: Humphrey Milford, 1933. Pp. xix+333, 7 plates. Reviewed by WILCKEN (*Archiv*, XI, 146–52; important criticisms from the point of view of *Urkundenlehre*); by J. G. MILNE (*J.H.S.*, LIII (1933), 318–19); and in *Anc. Egypt*, 1932, 113–14.

Vol. VIII of the *B.G.U.*, edited by W. SCHUBART and D. SCHÄFER, is another work of the same high standard. It contains 161 documents which have been recovered from the cartonnage of one of the mummies found at Abusir el Melek, and which with one exception date from the reigns of Ptolemy Auletes and the last Cleopatra. Two groups of these, comprising the oaths and agreements concerning the cession of catoecic land and the official orders concerning deliveries of corn, together with the royal decree no. 1730, have already been published by W. KUNKEL in *Z. Sav.*, XLVIII and *Archiv*, VIII, but are here reprinted with some additions and improved readings; their inclusion in this edition is a welcome convenience. But the bulk of the material is new. One interesting group consists of orders of the dioecetes to the Heracleopolite strategus about administrative and judicial matters (nos. 1756–61). Nos. 1762 and 1764 are reports concerning local unrest and agitation. In nos. 1767, 1768 we have fragments of (or perhaps reports in the style of) a day-book of a strategus, which in various points resemble the well-known *P. Par.* 69. Nos. 1773–8 are valuable documents for the study of judicial procedure. There are also many interesting petitions from private persons; for instance, no. 1827, which is a companion piece to P. Tor. 13; no. 1848, a request of a deserted wife for restitution of her dowry; no. 1849, a complaint of a widow against her brothers-in-law; as both parties belonged to priestly families she had first obtained a decision from the local priests, but as this proved ineffective she now appeals to the strategus. The decipherment of these difficult and often fragmentary texts is an achievement in itself, and the editor's comments, though concise, are always instructive. *Spätptolemäische Papyri aus amtlichen Büros des Herakleopolites* (Ägyptische Urkunden aus den staatlichen Museen zu Berlin: Griechische Urkunden, VIII). Weidmannsche Buchhandlung, 1933. Pp. 181, 1 plate. Reviewed by WILCKEN (*Archiv*, XI, 118–24), and by J. G. MILNE (*J.H.S.*, LIII (1933), 318–19).

P. Cairo Zenon, IV (*Journal*, XVIII, 84), is the subject of a review by W. PEREMANS in *Chron. d'Ég.*, 1933, 158–62. P. Mich. Zenon (*Journal*, XVIII, 84), which is now to be known as P. Mich. I, is dealt with by P. VIERECK (*Gnomon*, IX (1933), 215–17); P. COLLART (*Rev. ét. gr.*, XLV (1932), 351–3); CASPAR C. KRAEMER, JR. (*Classical Journal*, XXVII (1932), 540–2). E. BERNEKER, *Zur Sondergerichtsbarkeit* (*Aegyptus*, XIII (1933), 25–30) discusses P. Cairo Zen. 59466, of which he proposes a new interpretation. An article by E. ZIEBARTH in *Klio*, XXVI (1933), 231–47, *Neue Beiträge zum griechischen Handel*, is largely a commentary on the Zenon papyri which refer to commerce by sea and river; he devotes particular attention to P. Cairo Zen. 59036, offering a new, but improbable, explanation of the financial transactions.

P. Enteuxeis (*Journal*, XVIII, 84) has been reviewed, in all cases very appreciatively, by CLAIRE PRÉAUX (*Chron. d'Ég.*, 1933, 170–9); J. G. MILNE (*J.H.S.*, LIII (1933), 141); C. C. EDGAR (*Journal*, XIX (1933), 108–9); E. BERNEKER, who gives a long account of the book with many useful comments in *K.V.G.R.*, XXVI (1933), 363–417. The following reviews are particularly concerned with pt. 2: by P. CHANTRAINE (*Rev. critique* (1932), 531); P. COLLINET (*Rev. hist. dr.*, XII (1933), 384–5. An article by E. ZUCKER in *Aegyptus*, XIII (1933), 213–24, entitled *Zur Textherstellung und Erklärung von P. Enteuxeis*, fasc. ii, contains a series of good suggestions.

F. HEICHELHEIM, *Zu Pap. Berol.* 5883+5853, in *Aegyptus*, XIII (1933), 187–92, discusses the fragmentary sea loan published by WILCKEN in *Ä.Z.*, LX, 86 ff.

B. A. VAN GRONINGEN has published in *Aegyptus*, XIII (1933), 21–4, a Ptolemaic letter under the title *Un autographe du méridarque Polemon?*; a facsimile is given. As Wilcken has remarked, the hand is obviously of the second century B.C. and the writer cannot be the eponymous meridarch. Reviewed by WILCKEN (*Archiv*, XI, 125).

An account of house rent received from various lodgers, probably dating from 177 B.C., is the only new document included in HUNT and EDGAR's *Select Papyri* (no. 184 = Michigan Inventory 3197).

In *Cl. Phil.*, XXVIII (1933), 131, M. F. McGregor quotes an unpublished Michigan papyrus which gives the names in Greek of the eponymous priests of the ninth year of Philometor; the demotic transliterations were already known.

S. R. K. Glanville publishes in *Journal*, XIX (1933), 34–41, with a facsimile as well as translation and commentary, an interesting demotic text of 142 B.C. from Tebtunis. *The admission of a priest of Soknebtynis in the second century B.C.: Merton demotic papyri I.*

In *Eos*, XXXIV (1933–4), 288–90, S. Witkowski writes an amusing little article, *De epistula matris ad filium, ludi magistrum futurum* (*P. Lond.* I, 43 = *Witk. Epist.*, 59), maintaining his view that the *filius* was a budding schoolmaster, and not, as Wilcken argues, a private tutor.

In *Aegyptus*, XIII (1933), 107–12, A. E. R. Boak publishes *A loan of 74 B.C.*, being a six-witness contract with this peculiar feature that the name of the lender has not been inserted in the blank space left for it. Discussed at length by Wilcken (*Archiv*, XI, 125–7).

In the same number of *Aegyptus*, 62–6, W. Schubart prints a letter of the first century B.C. to which is appended another letter addressed to an ἀρχεδέατρος in Alexandria about certain money matters. *Ein Brief an den Archedeatros.* Reviewed by Wilcken (*Archiv*, XI, 125–7).

D. Schäfer, as an addendum to his study of πίστεις in *Studi italiani di Papirologia*, contributes an article to *Philologus*, LXXXVIII (1933), 296–301, in which he publishes a short text of the first century B.C. in the Berlin collection. *Zu den Ptolemäischen* ΠΙΣΤΕΙΣ.

Ptolemaic-Roman. The third volume of Spiegelberg's catalogue of the demotic monuments in the Cairo Museum has been published posthumously under the supervision of W. F. Edgerton. About a third of the material consists of inscriptions on stone, the remainder of papyri, some of which go back to the Persian period; the ostraca he had reserved for a separate publication. As in the former volumes, he has given translations wherever possible, which greatly enhances the usefulness of the book. Those who have had the pleasure of consulting Spiegelberg know how ready he was at all times to place his great knowledge at their disposal and how helpful a friend he was to students of Greek papyri who know no demotic. *Die demotischen Denkmäler*, III: *Demotische Inschriften und Papyri* (*Fortsetzung*). (Catalogue général des antiquités égyptiennes du Musée du Caire: nos. 50023–50165.) Berlin: Reichsdruckerei, 1932. Pp. vi+117, 56 plates. Reviewed by E. Seidl (*Z. Sav.*, LIII (1933), 561–4).

Roman. To begin with what is easily the most important item in this section, A. E. R. Boak has given us a careful and admirable edition of a group of Michigan papyri from the grapheion of Tebtunis. It comprises only eight pieces, but some of them are of great length. No. 121 contains on the verso an ἀναγραφή or official register of contracts recorded at the grapheion for four months of the year A.D. 42 and on the recto a series of abstracts, an εἰρόμενον, of nearly fifty of these contracts (see *Journal*, IX (1923), 164–7, and XII (1926), 100–9). The greater part of no. 123 consists of a register of a different character, being a list of documents of all kinds drawn up in the grapheion and of the fees charged for them; the rest of the roll contains accounts of the sums disbursed by the lessees of the grapheion in various ways, such as in purchases of writing material and in travelling allowances for persons attached to the office. Nos. 124–8 are of the same type. Altogether this group of papyri presents a full and unique picture of the operations of a grapheion in the early Roman period, and the entries contain innumerable points of interest. The excellent introductions of the editor explain clearly the import of each document. There are good indexes. *Michigan Papyri*, II: *Papyri from Tebtunis*, Part 1. (University of Michigan Studies, Humanistic Series, XXVII.) Ann Arbor: University of Michigan Press, 1933. Pp. xvi+259, 4 plates.

P.S.I. 1160 and the passage in the letter of Claudius referring to the constitution of a senate are analysed by F. Smolka, *L'Histoire d'une hypothèse importante* in *Eos*, XXXIV (1933–4), his conclusion being that Alexandria possessed a senate down to the death of Cleopatra.

H. Kortenbeutel, *Eingabe an den Statthalter G. Turranius* (*Aegyptus*, XIII (1933), 247–52), publishes an incomplete report, of about 6–5 B.C., concerning the taxation of some unwatered land. Reviewed by Wilcken (*Archiv*, XI, 128).

Collart's *Papyrus inédit et P. Ryl. 178* (*Journal*, XIX, 75) has been reviewed by Wilcken (*Archiv*, XI, 128).

Further reviews of Johnson and van Hoesen's *P. Princ. Univ.* (*Journal*, XVIII, 85, and XIX, 75) have to be recorded: by P. Collart (*Rev. ét. gr.*, XLV (1932), 353–4, and *Rev. de phil.*, LVIII (1932), 407–8); H. Kortenbeutel (*O.L.Z.*, XXXVI (1933), 151–2); G. Corradi (*Mondo classico*, II (1932), 369–71); S. A. B. Mercer (*Journ. of Soc. of Oriental Research*, XVI (1932), 63–4).

A. E. R. Boak has published an interesting text from Tebtunis concerning a transfer of mortgaged property. *A petition to an exegetes, A.D. 36*, in *Journal*, XIX (1933), 138–42.

F. Schehl, *Zum Edict Domitians über die Immunitäten der Veteranen*, in *Aegyptus*, xiii (1933), 137–44, makes some new suggestions about the import of the text preserved in the Alexandria tablet.

Two interesting documents have been published by O. Guéraud, *Deux documents relatifs au transport des céréales dans l'Égypte romaine* in *Ann. Serv.*, xxxiii (1933), 59–64. One is a letter on an ostracon, of the first century A.D. approximately, concerning the supercargo on a river-boat transporting corn. The second is a Latin inscription on a fragment of a leather sack which had contained a specimen of the wheat transported *ex nomo Memphite a⟨d⟩ metropolin*.

The same scholar has also published, with a facsimile, a fragment of a Latin tablet in the Cairo Museum, from the middle of the second century A.D. *Un fragment de tablette latine* in *Ann. Serv.*, xxxii (1932), 177–9.

Westermann and Keyes' *P. Columbia*, II (*Journal*, xix, 75) has been greeted by the following reviewers: P. Collart (*Rev. ét. gr.*, xlv (1932), 444–5); A. C. Johnson (*Amer Hist. Review*, x (1932), 270–3); H. Gerstinger (*Oesterr. höh. Schule*, i (1932), 10); M. E. Dicker (*Journal*, xix (1933), 110); J. G. Milne (*J.H.S.*, liii (1933), 140); B. A. van Groningen (*Museum*, xl (1933), 110); H. I. Bell (*Cl. Rev.*, xlvii (1933), 247).

H. Kortenbeutel's *Kaisereid* (*Journal*, xix, 76) has been reviewed and reinterpreted by Wilcken (*Archiv*, xi, 129–30); see also the remarks of Kunkel in *Aegyptus*, xiii (1933), 253 ff.

Manteuffel's *Diplomatische Beiträge zum Pap. Varsoviensis no.* 10, which the present writer has not seen, is said to identify a Warsaw papyrus as part of a τόμος συγκολλήσιμος of the Tebtunis grapheion (A.D. 156). From *La Pologne au VII congrès international des sciences historiques*, 277–85: Warsaw, 1933.

Vitelli's *Lettera di Maximos a Chairemon ed Eudaimon* (*Journal*, xix, 76) is reviewed by M. Lenchantin (*Athenaeum*, x (1932), 433–4).

A contribution by W. L. Westermann to *Aegyptus*, xiii (1933), 229–37, is entitled *Slave Transfer: Deed of sale with affidavit of vendor*. The document dates from A.D. 160 to 161 and contains on the same sheet as the contract an oath by the vendor that he has sold the slave to the purchaser. Reviewed by Wilcken (*Archiv*, xi, 134).

The Gnomon is the subject of an article by Egon Weiss, *De nonnullis locis papyri illius qui Gnomon inscribitur, praesertim de jure sepulcrorum in Aegypto*, in *Aegyptus*, xiii (1933), 299–304.

Boak's *Petition for relief from a guardianship* (*Journal*, xix, 76) is reviewed by Wilcken (*Archiv*, xi, 132–3).

Eitrem's *Two Greek papyri* (*Journal*, xix, 76) is likewise reviewed by Wilcken (*Archiv*, xi, 136–7).

In *C.-R. Ac. Inscr. et B.-L.*, 1933, 309 ff., M. Rostovtzeff gives an account of a surprising find at Doura, consisting of the remains of the military archives. The documents are almost entirely in Latin. He publishes, with a facsimile, one of the most interesting pieces, a Latin circular from Marius Maximus, the military commander, about the beginning of the third century A.D., giving a copy of his letter to the procurator of Syria, Minicius Martialis, about providing hospitality for a Parthian ambassador who was passing through the district.

Elinor M. Husselman, *P. Mich. Inv. no.* 5474 in *Archiv*, xi, 110–2, publishes a fragment of a document which contains the beginning of a contract drawn up in A.D. 207 at Pompeiopolis the metropolis of Paphlagonia.

W. Reusch, *Zur Datierung des Papyrus Gissensis* 40, 1, in *Hermes*, lxvii (1932), 473–7, gives reasons for dating the much-discussed edict of Caracalla at the end of A.D. 211 or the beginning of 212, directly after the murder of Geta.

L. P. Kirwan has published a series of forty mummy-labels from Assiut; some of them are bilingual, but the demotic versions await a decipherer. *Some Roman mummy tickets* in *Ann. Serv.*, xxxiii (1933), 54–8.

An incomplete petition to the praefect in Latin and Greek, with the praefect's subscription in Latin, is published by H. A. Sanders, *A bilingual request for appointment of a guardian* in *Aegyptus*, xiii (1933), 169–75, and discussed at some length by Wilcken (*Archiv*, xi, 137–9).

New readings in various papyri are proposed in the following articles. V. Martin, *Sur la formule "Archontes Conseil des Ptolemaiens Arsinoites"*, in *Aegyptus*, xiii (1933), 213–24, establishes, partly in confirmation of Wilcken, the correct text of *B.G.U.*, 362, v, 1–2. In *A.J.A.*, xxxvii (1933), 287–8, H. Comfort, writing on *Amantius and the date of C.P.R.* 247, corrects the reading of the said date. J. C. Naber, *De Verrina quadam rusticana*, in *Aegyptus*, xiii (1933), 31–4, offers a new interpretation of *Sammelbuch* 7368 and restores the text accordingly. A revised and restored text of *Stud. Pal.*, xx, 50, is printed by P. Meyer, *Der Immobiliarkauf Stud. Pal. XX no.* 50, in *Aegyptus*, xiii (1933), 323–6.

Roman and Byzantine. The University library of Groningen acquired some time ago a small collection of papyri which have now been published, together with two pieces belonging to the University library of

Amsterdam, by A. G. Roos. The little volume contains twenty-four texts in all, some of which are very fragmentary, ranging from the second to the sixth century A.D. They are carefully edited, with translations and ample commentaries; and Roos has had the advantage of checking his own readings by those of B. A. van Groningen. Among the more interesting pieces may be mentioned: no. 10, a fourth-century deed of gift, *χάρις*, to take effect after the death of the donor, *μετὰ θανατόν μου*; no. 15, a request from a certain Turbo to his friend Apis to accept delivery of the mummy of his mother, which had been dispatched by river (second century A.D.); nos. 17, 18, two Christian letters of the third or fourth century, written by a monk or cleric. *Papyri Groninganae: Griechische Papyri der Universitätsbibliothek zu Groningen, nebst 2 Papyri der Universitätsbibliothek zu Amsterdam.* (Verhandelingen der Koninklijke Akademie van Wetenschappen te Amsterdam, Afdeeling Letterkunde, Nieuwe Reeks deel xxxii, Nr. 4.) Uitgave van de N. V. Noord-Hollandsche Uitgevers-Maatschappij. Amsterdam, 1933. Pp. viii+67, with 7 plates. Reviewed by Wilcken (*Archiv*, xi, 141–4).

A. S. Hunt, *P. Warren* 5–7, in *Aegyptus*, xiii, 241–6, has given us three more texts from the Warren collection: receipt of a shipper, A.D. 133, with variations from the ordinary type; a contract of deposit, A.D. 198–9, probably a disguised dowry; and a tax receipt of the fourth century A.D. Reviewed by Wilcken (*Archiv*, xi, 131–2).

Kalén's *Berliner Leihgabe griechischer Papyri*, i (*Journal*, xix, 77) has been reviewed by Wilcken (*Archiv*, xi, 139–41) and by J. G. Milne (*J.H.S.*, liii (1933), 141).

Byzantine. A. S. Hunt contributes an article entitled *Two papyri from the Warren collection* to the *Studi in onore di Salvatore Riccobono*, 521–5. The texts which he publishes are: (1) a request for transfer of taxation, of about A.D. 530, and (2) a contract of loan upon mortgage, dated A.D. 591–2.

4. Political History, Biography, Administration, Topography, and Chronology.

General. In vol. ix of the *Cambridge Ancient History*, Cambridge, 1932, the sections particularly concerned with Egypt are c. viii, § ix, 383–90, on Pompey and Egypt, by M. Cary; c. ix, § vi, 428–36, on the Jews of the Diaspora, by E. R. Bevan; and c. xvi, § 6, 667–74, on Caesar at Alexandria, by F. E. Adcock.

T. Lenschau's *Bericht über griechische Geschichte* (1926–31) in vol. 244 of Bursian's *Jahresbericht*, Leipzig, 1934, contains references to studies falling under this section on p. 78 (Alexander, and Cyrene inscription), p. 95 (Ptolemaic, third century), and p. 114 (Cyrene).

In the third volume of Gabriel Hanotaux, *Historie de la Nation égyptienne*, Paris, 1933, the Ptolemaic period is taken by P. Jouguet, the Roman by V. Chapot, and the Byzantine by C. Diehl.

Political History. Reference may be made to *The Ephemerides of Alexander's Expedition*, by C. A. Robinson, Providence, 1932: it is reviewed by M. Cary in *Journal*, xix (1933), 107–8, by G. Radet in *Rev. ét. anc.*, xxxv (1933), 57–62, by G. Seure in *Rev. de phil.*, 3, vii (1933), 303, by P. H. Davis in *Am. Journ. Phil.*, liv (1933), 89–91, and by C. J. Kraemer in *Am. Journ. Arch.*, xxxvii (1933), 351–2.

Radet's *Alexandre le Grand* (see *Journal*, xix, 78) is reviewed by G. Seure in *Rev. de phil.*, 3, vii (1933), 115–17.

A dissertation by Heinz Winkler, *Rom und Aegypten im 2 Jahrhundert v. Chr.*, Leipzig, 1933, deals with the period from 200 to 130 B.C.

The discussion of the inscription of Ptolemy of Cyrene is continued by L. Wenger, *Zum Testamente des Ptolemaios Neoteros von Kyrene*, in *Studi Riccobono*, i, 529–48, by A. Steinwenter, *Das Testament des Ptolemaios Neoteros, Königs von Kyrene*, in *Z. Sav.*, liii (1933), 497–505, and by Claire Préaux, *À propos du testament de Ptolémée le jeune trouvé à Cyrène*, in *Chron. d'Ég.*, viii (1933), 154–8. (See also § 6.)

H. Comfort in *Amantius and the date of C.P.R. 247*, *Am. Journ. Arch.*, xxxvii (1933), 287–8, after a re-examination of the papyrus for ὑπατείας Ἰουλίου Ἀμαντίου πατρικίου

τοῦ κυρ]ίου τοῦ δεσπότου ἡμῶν Κωνσταντίνου ἀγουστ'
κ]αὶ Ρουφίου Ἀλβίνου . . . etc. reads
ὑπατείας Ἰουλίου Κω(ν)σταντ̣ί̣ο̣υ̣ πατρικίου
ἀ̣δ̣ε̣λ̣] φοῦ κ.τ.λ.

The date of the papyrus is thus April 7, A.D. 335, instead of April 7, 345. Hence there is an interval of only one season between the date of the lease and the occupancy of the land.

A. Piganiol, *Dates constantiniennes*, *Revue d'hist. et de philosophie religieuses*, xii (1932), 360–72, supports Stein's view that the Battle of Chrysopolis was fought in A.D. 324. The question is of importance for papyrus datings of the period.

Biography. A. STEIN's papers *Balbillus* in *Aegyptus*, XIII (1933), 123–36, and *Nachtrag zu Balbillus*, *ibid.*, 331–2, are largely concerned with the Egyptian careers of the bearers of that name.

We have not seen *Kleopatra, die genialste Frau der Weltgeschichte*, by O. VON WERTHEIMER (Wien, 1932).

GRACE H. MACURDY's *Hellenistic Queens* (see *Journal*, XIX, 79) is reviewed by CH. PICARD in *Rev. de phil.*, 3, VII (1933), 400–2, and by W. KAHRSTEDT in *Gnomon*, IX (1933), 278–9.

Administration. In *Bull. Soc. Arch. Alex.*, VIII (1933), 143–82, A. SEGRÈ writes *Note sullo Status Civitatis degli Ebrei nell'Egitto tolemaico e imperiale.*

The Gaza inscription is discussed by P. ROUSSEL, *Epitaphe de Gaza commémorant deux officiers de la garnison ptolémaique*, in *Aegyptus*, XIII (1933), 145–51, and by M. N. TOD, *A Greek epigram from Gaza*, *ibid.*, 152–8.

Other articles in the same number of *Aegyptus* which come under this head are by V. MARTIN, *Sur la formule "Archontes Conseil des Ptolémaiens Arsinoites"* (294–8), by E. WEISS, *De nonnullis locis papyri illius, qui Gnomon inscribitur, praesertim de iure sepulchrorum in Aegypto* (299–304) (see also § 6), and by H. KORTENBEUTEL, *Eingabe an den Statthalter G. Turranius* (323–6).

H. HEANE contributes *Petites recherches sur le directeur des cultes dans l'Égypte romaine* to the *Mélanges Iorga* (see also § 2).

W. W. TARN has *Two notes on Ptolemaic History* in *J.H.S.*, LIII (1933), 57–68, dealing with the lineage of Ptolemy I and the duration of the Ptolemaic nauarchate.

In TENNEY FRANK's article *On Augustus and the Aerarium*, in *J.R.S.*, XXIII (1933), 143–8, there are some useful remarks on the Egyptian state revenues.

W. B. ANDERSON discusses Gallus as an administrator in Egypt in *Gallus and the Fourth Georgic* in *Cl. Quart.*, XXVII (1933), 36–45.

There are some useful notes on local administrative officials in A. G. ROOS, *Papyri Groninganae*: see pp. 91 f. above.

Topography. In *Karanis: Reports 1924–31*, Ann Arbor, 1933, A. E. R. BOAK deals with the North Temple and E. E. PETERSON with the Temple of Pnepheros and Petesouchos. See also p. 82 above.

Chronology. A careful estimate of the results of recent research into the reigns of the second, third, and fourth Ptolemies is made in *Archiv*, XI, 1–56, by HELLMUT FRANK, *Ein Beitrag zur Ptolemäerchronologie des III Jahrhunderts v. Chr.*

SCOTT's *Honorific months* (see *Journal*, XIX, 80), is reviewed by H. VON GAERTRINGEN in *Phil. Woch.*, 1933, 23/4, 647–8.

5. SOCIAL LIFE, EDUCATION, ART, ECONOMIC HISTORY, NUMISMATICS, AND METROLOGY.

General. W. SCHUBART has contributed to *Archiv*, XI (1933), 74–106, an excellent lecture on *Vom Altertum zum Mittelalter*. This sketch of the general development of life and thought within the Empire from Diocletian to Justinian should be read by all students of the culture of this period.

G. MICKWITZ has studied in *Aegyptus*, XIII (1933), 95–106, *Ein Geldwertindex der römisch-byzantinischen Zeit.*

I have not yet seen HUGH G. EVELYN WHITE, *The Monasteries of the Wâdi 'n Natrûn.* Part III. *Architecture and Archaeology.* Metropolitan Museum of Art, New York, 1933. Pp. xxxiv+272, 93 plates. Reviewed by F. LL. GRIFFITH, *Journal*, p. 117 below. There is a review of Part II of this work by L. TH. LEFORT, *Rev. d'hist. ecclés.*, XXIX (1933), 986–8; and *cf.* E. BRECCIA, *Dans le désert de Nitrie*, *Bull. Soc. Roy. d'Arch. d'Alexandrie*, VIII (1932), 17–26, 7 plates.

ET. COMBE, *Alexandrie musulmane. Notes de Topographie et d'Histoire de la ville depuis la conquête arabe jusqu'à nos jours.* 1 Série. *Bull. Soc. Roy. de Géographie d'Égypte*, XV, 201–38; XVI, 111–21, 269–92. On the lakes in the neighbourhood of Alexandria: *cf.* A. Adriani in *Bull. Soc. Roy. d'Arch. d'Alexandrie*, VIII (1933), 218.

Social Life. N. LEWIS collects *New light on the Greek house from the Zenon papyri* in *Am. Journ. Arch.*, XXXVII (1933), 397–9.

In *Life and Letters in the Papyri*, Ann Arbor, 1933, J. G. WINTER gives a very interesting summary of the evidence derived from this source.

Art. F. VON BISSING, in *Zu Alexandrinischen Denkmalern*, in *Bull. Soc. Arch. Alex.*, VIII (1933), 183–92, treats of the tomb of Petosiris and that of Alexander: E. BRECCIA adds a note.

R. DELBRUECK's *Antike Porphyrwerke*, Berlin, 1932, which should have been noted last year for its importance to Egypto-Roman art, is reviewed by J. SIEVEKING in *Gnomon*, IX (1933), 292–6.

A. ADRIANI publishes a torso of Hermes: *Sculture del Museo Greco-Romano di Alessandria* in *Bull. Soc. Arch. Alex.*, VIII (1933), 193–8.

Finance, Agriculture, Industry. M. SCHNEBEL examines *Die Geschäfte des Γάιος Ἰούλιος Φίλιος* in *Aegyptus*, XIII (1933), 35–41.

Under this head also comes an article by F. HEICHELHEIM, *Zu Pap. Berol.* 5883 *u.* 5853, in the same journal, 187–92.

A. ANDRÉADES deals with *Droits de douane prélevés par les Lagides sur le commerce extérieur* in *Mélanges Glotz*, 7.

An important book has been published by G. MICKWITZ, *Geld und Wirtschaft im römischen Reich des vierten Jahrhunderts n. Chr.* (*Societas Scientiarum Fennica. Commentationes Humanarum Litterarum*, IV, 2). Akademische Buchhandlung, Helsingfors, Otto Harrasowitz, Leipzig, 1932, pp. xv, 232. This has been reviewed by H. MATTINGLY, *Cl. Rev.*, XLVII (1933), 27, by F. HEICHELHEIM, *Z. f. d. gesamte Staatswissenschaft*, XCIV (1933), 531–4, by P. GRAINDOR, *Rev. belge*, XII (1933), 774–5, by M. GELZER, *B.Z.* XXXIII (1933), 387–9, and by J. G. MILNE, *Journal*, p. 000 above.

E. R. HARDY, JR., *The Large Estates of Byzantine Egypt* (1932), has been reviewed by H. I. BELL, *Cl. Rev.*, XLVI (1932), 236, by G. SOYTER, *Phil. Woch.*, 1933, 492–3, by W. SCHUBART, *O.L.Z.*, 1933, 298–9, by F. ZUCKER, *Journal*, XIX (1933), 99–103, by F. HEICHELHEIM, *D. Lit.-Z.*, 1933, 132–4, by C. PRÉAUX in *Chron. d'Égypte*, VIII (1933), 166–9.

Numismatics and Metrology. S. H. WEBER describes *An Egyptian hoard of the Second Century*, New York, 1932: it is reviewed by C. A. ROBINSON in *Amer. Journ. Arch.*, XXXVII (1933), 177–8.

The Ashmolean Museum has published a *Catalogue of Alexandrian Coins*, by J. G. MILNE, Oxford, 1933: it is reviewed by H. MATTINGLY in *J.R.S.*, XXIII (1933), 244–5, and by A. ADRIANI in *Bull. Soc. Arch. Alex.*, VIII (1933), 215.

In *Karanis: Reports 1924–31* (see § 4) the coin-hoards are described by J. G. MILNE and A. G. K. HAYTER.

W. KUBITSCHEK, *Sinn der frühbyzantinischen Formel: Ein Goldstück weniger x Karate*, *Numism. Z.*, LXV (1932), 16–22, defends his interpretation (first published as against Wessely in 1896) of the phrase, appearing in papyri from the sixth century, *x νομίσματα παρὰ καράτια x*. On payment the coins were weighed in order to discover how far their worth had been diminished through use: then the number of the coins of full weight which the payment represented was noted and the number of the *καράτια* by which the payment fell short of the total of coins of full weight. The formula thus = "x nomismata=x karatia". It is not therefore a *general* discount payable on gold coins of a specific character.

6. LAW

A. *General.*

i. *Bibliography. Necrology. Congresses.* U. WILCKEN, *Urkunden-Referat*, *Archiv*, XI (1933), 117–52. F. OLIVIER-MARTIN and R. BESNIER, *Rev. hist. dr.*, XII (1933), suppl. with fasc. 4, *Bibliographie courante*—1931, 42 pp., especially pp. 6–11. M. HOMBERT, *Bulletin papyrologique*, *Byzantion*, VIII (1933), 605–26, especially 616–17. *B.Z.*, XXXIII (1933), 164–6; 232–4; 412–14; 472–6. Announced as an appendix to *Riv. Stor. Dir. Ital.*, VI (1933): *Bibliografia della Riv. Stor. Dir. Ital. per l'Anno* 1932 (not seen). P. COLLINET, *Répertoire des Bibliographies, Vocabulaires, Index, Concordances et Palingénésies du Droit romain*, *Rev. hist. dr.*, XII (1933), 324–34 (also separately).

Necrology. P. BONFANTE: E. ALBERTARIO, *Arch. Giurid.*, CIX (1933), 5–21 (with bibliography); S. RICCOBONO, *Ann. R. Univ. Roma*, 1932–3 (extr. 14 pp.); E. RABEL, *Z. Sav.*, LIII (1933), 647–9. F. VON WOESS: L. WENGER and E. RABEL, *Z. Sav.*, LIII (1933), 651–6. S. PEROZZI: S. RICCOBONO, *Italian Acad.*, 15 Jan. 1933 (10 pp.). N. TAMASSIA: G. FERRARI DALLE SPADE, *Ann. R. Univ. Padova*, 1932–3 (28 pp., with bibliogr.). F. MARTROYE: J. MAURICE, *Byzantion*, VIII (1933), 797–9. A. FLINIAUX: OLIVIER-MARTIN, *Rev. hist. dr.*, XII (1933), 838–40. U. RATTI: E. ALBERTARIO, *Arch. Giurid.*, CIX (1933), 232–4 (with bibliogr.).

Congresses. A short account of the legal history section of the Historical Congress, Warsaw, August, 1933, is given by OLIVIER-MARTIN, *Rev. hist. dr.*, XII (1933), 530–6. *Ibid.*, 579–85, A. FLINIAUX and H. LÉVY-BRUHL report on the Congress of Roman Law held at Bologna and Rome, April, 1933. E. SEIDL, *Deutsche Juristen-Zeit.*, XXXVIII (1933), 1351–2, mentions briefly the principal papers touching legal history read at the Papyrological Congress, Munich, Sept., 1933.

ii. *Miscellaneous reviews.* Reviews of *Conferenze per il xiv centenario delle Pandette* (Milan, 1931; *Journal* XIX (1933), 84) have appeared by E. SEIDL, *B.Z.*, XXXIII (1933), 396–400; by J. VAN OVEN, *Tijdschrift v. Rechtsgeschiedenis*, XII (1933), 210–19; by G. SCHERILLO, *Arch. Giurid.*, CIX (1933), 100–24; by F. WIEACKER, *Gnomon*, IX (1933), 201–10; and by E. TROILO, *Mondo Classico*, III (1933), 234–7 (not seen).

In *L.Q.R.*, XLIX (1933), 443–4, F. DE ZULUETA welcomes the publication of Vol. I, *Persone e famiglia*, of

E. Albertario's collected *Studi di diritto romano* (Milan, 1933–). W. W. Buckland, *Tulane Law Rev.*, vii (1933), 627–32, finds serious defects in S. P. Scott's (+) translation of the *Corpus Iuris* (Cincinnati, 1932, bound in 7 vols.), though he thinks that they do not render the work unserviceable, if cautiously used, for the limited purposes to which a translation can properly be put.

iii. *Legal history of antiquity.* In a lecture-programme, *Les droits antiques antérieurs à la fondation de Rome* (Paris, 1932–3), A. Fliniaux gives a valuable conspectus of the present state of knowledge of the earliest law of Mediterranean and nearer Oriental peoples; scholarship has suffered a severe loss by the author's premature death.

Cuneiform law. In the *Encyclopaedia of the Social Sciences* P. Koschaker has given a masterly summary of *Cuneiform Law*. His *Fratriarchat, Hausgemeinschaft und Mutterrecht in Keilschriftrechten* (*Z. f. Assyriologie*, vii (1933), 92 pp. offprint) will have to be given very serious consideration by all students of primitive law. In the cuneiform area he finds widespread traces of fratriarchy, actual and in decay. This fratriarchy is not the headship of the mother's brother, but a sort of alternation with patriarchy. Logically one has to start with a patriarch, but if the family is to hold together, he must be succeeded by *one* of his sons, naturally the eldest, who when he dies is succeeded by his next brother and so on. The type of power thus becomes '*fratria*' *potestas*: a wife, for instance, is *sororis loco*. But there is a natural tendency towards patriarchy: the younger brothers will be heads of sub-families, they will assert parity with the eldest, and when he or they die, the claim of their respective sons to succeed them will make themselves felt, though this may be obviated by the sons leaving the joint-family on marriage. These speculations offer the key to the problem of *adoptio in fratrem*, which arises out of C. 6, 24, 7 (285) and of a passage in the *Syro-Roman Lawbook* (L. 86), discussed by E. Volterra, *Bull. Ist. Dir. Rom.*, xli (1933), 289–304 and P. Koschaker, *Studi Riccobono* iii (1933), 361–76. Two texts from Susa of about 2000 b.c., recently published by Scheil and commented by E. Cuq, *Rev. d'Assyrologie*, xxviii (1931), 51 ff. and xxix (1932), 155 ff., show *adoptio in fratrem* utilized for testamentary purposes, precisely as seems to have been attempted in the case put by C. 6, 24, 7. The underlying assumption is that brother succeeded brother either alone, in the stage of pure fratriarchy, or along with the sons of the deceased, in the later stage of paritary fratriarchy. Diocletian of course refused to admit any such brother-right, but the cuneiform evidence, though too remote for any direct connexion to be thought of, makes it conceivable that local custom would have admitted it. A similar explanation may lie behind the strange L. 86, nor can the new evidence marshalled by Koschaker be lightly dismissed in considering the new fragment of Gaius on *consortium* (below iv).

M. San Nicolò continues his *Parerga Babylonica* in *Archiv Orientální* (*Czechoslovak Oriental Institute*), iv (1932), and v–vi (1933). See iv, 336–7 on the decisory oath, v, 285–7 on duties to the dead, v, 301–2 on a possible parallel to the euphemism *πειθανάγκη* for flogging, and especially vi, 179–202: *Einiges über Tempelpfründen* (*isqu*) *und ἡμέραι λειτουργικαί in Eanna*, which adduces from Uruk in the late Babylonian period a close parallel to the Serapeum papyri from Memphis in U.P.Z., i. In *Z. Sav.*, liii (1933), 551–60, J. Lautner reviews favourably W. Eilers, *Gesellschaftsformen im altbab. Recht* (Leipzig, 1931), and *ibid.*, 605–7, P. Koschaker considers Eilers' *Die Gesetzesstele Chammurabis* to be a great advance on H. Winckler's translation, which it replaces. V. Korošec's *Hethitische Staatsverträge* (Leipzig, 1931; *Journal*, xviii (1932), 92) receives a good review from F. Schachermeyr, *O.L.Z.*, xxxiii (1933), 612–16, with a reserve as to the classification of the treaties. In *Studi Riccobono* (1932), 551–70, V. Korošec, *Raub- und Kaufehe im hethitischen Recht*, tells us that Hittite law shows both forms of marriage, the former being probably native custom, the latter so closely resembling Hammurabi's law as to suggest influence, if not reception.

Demotic law. *Z. Sav.*, liii (1933), 561–4: E. Seidl, reviewing *Cat. gén. des Antiquités ég. du Musée du Caire; Die demotische Denkmäler III*, ed. W. Spiegelberg (Berlin, 1932), says that the papyri of this collection are valuable for the study both of enchoric procedure and of private law generally, including the antecedents of the Ptolemaic *συγγραφὴ ἀποστασίου*.

Greek law. G. La Pira, *Bull. Ist. Dir. Rom.*, xli (1933), 305–20, criticizes the second of U. Paoli's *Studi di diritto attico* (Florence, 1930; *Journal*, xix (1933), 83), that on *hypotheca* and *apotimema*, arguing that the very existence of ὅροι shows that possession was not transferred at once to the hypothecary creditor; if literary texts show a creditor in possession, the debtor must have been in default. But as regards the ultimate effects of hypothec he accepts on the whole Paoli's view that they amounted to indefinite possession, a mode of pressure rather than of realization. Paoli's view that *apotimema* carried immediate possession he regards as impossible on practical grounds. In *Z. Sav.*, liii (1933), 508–13, *Der Pachtvertrag der Klytiden auf Chios* (4. *Jh. v. Chr.*), *ein griech. Beispiel der Rechtsübertragung in der Formen des Prozesses*, K. Latte and W. Kunkel reproduce, with corrections by Latte, an inscription published by Haussoullier, *Bull.*

Corr. Hell., III, 242 (revised *ibid.*, XXXVII, 203). In comment KUNKEL makes the interesting point that the transaction (a perpetual lease, or transfer of property subject to rent and other conditions) is in the form of an *in iure cessio*. The processuality of the form is clearer than in the Alexandrian συγχωρήσεις, which, however, may now be traced with probability to Greek antecedents (*contra* P. M. MEYER, *Jur. Pap.*, pp. 82, 92). The conception of a limited transfer of property is characteristically Greek.

Eastern Hellenistic law. E. SCHÖNBAUER, *Paramone, Antichrese und Hypothek. Studien zu P. Dura* 10, *Z. Sav.*, LIII (1933), 422–50, reinforces his argument (*cf. Journal*, XIX (1933), 83, etc.) that P. Dura 10 is pure Greek, and denies that it shows any assimilation of Oriental conceptions. On this point his difference with P. KOSCHAKER is not very substantial, and it will be agreed that the letter of Artabanus III addressed to the city of Susa in A.D. 21 (published by F. CUMONT, *Ac. des inscr. et belles lettres, C.-R.* 1932, pp. 238–59, with illuminating commentary) shows an extraordinary persistence of Greek ideas and institutions in the East a century earlier. SCHÖNBAUER also denies that the idea of divided ownership is Greek, nor does he find it necessary as an explanation of *paramone*, for which KOSCHAKER uses it. For SCHÖNBAUER the decisive test of slavery is the right of the master to alienate. This is abandoned in *paramone* for manumission and is not acquired under *paramone* for security. The result in both cases is a form of *potestas* comparable to that of the Roman patron in early times over his *liberti* and clients.

Roman law. The interpolation question. F. PRINGSHEIM, *L.Q.R.*, XLIX (1933), 43–60, 379–412, has two powerful articles on *Animus in Roman Law*, which are a systematic development of his position in *Animus donandi*, *Z. Sav.*, XLII (1921), 273–327. "The Byzantines were the first to attribute to the parties an intention directed towards the attainment of a specific legal consequence, to make the intention supreme, even where it is unexpressed and undemonstrable", but apart from this theory of theirs they are not charged "with introducing an idea which is either novel or intrinsically false". Comparison of classical and post-classical juristic development is also to be found in H. KRELLER, *Das Problem des Juristenrechts in d. röm. Rechtsgesch.* (Tübingen, 1932, 28 pp.), I. KOSCHEMBAHR-LYSKOWSKI, *Les facteurs intérieurs de l'évolution du droit romain privé* (Warsaw, 1933, 8 pp.), and A. A. SCHILLER, *Sources and influences of the Roman law, iii–vi Centuries A.D.* (*Georgetown Law Journ.*, XXI (1932–3), 147–60). L. CHIAZZESE, *Confronti testuali. Contributo alla dottrina delle interpolazioni Giustinianee, Parte Generale* (*Ann. Sem. Giurid. Palermo*, XVI (1933), Cortona), in a very substantial volume, begins a systematic study of the passages of the *Corpus Iuris* of which a different version has come to us by another channel. The review of literature (pp. 47–54) shows that this task has never been attempted over the whole field, though W. W. BUCKLAND, *Yale Law Journ.*, XXXIII (1924), 343–64, has given the lead.

Coptic law. A. A. SCHILLER, *The Coptic* λόγος μπνουτε *documents* (*Studi Albertoni*, I (1933), 305–45), studies certain documents which he regards as a development and expansion, in some respects characteristically Coptic, of the Byzantine λόγος δουλίας, an institution which can be traced back possibly to native Egyptian sources. On this study D. SCHÄFER, *Philologus*, LXXXVIII (1933), 296–301 (below, F) offers some criticisms. A. A. SCHILLER, *Ten Coptic legal texts edited with translation, commentary and indexes together with an introduction* (New York, 1932; not seen), is favourably reviewed (some criticism) by P. P[EETERS], *Analecta Bollandiana*, LI (1933), 169–70: the light thrown on monasticism in the Thebais in the eighth century is welcomed. In the first part of a joint article (*Neue koptische Rechtsurkunden*, *Aegyptus*, XIII (1933), 305–22) W. TILL disagrees with various of SCHILLER's interpretations of these texts; in the second part A. STEINWENTER comments on the legal aspects of some of them: monastic organization, status of monks, continuance of the pagarch, a legal dispute, *protocometae*, ἀπαργυρισμός.

Byzantine law. E. LEVY's account in *Z. Sav.*, LIII (1933), 618–21, of *Ius Graecoromanum*, ed. J. and P. ZEPOS (Athens, 1931; *Journal*, XIX (1933), 84), leaves one in no doubt of the practical utility of this publication, but less clear as to its indispensability for those who possess ZACHARIAE v. LINGENTHAL's collection.

iv. *Juristic texts.* The most important Roman juristic text that has ever been recovered from Egypt has received a wholly admirable and commendably prompt first edition, issued with four large double photographs at the very reasonable price of 8*s.* 6*d.*: *P.S.I., XI, extr. No.* 1182. *Frammenti di Gaio a cura di V. Arangio-Ruiz* (Florence, 1933). These remains of a magnificent parchment copy give us (1) the text of Gaius 3, 153 *fin.*–4, followed by a considerable passage, omitted (without our having suspected the fact) by the Veronese MS., on *aliud genus societatis proprium civium Romanorum*, viz. the *consortium* of *fratres coheredes* and its conventional imitation (defective at the end), (2) Gaius 3, 167 *fin.*–174 *init.*, (3) Gaius 4, 16 *fin.*–17 (nearly as far as the Veronese text), (4) after a gap of a folio, a few words ending the treatment of *sacramentum*, and then the missing passages on *iudicis postulatio* and *condictio*, joining on to Gaius 4, 17a–18 *init.* G. A. PETROPOULOS, *Δικαιοσύνη, Τόμος ΙΑ'* (1933), 289–96, does not do more than announce the editor's results. R. MONIER, *Les nouveaux fragments des Institutes de Gaius* (*P.S.I.* 1182) *et leur importance pour la connaissance du droit romain* (Paris, Éditions Domat-Chrestien, 1933: 10 frs.) gives the text in a form convenient for scholastic use, with a good commentary. There should be plenty of comment to record next year.

E. WEISS, *Laterculi iuris, Z. Sav.*, LIII (1933), 482–8, gives, with instructive commentary, a series of extracts from the lists of *Notae iuris*, other than Probus', published by Mommsen in *Gramm. Lat.*, IV, 265–352. The *notae iuris* are valuable as relics of the times before Justinian (*const. Tanta* 22) forbade *siglorum malitia*. F. PRINGSHEIM, *Z. Sav.*, LIII (1933), 488–91, presents his view of the fragment of a version of the Digest published by G. LA PIRA, *Bull. Ist. Dir. Rom.*, XXXVIII (1930), 151–74 (*Journal*, XVII (1931), 133). The work is little later than Justinian, the omission of inscriptions of fragments not being a breach of *const. Tanta* 22. It is not a true κατὰ πόδα, and the editor's suggestion that Dorotheus was its author rests on flimsy evidence. It is to be noted that the author begins his version of an extract (l. 6) with the name of its author and the first word of the original, a practice found in the *Schol. Sinaitica* and in P.S.I. 55; *cf.* P. COLLINET, *École de Beyrout*, 287 ff. In *Z. Sav.*, LIII (1933), 451–64, E. SCHÖNBAUER gives the text of *Ein neues vorjustinianisches Werk* (*P. Festh. Wilcken*), with short commentary, referring for fuller details to a number of *Aegyptus* (presumably the second of 1933) which has not yet reached us. The order and connexion of the remains, which are found on two Berlin papyri, are uncertain: there are two large folios preserving only the beginnings and ends of lines. They must be early sixth century, if we accept the editor's conjecture that they are pre-Justinian, but by Anatolius of Berytus, one of the compilers of the Digest. The subject of one of the fragments is the question what is covered by certain formulae of legacy (*accessio*). The citations, apparently from Paul *Ad Sabinum*, are not from the Digest.

v. *Documents and comments on documents.* Taking U. WILCKEN's *Urkunden-Referat, Archiv*, XI (1933), 117–52, as read, we mention some articles which do not fit easily into our general scheme. O. GUÉRAUD's *P. Enteuxeis* is reviewed by E. BERNEKER, *K.V.G.R.*, XXVI (1933), 363–417: he summarizes the introduction and discusses nearly all the texts, criticizing (pp. 412–13) E. SCHÖNBAUER's interpretation of nos. 14 and 15 in connexion with the problem of ἀνανέωσις (*Journal*, XIX (1933), 86–7). F. ZUCKER, *Aegyptus*, XIII (1933), 213–24, makes textual and interpretative suggestions on fasc. 2 of *P. Enteuxeis*. There are also shorter, but highly appreciative, reviews by H. I. BELL, *J.H.S.*, LIII (1933), 319–21, and C. C. EDGAR, *Journal*, XIX (1933), 108–9 (some textual suggestions). In a review of B.G.U. VIII, E. SEIDL, *D.L.Z.*, 1933, 2281–3, states shortly the chief points on which the volume throws light—history of the Ptolemaic judicial system, complete publication of the catoecic documents partly published by W. KUNKEL, the question of marriage for a limited term, public administration, especially taxes.

Esegesi del papiro vaticano (documento della Marmarica), *Bull. Ist. Dir. Rom.*, XLI (1933), 103–41, by G. LA PIRA, maintains and confirms the conclusions of a previous article (*ibid.*, XXXIX (1931), fasc. IV–VI, 19–39; *Journal*, XVIII (1932), 93). He studies in succession the administrative structure of the Marmarica, the judicial and administrative organs of the *nomus*, the important cadastral register, the absence of βασιλικὴ γῆ and δημοσία (γῆ Καίσαρος once, but in general private property), a normal system of taxation, but with valuation in *denarii*, the controversial cases of Cols. I–VIII. P. M. MEYER, *Der Immobiliarkauf Stud. Pal. XX. n.* 20, *Aegyptus*, XIII (1933), 323–6, republishes the papyrus with his own completions and some corrections of readings by GERSTINGER. In *Aegyptus*, XIII (1933), 45–50, P. VIERECK edits three ostraca and a papyrus of his own, and P. Berol. 16011 *verso*. *Ibid.*, 31–4, J. C. NABER, *De Verrina quadam rusticana*, suggests, besides other emendations and completions, that in SB. 7368 (P. Berol. 7274) διὰ νυκτός refers to a woman named Νύξ through whom the village Verres enriched himself, not to nocturnal activities.

vi. *Diplomatic.* B. KÜBLER, *Ἴσον und ἀντίγραφον*, *Z. Sav.*, LIII (1933), 64–98, studies a baffling question of terminology. The Romans distinguished the legal act and the document proving it (*instrumentum*), the Greeks identified them, and had no general term for document. For the original they used the word αὐθεντικόν, which the Romans borrowed; for a copy ἀντίγραφον. But if, as often happened, sometimes even in unilateral acts (wills D. 31, 47. 28, 1, 24. *Inst.* 2, 10, 13), execution was in duplicate, triplicate, etc., then each exemplar was *authenticum*. From an examination of the various occasions on which several originals were needed the conclusion is reached that the proper term for an authentic duplicate was ἴσον (Latin *pariculum*, falsely read *periculum: Journal*, XIX (1933), 84), but ἴσον can also mean simply a copy. On the other hand a copy obtained from an official register was properly ἀντίγραφον, in spite of the fact that its official confection made it *authenticum*, and several copies were ἴσα. The difficulty is that terminology varied from chancery to chancery and with locality, while outside official usage—in documents drawn by notaries and scribes, still more by parties—we find no exactitude.

W. Schwahn, *'Αμφούριον und ἀμφουριασμός*, *Archiv*, xi (1933), 57–63, argues that these words, found only in P. Hal., i, 253 and a Rhodian inscription, denote the sale-document, not, as previously supposed, some tax or fee. E. Bickermann, *Testificatio Actorum. Eine Untersuchung über antike Niederschriften "zu Protokoll"*, *Aegyptus*, xiii (1933), 333–55, distinguishes between *ὑπομνηματισμοί τοῦ δεῖνος*, which are a register of the words and acts *of* a magistrate, kept for him in the third person by his secretary and forming a continuous diary (*ephemerides, commentarii*), and *ὑπόμνημα ἐπὶ τοῦ δεῖνος*, which is an individual document recording, also in the third person, a declaration made for the purpose of registration by a party *before* (*ἐπί*) a magistrate. These latter are separate documents (*acta*), though they might be classified by pasting together. The form of *acta* under the early Empire is not known elsewhere than in Egypt, but they, not the *commentarii*, are the precursors of the Byzantine *acta* or *gesta*. Diocletian abolished *commentarii*, so that there ceased to be a formal distinction between the record of what was done before and what was done by the magistrate. The suggestion is made that the contrast between the continuous book and the isolated pages comes from Persian diplomatic, where the skin formed a natural unity in contrast with the piece of leather.

W. Kunkel, *Zur gräko-ägyptischen Doppelurkunde*, *Studi Riccobono*, i (1932), 415–33, regards the Babylonian origin of the double document as unprovable, but holds that it was probably introduced into Egypt by the Greeks. No such documents have been found either on pure Greek ground or in pre-Ptolemaic Egypt, but the Roman adoption of the practice is significant, and the Avroman documents, which cannot be derived from Egypt, are pure Greek. The earliest Graeco-Egyptian double document found is forty years older than the earliest demotic, and the majority of demotic occur in official intercourse, which suggests that the form was imposed. But the form was gradually ousted by the notarial and autograph document, and the few double documents found in the imperial period, three in Latin and three in Greek, are not descendants of the Ptolemaic double document, but belong to the kindred Roman practice: they are Roman *testationes*. Greek documents *inter vivos* in this period are sometimes described as *ἐξαμάρτυρα*, but they seldom have subscriptions of witnesses; there is no sign of subscription in B.G.U., iv, 989 (M., *Chr.* 136: the full document, not a summary) or in Stud. Pal., xx, 16. The description *ἐξαμάρτυρον* is perhaps a reminiscence. The article ends with two appendixes: I. Supplements to Bilabel's tables, *Aegyptus*, v, 156; vi, 95, 102, 105; II. List of royal oaths in the form of double document. The point that the double documents of the Empire are Roman is further supported by the same writer in *P. Berol.* 13877, *P.S.I. VIII*, 901 *und das Vorkommen der Doppelurkunde im röm. Ägypten*, *Aegyptus*, xiii (1933), 253–9. The Berlin papyrus, which was published by H. Kortenbeutel, *Aegyptus*, xii (1932), 129–40, is a *testatio*; though it and P. Oxy., xvii, 2131 seem to have only six witnesses, this is due to bad conservation: there were really the Roman seven. P.S.I., viii, 901 is not Roman, but neither is it a double document. These conclusions are accepted by U. Wilcken, *Archiv*, xi (1933), 129–31.

vii. *The oath.* E. Seidl, *Der Eid im römisch-ägypt. Provinzialrecht. I. Die Zeit von der Eroberung Ägyptens bis zum Beginn der Regierung Diokletians* (Munich, 1933), continues the history begun in *Der Eid im ptol. Recht* (1929; *Journal*, xviii (1932), 99, etc.). The work opens with a sketch of the various legal systems which meet in Roman Egypt—the Greek, the Egyptian, the Ptolemaic, the Roman. The Romans made no attempt to impose their own ideas, which were then nearer to pure Greek than to Ptolemaic practice, but simply substituted oath by the emperor for oath by Ptolemy; in official business, however, they did not tolerate other oaths. In the use of the imperial oath Egypt was ahead of the rest of the Empire, and closer to post-classical than to classical Roman law. After this are studied: the formulae of imperial and other oaths, their use in various branches of administration and jurisdiction and for private business, their sanction, their redaction in writing. In the section on the use of the oath in contentious procedure we read of sworn written depositions for the purpose of preserving evidence and perhaps too of expediting the prefect's business at the *conventus*. This practice may be Egyptian; there is no Ptolemaic evidence of it, but neither is it Roman, for Roman law contemporary with SB. 5240 of A.D. 14 seems to have required a written *testatio* to be supported orally by its witnesses. We find also judgements given conditionally on a decisive fact being sworn to in a *χειρογραφία*: this too is Egyptian, in Seidl's opinion, and un-Roman, but was adopted by post-classical law. Another anticipation of post-classical procedure is the imposed oath. Further, there are promissory processual oaths, recalling not only the Roman *vadimonium*, but also the Ptolemaic bail given on oath taken to officials, not to the other party. In private business oaths are common in pre-Ptolemaic and Byzantine Egypt, rare in the interval, in accordance with the varying vitality of religious belief.

B. *Law of Persons.*

i. *Juristic persons.* The first volume of L. SCHNORR V. CAROLSFELD'S *Gesch. d. juristischen Person* (Munich, 1933) treats of *Universitas*, *Corpus*, and *Collegium* in classical Roman law. There is little in it for papyrologists: σῶμα, p. 174, n. 4, δίκαιον, pp. 206–7, monastic establishments pp. 394 ff. Treatment of Greek law is reserved for another volume.

ii. *Slavery and bondage.* See above A. iii. *Eastern Hellenistic law.*

iii. *Civitas.* In *Bull. Soc. Arch. d'Alex.*, VIII, 2 (1933), 143–82, A. SEGRÈ supplies *Note sullo Status Civitatis degli Ebrei nell'Egitto tolemaico e imperiale.* He has made a special study of B.G.U. IV for the purpose, and is chiefly concerned with the Jews of Alexandria. It is not easy to disengage definite results from the article. The Alexandrians regarded the Jews as being in the same category as Egyptians, and were determined to exclude them from citizenship, which the Jews sought to claim. Thus Hebrew ἀστοί are rare and questionable; Ἀλεξανδρεῖς are somewhat less rare, but the meaning of this term is doubtful. A Ἰουδαῖος ἀπ' Ἀλεξανδρείας might tendenciously describe himself as such, and it is possible that, though λαογραφούμενοι, Jews might have certain privileges, such as exemption from flagellation. The claim to some sort of citizenship was probably justified in the case of the descendants of the earliest Hebrew colonists, but it was not helped by the anti-Semitic feeling provoked by later Jewish immigration, which was large, though Philo grossly exaggerates the number of Jews in Egypt. However, the difference between *civis* and *incola* gradually became insignificant under the Empire.

After all the study given to P. Giss. 40 (*Journal*, XVIII (1932), 95, etc.), J. STROUX, *Die Constitutio Antoniniana, Philologus*, LXXXVIII (1933), 272–95, makes notable improvements in the text. His proposals for the restoration of the introductory motivation (ll. 2–7) and the peroration (ll. 9–13) will, we believe, be generally accepted. The chief of these are: l. 6 [εἰ τοσάκις μυρίους ὁσ]άκις ἐὰν; l. 7 [συνθύοντας εἰς τὰ ἱερὰ τῶ]ν θεῶν; l. 11 (following Schubart) ἐ[ξο]λώσει [τὴν] μεγαλειότητα. The reconstruction of the enactment itself (ll. 7–9) remains more disputable: Δίδωμι τοῖ[ς]ιν ἅπα[σιν ὅσοι ἐὰν ὦσι κατὰ τ]ὴν οἰκουμένην π[ολιτ]είαν Ῥωμαίων [μ]ένοντος [ξένου οὐδένος τῶν πολιτευμ]άτων χωρὶς τῶν [δε]δειτικίων. A content is thus given to the μένοντος clause to which the exception of *dediticii* can be related, but at first sight the objection that *civitates dediticiae* are unknown, which was advanced against G. SEGRÈ's interpretation, seems to apply. STROUX does not meet this, except tacitly—by translating: *manente peregrina nulla civitatium praeter dediticios.* E. BICKERMANN's view of *dediticii* is rejected: we ought to attribute to them all the characteristics of the fictitious *dediticii* of the *l. Aelia Sentia*, especially their complete incapacity for *civitas*. The Egyptians, however, were not *dediticii*. It has been impossible here to do justice to the subtle arguments by which STROUX supports his proposals; the article conveniently begins with P. M. MEYER's, E. BICKERMANN's, and E. SCHÖNBAUER's texts, and closes with the author's own.

iv. *The family.* See above, A. *Cuneiform law.* R. MONIER, *A propos de l'"adoptio plena" du droit de Justinien, Studi Albertoni*, I (1933), 235–9, argues that C. 8, 47 (48), 10, 4 does not mean that there is *adoptio plena* when a grandson is given in adoption by a grandfather who still has the father in his *potestas*. *Cf.* W. W. BUCKLAND, *Textbook*,[2] 123, n. 8. E. RABEL, reviewing in *Z. Sav.*, LIII (1933), 592–5, W. G. BECKER, *Platons Gesetze u. d. griech. Familienrecht* (Munich, 1932), says that the book gives a good conspectus both of Plato's views and of existing literature on ancient Greek family law and parts of the law of succession, but that the author makes too light of difficulties. The book confirms the view that Plato's ideas were derived from Attic law and that he sympathized with its archaic features. Another reviewer, W. C. KAMPS, *Rev. hist. dr.*, XII (1933), 545–7, regards the treatment of Greek law as good, though unfortunately confined to family law and though the author has cut the Gordian knot of many controversies. A less legalistic treatment would have been preferable.

v. *Tutela.* U. WILCKEN, *Archiv*, XI (1933), 132–3, comments on the petition for exemption from a *tutela* (A.D. 173) published by A. E. R. BOAK, *Journal*, XVIII (1932), 69–76. The ground of the claim for exemption is the wider rule that Antinoites were exempt from liturgies outside Antinoopolis. Textual improvements are suggested. In the same article, pp. 137–9, WILCKEN points out that in his careful edition of P. Mich. 3805 (A.D. 236) H. A. SANDERS (*A bilingual request for appointment of a guardian, Aegyptus*, XIII (1933), 169–75) has overlooked the assistance to be obtained from the Oxford diptych edited by GRENFELL in *Bodleian Quart. Record*, II (1919), 258–62 (GIRARD, *Textes*,[5] 916–17). The consequent improvements of text, with others, are made by WILCKEN.

vi. *Marriage.* G. A. PETROPOULOS, *Περὶ τῆς συζυγικῆς κοινοκτημοσύνης. I. Τὸ Αἰγυπτιακὸν δίκαιον, ἰδίως κατὰ τοὺς δημοτικοὺς παπύρους* (*Πραγμ. Ἀκ. Ἀθηνῶν.* II. 1 (1932), 92 pp.). We must be content to note that the second part of this work will carry the subject through to the Isaurian *Ecloga*. E. SEIDL, *Das* *vertrāgliche und das gesetzliche Güterrecht unter Ehegatten nach den demotischen Papyri*, *Aegyptus*, XIII (1933), 73–83, observes that the demotic documents regulating the patrimonial relations of husband and wife are all unilateral: they emanate from one spouse in favour of the other, and a lawyer will infer that they were binding against, but not in favour of, their maker. The various classes of property, whether of husband or wife, mentioned in these documents, are examined.

M. San Nicolò, *Archiv f. Orientforschung*, IX (1934), 67–8, reviews favourably W. F. Edgerton's *Notes on Egyptian Marriage chiefly in the Ptolemaic Period* (Chicago, 1931; *Journal*, XIX (1933), 86). Against the author he thinks that the Egyptian marriage-contracts were not merely patrimonial, but served also to convert concubinage into full marriage. The registration of the Greek συγγραφαί may perhaps have served the same two purposes, though this system may be a Greek importation. He also questions Edgerton's view that Egyptian marriage was of a single, consensual, type; the alimentary agreements seem distinct; the *dos* which they exhibit the reviewer believes to have been imported in the Persian period. Reviewing also (*Z. Sav.*, LIII (1933), 549–52) S. G. Huwardas, *Beitr. zum griech. u. gräko-äg. Eherecht der Ptol.- u. frühen Kaiserzeit* (Leipzig, 1931; *Journal*, XVIII (1932), 95–6), M. San Nicolò gives, with some critical notes, an analytical account of the work, which he regards as a useful contribution, though further evidence is needed. H. Youtie, *A note on P. Turin* 13, *Aegyptus*, XIII (1933), 89–94, suggests that the συγγραφὴ τροφῖτις there in question was made between Chonuphis, father of Thaues (also called Asclepias), of the one part, and Paintaes, his wife (another) Thaues and their son Zmanres (husband of the first-named Thaues) of the other part. The contract thus ceases to be evidence of double marriage in Egyptian law.

The second of the documents published by A. S. Hunt, *P. Warren* 5–7, *Aegyptus*, XIII (1933), 241–6, which is a contract of deposit of gold and clothing made in A.D. 198–9 between Heraclides (not described as a soldier) and a woman, is thought by the editor to be a concealed *dos*; *cf.* B.G.U., III, 729 (M., *Chr.* 167). U. Wilcken, *Archiv*, XI (1933), 132 agrees.

In Παρρησία, *Symbolae Friburgenses in Honorem Ottonis Lenel*, 80–107 (Leipzig, offprint, n.d.), A. Ehrhardt throws light on a difficult passage of the *Syro-Roman Lawbook*, L. 93, in which a contrast is drawn between marriage with *instrumenta dotalia* and marriage in παρρησίᾳ. The Syrian translator did not translate the word because he did not understand it. It should be interpreted by its legal usage at the time of the Greek original, about 476/7 according to C. A. Nallino. In papyri it is rare, but in Theophilus and, according to modern translations, in Justinian's Code and Novels it usually means *licentia*, *libertas*; though in the *Authenticum* and the Vulgate it is translated *fiducia*, this is a usage of *fiducia* peculiar to Byzantine and early ecclesiastical Latin. Marriage in the land of the writer of L. 93 was with written *instrumenta dotalia*, but he knew of lands where marriage was free, *i.e.* purely consensual. The contrast is common in imperial constitutions (*cf. Inst.* 2, 7, 3), but not in the classical jurists, because the necessity of *instrumenta*, at least where the parties were *honestate impares*, is post-classical. The Church, however, was on the side of consensual marriage; *cf. Nov.* 74, c. 4. In L. 93 we have, reflected in a somewhat altered sense, the classical principle: *matrimonia debere libera esse*, a conclusion which agrees with Nallino's view of the *Lawbook* (*Journal*, XVII (1931), 133; XVIII, 92), though not with his earlier special study of this text (*Riv. stud. orient.*, X (1923), 58).

vii. *Veterans.* F. Schehl, *Zum Edikt Diokletians über die Immunitäten der Veteranen*, *Aegyptus*, XIII (1933), 136–44, suggests some good emendations of the corrupt W. *Chr.* 463.

C. *Law of property.*

See above, A. iii. *Cuneiform law* (San Nicolò, temple-prebends), *Greek law* (Latte-Kunkel, La Pira), *Eastern Hellenistic law* (Schönbauer). In connexion with the problem of the early conception of property, we must note an excellent article by F. De Visscher, *Rev. hist. dr.*, XII (1933), 603–44. His theory is that the essential, operative part of *mancipatio* was the seller's approbation (*auctoritas*) of the buyer's well-known declaration of right. *Auctoritas* imported a warranty against disturbance whether by seller or third parties; from it the translative effect of *mancipatio* was distinguished comparatively late, indeed *dominium* itself is a comparatively late idea. Parallels to the *auctoritas* are to be found in the renunciations of Babylonian, demotic, and Graeco-Egyptian sales, and the relativity of property in Germanic law belongs to the same order of ideas.

In *Z. Sav.*, LIII (1933), 491–7, *Randbemerkungen zu Schönbauer, Zur Frage des Eigentumsüberganges beim Kauf* (*Z. Sav.*, LII (1932), 195–250; *Journal*, XIX (1933), 87), F. Pringsheim is, as always, conscious of the weak points in his theory that the rule in *Inst.* 2, 1, 41 is Byzantine, but regards Schönbauer's rival theory as untenable. His objections to it are given in a form convenient for special study, but not for summarization. In brief, SCHÖNBAUER agrees with APPLETON, and merely fills up the obvious gaps in APPLETON's argument by a series of unconvincing hypotheses.

W. FELGENTRAEGER's *Antikes Lösungsrecht* (*Romanist. Beitr. z. Rechtsgesch.*, Berlin-Leipzig, 1933, 133 pp.) is to an English lawyer an interesting but difficult book. The subject is any rights (other than a debtor's to redeem security) of a former owner of property to recover it from its present owner by means of a compensatory payment: we might say the right of redemption in every sense except the obvious one. Such rights are clearly un-Roman, but widespread in antiquity. There is thus a conflict between imperial and popular law. After classifying the constitutions in which the idea of a right of redemption appears (I), the author seeks its origins in Babylonian-Assyrian, Greek, and Jewish law (II), and finally considers the effect of these laws on Roman law (III). There is a great deal that is interesting and important for papyrologists in the section on Greek law (especially pp. 72 ff., 83 ff.). To illustrate the author's results: Jewish law (pp. 89–91) allowed an owner of goods stolen from him to recover them on repayment, but only on repayment, of the price paid for them by their present holder, whence it seems likely that the *negotiatores* of C. 6, 2, 2 (A.D. 205), who claimed not to restore stolen goods without such repayment, were Jews. Again, the Milesian treaties of the third century B.C. establish an interstate right to redeem kidnapped free men or slaves from a *bona fide* purchaser in another state; against this, or a similar Babylonian rule, Diocletian reacts in C. 3, 32, 23. Again, local laws recognized certain *iura poenitendi* whether of a seller or of his relatives; un-Roman, but perhaps reflected in, for example, Justinian's rule of *laesio enormis*.

L. WENGER, *Superficies solo cedit*, *Philologus*, LXXXVIII (1933), 254–8, points out that this maxim, though regarded by classical writers as *iuris naturalis*, is contradicted by the ultimate evolution of *superficies*, which is held, in contrast to *emphyteusis*, to be a Roman growth. But now P. Tebt., III, 1, 780 (171 B.C.) shows us a plaintiff demanding ejectment of persons who had built partly on his land, and claiming this on the strength of a royal *diagramma*. If a *diagramma* was needed, the contrary idea must at least have been entertained. There is no trace of legislation behind the Roman classical principle, but Servius, the oldest authority cited for it, is a man who may have been influenced by Hellenistic precedents.

H. KRELLER, *Aegyptus*, XIII (1933), 260–74, gives two examples of *Spuren d. röm. Jurisprudenz in d. ägypt. Praxis*. According to the received Roman doctrine there was not private ownership, but only *possessio vel usus fructus* of provincial land (Gaius 2, 7; the terms are not used strictly). Set that by the side of the Edict of Mettius Rufus, P. Oxy., II, 237, viii, 34–6, and observe the embarrassment of the draftsman over the inadequacy of the Roman terminology for the expression of the Greek division of property rights. Contrast, after a century of classical jurisprudence, the masterly fashion in which the rescript of Severus and Caracalla on *praescriptio longae possessionis* (M. *Chr.* 374) handles (ll. 17–24) a very difficult question. But that question has not been properly understood. The words ἂν ἀλλαχόσε νομὴ παρακολουθήσῃ refer to exported chattels; in the phrase ἀφορμὴν κἂν βραχεῖαν δικαίαν κατοχῆς, the adjective βραχεῖαν must, in spite of its case, refer to length of possession. The question dealt with seems to have been one of *accessio possessionis*, which we know was regulated by these same emperors, and the decision is, that in a case of foreign exportation, where the enforcement of warranty would be difficult, quite short possession by defendant, if *iusto titulo*, may be a good defence against a claimant who has slept on his rights for ten years in all. E. WEISS, *Aegyptus*, XIII (1933), 299–304, contends that the explanation of *Gnomon* s. 2 also lies in Gaius 2, 7. Egyptian land being stipendiary and therefore *nec mancipi*, the Roman civil law rule against alienating a *res religiosa* by mancipation did not apply.

Certain points still require elucidation in the *Two papyri from the Warren Collection* edited by A. S. HUNT, *Studi Riccobono* (1932, vol. not stated in offprint), 521–5. The first (*cf.* P. Oxy., XVI, 1887) is an application, *c.* A.D. 530, for liability for taxes on land to be transferred against the name of the mortgagee during the continuance of the mortgage. What is meant by σωματικὴ ὑποθήκη? In the second, which is a loan on mortgage of land dated A.D. 591–2, the hypothec is expressed to be of the νομή, possession, of the land; but later the debtor renounces, during the continuance of the mortgage, all right to alienate the actual land.

D. *Law of obligations.*

i. *General.* F. WEBER, *Untersuchungen zum gräko-äg. Obligationenrecht* (Munich, 1932; *Journal*, XIX (1933), 88), has been reviewed by F. PRINGSHEIM, *Z. Sav.*, LIII (1933), 516–24, by E. WEISS, *K.V.G.R.*, XXVI (1933), 81–91, and by M. KASER, *D.L.Z.*, LIV (1933), 807–10. PRINGSHEIM allows that the author's careful analysis of texts leads to some good textual results, that several topics receive useful treatment, and that the grouping of materials is good: in short the author knows his papyri and has made them more accessible. But the reviewer is out of sympathy with the author's method, which is to apply pandectistic and modern jurisprudence to the ancient material, instead of looking for the ancient ideas. Thus his conclusion that the Romans found in Egypt essentially the same commercial law as their own is beyond the reach of his method, and overlooks the historical stages of development in Egypt and at Rome. WEISS, on the contrary, approves of the application of this method to so developed a system as the Graeco-Egyptian. In detail, though regretting some omissions, he accepts the author's conclusions. KASER is favourable, but inclines to PRINGSHEIM's point of view.

ii. *Sale.* F. PRINGSHEIM's reply to E. SCHÖNBAUER has been mentioned above (C.). F. WIEACKER, *Lex Commissoria*, etc. (Berlin, 1932; *Journal*, XIX (1933), 88), has been reviewed by R. MONIER, *Rev. hist. dr.*, XII (1933), 136–9 (analytical; favourable), and by H. SIBER, *Z. Sav.*, LIII (1933), 537–43. SIBER makes objections, too technical to reproduce here, to WIEACKER's position, which is that in sale with *lex com.* the seller's ownership was, according to the older Roman view, reserved, but was transferred, except when he took special precautions to reserve it, according to the later view established by Salvius Julianus; by the Greek law of *arrha* ownership did not pass to the buyer till he paid the price; Justinian made the matter turn on the intention of the parties. SIBER believes that this contrast between *lex com.* and *arrha* is proved on the side of obligation, as is also their assimilation by Justinian, but that on the side of conveyance the conflict was not so acute, because *lex com.* also normally suspended the passing of ownership till payment of the price, so that Justinian's fusion was not so difficult. The same problem occurs in the final section of E. LEVY's *Zu den Rücktrittsvorbehalten des röm. Kaufs* (*Symb. Frib. Lenel*, Leipzig, offprint, n.d., 108–42). According to him *lex com.* was often accompanied by forfeiture of earnest-money, but in other respects the difference between it and the Greek *arrha*-transaction (understood in PARTSCH's sense) are many. Even in late papyri *arrha* does not develop in the direction of consensual sale and compulsory performance. C. 4, 21, 17, 2 (A.D. 528) shows complete continuity with the ἀρραβώνων νόμος of the second century B.C. (M. *Chr.* 257–8), and this constitution, in spite of the combination of *arrha* with the classical consensual contract in Inst. 3, 23 pr., passed into the *Codex* of 534. We have here a typical case of Roman legal development: in the earlier period assimilation, in the classical period self-sufficiency, in the final period indigestion. But the dominant view of *arrha*, though supported by many arguments and indications, has but little textual basis, and we must be prepared for surprises. Thus in P. Enteux. 34 and 2 of 217 B.C. buyers seem to claim damages, not the *arrha*-penalty. Perhaps the *arrha*-transaction had in these cases given the buyer a right not indeed to delivery by the seller, but himself to go and take without interference. The seller by taking *arrha* had renounced his ownership in advance, though conditionally on payment of the price. *Cf.* καρπωνεία.

I find no mention of papyri in either G. G. ARCHI, *La restituzione dei frutti nelle vendite con in diem addictio e con lex commissoria*, *Studi U. Ratti*, 327–65 (Milan, 1933), or H. SIEG, *Quellenkrit. Stud. zur Bessergebotsklausel (in diem addictio) im röm. Kaufrecht* (Hamburg, 1933). W. L. WESTERMANN, *Slave Transfer: Deed of Sale with Affidavit of Vendor*, *Aegyptus*, XIII (1933), 229–37, publishes P. Colomb. 551 *verso*, A.D. 160–1. *Cf.* U. WILCKEN, *Archiv*, XI (1933), 134. On the same page appear the contract of sale and the vendor's agoranomic oath (closely analogous to P. Oxy., I, 100; IV, 263 (M. *Chr.* 59)). The gold ring given as *arrha* is returnable on payment of price. The vendor warrants against ἱερὰ νόσος καὶ ἐπαφή, which supports the view that ἐπαφή means some skin disease, not lien. A. DE SENARCLENS, *Tijdschr. v. Rechtsgesch.*, XII (1933), 390–407, argues that the meaning given to *servus recepticius* by Cato on the *l. Voconia* proves that the aedilician Edict existed as early as 169 B.C.

iii. *Loan.* See U. WILCKEN, *Archiv*, XI (1933), 125–7 on the interesting *scriptura exterior* of a contract of loan (P. Mich. 6051) edited by A. E. R. BOAK, *A loan of 74 B.C.*, *Aegyptus*, XIII (1933), 107–12. M. SCHNEBEL, *ibid.*, 35–41, investigates *Die Geschäfte des Γάιος Ἰούλιος Φίλων* (B.G.U., IV, seven documents). This usurer seems to have been most dangerous when he described the δάνειον as ἄτοκον. F. HEICHELHEIM, *Zu Pap. Berol. 5883+5853*, *Aegyptus*, XIII (1933), 187–92, studies a maritime loan (SB. 7169) of the first half of the first century B.C., drawing attention to the parallel speculations of Cato as described by Plutarch, *Cato maior* 21, and to a suggestion made by KRÜGER, P. Ross. Georg., II, p. 93. H. KRELLER, *Zur Gesch. der "exceptio non numeratae pecuniae"*, *Studi Riccobono*, II (1932), 285–323, without using papyri, treats of a matter of importance to us. His summing up (pp. 322–3) is that till Diocletian a borrower who engaged himself by formal contract before receiving the money could within a certain period put the burden of proof on the alleged lender by raising the *exceptio* or by bringing *condictio liberationis*. The later changes, chiefly external, are that the period was lengthened (for a time), that the verbal contract was replaced by writing, and that the *exc. n. n. p.* was fused with the *exc. doli*. The subjection of the *exc. doli* to the time-limitation produced the literal contract of *Inst.* 3, 21.

iv. *Varia.* U. WILCKEN, *Archiv*, XI (1933), 131–2, identifies P. Warren 5 as *receptum nautarum*, and agrees that P. Warren 6, is *dos* disguised as deposit (above, B. vi): both published by A. S. Hunt, *Aegyptus*, XIII (1933), 241–6. R. Taubenschlag, *Afterpacht u. Aftermiete im Rechte der Papyri*, *Z. Sav.*, LIII (1933), 234–55, gives a methodical survey of sub-leases not merely of land (public, temple, and private) and buildings, but also of taxes and monopolies. The same, *Der Leihvertrag im Rechte der Papyri*, *Aegyptus*, XIII (1933), 238–40, sets out the material on *commodatum*, which, since *commodatum* is not "business", is not much. The contract is designated in the papyri by χράω, χρᾶσθαι, but the word is also used for δάνειον, an ambiguity of which the Orators also are guilty and which exists in English. G. A. Petropoulos, *An unpublished Greek papyrus of the Athens collection*, *Aegyptus*, XIII (1933), 563–8, edits a τροφῖτις-contract of A.D. 111, whereby a Persian woman of the *epigone* engages herself to rear a baby picked up from the κοπρία by C. (?) Longinus and therefore his slave. Some interesting points, especially linguistic, arise.

E. *Law of succession.*

On problems of primitive law the studies of fratriarchy and *adoptio in fratrem* mentioned above, A. iii. *Cuneiform law*, are important. U. Wilcken, *Archiv*, XI (1933), 142, states that no. 10 of *Papyri Groninganae* (ed. A. G. Roos, Amsterdam, 1933; not seen) is a *donatio mortis causa* of the fourth century, thoroughly interpreted by its editor. Though the document is political rather than legal, some points may be picked out of three studies on the will of Ptolemy the Younger of Cyrene: A. Steinwenter, *Z. Sav.*, LIII (1933), 497–505, A. Piganiol, *Rev. hist. dr.*, XII (1933), 409–23, and P. Frezza, *La Stele di Tolomaeo Neotero Re di Cirene. Note storico-giuridiche* (Rome, ed. Studium, 1933). It is agreed that the will is probably not given in full. The use of the form of private testament for the purpose of regulating the succession, which in default of children would pass, under Greek private law, to the king's brother, shows a patrimonial conception of kingship, and reminds Steinwenter of the philosophers' and monks' wills. The idea that the word παρακατατίθεμαι imports an immediate *depositum* is unanimously rejected; Steinwenter regards it as merely political, Piganiol as the nomination of a testamentary executor, ἐπίτροπος, Frezza as creating a precatory trust, which in Greek private law, as till Augustus in Roman, was devoid of legal sanction. In connexion with this idea, Frezza develops a rather attractive theory that *Inst.* 2, 25 pr. garbles the story of the *fideicommissum* made by Lentulus in Africa, in Hellenistic surroundings, which was the first to be legally enforced. He thinks the *fideicommissum* was laid on Lentulus' daughter in Greek form with invocation of the safety of the emperor: *cf. Inst.* 2, 23, 1. Piganiol holds that the will must have been published almost as soon as executed, because its main intention was to deprive Philometor of any motive for murdering his brother, but Steinwenter makes a good case for the date, Feb. or March 155 B.C., being the date of execution only, since if by 154 the will had become public by inscription, Polybius must have mentioned it in his account of Ptolemy's appeal to the Senate in that year.

F. *Law of procedure.*

P. Collinet, *La procédure par libelle* (Paris, 1932; *Journal*, XIX (1933), 90), is favourably reviewed by L. Michon, *Rev. hist. dr.*, XII (1933), 348–55, F. de Zulueta, *L.Q.R.*, XLIX (1933), 275–8, and F. De Visscher, *Byzantion*, VIII (1933), 668–72. Michon lays special stress on the new papyrological material used, and observes that Collinet's theory of the origin of the libellary procedure differs from A.-J. Boyé's (*La denuntiatio introductive d'instance*: Bordeaux, 1922). Zulueta gives a synopsis of the reconstruction of the procedure, expressing a few doubts. De Visscher brings out in an interesting manner some of Collinet's main theses. W. W. Buckland, *J.R.S.*, XXI (1933), 82–4, is not very favourable to the results of R. Düll's *Der Gütegedanke im röm. Zivilprozessrecht* (Munich, 1931; *Journal*, XIX (1933), 89–90, etc.), disagreeing especially with the view that the classical *exceptio* meant primarily a defence adjudicated upon by the praetor himself.

Valuable processual material will be found in G. La Pira's commentary on P. Marmarica (above, A. v.). E. Berneker, *Zur Sondergerichtsbarkeit* (*P. Cairo Zenon* 59466), *Aegyptus*, XIII (1933), 25–30, gives the text with his own completions and translation. The situation, in his view, is that Zeno had referred the claim of certain of his subordinates against another ὑποτεταγμένος τῇ διοικήσει to Crocodilopolis, the *forum rei*, on a principle customary in the special jurisdiction (reading ἔ]θος, l. 4), but that the defendant was a direct subordinate of the subdioecetes at Crocodilopolis, by whom the case would there have been judged. Guardedly in the present document one of the plaintiffs explains why they had preferred not to proceed at all, and asks Zeno to obtain trial in a city, to be chosen by the defendant, where all parties would be ξένοι.

D. Schäfer, *Zu den ptol. Πίστεις*, *Philologus*, LXXXVIII (1933), 296–301 (*cf.* above, A. iii. *Coptic law*), supplies an appendix to his study of B.G.U., VIII, 1810–12, forthcoming in A. Vogliano's *Studi Italiani di*

Papirologia (Bologna). In P. Tebt., III, 1, 741 we have now the oldest evidence of Ptolemaic πίστεις, which are safe-conducts converting asylum acquired by being in a certain place into a personal right of unmolested movement. The documents show that State-debtors, though not covered by local asylum, might be granted πίστεις; there is no contradiction, because in both cases the object is to secure resumption of work; *cf.* P Berol. 11837 (first century B.C.) which SCHÄFER publishes. Mention should have been made previously here of L. WENGER, *Ὅροι ἀσυλίας*, *Philologus*, LXXXVI (1931), 427–54, on the Byzantine period.

J. LAMMEYER, *Die "audientia episcopalis" in Zivilsachen der Laien im röm. Kaiserrecht und in den Papyri*, *Aegyptus*, XIII (1933), 193–202, sketches the different historical phases of this institution, ending with discussion of P. Leipz. 43, P. Oxy. 903 and B.G.U. 103.

G. *Public law.*

U. WILCKEN, *Archiv*, XI (1933), 148–50, defends against M. ROSTOVTZEFF's introduction to P. Tebt., III, 1, 703, his view that basic instructions to an official entering office were called ἐντολαί as well as ὑπομνήματα, citing B.G.U., VIII, 1768. P. Tebt. 703 suggests that Augustus' *Gnomon* followed Ptolemaic practice, which itself may have followed earlier precedent. The same may be suggested for *mandata principis* (ἐντολαί), though Republican *mandata senatus* must not be forgotten. The *Gnomon* itself is studied by E. WEISS, *Die erbrechtliche Stellung des röm. Staatsschatzes u. d. Gnomon des Idios Logos*, *Z. Sav.*, LIII (1933), 256–74. The document is a private work for the use of some one who, as official or advocate, had to deal with a certain class of case. The ἐν μέσῳ κεφάλαια have been wrongly understood; they are simply the middle chapters (so previously H. STUART JONES, *Fresh Light on Roman Bureaucracy*, Oxford, 1920), which happened to have been those most affected by post-Augustan legislation. All the sources named by the *prooemium* are Roman, and most, if not all, seem to have been originally in Latin. Thus the author of *Gnomon* s. 4, like Diocletian C. 10, 10, 1, probably had the *l. Iulia caducaria* before him. Note that the rule of the *l. Iulia* is applied here generally, as paramount law, just as the *l. Aelia Sentia* in s. 19, though a *SC.* was presumably necessary for that (Gaius 1, 47). Under the *l. Iulia* the fisc (*populus?* Gaius 2, 150) was not *heres*, but simply had the right to take; but as to the manner of its taking formality, indicated by the word προσκρίνεσθαι in s. 4, as opposed to ἀναλαμβάνειν elsewhere, seems to have grown up. This point is followed up in the Roman texts.

In connexion with *tergiversari*, which is one of the topics of E. LEVY's *Von d. röm. Anklägervergehen*, *Z. Sav.*, LIII (1933), 151–233, the *Oratio Claudii* (B.G.U. 611) comes up for discussion (pp. 212 ff.). The same author's *Die röm. Kapitalstrafe* (Heidelberg, 1931; *Journal*, XVIII (1932), 100) is radically criticized, as regards the end of the Republic, by R. DÜLL, *K.V.G.R.*, XXVI (1933), 118–51, who maintains that even earlier than the *quaestiones* the phrases *res capitalis* and *anquirere de capite* covered civic status as well as life. Actual putting to death and civic death (*exsilium*) were equally capital punishment, but the former was exceptional because of the practice of voluntary *exsilium*. The *ll. Corneliae* were expressly limited to the latter mode of execution; they spoke of *exulem facere*, it seems, not of *exsilio punire*.

7. PALAEOGRAPHY AND DIPLOMATIC.

F. G. KENYON, *Books and Readers in Greece and Rome*, has been reviewed by W. SCHUBART in *Gnomon*, IX (1933), 445–6, and by F. GRANGER in *J. Theol. Stud.*, XXXIV (1933), 332.

B. L. ULLMANN, *Ancient Writing and its Influence*, a new number of the series "Our Debt to Greece and Rome", is dealt with in the same review. This latter is also reviewed by A. MENTZ in *Phil. Woch.*, 1933, 36, 1003–6.

An important article by A. MENTZ, *Beiträge zur hellenistischen Tachygraphie*, in *Archiv*, XI (1933), 64–73, deals with some new material.

I have not been able to see what I am told is a remarkable article on the Greek Alphabet in *Am. Journ. Arch.*, 1933, 1.

In *Archiv*, XI (1933), 112–14, U. WILCKEN discusses the palaeography of the Chester Beatty Biblical Papyri.

H. GERSTINGER contributes an interesting article, *Ein Buchverzeichnis aus dem VII–VIII Jahrh. in Pap. Graec. Vindob.* 26015 to *Wiener Studien*, L (1932), 185–92. This is noted shortly in the Bibliography in *B.Z.*, XXXIII (1933), 414.

C. H. ROBERTS in *J.R.S.*, XXIII (1933), 139–42, discusses the meaning of *libellus* and *transversa charta*.

E. BICKERMANN's article *Eine Untersuchung über antike Niederschriften "zu Protokoll"*, in *Aegyptus*, XIII (1933), 333–55, has not yet come my way. Neither have I been able to obtain H. SCHREIBER, *Faksimilierte Handschriften antiker Klassiker* (Leipzig, 1932), which may include facsimiles of papyri.

8. LEXICOGRAPHY AND GRAMMAR.

LIDDELL AND SCOTT, Part VII, *οἶ—περίφουρνος*, pp. 1201–392, has appeared, and has been reviewed (with Parts IV–VI) by P. MAAS in *Gnomon*, IX (1933), 663–5. T. C. SKEAT shows in *Cl. Rev.*, XLVII (1933), 211–13, that τετράδερμα in *P. Oxy.* 1294. 4 means not "quaternion" but "leather mattress" or "ground sheet". W. SCHWAHN in *Archiv*, XI (1933), 57–63, discusses the meaning of ἀμφούριον and ἀμφουριασμός and arrives at the following conclusion: "ἀμφούριον heisst also Liegenschaftsvertrag, ἀμφουριασμός Liegenschaftskauf bzw. uneigentlich: Urkunde über einen solchen". He starts out from a hypothetical *ἄμφουρον = "what is surrounded by ὅροι" (*i.e.* a piece of land). Several late Greek words and expressions occurring in the *Lausiac History* of Palladius are elucidated by D. TABACHOVITZ in *Eranos*, XXX (1932), 97–109. The same writer draws attention in *Eranos*, XXX (1932), 122–3, to two occurrences of εἴ τις = ὅστις in a chemical manuscript edited by LAGERCRANTZ in *Catal. des manuscrits alchimiques grecs*, Bruxelles, 1924. In *Eranos*, XXXI (1933), 71–2, he supports the rendering of χωρεῖν in *Ev. Joh.*, VIII, 37, as "find room, be contained" by comparing a passage of the *Lausiac History*.

Some use of papyri is made by H. FRISK in his *Studien zur griechischen Wortstellung* (*Göteborgs Högskolas Årsskrift*, XXXIX, 1933: 1; pp. 184: Göteborg, 1932). The book is reviewed by J. D. DENNISTON in *Cl. Rev.*, XLVII (1933), 18–20.

In *Aegyptus*, XIII (1933), 159–68, H. LJUNGVIK has published some notes on late Greek syntax. These concern (1) the so-called ethic dative (ἔρρωσό μοι *P. Oxy.* 1759. 10, etc.; he argues that μη is to be understood as μοι in *P. Oxy.* 1483. 10, and *P. Got.* 14); (2) distributive reduplication (in *P. Oxy.* 940. 6, μίαν μίαν = *day by day* = *always*; the exact shade of meaning conveyed by the reduplication varies a little); (3) the combination of a preposition with an adverb, the meaning being the same as that of the adverb alone (ἀπ' ἐντεῦθεν etc.)

B. OLSSON has collected "*Die περιεκτικά auf -ών, ἐλαιών, etc. in den Papyri*", in *Aegyptus*, XIII (1933), 327–30. A more general work on Greek noun-formation is P. CHANTRAINE, *La formation des noms en grec ancien* (*Collection linguistique publiée par la société de linguistique de Paris*, XXXVIII), Paris, 1933 (473 pp.).

H. LJUNGVIK, *Beiträge zur Syntax der spätgr. Volkssprache* (see *Journal*, XIX (1933), 91) has been briefly reviewed in *J.H.S.*, LIII (1933), 158. R. TRAMONTANO, *La Lettera di Aristea a Filocrate* (a book which I have not seen) is reviewed by L. CERFAUX in *Rev. d'hist. eccl.*, XXIX (1933), 119–20.

9. GENERAL WORKS, BIBLIOGRAPHY, GENERAL NOTES ON PAPYRUS TEXTS.

I have not yet seen a book by J. G. WINTER, *Life and Letters in the Papyri* (*The Jerome Lectures.* University of Michigan Press, 1933. Pp. vii+308).

The Bibliography in *B.Z.*, XXXIII (1933), 162–6, has a section on *Papyruskunde*. I know from references only P. COLLART's *Bulletin papyrologique*, in *Rev. ét. gr.*, XLV (1932), 397–421, also G. COPPOLA's *Papiri Italiani*, in *Nuova Antologia*, LXVII (1932), 348–59.

G. A. PETROPOULOS in *Ἀρχεῖον Βυζαντινοῦ Δικαίου, παράρτημα* I (1933), publishes a βιβλιογραφικὴ ἐπισκόπησις τοῦ 1931. I have not been able to obtain this.

F. UCKER has an article *Zur Textherstellung und Erklärung von P. Enteuxeis, Fasc. II*, in *Aegyptus*, XIII (1933), 213–24.

10. MISCELLANEOUS, EXCAVATIONS, PERSONAL.

M. HOMBERT writes on *Le Commerce des papyrus en Égypte*, in *Chron. d'Ég.*, VIII (1933), 148–54—at present inaccessible to me.

W. G. WADDELL in *Cl. Journ.*, XXVIII (1933), 489–96, has an article on *A teacher of Classics in Egypt* which I have not been able to obtain.

U. WILCKEN reviews *The Chester Beatty Biblical Papyri* in *Archiv*, XI (1933), 112–14.

M. HOMBERT gives a detailed description of the contents of *Papyri Osloenses, Fasc. II*, in *Rev. belge*, XII (1933), 662–4.

B. L. BULL reviews BOAK and PETERSON, *Karanis*, in *Am. Journ. Arch.*, XXXVII (1933), 354–5.

G. VON MANTEUFFEL publishes *Vorläufiger Bericht aus der Warschauer Papyrussammlung*, in *Eos*, XXXIV (1932/3), 195–204.

M. Hombert in *Chron. d'Ég.*, *loc. cit.*, says that E. Breccia has been "appelé à une chaire universitaire en Italie".

C. H. Becker, the Islamic scholar, died on February 10, 1933. An obituary notice by H. H. Schaeder appears in *Forsch. u. Fortschr.*, 1933, 119.

F. von Woess died on March 26, 1933. There is an obituary notice by A. Herdlitczka in *Forsch. u. Fortschr.*, 1933, 195.

NOTES AND NEWS

The present number of the *Journal* appears under the shadow of tragic losses to Egyptology, England being the greatest sufferer. The deaths of Griffith and Peet are dealt with elsewhere in our pages; space does not admit of an equally full tribute being paid to the memory of Arthur E. P. Weigall, who at one time excavated under Petrie on behalf of our Society. *Abydos I* contains a chapter by him, and he was a joint author in *Abydos III*. At a later date he became Inspector-General of the *Service des Antiquités* for Upper Egypt, and was closely associated with our President's excavations in the Theban Necropolis and those of Theodore Davis in the Valley of the Tombs of the Kings. In his official capacity, as also in the occasional expeditions which he made in lieu of home leave, he rendered services of the greatest possible value to Egyptology. These it is all the more desirable to recall, since they run the risk of being forgotten on account of his drifting ever farther away from our science in the later years of his short life. As an Inspector he was energy and efficiency personified, drilling his *ghaffirs* with almost military rigour. Under his rule the temples and tombs of Western Thebes obtained an orderly and well-conserved appearance, the very antithesis of their previous condition. It is he who initiated the numbering of the Tombs of the Nobles now in general use, and greatly furthered the opening up and restoration of them which Sir Robert Mond had started and subsequently continued with the help of E. Mackay. Together with the present writer he devised the *Topographical Catalogue of the Private Tombs of Thebes* later supplemented by Engelbach. His large work on the Antiquities of Lower Nubia is packed with valuable information concerning numerous sites at that time known little or not at all. To the general public Weigall will be remembered for his brilliantly written popular works on Ancient Egyptian topics, and most of all for his *Life and Times of Akhnaton*. He was not a very accurate or a very profound scholar, but made up for these deficiencies by a gift of vision and sense of realities vouchsafed to few. He had a highly original personality and was a delightful companion. No one could be dull in his company, or fail to be amused by his witty and unusual outlook on things.

In the American Albert M. Lythgoe we have lost one whose life's work was ended, but of whose passing his colleagues will have learnt with the deepest regret. A pupil of Wiedemann at Bonn, he assisted Dr. Reisner in his excavations at Naga ed-Dêr, proving himself a painstaking and capable archaeologist. His finest achievement, however, was the arrangement of the Egyptian Collection of the Metropolitan Museum of New York, which all who have seen it praise in almost unmeasured terms. As head of the Egyptian Department he was often to be seen in Egypt, where he conducted the digs at Lisht, Thebes, and elsewhere. Particularly memorable is the prompt liberality with which he lent his staff to assist in the excavation of Tutʿankhamūn's tomb. A man of great courtesy and kindliness, the hospitality with which Mrs. Lythgoe and he received their guests at Gurnah will be long remembered.

The make-up of the present number of the *Journal* is almost entirely due to the late Professor Peet. As a temporary measure Dr. Alan H. Gardiner has undertaken the editorship. Contributions and correspondence should be addressed to him at 9 Lansdowne Road, London, W. 11. Books for review are, as hitherto, to be sent to the Secretary, at the offices of the Society, not to Dr. Gardiner personally.

The excavations at el-Amarna were continued last season with the co-operation of the Brooklyn Museum of Fine Arts. Work began on December 1, 1933, and finished on February 8, 1934; a further week was spent in final planning and in packing. Mr. J. D. S. Pendlebury was again Director; with him were Mrs. Pendlebury, Mr. R. S. Lavers, Mr. S. R. Sherman, and Mr. C. O. Brasch. First the Sanctuary at the east end of the Great Temple enclosure was cleared, a work made difficult and delicate by the complication of the concrete on floor and walls; but, helped by the experience of similar conditions in Hat-Aten and in the front courts of the Great Temple, Mr. Lavers and Mr. Pendlebury were able to recover the plan, which agrees most satisfactorily with that in the tombs. Meagre remains of a disturbed foundation deposit were discovered by one of the doors, and in the debris a battered but still beautiful quartzite head, slightly under life-size and of the finest workmanship. Most of the men were then set to work on the extensive magazines south of the large row adjoining the Great Temple and begun last season; they went as far west as the royal road, almost completing the area between the Great Temple and the King's House.

The chief work of the season was in the centre of the city, east of the royal estate, where the men who had been left in the Sanctuary rejoined the main body. They started on the block of the Records Office, which lies along the road running east of the royal estate. In this block, in 1888, was found the original hoard of cuneiform tablets, the Tell el Amarna letters; and Petrie dug and planned the Records Office itself and the surrounding buildings; but the whole area was dug or re-dug this season with the greatest care. The Records Office was built of stamped bricks which leave no doubt as to its purpose: it was the house of the king's correspondence. Nor had all the correspondence vanished, for nine fragments of cuneiform tablets were found there. Later, in a small house farther south, was found the best piece of all. Another house near by, also built of stamped bricks, Professor Capart, then on a visit to Amarna, identified as the University. From the Records Office the clearance was carried to the eastern limit of the city. There, north of the palace rubbish-heaps, lies a large block which seems to have served, at least in part, as royal stables, and to have housed both horses and chariots. In the middle of the block is a strange deep pit of sand, always a landmark on the plain; it was probably a well, and excavation—which is still incomplete—uncovered a wall at a depth of about 30 feet. Apart from the tablets the finds from this central quarter of the city, which consists largely of magazines, do not of themselves quite indicate its importance; but they include a hunting scarab of Amenophis III and Tyi.

By the courtesy of the Omda of el-Amarna the expedition was able to dig and plan, before it was built over, a group of buildings in the modern cemetery north of the temenos wall of the Great Temple.

There will be an exhibition of objects, plans, and photographs from the season's work in September at 2 Hinde Street, London, W. 1.

At Abydos the recording of the Temple of Sethos I has made good progress. Miss Broome was the first to arrive on the site, and was later joined by Miss Calverley. While the two ladies have been wholly occupied by the colour-work of Vol. III, Mr. Little has been busy with retouching the photographs, this style of work having proved so successful in Vol. I that it is henceforth to be used much more lavishly. The completion of Vol. III is likely to require half a season more. Dr. Černý visited the Temple for a fortnight in order to collate the inscriptions on the plates already made and also to copy some extremely faint and difficult texts in the chambers at the rear.

The last few months have brought forth from our Society an unusually abundant crop of publications, all of them exceptional in interest and quality. The first volume of our joint work with the Oriental Institute of Chicago University, namely *Temple of Sethos I at Abydos*, will vie in magnificence with any book which Egyptology has yet produced. The coloured plates by Miss Calverley and Miss Broome are unsurpassed in their excellence, and Messrs. Whittingham and Griggs are to be congratulated on the fidelity of their reproductions. The line plates are excellent also, though perhaps a trifle less successful than the superb photographs due to Miss Linda Holey and to Miss Calverley herself. Through the munificence of Mr. John D. Rockefeller, jun., who supplied the funds for the work, it has been possible to offer this volume to the general public at a price (£5) at least the half of its market value, and to our Members at even less (£4).

The two volumes of *The Cenotaph of Seti I at Abydos*, by H. Frankfort, with chapters by A. de Buck and Battiscombe Gunn, have been long delayed, but have lost nothing in consequence. It will be remembered what interest was excited by the discovery of the Osireion, and what divergent theories were held as to its date and purpose. Mr. Frankfort was signally successful in answering both of these questions, and the arguments with which he proved his case are lucidly set forth in the present work. The scenes and inscriptions are reproduced *in extenso* in the ninety-three plates. Particularly interesting is the dramatic text edited by Dr. de Buck. It adds greatly to the utility of this work that the text and the plates have been kept separate, so that the two can be used side by side without turning of pages.

City of Akhenaten, Vol. II, describes the excavations at El Amarna during the seasons 1926–32, when H. Frankfort and J. D. S. Pendlebury were successively in charge of the work, which was made possible mainly by the generosity of Mrs. Hubbard. This large and elaborate volume, containing no less than fifty-eight plates, contains the description of the North Suburb and of the Desert Altars to the East. It is particularly rich in architectural plans. The small objects found were comparatively few, but special attention may be called to the interesting seated figure of a man published on Pl. xxxvii, and to the fine head of a princess on Pl. xxxix. The few inscriptions are excellently treated by H. W. Fairman.

As a special concession the Committee obtained permission for two lectures to be given in the Lecture Theatre of the Royal Institution. These, the first and last of the series, were held on December 13 and April 25 respectively. The first by Sir Denison Ross was entitled "Recent Excavations in Persia with special reference to Persepolis", and the last by Mr. W. T. Blackband, R.B.S.A., Head Master of the Birmingham School for Jewellers and Silversmiths, was on "Ancient Gold Grainwork; the Recovery of the Etruscan Method".

Three other lectures were given in the Meeting-room of the Royal Society, the first being by Dr. Margaret Murray on "Early Forms of Religion in Historic Egypt" on January 31, and the second by Mr. A. J. B. Wace on "Textiles from Egypt and the Hellenistic Tradition", on February 28. On March 22 Mr. Martin S. Briggs, F.R.I.B.A., discoursed upon "The Mosques of Egypt". All were illustrated with excellent lantern slides, and were well attended. It will be noticed that the series dealt with matters rather outside the realms of Egyptology, but nevertheless all may be said to link up with Egypt and its civilization. We desire to express our thanks to the lecturers, and our appreciation of the generous manner in which they have given their time and knowledge for the benefit of the Society.

NOTICES OF RECENT PUBLICATIONS

Mizraim: Journal of Papyrology, Egyptology, History of Ancient Laws, and their Relations to the Civilizations of Bible Lands, edited by NATHANIEL JULIUS REICH, vol. I. Stechert & Co., New York, London, Paris, and Leipzig, 1933. 4to. 195 pp., with 16 photographic and other plates. Sewed £1 17*s*. 6*d*., bound £1 19*s*. 0*d*.

The indefatigable Dr. Reich has edited the first volume of a new journal of Egyptology, and we may wonder how the student and the librarian will receive such an addition to their responsibilities. But a glance at the contents shows that its scope is different from that of any contemporary journal. Its programme reminds one alarmingly of the defunct *Revue Égyptologique*. Let us now examine the work in detail. One hundred and twenty-nine pages and thirteen plates are devoted to *New Documents from the Serapeum of Memphis*. The documents are only three in number, all from the Abbott collection in the Museum of the New York Historical Society. Spiegelberg referred to them in 1928, but Reich's full and careful publication of these documents shows that Spiegelberg erred considerably in his readings from the photographs which were sent to him. To all intents and purposes they are novelties to add to the rich Greek and scanty demotic materials from the Serapeum hitherto available in the excellent works of Wilcken and Sethe. To clear the situation Reich gives maps of the Serapeum region at Memphis from Wilcken and adds some important geographical details from his own researches, more particularly from a critical consideration of the First Story of the Sethon Khamois. The Serapeum, as Wilcken showed, is the region at the west end of the dromos of sphinxes and therefore lay far from the edge of cultivation. Notwithstanding its remote situation and its sacred purpose, the Serapeum contained a populous village and many shops and artificers, who were not above engaging in an occasional brawl. Dr. Reich labours with some success to justify the assault complained of in a Greek papyrus, suggesting that Apollonius deserved the beating that he received from the Egyptian shopkeepers. Having disposed of these preliminaries, he proceeds to edit the three new documents with the most scrupulous care. They reveal the remarkable fact that even the calves born to the Apis had a priesthood attached to their burial. The next article is a brief publication by Dr. W. F. Albright of *A Set of Egyptian Playing Pieces and Dice from Palestine*. The pieces are in the shape of pyramids and cones, five of each, of blue fayence, accompanied by a four-sided die of ivory which narrows to the top with pips from one to four; apparently this die was to be twirled by the fingers. The group is of Hyksos date and was found at Tell Beit Mirsim near Hebron. Next *A Demotic Divorce*, a fine and rare document in the University Museum at Philadelphia, and dated in the fourth year of Ptolemy Philadelphus, is edited by Reich with a photograph. In the next place Mr. R. P. Dougherty discusses *Têmâ's place in the Egypto-Babylonian world of the sixth century B.C.* He considers that Nabonidus ruled the Babylonian empire effectively from Têmâ and by no means retired thither in favour of Belshazzar; but it seems a mistake to suppose, as Mr. Dougherty does, that Psammetichus I had been previously called Nabû-shêzibanni by any one except his Assyrian overlords and their adherents. Reich also publishes a stela of the Middle Kingdom found at Sarâbîṭ by the American expedition, and discusses the quarrel between Apollonius and the sons of Teebesis in the Serapeum, identifying Teebesis with the Egyptian name Zeḥo-Bes; he also re-edits from Revillout's extremely uncertain copies a papyrus at Bologna recording the dreams of Apollonius, and writes an interesting article on *The Codification of the Egyptian Laws by Darius and the origin of the "Demotic Chronicle"*. He concludes that the writer of the "Chronicle" lived somewhere in the north-east corner of the Delta.

The rest of the number, ten pages, is occupied with reviews of books, by H. I. Bell, Hyvernat, and the Editor. Summing up the contents, the tone throughout is excellent, with no traces of the vitriol of its prototype, the language is English but with too many Teutonisms to be quite clear. The comments are a little tedious, but learned and precise, and Sir Herbert Thompson has lent his aid at some crucial points. The get-up of the volume by Holzhausen of Vienna is admirable. A few misprints occur and I have noted two proper names that might be improved: *Pil't'* (p. 47) must be the Greek name Φιλήτη (see Pape *s.v.*) but *S'trt's* is a real puzzle; I can only imagine that *Στρατιῶτις, a good Greek word though not known as a name, may have been adopted as a name for girls at the time in honour of Arsinoe's courageous exhortation to the troops at the battle of Raphia, and that a concession to Egyptian tongues was made by inserting an ' (*a*?) in the middle of the combination Στ, which was notoriously difficult for them to pronounce.

The volume is obviously indispensable to the students of those classes—demotists, papyrologists, and jurists—to whom its programme appeals.

F. Ll. Griffith.

Coptic Sounds. Part I: *The Main Currents of their History.* By William H. Worrell. Ann Arbor, 1932.

This is a very valuable and important book, constituting as it does the latest pronouncement on the subject of Coptic sounds by one who is thoroughly competent on the phonetic side. It is not all new, for some of its points have been made by the author in various articles published during the last few years.

The introduction contains a rapid sketch of what has previously been written on the subject, and a short history of Coptic orthography, which will, we hope, be enlarged in a later volume.

Chapter i attacks the theory of the indefinite vowel (*Murmelvokal*) which most writers on Coptic have supposed to be indicated by the overline stroke in Sahidic. According to Mr. Worrell there is no vowel, and the stroke indicates simply the sonant functioning of a consonant, most commonly ⲃ̄, ⲗ, ⲙ, ⲛ, ⲣ, more rarely others such as ⲥ, ϣ, ϥ, ϩ. Consequently the position of the stroke in a group like ⲛ̄ⲧⲙ̄ⲛ̄ⲧⲙ̄ⲛ̄ⲧϩ̄ⲗ̄ⲗⲟ indicates the correct division into syllables.

Mr. Worrell is especially severe on the supposed accented indefinite vowel in such words as ⲥ̄ⲙ̄ⲙⲉ. He would explain the history of such a word in Sahidic as **sem'et>*semmet>*sm̄met>sm̄me.* The ' is assimilated back to the *m*, and the first *e* forward to the *m*. The first *m* now becomes sonant and long, and bears the accent.

It may be thought that this point is a small one, little more than a matter of the correct description of a phenomenon. At the same time it seems clear that Mr. Worrell's account of it is more in accordance with modern phonetic observation than the old theory of an indefinite vowel.

Chapter ii is the most important in the book. It deals with the treatment in Sahidic and Bohairic of the stops. Mr. Worrell sets out from the usual division of stops into three kinds, voiced, half-voiced (or voiceless unaspirated), and voiceless. The first are the *b, d,* and *g* of English, the second are the *p, t,* and *k* of English in unaccented syllables, and the third are the *p, t,* and *k* of English in accented syllables. The third are accompanied by aspiration, the first and second are not. In the English word "paper" the first *p* is aspirated; the second, being in an unaccented syllable, is not; it is the half-voiced stop which many South Germans use for both *b* and *p* both in accented and in unaccented syllables.

Now in Sahidic the letters ⲭ, ⲫ, ⲑ, says Mr. Worrell, have only one function, that of replacing the combinations ⲕϩ, ⲡϩ, ⲧϩ. Consequently, he continues, it is evident that they represent aspirated stops, *i.e.* voiceless stops, and not the fricatives *ch* (as in Scotch "loch"), *f,* and *th*. If this is so, he goes on, it is reasonable to conclude that ⲕ, ⲡ, ⲧ without a following ϩ represent the unaspirated voiceless (*i.e.* half-voiced) stops *k, p, t,* as heard in unaccented syllables in English. Since, moreover, Sahidic ⲧ stands for Egyptian *t* and *d*, ⲡ for Egyptian *p* and *b*, and "ⲕ with its palatalized variety ϭ" for Egyptian *k* and *g*, Mr. Worrell concludes that ⲕ, ⲡ, ⲧ in Sahidic always stand for the half-voiced stops, *ġ, ḅ, ḍ*, and that "unvoicing and de-aspiration are apparently complete in Sahidic". That is to say, assuming that Egyptian possessed voiceless aspirated and voiced (unaspirated) stops, both have disappeared in Sahidic, merging into the half-voiced stops represented by ⲕ, ⲡ, ⲧ.

I am not at all convinced by this reasoning. Mr. Worrell argues that ⲕ, ⲡ, ⲧ cannot be voiceless aspirated stops because these are represented by ⲭ, ⲫ, and ⲑ, or, as they are often written, ⲕϩ, ⲡϩ, ⲧϩ, which arise out of the combination of ⲕ, ⲡ, ⲧ with ϩ. Now although the Egyptian 𓉔 and 𓎛 may eventually have disappeared in Sahidic, they were certainly pronounced (perhaps both as 𓉔) when the Coptic alphabet was chosen; otherwise its inventors would not have been at the trouble of going specially to demotic to find a sign for them. Consequently ⲭ, ⲫ, ⲑ represent ⲕ, ⲡ, ⲧ followed by a clearly pronounced aspirate with a written consonantal origin in Egyptian. Mr. Worrell has confused this with the ordinary voiceless stops heard for *k, p,* and *t* in an English accented syllable. Thus although the *t* in "torso" and the *c* in "course" are "aspirated" (in the phonetician's sense) there is a distinct difference between this *t* and *c* and the *t* or *c* plus a distinct and separate aspirate which we hear in "white horse" and "black horse", whether the first word in each case be accented or the second. Thus ⲭ, ⲫ, ⲑ do not represent the voiceless aspirated stops, and consequently it is no longer to my mind "reasonable to infer that ⲕ, ⲡ, ⲧ without a following ϩ represent the voiceless unaspirated stops *ġ, ḅ, ḍ*". It seems to me perfectly possible to maintain that ⲭ, ⲫ, ⲑ in Sahidic represent the sounds heard in "black horse', "cup-holder", "white horse"; and if this is the case ⲕ, ⲡ, ⲧ may still be, in some cases at any rate, the voiceless aspirated stops. I do not say that this is necessarily so, only that the evidence which Mr. Worrell adduces does not prove it to be impossible. Moreover, ⲕ, ⲡ, and ⲧ might conceivably stand sometimes for the half-voiced and sometimes for the unvoiced stops, a possibility to which Mr. Worrell is well alive in dealing with Bohairic.

We now come to Bohairic. Here ⲭ, ⲫ, ⲑ can be, though they rarely are, used for ⲕ, ⲡ, ⲧ followed by ϩ. Their main use is to represent Egyptian *k*, *p*, and *t* (1) before a vowel in an accented syllable or (2) before one of the consonants ⲃ, ⲗ, ⲙ, ⲛ, ⲣ, ⲟⲩ (when functioning as consonants and not as sonants). Mr. Worrell now argues that since ⲭ, ⲫ, ⲑ *can* be used as equivalent to ⲕϩ, ⲡϩ, ⲧϩ they represent in all cases aspirated stops, and ⲕ, ⲡ, ⲧ will then represent the half-voiced (unaspirated) stops. While, however, Egyptian *p* and *b* (voiceless and voiced) both yield the aspirated voiceless ⲫ in the accented syllable, Egyptian *g* and *d* do not yield ⲭ and ⲑ but ⲕ and ⲧ, though whether these are in this case half-voiced or fully voiced Mr. Worrell is not prepared to say. Bohairic then, for Mr. Worrell, exhibits the same phenomenon as English, namely aspiration of stops in the accented syllable and lack of it in the unaccented. For him ⲭⲁⲕⲓ is parallel to our "cocoa", ⲫⲟⲣⲡⲉⲣ to our "paper." But let us think what this involves. How many Englishmen, except those with some considerable knowledge of phonetics, are aware of any difference between the two *p*'s in "paper" or the two *c*'s in "cocoa"? Who, among teachers, does not know how extremely difficult it is to convince even intelligent pupils that this difference really exists? And how many years has any one whatsoever been aware that this difference consisted in aspiration? Yet Mr. Worrell would have us believe that the men who first adapted the Greek alphabet to the writing of Egyptian felt so strongly the difference between the voiceless aspirated and the voiceless unaspirated (half-voiced) sounds in "cocoa", "paper", and "total" that they represented them by different signs. I find myself unable to believe this.

The other use of ⲭ, ⲫ, ⲑ in Bohairic is before consonant ⲃ, ⲗ, ⲙ, ⲛ, ⲣ, ⲟⲩ. Here again Mr. Worrell assumes that the use of these letters rather than of ⲕ, ⲡ, ⲧ indicates that aspiration took place when they stood in this position. Again I find the same difficulty. The modern phonetician with a trained ear may easily perceive whether the *c* in "class" or the *t* in "trite" is aspirated or not, but I cannot believe that those who first wrote Coptic heard so much aspiration in these cases as to lead them to use letters which, on Mr. Worrell's hypothesis, originated in the combination of ⲕ, ⲡ, ⲧ with ϩ.

The last part of this chapter (ii), that which deals with ϭ and ϫ, proved a great stumbling-block to me, and I read it many times before I was absolutely certain of its meaning. I feel sure I am not unfair to to Mr. Worrell when I say that it is very unfortunately worded and arranged. On p. 20 we are suddenly introduced to examples of Bohairic ϭ for ϫ before ⲗ, ⲙ, ⲛ, etc., illustrating aspiration in this position, before even a hint has been given us that ϭ is the voiceless aspirate corresponding to ϫ. The first paragraph on p. 21 is most unhappy, for the statement that "ϭ stands for ϫ in accented syllables" is simply not true without the limitation mentioned in the following paragraph.[1] On p. 22 the paragraph beginning "Again" constitutes an exception, and a very important one, to the rule just given in the preceding one, and should be stated as such, rather than introduced by the misleading "again". The addition of the words "in Bohairic", too, would have made the position clearer. But the climax of misstatement is reached in the first sentence of chapter iii, where we again read, this time entirely without qualification, that "Bohairic employs ϭ for ϫ in accented syllables".

For those who may be puzzled, as I was, by these wordings I state here as succinctly as I can Mr. Worrell's belief regarding ϭ and ϫ. In Sahidic both are palatal stops, ϫ representing the old Egyptian palatals *ṯ*, *ḏ*, and ϭ the later palatalized velars, *ḳ*, *k*, *g*. Like the other stops in Sahidic both are half-voiced (voiceless unaspirated). In Bohairic both ϭ and ϫ are articulated at the same point on the palate, but ϭ is aspirated (and therefore voiceless) while ϫ is not aspirated, and therefore voiced, or at least half-voiced. Normally ϭ is derived from Egyptian *k* and *ṯ*, which were presumably voiceless, while ϫ is derived from Egyptian *g*, *ḏ*, *ḳ*, which were voiced. Before ⲗ, ⲙ (?), ⲛ, ⲣ, however, only ϭ can stand, whatever the Egyptian sound represented may be.

After the end of chapter ii the interest flags a little, for what follows is mostly fairly well-known ground, although Mr. Worrell occasionally discusses new aspects of it. Chapter iii is called New Palatalization of Velars: complete in North, incomplete in South. The old palatalization (chapter iv) had brought certain of

[1] In any case it is misleading to say that ϭ stands for ϫ. Either one stands or the other, according to the Egyptian prototype—at least this is the case in accented syllables.

the old velars forward on to the palate, where they are represented by *ṯ* and *ḏ*. This took place at the very beginning of Egyptian history. The new palatalization affects the velars *ḳ*,[1] *k*, and *g*; the last was in all cases, and the first two were in many cases, palatalized. Bohairic took ϭ, the demotic form of , for the new palatalized velar *k* and the old palatal *ṯ*, both of which were voiceless and aspirate. It took ϫ, the demotic form of , for the old palatal *ḏ*, and for the new palatalized velars *g* and *ḳ*, all of which were voiced or at least half-voiced. Sahidic, on the other hand, took ϭ for the old palatalized velars *ḳ*, *k*, *g*, and ϫ for the old palatals *ṯ* and *ḏ*; both sounds were voiceless and unaspirated. Thus Sahidic distinguished point of articulation, Bohairic aspiration and non-aspiration. In other words, in the North (Bohairic) palatalization is complete, *i.e.* both the new palatalized velars and the old palatals are articulated at the same point, while in the South (Sahidic) it is incomplete, for the new palatalized velars are not yet so far forward as to be articulated at the same point as the old palatals.

Chapter iv deals very shortly with the older palatalization of velars, which produced *ṯ* and *ḏ*, which in some cases moved farther forward to become dentals *t* and *d*. It also gives a conspectus of the whole forward shift of articulation, both earlier and later.

Chapter v treats of Pressure Articulation, which has little application to Coptic except in so far as the pure voiced pressure articulation *ʿ* (*ʿain*) may just have survived into Coptic.

Chapter vi is called Fricatives. Here we look for something on the vexed question of Egyptian *ś* and *s*. Mr. Worrell believes that *s* lost its voicing in the Middle Kingdom and became identical with voiceless *ś*, both appearing as ⲥ in all Coptic dialects. For Mr. Worrell *ẖ* is probably a voiced uvular fricative with lip-rounding, the latter being necessary to explain its occasional confusion with *š* in early Egyptian. The usual supposition that *ẖ* is the forward *ch* of German *nicht* while *ḫ* is the backward *ch* of German *nacht* does not, according to Mr. Worrell, explain the history of the two sounds in all dialects.

The remainder of the book deals with the "vowel-supports", *ꜣ*, *ỉ*, and *w*, with the evidence afforded by the writing of Canaanitish words in Late Egyptian, and with current theories concerning the vocalization of Ancient Egyptian.

It may be felt that my attitude, especially towards chapter ii, is far too agnostic. Yet I cannot help being appalled by the difficulties of reaching valid results. We know so little about the pronunciation of Egyptian, even when the cuneiform and Canaanite parallels have been fully exploited. We know very little about the pronunciation of Greek in Egypt in the first few centuries after Christ. We do not know how far it was consistently written. We know nothing of the men who adapted Greek writing to the Egyptian language, and nothing of the conditions under which they did it. We do not know how far their system was scientific; clearly they aimed at a practical means of writing the language rather than at one which should be phonetically sound. The same sign may have been differently pronounced in different places, or the same sound may have been represented by more than one sign. Arabic equivalents are not wholly consistent, and it seems generally agreed that the tradition preserved in the Coptic church is almost valueless.

At the same time Mr. Worrell has obtained some very consistent results, and he may be right in every case. He has certainly taken the subject a stage beyond that reached by his predecessors. Whether subsequent research will take us very much farther I am inclined to doubt.

T. Eric Peet.

M. Rostovzev, *Storia economica e sociale dell'impero romano*, tradotta sull'originale inglese da G. Sanna e riveduta ed aumentata dall'autore. Prefazione di G. de Sanctis. Firenze, "La Nuova Italia" Editrice, 1933. 8vo. xix+723 pp., 80 pls.

Rostovtzeff's great work on the social and economic history of the Roman Empire is already sufficiently familiar to all students of ancient history to render a detailed review of this translation superfluous; but a mind so fertile and alert, an industry so untiring, as Rostovtzeff's cannot rest content with a mere re-issue of an earlier publication, and each fresh edition is in some measure a new book. The present volume is no mere translation of the original English edition or even of its German predecessor but has been revised and supplemented throughout, in both text and plates. A detailed study of any extended passage will show the reader how quick the author has been to appreciate and utilize new evidence and how remarkably he has kept abreast of recent research. The main lines of his survey are, of course, unchanged, and, as is well known, some of his theories are by no means unassailable; but whatever differences of opinion may exist on these points, the value of the work as a mine of information on the economic and social aspects of the Graeco-Roman world in the first three centuries of our era remains; and scholars who wish to acquaint themselves

[1] *ḳ* may at one time have been a uvular stop which moved forward to the velar position.

with the latest evidence on these subjects must have recourse to this edition rather than any other—that is, until it is superseded by a new translation into yet another language! So far as I am capable of judging, the Italian reads smoothly and well and shows little trace of being a translation.

H. I. BELL.

Thomas Young, F.R.S., Philosopher and Physician. By F. OLDHAM. London, 1933.

This monograph is an interesting account of a remarkable man. Linguist, doctor of medicine, scientist, and philosopher, he was no recluse but enjoyed riding, dancing, and social intercourse. As a teacher he was unsuccessful, the difficulties of ordinary minds being, for him, non-existent. Optics, the transmission of light, and capillarity were the subjects he studied most, especially the mechanism of the eye and the way sight is focused. He was one of the first to abandon the corpuscular theory of light in favour of the wave theory, advocating the latter in consequence of his experiments in partial reflection and "interference" of light, Having studied "interference" in water waves he perceived the similar effects in sound and light. His theories were most mercilessly attacked by the editor of the *Edinburgh Review*, Brougham, whom he had offended by adverse criticism. Young's dignified reply was in great contrast to Brougham's diatribes.

To Egyptologists the most interesting chapter is the last, which describes Young's attempts to decipher the hieroglyphic inscription on the Rosetta Stone. In this he was aided by his knowledge of Greek. Having obtained copies of engravings of the three inscriptions, he compared them by pasting similar parts of each on parchment. Besides deciphering the names of PTOLEMY and BERENICE he reached the following conclusions: (1) That Demotic was a cursive writing of the hieroglyphics. (2) That the hieroglyphic signs were largely phonetic and could be used alphabetically. (3) That the cartouche enclosed a proper name (he did not realize it must be a royal name). (4) That the "semicircle" above an oval indicated a goddess. Champollion corrected and enlarged Young's list of alphabetical signs, and, helped by his knowledge of Coptic, he formulated the system of grammar and decipherment used to-day.

In Fig. 10 Young's arrangement of the last line of the Rosetta Stone only occupies the upper half. In Fig. 11 the name, Cleopatra, reads from right to left but the signs are drawn the reverse way.

E. E. BOUGHEY.

University of California Egyptian Series, Vol. VI. A Provincial Cemetery of the Pyramid Age: Naga-ed-Dêr III. By G. A. REISNER. Oxford, University Press, 1932.

The present volume, which is the third report of the excavations of the Hearst Egyptian Expedition on the site of Nag'ed-Dêr, is concerned with the clearance of the cemetery numbered by Reisner N 500–900, which included graves dating from the Second to the Sixth Dynasty. The types of tomb found varied from simple pit-graves to brick mastabas with shaft or stairway. The burials ranged from the tightly contracted to full-length with the knees slightly flexed; coffins, where found, were of pottery or wood. There were no stone-built mastabas and no stone sarcophagi, so that scenes and inscriptions were entirely lacking except for some fragments of limestone roughly inscribed with names and titles. On the other hand, many vessels of stone, mainly alabaster, and of pottery were found, as well as a host of smaller objects such as scarabs and button-seals, beads, and amulets.

While no fresh discoveries of first-rate importance appear to have been made, the site is of considerable interest in that it presents a picture of a provincial community of the Old Kingdom comparatively little influenced by the highly advanced culture which centred at the royal court. The excavations have also shed further light on various matters of archaeological detail such as the development of tomb-types and the amulets in use at this early period. The author has spared no pains to give a full account of every possible detail of his material and has illustrated it most fully with line-drawings and photographs, but it is impossible to avoid the conclusion that an equally satisfactory result might have been attained with a much smaller bulk of text. The letterpress is over-burdened with complicated statistical tables and the like, with the result that the reader is in danger of recoiling bewildered from the mass of figures and of overlooking the points of real interest. Nevertheless, it is all to the good that we have at last the publication of an excavation carried out as long ago as 1901.

R. O. FAULKNER.

Löwenjagd im alten Aegypten. By WALTER WRESZINSKI. Leipzig, J. C. Hinrichs'schen Buchhandlung, 1932.

This little book of 27 pages and 60 figures on 24 plates, which forms *Heft* 23 of the series *Morgenland*, deals with the representations of lion-hunting in Egyptian art and their connexion with similar scenes in the art of the neighbouring countries, and the author commences by pointing out that scenes of lion-hunts are rare prior to the New Kingdom, and that when they are portrayed they are not pleasure-hunts but expeditions for the purpose of eliminating a dangerous pest. In hunting scenes where the hunter is pursuing the game as a recreation, the lion is not the object of the chase, but pursues his usual occupations quite undisturbed.

Lion-hunting as "the sport of kings" first appears in Egypt in the Eighteenth Dynasty, and seems to have been a fashion adopted from the rulers of the Asiatic countries conquered by Egypt. Wreszinski points out that the scenes of the royal lion-hunts are very closely assimilated to those of conquest, the lions replacing the fleeing foe, as a comparison of the scenes of battle and the chase on the Tutʿankhamûn casket clearly demonstrates, and he discusses the possible connexion of the Egyptian representations with the depictions of men hunting or warring with chariot and horse which are found on both large and small objects from the Aegean and Nearer Asia, and which seem to have been particularly favoured for decorating cylinder-seals. Scenes of the king hunting the lion on foot with a long lance are rare, but are found both in Egypt and in Mesopotamia. The present book forms an excellent little study of the subject, and others of a similar kind would be welcome.

R. O. FAULKNER.

The Alphabet: Its Rise and Development from the Sinai Inscriptions. By MARTIN SPRENGLING. (Oriental Institute of the University of Chicago Communications, no. 12.) Chicago, 1931.

The Sinaitic inscriptions discovered by Sir W. Flinders Petrie in 1904 have been the subject of a copious literature; between that year and 1929 forty books or papers dealing with them appeared. Mr. Sprengling's Communication is in three parts: a discussion of recent works dealing with them; an interpretation of the inscriptions; and an endeavour to prove the thesis which gives its title to the Communication. The author is well satisfied with the results which he has obtained; he holds that "he has made a considerable advance towards the solution of the Sinai inscriptions with sufficient lucidity and verisimilitude to make retrogression difficult, if not impossible".

His style is not always calculated to inspire confidence in his judgement or assertions. Of Moses he says "He was so utterly analphabetic that when he found alphabetic writing on stone tables it appeared to him to have been done by the finger of a deity; and according as this deity enraged or overawed him, he smashed these tables or carried them about as fetishes". Now we do not know whether the writing on the tables was alphabetic or not; and our sole authorities for the act of Moses state that he was enraged not by the Deity but by the Children of Israel. Further, the fact that he smashed them would not prove that he was "analphabetic"; and though the Ark itself at a later period seems to have been carried about as a fetish, the evidence does not extend this to the tables of stone.

This slapdash style seems ill suited to an inquiry in which accuracy is all-important; and it is unfortunate that the writer should have employed it in dealing with what is certainly the most plausible reading in the whole collection, Professor Gardiner's בעלת Ba'lat, according to Mr. Sprengling "an abomination which Israel spent centuries in stamping out". Since the Old Testament is not acquainted with this abomination, one wonders how the activities of the Israelites in extirpating it can have been discovered.

The interpretations offered at times coincide with those which Herr Grimme periodically produces, their Hebrew is of about the same quality, and the result about as convincing. Comparison of these and other attempts at decipherment seems to confirm the view of Leibovitch[1] that the only point connected with the Sinaitic script that is certain is that "it is a definite system and not mere scribbling" (Sir W. Flinders Petrie's words). Fault should not be found with Mr. Sprengling for resorting to desperate expedients, as in his reading and rendering of no. 356 אנך שפן סהמלאת רב מן נמע אמר ארבע *I am the miner* (literally rock-badger) *Sahmilat, foreman, of mineshaft No.* 4. But it cannot easily be admitted that this marks an advance in our knowledge from which there can be no retrogression. It is characteristic of the writer's logic that he finds wonderful confirmation of his rendering in a statement by Breasted that *the mine(shaft)s were placed each under charge of a foreman, after whom it was named.* If the rendering be right, the shaft was called by a number. But the Hebrew here is decidedly below the ordinary level.

The concluding chapter contains some statements which one could wish otherwise. "Between about A.D. 325 and the rise of Islam, about A.D. 650 (!), South Arabic is practically completely wiped out in the Arabian peninsula, leaving to the spoken language only a few islands off the south-eastern coast and to the

[1] *Z.D.M.G.*, 1930, p. 1.

script only the forlorn outpost of Abyssinia." One is almost ashamed to point out that two of the longest of the Sabaean inscriptions are dated A.D. 450 and A.D. 543. These are not from Abyssinia, but from Marib the capital of Saba. And these are by no means isolated.

The comparative table of alphabets is imperfect and so of very moderate usefulness; even supposing the interpretation of the Sinaitic signs to be correct, only by extreme goodwill can one find in it any confirmation of the thesis that the other Semitic alphabets are derived from it.

It is noticeable that Grimme in his work of 1929 abandons views which he had taken vast trouble to defend in 1926, and one might imagine the same happening to Mr. Sprengling in a later Communication. And this indicates that since Gardiner's בעלת little, if any, progress has been made. For the hypotheses do not seem to work. One might grant that תנת בנשמש could mean "gift of Benshemesh", though such a form as תנת is unknown and improbable; but when we find תנת by itself on a bust the supposition that it means "gift" does not commend itself; Grimme's explanation that the bust represents the giver, who therefore had not to mention his name, savours of the comic. Similarly when Benshemesh calls himself מהב בעלת we might strain our consciences sufficiently to allow that מהב stands for מאהב and that it means not "paramour of Ba'lat", but "beloved of Ba'lat". But when "we venture to read" another inscription as מנחת מהבעלת and render it "Votive offering of the beloved of Ba'lat", doubts insinuate themselves, since what is an epithet in the former text becomes a proper name in the latter. Indeed suspicion falls on Ba'lat herself.

If then the judgement of Leibovitch quoted above be sound, naturally little importance can be attached to the inferences which are drawn from the renderings of the inscriptions.

D. S. MARGOLIOUTH.

Die ägyptischen Personennamen. Von HERMANN RANKE, ord. Professor der Ägyptologie an der Universität Heidelberg; mit unterstützung der Notgemeinschaft der deutschen Wissenschaft, Lieferungen 1–4. Im Selbstverlag des Verfassers, buchhändlerische Auslieferung durch: L. Friederichsen und Co., Hamburg. RM 16 per Lieferung.

A dictionary of Egyptian proper names is a very necessary instrument of Egyptological research. In 1871 the late Professor Lieblein of Christiania completed a genealogical collection of names in families as found upon the monuments known up to that time in Museums or in publications. Lieblein's aim was especially to provide materials useful for chronology by way of genealogies. From this point of view his work must be pronounced a failure; for the gaps in the genealogies were impossible to fill up. But as a great store of proper names with the accompanying titles, Lieblein's *Dictionnaire de noms hiéroglyphiques* has been of enormous value to scholars, especially as an alphabetic index to all the names was issued with it. A supplement of equal bulk with the original, containing corrections and additions, was completed in 1892, and the two volumes together have for forty years been the chief resource for scholars seeking to interpret fragmentary names or those encountered in difficult hieratic and demotic scripts, while also utilizing the special indices attached to many publications of collected monuments. Now at length, chiefly from the enormous material amassed for the Berlin *Wörterbuch*, Professor Ranke has given us the beginning of a work which is both far richer than that of Lieblein, and is brought up to date in the readings. As yet it has not gone beyond the root *nb*, but a substantial section appears twice yearly, so that after a few more years it should be complete. To give an idea of the richness of the new collection it may be stated that the first letter of the alphabet, the 𓄿, has ninety-four names. It would be difficult to count the corresponding group in Lieblein owing to the numerous misreadings. Ranke gives seven names under 𓂝, while Lieblein in his two volumes has six correctly classed. Under *b*, 𓃀, Lieblein has only about one hundred and sixty, Ranke about two hundred and seventy separate names. Notwithstanding this abundance the seeker after the hieroglyphic prototypes of names in late hieratic, in Saite, Persian, and later demotic, and in Ptolemaic and Graeco-Roman papyri, will too often seek in vain. For all these later periods of Egyptian history our knowledge of Egyptian names is sadly deficient. As to method, Ranke's entries are very brief, a transcription followed by the hieroglyphic group; then, in a separate line, date and references, with occasionally an etymological or other note. There is no indication of the titles or filiation, wherein Lieblein still holds the advantage over Ranke.

F. LL. GRIFFITH.

The Metropolitan Museum of Art, Egyptian Expedition. The Monasteries of the Wâdi'n Natrûn, Part III. The Architecture and Archaeology. By Hugh G. Evelyn White; edited by Walter Hauser. New York, 1933. Pp. xxxiv and 272 and 93 plates, fo. $15.

This is the concluding volume of a memoir on the Coptic monasteries of the Wâdi'n Naṭrûn, a memoir which forms the most magnificent monument ever raised to commemorate a group of Coptic institutions, and is due to the devotion of the late Evelyn White and his collaborators, backed by the resources of the Metropolitan Museum and more particularly, as regards the publication, by the generosity of Mr. Edward S. Harkness. The author's preface is dated in 1923, and he died in the following year. His memoir was of colossal dimensions, to be divided into three volumes: (1) A study of the famous Library in the Monastery of St. Macarius, together with a full publication of the valuable remnants of its books left by previous investigators. This appeared in 1926. (2) The History of the Monasteries of Nitria and of Scetis, published last year. (3) The present volume. The materials for the last two volumes needed a large amount of rearrangement and pruning to prevent unnecessary repetition, and this heavy task was confided to Walter Hauser, the architect of the expedition, who had a thorough grasp of the problems involved. He tells us that for the third volume, the bulk was reduced by one-third, and that although the wording is all Evelyn White's the arrangement has been greatly changed. Certainly one can find no fault either in the amount of information given, or in the clarity of the exposition. The completeness of his historical research enabled the author to assign exact dates to the surviving buildings and details where hitherto almost nothing was known, and to trace the growth and consolidation of the settlements from anchorite cells, helpless against the attacks of nomad robbers, to compact monasteries, walled and fortified. The remains of the earlier stages, down to the ninth century, are indeed buried under heaps of sand and débris, and their examination can only be undertaken when permission can be obtained for systematic excavation. Destruction of architectural and other treasures goes forward all too rapidly both through neglect and through restoration, and on pp. 249–53 is outlined a very moderate but effective scheme to enable the Coptic authorities themselves to safeguard the monuments of their pious ancestors. It is to be hoped that action will be taken on the lines suggested. Meanwhile the plates offer a complete photographic architectural and archaeological survey of the monasteries, so far as they were accessible, with their frescoes and fine work in stucco and wood.

F. Ll. Griffith.

The Tomb of Neferhotep at Thebes. By Norman de Garis Davies, with plates in colour by Nina de Garis Davies. Publications of the Metropolitan Museum of Art Egyptian Expedition, Vol. ix. New York, 1933.

To act as bush to Mr. Davies's wine may be unnecessary, but it is nevertheless pleasant. Those of us who have actually seen his devoted figure on its way to and from some private tomb under the hot Theban sun must rejoice that the Metropolitan Museum is making a determined effort to bring the publication of his accumulated labours up to date. Ḳenamûn is already published, Rekhmirēʿ is well on its way, and here before us we have Neferhotep. What an attractive tomb this must have been as its Egyptian owners left it, before the dilapidations of successive families of peasants had brought it to its present pass. And how lucky we are to have had Hay—prince of copyists, Mr. Davies calls him—in the early nineteenth century and Mr. Davies himself in the twentieth to save what remained. Hardly any tomb in Thebes presents such an interesting variety of subjects or tells us so much in so small a compass about life—and death—in ancient Egypt. There is perhaps no single scene of which we have not an equally good or an even better version elsewhere, yet in each case Neferhotep's artist manages to enlist our interest either by the excellence of his work or by some originality of treatment. If the scene in which Neferhotep receives decorations from the king leaves us cold, we turn with interest to that in which his wife is similarly honoured by the queen, who leans out from the balcony of a building drawn in a very interesting fashion, which Mr. Davies is at his best in interpreting. And another interesting building is represented in the tomb, the temple of Karnak, according to Mr. Davies, who ingeniously and convincingly identifies the three pylons and the obelisk which are shown.

These are by no means the only unusual features of the tomb. There is—alas, was—a representation of a loom and another of the rare scene of the making of a coffin. How many tombs can show so fine a scene as this does of the wine-press with the little shrine to the harvest- and vintage-goddess Ernutet beside it? How many can show pictures of the *shadûf*? Mr. Davies knows the answer to this, and gives it in an appendix which will be rather startling news to those who, like myself, had never thought about the matter.

With regard to the date of the tomb Mr. Davies is apparently not prepared to commit himself. On style, he says it must be assigned either to the reign of Ay or to that which preceded or to that which followed it. In the scene in which Neferhotep receives the royal favours the king's cartouche-names actually occurred in the descriptive text. Mr. Davies reproduces on p. 19 what remains of one cartouche—the other has perished—and says that it suggested to him the prenomen of Ay. But his figure (Fig. 7) hardly bears this out, for it shows the cartouche to have certainly contained more than the *Ḫpr-ḫprw-rʿ* required; and though there is a trace of on the right, just above the half-way line, yet the traces at the top do not in the least suit the expected ☉. This last objection, however, if pressed, would prevent our reading any royal prenomen at all, and merely serves to indicate the difficulty of the problem. Mr. Davies's view is based on the fact that by stripping the coating of later plaster from the cartouches which adorn the balcony in this scene he was able to establish the presence in one case of colours indicative of the presence of , a sign which occurs in no royal name of this period except that of Ay, *itf-nṯr ỉy*. This is so important that we could wish that he had given us a sketch which would have convinced us that the sign occurred in that position in the cartouche where it would be expected in this name. In the absence of this we can but follow Mr. Davies's own lead and leave the question undecided. The cartouche as it stands seems to suit no known king-name, and the truth may be as indicated in note 5 on p. 19, where it is suggested that an original cartouche of Ay was adapted and altered to suit that of Horemheb.

The tomb is full of inscriptions, most of them of an orthodox and unexciting nature; I have, as in duty bound, followed Mr. Davies through their tedious intricacies, and found him accurate and painstaking everywhere. Almost the only bright patches are the texts accompanying the boats and mourners in the funerary procession. These are as difficult as they are interesting (Pls. xxii–xxv), but Mr. Davies has succeeded in making most of them out.

The first is that over the boat in the left half of Pl. xxii. Here Mr. Davies's restoration of *bw ỉ·ỉr·ỉ sḏm ḫrw·k* may be regarded as certain. In the last column we should perhaps read , *ḫsỉ ḥr*, "the *ḫnt*-snake (the crocodile, *ḫnty*?) fierce of face". But there is little save guessing to be done in these last few columns.

In the next inscription, beginning on the left of Pl. xxiii, there are a few points to notice. *nỉ n ḥmwt* in col. 2 must be vocative, for the verb *rmy* below is clearly an imperative: "O, women of the passenger boat, weep bitterly." Later on I cannot subscribe to Mr. Davies's "for we see thee (with) gaze fixed on it (eternity)". *ḥr nty* is clearly the not uncommon Late Egyptian writing of *ḥr ntt* "because", and the *rf* that follows is the particle that so often supports it. Render "O that to-day might be eternity and that we might be seeing thee; for behold thou art going to the land . . .". *iw·n ḥr ptr·k* is added as a clause of circumstance to the main clause *ḫpr pỉ hrw m nḥḥ*, "we seeing thee"; the wife wishes that to-day were eternity, *i.e.* that she too were dead, for then she would see her husband again. *šbb* must be infinitive of *šbb*, "the land of mixing men" rather than passive participle of *šbi*, "the land in which men are mixed", which would require *im* (for *im·f*) at the end. I do not know to what the phrase really refers.

The inscriptions on Pl. xxiv are not altogether easy. On the right are the words of the wife in eleven columns from right to left. Here is a tentative translation followed by some justificatory notes. "I am thy wife, Merytrēʿ. O Great One, do not abandon me. O Rēʿ . . . thy kindly leading. O Good Father, behold, he who was mine is afar; thou hast made him like the horizon, while I must walk alone. Nay, look behind thee, thou that didst love to converse with me; thou art silent and speakest not."

at the bottom of col. 2 seems clear, and *nfr* in col. 3 can only be attributive, not predicative.

itf nfr in cols. 3–4 refers to *Rʿ*.

For *pỉy·ỉ*, "my man", "he who was mine", *cf.* Pl. xxii, last column on the left.

wỉyt must be the Old Perfective "is far off". The *t* is a writing of the ending generally written *tw*, which is used in all persons of the Old Perfective in colloquial Late Egyptian.

Mr. Davies's queried reading in col. 5 is certainly correct. The horizon is a common symbol of remoteness in Egyptian.

In col. 5 *ḥr ỉswt* (for) is a not uncommon combination of conjunction and enclitic. In *mỉk m sỉ·k*, if it be felt that *mỉk* can hardly be used as an independent imperative, we must understand the pronoun *wi*, "me", after it: "And behold I am (left) behind thee."

In cols. 9–11 we have the speech of the *ḥr-ḥb* priest, which is straightforward, and in cols. 12–22 that of the mourners. Mr. Davies has cleverly seized the sense of this and it is only on small points that I venture to question his rendering.

In col. 13 𓇋𓇋 (the copy suggests that as well as is possible) cannot be the word for "praise", for this is never written with two 𓇋's. It must be an interjection expressing grief, though it does not appear in the *Wörterbuch*. In the same column *ꜥḏ* can hardly mean "safe", for this seems unsuitable in a lament which goes on to complain that the dead man is just the opposite of safe. I cannot, however, find support for any more suitable rendering.

The end of col. 13 and the beginning of 14 is troublesome. We seem to need some word connected with the root *nḥ* or *nḥi*, "to lament". But to get this we must suppose a 𓈖 to have stood either at the bottom of 13 or at the top of 14, and there seems no room for it. In any case what would this form *nḥww* with its two *w*'s be? A plural imperative would suit best, but then *ni* is left standing. To suppose a word "a lament" or "mourners" would solve the problem, but no such word is known.

In col. 17 *pꜣ ꜥšꜣ rmṯ* cannot mean "abundance of men", the word for "abundance" being *ꜥšꜣt* (feminine), but only "O rich in men" (vocative), or "he who is" or "thou who art rich in men", *i.e.* "servants". The difficulty is that sense now forbids us to take the phrase as subject of *nḥm*. We might just possibly take *nḥm* as impersonal passive and the *n* of *nk* as the "*n* of disadvantage", meaning "from", which is common after *šsp* "to receive from" in Late Egyptian accounts. The meaning would then be: "There has been taken from thee", *i.e* "Thou hast suffered loss, O rich in servants". But this seems very harsh. Another possibility is that the *k* of *nk* in 17 and of *twk* in 18 refers to *tꜣ n nḥḥ* ". . . the land of eternity. Thou hast carried away him who was rich in men; thou art a land that loves solitude." Or, supposing a confusion of persons not at all too surprising for Egyptian, "Thou (the land of eternity) hast carried away him who was rich in men. Thou (the deceased) art in a land that loves solitude."

While the main work of this book is Mr. Davies's own, he has had the assistance of other efficient members of the Metropolitan Museum staff. Three plates of plans and sections of the tomb are the excellent work of Walter Hauser; five photographic plates are by Harry Burton, and they are up to the standard he has taught us to expect of him. The beauty of the whole work is enhanced by four fine coloured plates from the drawings of Mrs. Davies. Mrs. Davies's work is always welcome, but doubly so in a tomb where photography is almost impossible. The scenes she has chosen are a credit both to her and to Neferhotep's unnamed artist. It would be hard to find in the art of any period a more lovely piece of "line" and grouping than the wailing women on the boat in Pl. iv of Vol. II.

The arrangement of this book has evidently been the product of most careful design, and leaves nothing to be desired. The large key-plates are bound with the coloured plates in Vol. II, and can thus be kept open for reference while Vol. I is being studied, a most convenient arrangement. The cross-referencing from page to plate, plate to page, and plate to key-plate, is perfect, and every possible precaution has been taken to prevent wasting a moment of the reader's time. Every user of the book will be particularly grateful for the printing of the plate-number on the outside as well as the inside of folded plates, so that he can see it at a glance without having to open them.

A noble book, and a credit to its editor, Dr. Ludlow Bull, and to the Trustees of the Metropolitan Museum, to whom all who use it will join me in saying "Next, please".

T. Eric Peet.

The Decoration of the Tomb of Per-neb: the Technique and the Color Conventions. By Caroline Ransom Williams, Ph.D. The Metropolitan Museum of Art, Department of Egyptian Art, Vol. III. New York, 1932.

One might have begun this review by discussing how far it is advisable to transfer an Old Kingdom mastaba, with its delicate wall-reliefs and paintings, from Egypt to New York. It would perhaps not have been difficult to justify it on the lines (*mutatis mutandis*) of "I hope they prefer their inheritance Of a bucketful of Italian quicklime". But even if this had not satisfied me I should have found sufficient justification for the transference in the opportunity which it has given to Mrs. Williams to examine the technique of the sculpture and painting of this mastaba. Not that she has confined her study to this alone, for the fact that she has spent some time in Memphis and gone thoroughly into the question on the spot is patent on every page of her book; and while she would, I am sure, agree that the book would not have been worth writing if she had not made this pilgrimage, those who read it will agree with me that, since she has, her book is well worth reading. Many hours, days, and months must have gone to the accumulation of this store of knowledge on a subject which is in part completely new ground. We might have expected that it would make very dull reading. Yet precisely the contrary is the case. It is easy and even absorbing. For this the author deserves our thanks, for it is mainly due to her clear straightforward manner of writing. The division into paragraphs is excellent, and in each paragraph we are told at once what it is to be about. Should we need further help—and we hardly do—there is a running *précis* of marginal headings; how well this has been done will be realized by those who have tried to produce such a thing in their own works and know its difficulties.

The work consists of two parts, which are in reality quite separate. The first deals with the technique of the work, while the second is an attempt to determine the rules which underlie the use of particular colours for particular purposes. In the first part we learn about the preparation of the wall surfaces; the use of guiding lines, not very numerous at this period, and quite different from the network used in later days; of the preliminary sketching in of the scene; of the first sculptor's-work which followed; of the second outlining, not necessarily following exactly the lines of the sculptor, which served as a preliminary to the final painting. Next we have a discussion of the manner in which the colours were put on—in *tempera*, not *al fresco*—the order in which they were applied, and the composition of the colours themselves. In this section there is a full and very interesting treatment of the origin and history of the so-called "Egyptian" or "Vestorian" blue.

The second part of the work deals with what the author calls the colour conventions. It is explained that colour is used either for drawing the outlines and, more rarely, the forms of inner details of objects, or else in broad washes to indicate the colour of whole objects or parts of them. In the first case black and red are the colours most used, and as a rule they are to be regarded as devoid of colour significance. We must use caution therefore in drawing from such lines, even when in colours other than the usual black or red, any conclusions as to the true colouring of the objects on which they occur. The considerations which influenced the Egyptian artist in choosing colours for his broad washes are discussed in great fullness, and it would take too long to analyse this section here. Some colours are natural, approximately those of the object in its most usual form, others are conventional. Suggestions are made for the explanation of the curious variation of choice between blue and black, and of the much more natural confusion of blue and green; occasional falsification of colours in the interests of balance is even admitted to be possible.

There remain some puzzles, however, as the author herself is not slow to see. Much new light has recently been thrown on Egyptian drawing and sculpture, and on Egyptian mathematics, by the ability of some writers, notably Schäfer in the case of drawing and sculpture, and Gunn, Neugebauer, Vogel, and most recently Luckey, in the case of mathematics, to clear their minds effectively of the modern point of view, to go back behind the Greeks and to see the subject as the Egyptians saw it. I venture to think that if ever any serious addition is made to Mrs. Williams's discussion of the colour problems it will be made on these lines.

There are excellent plates, in line, collotype and colour, which serve adequately to illustrate the text. At the risk of being considered a heretic I cannot help expressing my wonder whether, if all Egyptian tomb work of the Old Kingdom had been preserved in the state suggested—and, I doubt not, rightly suggested—in Plate xiii, we should have admired it as much as we do. One thing alone in the book made me a little uneasy. On p. 39 we are warned against putting too much trust in the colouring of early plates such as those of Lepsius's *Denkmaeler*. But we are then told that our mainstay for the Old Kingdom must be among other things the Mêdûm volume. Now the coloured plates of this volume were a laudable attempt to give us some idea of what Old Kingdom mastaba-work looked like. But I should be sorry to use them in a scientific research into Egyptian painting. Mrs. Williams refers, for instance, to the figure of a man leading two bulls which appears in colour in *Medum*, Pl. xxviii, 4. The original of this is in the Manchester Museum, where I have examined it very carefully more than once. The bull-sinew whip which the neatherd holds is shown in the plate as being white with bright lemon-yellow tip and handle, and this has even misled a writer into suggesting that the object is a lighted candle. In the original this object is of uniform colour throughout; it may once have been dead white but is now a dull cream. If *Medum* can mislead us like that it is hardly to be used as a mainstay for our research. These misgivings, however, do not affect our confidence in the work of Mrs. Williams, who in nine cases out of ten has worked from originals, not copies.

T. ERIC PEET.

Catalogue of Alexandrian Coins in the Ashmolean Museum. By J. G. MILNE. Oxford: Printed for the Visitors and Sold by Humphrey Milford. 1933. 42*s*. net.

The fine collection of Alexandrian coins in the Ashmolean Museum—more than 5,500 in number—was eminently deserving of publication, and it is peculiarly appropriate that it should be published over Dr. Milne's name. His own donations to it have been far more extensive than those of anybody else, and (as we learn from the foreword by the Keeper) his personal contribution towards the production of the Catalogue has meant something besides the expenditure of a vast amount of disinterested labour. But that is not all. The Alexandrian series stands by itself among the coinages of the ancient world. The full appreciation of its characteristic features calls for the exercise of exactly those qualities of mind of which he has proved himself the possessor, while his familiarity with Egypt is, of course, an asset of substantial value.

The corresponding volume issued by the British Museum was in some respects unsatisfactory, mainly because it adhered too closely to the pattern that had been found suitable for its companions. The coins of the various emperors were classified according to their reverse types, with the result that the chronological sequence was largely obscured. Dr. Milne has preferred to follow the system that was subsequently adopted in the Hunter Catalogue. But, with more material at his command and a longer experience behind him, he has been able to develop it and to improve it almost out of all recognition. Great pains and much ingenuity have also been bestowed upon the elaboration of what amounts to a shorthand method of description. At the first glance the effect of this is not altogether pleasing. The novice may feel repelled by its seeming complexity. If, however, he takes the trouble to master the key, or rather the several keys, he will be astonished to find how much information is conveyed by the one or, at most, two lines of type devoted to each individual specimen. And the gain in economy of space is extraordinary. The coins of Alexandria in the Ashmolean are not far short of five times as numerous as those in the Hunter Cabinet. Yet they are disposed of in 131 pages as compared with 164 of precisely the same size. Diameters are given in millimetres, weights in grammes. The seven plates are so good that one would have welcomed many more of them. Here again, however, space and money have been saved by illustrating only such types as have not already been figured by Poole, Dattari, or myself.

The collection is thoroughly representative, and the book will therefore be indispensable to all future students of the series. Even those Egyptologists whose concern with coins is merely incidental will always find it handy for reference. Nor should they omit to study carefully the thirty introductory pages into which are compressed the fruits of many years of observation and reflection. As a general sketch of the Alexandrian coinage it could not easily be bettered. Not every one may be ready to accept every conclusion. But the points on which there is likely to be difference of opinion will be few and insignificant, when set beside the informative and stimulating remainder.

George Macdonald.

Conversion: the Old and the New in Religion from Alexander the Great to Augustine of Hippo. By A. D. Nock. Pp. xii+309. Oxford, Clarendon Press, 1933. 15*s.* net.

Since Professor Nock went to Harvard, he has read and thought much on those late classical and early post-classical forms of religion which have always interested him. This book is the ripe fruit of his labours, and, despite its modest size, one of the most important works on the subject which have appeared for some time. Accumulated stores of material and good expositions of particular phenomena or groups of phenomena have but made more urgent the need for an authoritative, unpedantic and sympathetic interpretation of the problem as a whole, *viz.*, why and how it happened that a world which, in Alexander's day, was tolerably well satisfied with the traditional cults, adding what tincture of philosophy individuals might care to acquire, had by the time of St. Augustine reached such a mood that the only serious choice left was between Christianity and some other religion having a revealed truth and a scheme of salvation.

The book begins well by making the fundamental distinctions between the traditional cult of a state or other group and a prophetic movement, also between mere adhesion to a religion new in itself or to the adherent (as when a pious Greek added an Egyptian or other foreign god to his pantheon) and conversion, with its attendant abandonment of the old ways. Next, the earlier history of such religions of prophetic type as affected the classical world directly is briefly traced, beginning with those which developed on Greek soil. "Delphi", the author concludes (p. 32), "produced a seat of authority, Dionysus a religion which became stereotyped and sterile, Orphism an idea of conversion and a sacred literature but no church." Then come accounts (occupying chaps. iii and iv) of the two currents, as the author calls them, the picking up by Greeks in barbarian countries of foreign cults and the domesticating on Greek sites of the worships of alien residents. All this is familiar enough, but told with remarkable freshness. The next two chapters deal with Rome and the propagation of Eastern cults in the Empire. So far, the matter is chiefly historical; the next chapters are more interpretative, for they treat of the appeal of the foreign cults (chap. vii), their success (chap. viii), and, having thus cleared the ground, of the process of conversion, illustrated by the experiences of Lucius-Apuleius (chap. ix), of Julian, the unnamed senator whom pseudo-Cyprian addresses, and Porphyry (chap. x), also of those converted, not to any cult, but to philosophy (chap. xi). Next comes

The Spread of Christianity as a Social Phenomenon (chap. xii), the explanation adopted being that the new faith "united the sacramentalism and the philosophy of the time" (p. 210 f.). We then meet, in chap. xiii, a really admirable piece of scholarly imagination, a reconstruction of the impression which Christianity made on the mind of the average decent pagan. This leads up to the final chapter, which discusses the experience of three outstanding Christian converts, Justin Martyr, Arnobius, and Augustine.

It is not to be expected that all this matter should be treated in so little space without the author laying himself open to contradiction or raising doubts. To begin with minor points,[1] Statius, *Theb.*, I, 720, does not mention Mithras slaying the bull, but his capture of it (*indignata sequi torquentem cornua*) (p. 126); brother Quartus (p. 212) had no connexion with any greetings to the Christian body in Rome, for his name occurs in Rom. xvi, which can by no possibility be addressed to that community. The reviewer does not understand why any one should refuse the name of religion to the cults discussed in chap. vi (p. 98). A matter of wider import is a certain tendency towards a greater intellectualism than the facts seem to warrant. For instance, the statement on p. 262 that "from early manhood Augustine sought to find an adequate theistic scheme of the universe", while quite true, omits the vehemently emotional quality of his search.[2] The other side is not, indeed, wholly neglected, as many passages show; the "passionate nature" of Julian, for example, is rightly stressed (p. 158). Yet the amazingly unintellectualist character of the third and fourth centuries especially requires more attention than it is given. The excesses in rhetoric of the Second Sophistic and the following of the many new cults are but two symptoms of an age sick in heart and mind, desiring above all things to have its emotions strongly stimulated, in which it would scarcely be possible, so far as our records go, to find an example of any one being influenced by arguments or precepts which did not appeal to his feelings, but calmly to his intellect. Of this state of mind the examples given and well commented upon by Professor Nock furnish excellent instances; but further and more penetrating psychological analysis would be in place, to reinforce the comments, always sound and to the point so far as they go, which the book already contains. As it is, there are numerous remarks (*e.g.* p. 125, on the temper of second-century Roman society; p. 155, on modern equivalents to the experience of Lucius; p. 172, on the "evangelical fervour" of Epicureans; p. 209, on the part played by sheer curiosity in attracting converts; p. 271, the final warning of the impossibility of reaching a perfect understanding of ancient conditions) which show that he has thought along those lines, and not in vain. There is room for another book, by the same author or one like-minded, analysing religious emotion in some of the more notable converts, whether to or from Christianity, with a careful use of modern psychological investigations.

The notes, which are collected at the end of the book after the annoying fashion affected by some publishers, are excellent, but would not be hurt by a little more detail. The index is a welcome addition.

H. J. Rose.

The Tomb of Queen Meryet-Amūn at Thebes. By H. E. Winlock. Publications of the Metropolitan Museum of Art Egyptian Expedition, Vol. VI. New York, 1932.

When the Metropolitan Museum appointed Mr. Winlock to the post of Director, Egypt lost a fine excavator. The Museum doubtless was not unaware of that unfussed and unfussing efficiency which those of us who have seen Mr. Winlock at work in Egypt have admired, and which impresses itself so strongly on his reports as well as on his field-work. At first sight it might seem extravagant to devote so large and magnificent a volume to a single tomb, and that a plundered one. On the other hand, it is the tomb of a royal lady, and the fact that it had been plundered and restored once, if not twice, lends it a special interest, for it shows us what was regarded in the Twentieth Dynasty as essential in the way of restoration. One thing, however, I cannot help regretting, namely that the burial of Entiuny, found in the outer part of the tomb, was not dealt with in full here. Mr. Winlock gives us reasons for this, but for once his reasons do not

[1] The style is not always as good as the substance; to take examples from the two ends of the book, the first sentence contrives to use "which" three times in as many lines, and p. 269 is defiled with the barbarism "urge" as a noun. There are some slips either of pen or press; on pp. 103, 104, something seems to have dropped out, for the sentences beginning "Since when" and "Defend me against" do not make complete sense; on p. 233, for Amphictyon read Amphitryon.

[2] The following random quotations from the *Confessions* (ed. Knöll, Teubner, 1926) may serve as illustrations of his temper: II, 2, *quid est quod me delectabat nisi amare et amari?* V, 10, *nimis extento desiderio uenturum exspectabam istum Faustum.* VIII, 2, *mihi autem displicebat quod agebam in saeculo, et oneri mihi erat ualde;* besides the famous *sero te amaui* and *fecisti nos ad te.* That he had also a keen and, for that age and country, a philosophical intelligence is of course true.

convince me. An intact tomb, *i.e.* intact since ancient Egyptian times, is an archaeologica lunity, and to my mind it seems more reasonable to separate Entiuny from the other burials of her period among which the Museum proposes to describe her than from the other burial in the same tomb. To include her would not have enlarged the book very much and would have avoided some repetition both of plates and description which will now be necessary in the future volume. More serious than this is the fact that the reader is called on here to accept, on nothing more than a very hasty outline of the evidence, an account of the burial of Entiuny which is, to say the least of it, extraordinary. While my confidence in Mr. Winlock's judgement is not in the least shaken I shall be happier when I have seen the evidence in full.

In every respect this report is a model of what such a piece of work ought to be, and shows how much can be deduced with comparative certainty from the smallest fragments found in a damaged tomb by an excavator whose field-methods are of the first order, whose perceptions are sharp, and who combines imagination with the good sense to keep it under control. Most readers will doubtless admit the cogency of the reasoning of chapter iv, in which the identity of the queen is discussed. Despite the size and shape of the coffin, and the position of the embalming incision, which might be taken to suggest a date nearer to the beginning of the Eighteenth Dynasty, Mr. Winlock decides that Meryetamūn was not the princess of that name who is known to us as a contemporary of Amenophis I, but a daughter of Tuthmosis III, of whom we have a representation in the Hathor shrine at Dêr el-Baḥri while she was still only a princess, and who, according to Winlock, was afterwards married to Amenophis II, but did not survive long enough to appear on any of his monuments as his wife.

From the existence of a niche for a lamp just at the bottom of the entrance-pit steps Mr. Winlock infers that the work of carrying up and dumping the chips from the original cutting of the tomb was done by night with a view to keeping secret its position. This may be true, but it raises some puzzling problems. Did the Egyptians really believe it was possible to conceal the position of rich tombs, even by working at night? The documents on the tomb-robberies of the Twentieth Dynasty make it quite clear that not only the officials but other people as well knew the positions of numerous tombs, and that what preserved the tombs from plunder was not concealment but the existence of a government organization strong enough to guard them. The moment this organization went to pieces owing to the internal weakness of the country the tombs were at the mercy of the malefactors. Those who had dug tombs must have passed on information concerning their whereabouts to their children, and officials were no doubt both garrulous and venal. In fact it looks as if we had here but one more example of the Egyptians' habit of fearing the worst and yet at the same time going to endless trouble to take what they must have known were wholly inadequate precautions against it.

Mr. Winlock's helpers have served him well. Harry Burton's photographs could not be surpassed, and his views taken in the interior of the tomb are admirable examples of artificial lighting. Hauser's plans are, as always, excellent, and Charlotte R. Clark has produced a most useful catalogue of the objects found, with references to letterpress and plates.

T. ERIC PEET.

Medinet Habu, Volume I: *Earlier Historical Records of Ramses III*; Volume II: *Later Historical Records of Ramses III*. By the Epigraphic Survey. Volume VIII of the University of Chicago Oriental Institute Publications. Chicago, 1930, 1932.

A review of this work must begin and end with an expression of thankfulness that the complete publication of an Egyptian temple has at length for the first time been undertaken, and of admiration for the magnificent scale on which it has been conceived and carried out. It is no secret that the conception originated with Professor J. H. Breasted and that its translation into fact is due to the munificence of John D. Rockefeller, Jr. We have now before us two volumes of the work, and we are in a position to judge of the success with which the Chicago expedition is surmounting the difficulties of the task it has set itself. Professor Breasted tells us in his preface that the system employed is one in which "the speed and accuracy of the camera, the reading ability of the experienced orientalist and the drawing skill of the accurate draughtsman" are combined. Of the work of the photographers and draughtsmen we can form some opinion from what lies before us; of that of the philologists we can form none whatsoever—except that their work bears every sign of the most careful attention to detail—until the promised volume of critical notes on the inscriptions has been issued. It is therefore solely with the appearance of the plates that the present review must deal.

The method of drawing on photographs finally adopted, which is clearly described by Dr. Nelson on p. 10 of vol. I, was chosen as the result of a long series of experiments. Some of those who saw these in progress may have doubted whether the method could ever be wholly satisfactory, and would not have been surprised if after all it had been abandoned in favour of the more clumsy method of tracing, which in any case may have to be employed for some of the curved surfaces, such as those of the columns. Obviously all depended on whether sufficiently able draughtsmen could be found to do the drawing, and whether a sufficiently accurate method of checking could be devised for scenes and inscriptions drawn on such a comparatively small scale. There seems no doubt that both these conditions have been fulfilled.

The method of setting out the work could not be bettered. Clearly drawn plans of the walls, with reference numbers, show us exactly where each scene is to be found, and practically everything is given both in line-drawing and, on a smaller scale, in photograph. Each photographic plate bears a reference to the plates on which the same scenes will be found drawn in line. One small addition would make the work even easier to use than it is. When a line plate forms part of a connected series of scenes it might be well to print at each side the number of the plate by which it is flanked. Thus Pl. 29 is adjoined on the left by 31 and on the right by 22. I wasted so much time through the lack of these helpful numbers that I eventually marked them in throughout. One other addition of the same kind might also be suggested. There are numerous double-leaved plates, and, as these have blank outer faces, the reader searching for a particular plate may open the book several times at a double blank before happening on a single plate whose number will tell him whereabouts he is. If the number of each double-leaved plate were to be printed in the top right-hand corner of the blank outside front page as well as on the inside, it would be much easier to find a particular plate. The cost would be small in comparison with the gratitude of the user of the book.

The choice of a suitable thickness of line for ink drawings of Egyptian reliefs is always difficult, and still more difficult is it to decide whether line of only one thickness or of two should be used. The latter alternative has been chosen, probably because it gives something of the impression of the very deep cutting of many of these sunk reliefs. The thicker line is to the right and top, *i.e.*, gives the impression of the shadows which would be thrown by a light from the right-hand top corner of the picture. By comparing the admirable coloured plates with the line-drawings it is possible to see how cleverly the artists have dealt with another tiresome problem, that of representing in black and white details which in the original are only put in in paint, which has mostly perished. Yet another difficulty lies in the necessity of showing where the design has been destroyed by damage done to the surface. In one or two cases, as for example Pls. 29 and 32, the indication of damage may be felt to be a little too noticeable; in places it is inclined to overwhelm and obscure the design, but I am not draughtsman enough to know whether it could have been put in more lightly, though plates like 62 suggest that it could. Moreover, while I am alive to the advisability of showing the reader whether a particular area in which nothing is now discernible could or could not originally have had design or inscription upon it, there are places where the copyists might have taken their courage in both hands and omitted the hatching, especially among the hieroglyphic signs. In some cases, for example the inscribed portions of Pl. 108, it could safely have been left out.

These vast wall spaces with their heavily cut reliefs and badly damaged surfaces must have offered more problems than pleasures to the photographic staff of the expedition. It has done its duty by them, however, and utilized every trick of the trade and every position of the sun to get the various effects needed.

One thing and one only I do not quite like, namely the so-called reinforced photographs, Pls. 89, 95, and 117. In the absence of an introductory text to vol. II their purpose is not obvious. They do not represent the scene as it was when new, for they give the breaks; they cannot show the colour, for they are monochrome; and, although they are clearer than a photograph, there is something a little artificial and un-Egyptian about them. I would rather puzzle the scene out from a line-drawing and an untouched photograph. However, this is purely a matter of taste, and I do not for a moment suggest that they are not a legitimate means of illustration.

It may be thought that the faults I have found with the work are very petty; and they are, for the simple reason that there are no serious faults to be found. And I end as I began, with a tribute of thanks to those whose skilled and patient labours are putting at our disposal in so beautiful a form complete copies of these valuable scenes and inscriptions.

T. ERIC PEET.

Michigan Papyri, vol. II. Papyri from Tebtunis, Part I, by A. E. R. BOAK. xvi+259, and 4 plates, $3.50. (University of Michigan Studies, Humanistic Series, vol. XXVIII.)

This finely produced volume is devoted to an instructive group of eight papyri emanating from the record-office of Tebtunis with the neighbouring village of Kerkesoucha Orous and dating from the reign of Claudius. Of the most important of them, no. 121, a description with some excerpts had already been given in *J.E.A.*, IX, 164–7; XII, 100–7. This is a roll inscribed on both sides, on the recto with an *εἰρόμενον*, *i.e.*

a series of abstracts of the contracts drawn up at the office, on the verso with a register of the contracts, the first 48 items corresponding with the abstracts on the recto. Such abstracts and registers covering periods of four months were among the regular duties of the office. No. 123 is another lengthy roll, having on the recto a list of all the documents written at the office during a year, with a statement of the fees charged, and on the verso an account of expenses. These two papyri constitute the bulk of the volume; the others are cognate but slighter specimens, and the whole group affords valuable insight into the working of a local record-office in its dual capacity of producer and repository of business documents. It is noticeable that P. Tebt. 815 of the third century B.C., while analogous as a series of abstracts to P. Michigan 121 recto, resembles 123 recto in specifying the charges made for drawing up the contracts concerned.

This volume is uniform with Mr. Edgar's edition of the Michigan Zenon papyri, but some small departures are made from the method of its predecessor, though hardly with advantage. Nothing is gained by substituting dashes for dots representing lost letters in lacunae, and the different alinement of dashes within brackets and of dots outside them is displeasing. While abnormal spellings, again, have as a rule been corrected in the commentary, here and there for no apparent reason the correction has been incorporated in the text, *e.g.* 123 recto IX. 39 *χλορῶ(ν)*, with the annotation "written *χλορ*". Consistency would rather demand *χλωρῶ(ν)*. Similarly in 123 recto VIII. 12 *μισθώ(σεως) νομῶ(ν)* is put into the text (*μισθ νομ* Pap.), whereas a few pages later at X. 22 we find *μισθό(σεως)* in the text, with the note "for *μισθώ(σεως)*". It would be better to adhere to what has hitherto been the almost universal practice of papyrologists and to retain the original spelling throughout. Professor Boak is a careful and competent decipherer, but some further progress may be found possible in places where the originals are poorly preserved. Thus in 121 recto II. i. 1 the facsimile shows that the letters at the end of the line are by no means illegible, suggesting *τὴν τιμὴν ἐκφορίων καὶ γενῶν*: was the final word meant for *ἐπομένω(ν)*? At X. i below, (*ἐτῶν*) *ιδ* (or *ιζ*) *αὐλ(ή)* looks likely. In I. x. 2 if, as seems probable, *τῶν Εἰσίων* is to be recognized (*cf., e.g.* P. Amh. 93. 11), *ἐξ ἔρια* perhaps conceals *ἐξέρετα* for *ἐξαίρετα*. That *εντηπ( )* in IV. ix. 2 represents *ἐν τῇ Τ(εβτύνι)* is unlikely and more probably *ἐν Τεβτ(ύνι)*, as at xi. 1, has been misread or miswritten. The commentary on this passage is not very happy. It is not clear that *εἰσαυλίζειν*, which appears not to have occurred elsewhere, is intransitive, and *ὁ ὁμολογούμενος* cannot mean the person with whom an agreement is made. A tolerable sense is obtainable with *ἐνοικ(οῦντας) καὶ κεχρη(μένους) . . . ἐν τῇ αὐλῇ τ⟨ῆ⟩ς ὑπαρχο(ύσης) . . . ἐν Τεβτ(ύνι) οἰκί(ας), καὶ χρήσονται οἱ ὁμο(λογοῦντες) κ.τ.λ.*: *ἐνοικ(ήσειν)* is preferable to *ἐνοικ(ίσειν)* also at xi. 1. *διονομημένδι* and *διε[ψ]ῦσθαι* in 122 i. 8 and 32 are stumbling-blocks, like *ἐγμήψε(ως)* which the facsimile does not substantiate at 123 recto II. 46. In l. 26 of that column the word partially read as *ο . φτριο( )* looks like *ἐκφόριο(ν)*, and in l. 9 *δο(θείσαι)* would be an easier resolution than *δο(ύς)*. Has Tybi a better claim to a *y* than Hathur and Pauni?

A. S. H.

Ostraca Osloënsia: Greek ostraca in Norwegian Collections. By L. AMUNDSEN. viii+88, and 4 plates, Kr. 8. (*Vid.-Akad. Avh. II H.-F. Kl.* 1933. No. 2.)

Dr. L. Amundsen here edits 28 miscellaneous ostraca, ranging in date from the third century B.C. to the sixth A.D.; four of them belong to Prof. S. Eitrem and the rest to the University of Oslo. The most interesting is an early Ptolemaic letter written from the neighbourhood of Coptos and referring to correspondence from Berenice on the Red Sea. In l. 12 might it not be possible to read *περὶ ὧν ἐν ἐλέ(φασι) ἐδαπάνησε*? If so, the identification of *Χαριμόρτου* in the previous line with the strategus of that name mentioned in Dittenberger, *Or. Gr. Inscr.*, 86, 7–9, as having been sent *ἐπὶ τὴν θήραν τῶν ἐλεφάντων* would become more than a hypothesis. The other texts are of the usual kinds—receipts for various taxes, for corn-transport, a few short lists, etc. (in 15. 6 *ἐ(πὶ τὸ αὐτό)* may be suggested). These Dr. Amundsen "places in their proper surroundings" by means of an elaborate and learned commentary, in which the value of the publication largely consists. The commentary is composed in English, with which the author is well acquainted, though his treatise would have gained by submission to some one for whom English was the native tongue. Nine of the ostraca are included in excellent photographic reproductions.

A. S. H.

Myth and Ritual. Essays on the Myth and Ritual of the Hebrews in relation to the Culture Pattern of the Ancient East. By A. M. BLACKMAN, C. J. GADD, F. J. HOLLIS, S. H. HOOKE, E. O. JAMES, W. O. E. OESTERLEY, T. H. ROBINSON. Edited by S. H. HOOKE. With a foreword by D. C. SIMPSON, D.D. Oxford University Press, 1933. Pp. xix+204. Twenty illustrations. 10*s.* 6*d.* net.

The contributors to this volume of essays write in accordance with a plan of approach laid down by the editor. This plan of approach may be indicated in the words of Professor Hooke himself. In Egypt and Babylon "the annual festival which was the centre and climax of all the religious activities of the year contained the following elements: (*a*) The dramatic representation of the death and resurrection of the god. (*b*) The recitation or symbolic representation of the myth of creation. (*c*) The ritual combat, in which the triumph of the god over his enemies was depicted. (*d*) The sacred marriage. (*e*) The triumphal procession, in which the king played the part of the god followed by a train of lesser gods or visiting deities." Such are the elements of the "Culture Pattern" which, it is maintained, were common to the early rituals of the Ancient East, and which it is the aim of the contributors to trace in those rituals.

The interest of the readers of this *Journal* will doubtless be focused in the first instance on the two essays by Dr. Blackman and Mr. Gadd, who write respectively on "Myth and Ritual in Ancient Egypt" and "Babylonian Myth and Ritual". Dr. Blackman, in his attempt to trace how far the characteristic features of Egyptian myth and ritual correspond with the "Culture Pattern" outlined above, examines in turn the myth and ritual surviving in the Osirian Festivals at the end of the month of Khoiakh, the great Spring Festival, the Harvest Festival of Min, the Coronation Drama, the Marriage Festival of Horus and Hathor at Edfu, and the great Theban Festival of Opet. In a short review like the present no more can be said than to indicate that Dr. Blackman finds clear traces of all those elements which go to form the "Culture Pattern". Mr. Gadd for his part summarizes the principal kinds of Babylonian myth and ritual, and his conclusion cannot better be indicated than in his own words—"there is, of course, no need to look far in Babylonia for the 'ritual-pattern' which Professor Hooke has traced, for here it is with all its particulars developed in the New Year Festival at Babylon".

The other essays are "The Myth and Ritual Pattern of the Ancient East", and "Traces of the Myth and Ritual Pattern in Canaan", both by Professor Hooke; "The Sun-Cult and the Temple at Jerusalem", by Dr. Hollis; "Early Hebrew Festival Rituals", by Dr. Oesterley; "Initiatory Rituals", by Dr. James; and "Hebrew Myths", by Dr. Robinson. The common ground in the last three essays is the belief of the writers that all the elements of Professor Hooke's "Culture Pattern" can be traced, albeit in a modified form, in the myth and ritual of the Hebrews.

This novel and interesting attempt to reconstruct the myth-ritual pattern common to the Ancient East will not prove convincing to every one. The space at our disposal allows us only to remark that it is difficult to escape altogether the impression that paucity of data has rendered in advance the writer's task at times well-nigh impossible, and that at other times data have been utilized to fill in the "pattern" with an ingenuity which in itself may arouse suspicion in some minds. If we may doubt the legitimacy of some of the deductions which the writers draw, there can, of course, be no question as to the fullness of learning these essays display. The names of the contributors are a sufficient guarantee of that. There is a great deal of information collected here in a handy form—especially worthy of mention is the use of the new material from Ras Shamra, particularly by Professor Hooke. The volume is well indexed.

D. Winton Thomas.

Excavations at Ancient Thebes, 1930–1; Oriental Institute of the University of Chicago, *Communications* No. 15, by Uvo Hölscher. University of Chicago Press. 65 pp., 4 plates, 41 figures. 5*s*. 6*d*.

This is a report on the continuation of the excavations undertaken in and about the temple of Ramesses II at Medinet Habu in conjunction with the Institute's epigraphical work. The following are the main results of the work.

The temple area as a whole was perfectly rectangular and symmetrical. The original temple area of Ramesses III consisted of the Great Temple of Amūn, surrounded by a wall. Towards the end of his reign, Ramesses III enlarged the area by means of a Great Girdle Wall, which united the parts into a whole and lent to Medinet Habu a fortress-like appearance. There was also the Low Outer Wall. The west half of the north wall bends to the south. A test excavation was carried out here to find the reason and a temple of Ay was discovered, which must have been still in use in the time of Ramesses III. A Roman cemetery of the third to fourth centuries A.D. lay over the remains of this temple. In the cemetery were some domed tombs containing one or more bodies. The excavation as far as it was carried out showed that the temple was built by Ay and usurped by Horemheb. It is a valuable site as it fills the gap in the knowledge of the mortuary temples of the Empire between Hatshepsut and the Nineteenth Dynasty.

The Quay, partially exposed 1929–30, was practically recovered. The exact direction of the canal could not be determined, but it was assumed by the excavator that it led to the Nile and formed the first part of the processional way from the river to the temple.

The Fortified Gate was again considered. Hölscher is quite convinced that the upper rooms were a royal kiosk, serving as living- and sleeping-apartments for the singers and dancers as shown by the reliefs on the walls, of the king and the ladies of his harim. It was a temporary retreat not the harim which lay beside and behind the Second Palace of Ramesses III.

The Survey of the walls of the palace shows that the Second Palace was built on the foundations of the older palace at the same time as the enlargement of the entire temple area and the construction of the Great Girdle Wall.

The Window of Royal Appearances of the First Palace was replaced by a Balcony of Royal Appearances of the Second Palace. It has been possible to reconstruct them both from the remains.

An outline of the history of the site shows that the reign of Ramesses III was the golden age of Medinet Habu. After his reign the site seems to have been less important. The levels of the Twenty-second to Twenty-fourth Dynasties show a decline of the old civilization. The Great Temple of Ramesses III was neglected but the small Amūn temple of the Eighteenth Dynasty had a reputation as a local sanctuary. In the Twenty-fifth Dynasty the district became a favourite burial ground for the "god's wives", the "singers of Amūn", and others. The new splendour was only transitory and Medinet Habu became practically a deserted ruin. The buildings of the Ptolemaic period were constructed with blocks of stone mainly taken from the Ramesseum. The Roman period is represented by a gateway of Tiberius Claudius, a street and gateway of Domitian, c. A.D. 90, and three houses with hot baths equipped with hypocausts. By the ninth century the site had become desolate.

The uncertain parts of the Ramesseum were excavated to recover the original plan at the time of Ramesses II. It had obviously served as a model for Medinet Habu and would be helpful for the better understanding of the plan of that area. The resemblance of the two temples is limited to the original group within the Inner Enclosure Wall. The similarities and differences of the two sites are discussed in detail.

The book contains many excellent photographs and plans of the site. Especially valuable are the plates of reconstructions, which include the Main Entrance and Quay, the Fortified Gate, and the Balcony and Window of Royal Appearances.

Mary S. Shaw.

Spätptolemäische Papyri aus amtlichen Büros des Herakleopolites, bearbeitet von Wilhelm Schubart und Diedrich Schäfer. Ägyptische Urkunden aus den staatlichen Museen zu Berlin: Griechische Urkunden VIII Band. Weidmannsche Buchhandlung, 1933. Pp. 181, 1 plate.

The documents published in this new volume of the *B.G.U.* were extracted from the cartonnage of a coffin from Abusir el Melek and with one exception date from the reigns of Ptolemy Auletes and the last Cleopatra. The method of publication is the same as that adopted in vol. VII of the same series, the texts being printed in accordance with the lines of the originals and provided with critical notes and, in the case of the hitherto unpublished material, with concise commentaries which bring out all the essential points. Some readers may regret the brevity of the discussions; but in publishing a long and new series of texts it is surely advisable not to overburden the pages with notes and references. The perfect competence with which Schubart and his younger collaborator have done their work is evident throughout. As regards the decipherment in particular, which must have been difficult, it is improbable that any one could have made out more than they have done, though naturally some additions and improvements may still be obtained by conjecture, if supported by the evidence of the mutilated letters.

The contents of the first three sections, comprising a royal πρόσταγμα (1730), contracts and oaths of κάτοικοι (1731–40), and orders for deliveries of corn and wages (1741–55), have almost all been already published by Kunkel and, though reprinted with a few corrections, are not discussed. The new material, a good deal of which is very fragmentary, consists of official documents (1756–1812), petitions from private persons (1813–70), a few private letters (1871–82), a few accounts (1883–5), and some unclassified scraps (1886–90). Useful indexes complete the volume.

The official documents contain several orders in the form of letters from the dioecetes to the strategus of the Heracleopolite nome; it is noticeable that the former usually bids his subordinate "take care of his health", an affability to which Apollonius the dioecetes of Ptolemy II does not condescend in any of his extant letters. In nos. 1762 and 1764 there are interesting references to local unrest and an early allusion, according to the editors' very probable interpretation of the passage, to racial and religious hostility towards the Jews. Nos. 1767 and 1768 are explained with some plausibility as fragments of a day-book of a strategus. Whether this is strictly correct is questionable; but without doubt they bear a close resemblance, both in style and matter, to the well-known day-book of the Ombite strategus of A.D. 232. On the other hand, they recall in more than one respect the famous report on the progress of the third Syrian war, *P. Petr.*, II, 45, and probably the scribes who drafted bulletins recording official activities, whether in the form of reports or of diaries, followed a traditional model. The editors identify the Heris mentioned in no. 1767 with the ὑπομνηματογράφος of *O.G.I.S.* 736, but they have overlooked the fact that the real name of the latter personage was not Heris, but Theris (*Ann. Serv.*, XX, 249). In no. 1828 we find an interesting allusion to a grant of the revenue of some property to one Apicius, a sign of the beginning of Roman penetration; and no. 1834 contains a reference to another grant of certain harbour dues to a royal favourite, which recalls the δωρεά of Dicaearchus mentioned in *P. Columbia Invent.* 480.

The petitions, which are partly concerned with official questions, partly with private troubles, form an equally important section. Like the Magdola petitions, which as a whole are much more picturesque and much superior in style, they are first-hand records of the life of ordinary people in the χώρα. In more than one of these texts we find statements that villages are being depopulated owing to financial exhaustion. The phrases used are very similar to those of *P. Graux*, 2 and suggest that ὀλιγανδρία was a recurrent complaint in Ptolemaic as well as Roman times, but that somehow or other the villages managed to survive.

Scattered throughout the new material are many unusual words and phrases which will be of interest to philologists, as for instance ἀστραγεύτως (unless the scribe intended ἀστραγγεύτως, "without loitering"), the Homeric ἀλεκομένου in the sense of ἐνοχλουμένου, and τρυγήσαντες τὸν περιστερεῶνα. In no. 1858, 7–8, perhaps it would be an improvement to read ἀργῶν (or ἀργοῦ) εἰς κόπον ἄλλ‹ας› (ἀρτάβας), for there is authority for πυροὶ ἀργοί; but the editors' readings are so careful and reliable that it is dangerous to suggest from a distance any alteration in the text which they print.

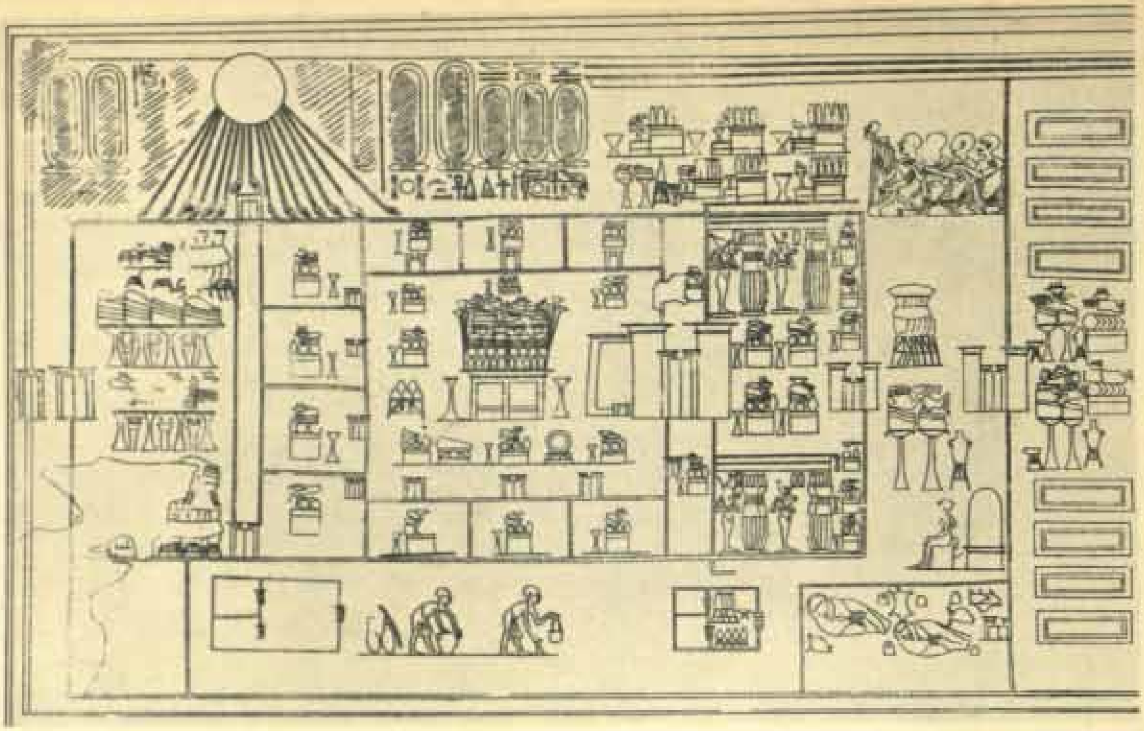
C. C. EDGAR.

Geld und Wirtschaft im römischen Reich des vierten Jahrhunderts n. Chr. Von GUNNAR MICKWITZ. (Societas Scientiarum Fennica. Comment. Human. Litt., IV, 2.) Helsingfors, 1932. Pp. xv+232. Fmk. 170.

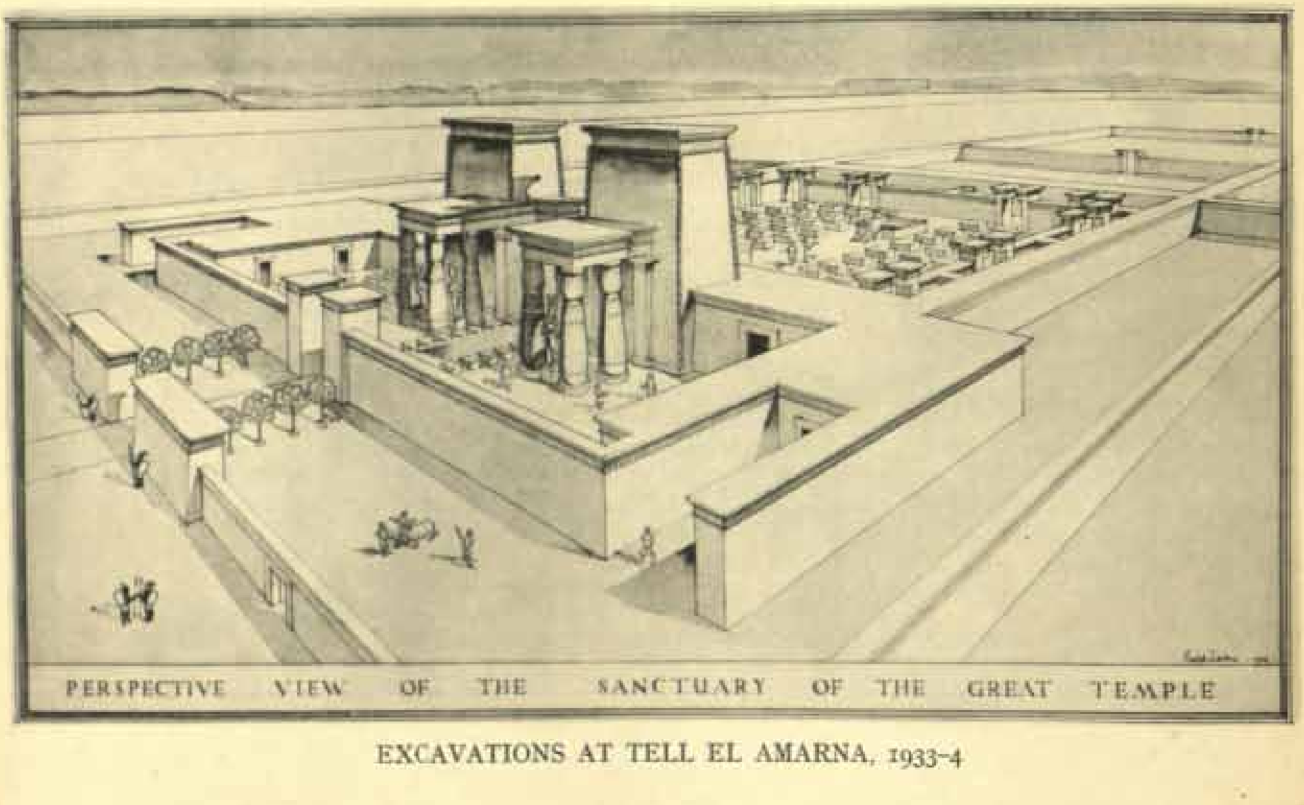
The main part of this essay is an attack on the theory, now commonly accepted, that the fourth century saw a general change-over, throughout the Roman Empire, from money to natural products and manufactures as the medium for payments: and the mass of evidence, carefully collected and tabulated, from a variety of sources, which is cited in support of the attack, is unquestionably impressive. But the difficulty in the way of accepting the conclusions drawn therefrom as valid for the whole Empire is the same as that which has been felt by some in respect of the old doctrine; the evidence is derived from comparatively few districts, and is not really homogeneous for different provinces. By far the greatest contribution is found in a long list of papyri, which do give a fairly clear idea of economic conditions in Middle Egypt and the Fayûm; but it does not necessarily follow that the same conditions prevailed in the Thebaid and the Delta, much less in Alexandria. From other provinces there is really very little detailed information: regulations as to payments laid down in Imperial edicts are cited, but it is quite conceivable that these represent an ideal which was not attained in practice—a thing not unknown in government orders at all periods of history—and the passages quoted from the sermons and writings of the Fathers of the Church are vague and might be described as impressionist, even if they are not to be discounted as rhetorical. Mr. Mickwitz does, it is true, recognize that Egypt stood apart from the rest of the Empire; but the problem of currency was at the root the same there as elsewhere, arising from the decay of the central authority, which in the fourth century was no longer in a position to impose a forced value on its coinage. Though the collapse of the credit of the government was naturally felt in varying degrees in different provinces, Egypt was not the only outlying region in which the Imperial issues had lost all relation to their nominal valuation; if we may judge from the coins themselves, Syria, Africa, and Britain were in much the same strait, and simply used gold, or silver if it existed, as bullion, and bronze as counters.

However, though the essay is stronger on the destructive than on the constructive side, it is nevertheless of substantial value; it is written with a sound appreciation of economic principles and illustrated by numerous comparisons with other periods and countries, and has done much to clear the ground and lay the foundations for a new treatment of the history of the later Roman Empire.

J. G. MILNE.



View of the Sanctuary from the Tomb of Meri-Rēʿ



PERSPECTIVE VIEW OF THE SANCTUARY OF THE GREAT TEMPLE

EXCAVATIONS AT TELL EL AMARNA, 1933–4

EXCAVATIONS AT TELL EL AMARNA

PRELIMINARY REPORT FOR THE SEASON 1933–4

By J. D. S. PENDLEBURY

The excavations lasted from December 1 to February 7. The staff was the same as last year except for Messrs. Fairman and Chubb, while Mrs. Pendlebury returned and took over the inscriptions.

Many visitors stayed with us during the season. Mr. Dows Dunham of the Boston Museum, Mr. J. H. Iliffe, Director of the Palestine Museum, Mr. T. C. Skeat of the British Museum, all came early on. Professor Capart, together with Madame Capart, Mlle Werbrouck, and Mlle Baud, stayed for twelve days after the new year. Since it is through his efforts that excavations have been made possible, we were particularly pleased to be able to offer him such hospitality as we could. Later on Sir Robert Greg spent two nights at Amarna, and M. Montagné, winner of the Grand Prix de Rome, one.

Again it is due to the generosity of the Brooklyn Museum, which on the advice of Professor Capart subscribed $5,000, that we were able to dig. It is a matter for congratulation that the season was not curtailed owing to the expense of publishing *City of Akhenaten II*. For this we have mainly to thank Mrs. Hubbard and the legacy left by Miss Scripps.

The Great Temple Area

Our first duty in the field was to complete the Great Temple. Last year we excavated the most westerly part—Per-ḥai and Gem-Aten, which have already been published in a preliminary way.

The last section, however, gave evidence of being the most difficult; for not only had it been partially excavated before, but such fragile plaster as had been cleared had been subjected to the stress of the weather for over forty years. It is therefore all the more to the credit of Mr. Lavers that the restored plan which he has produced accords not only with the existing evidence but also with the pictures in the Tombs.

The Sanctuary lies towards the east end of the great enclosure. It is separated from the east end of Gem-Aten by nearly 350 metres, much of which is now occupied by the modern cemetery. That it is earlier than the buildings excavated last year is apparent from the invariable use of the earlier form of the Aten's name.[1] But here also we obtained evidence for the existence of the earliest processional way which we suggested from the remains at the west end of the enclosure last year. There are the holes in which an avenue of trees was planted, actually underlying the north and south walls of the sanctuary. In addition to this are other tree holes nearer to the main axis, some still containing roots, and the base shown on the plan of the existing remains lying at an angle just to the left of the entrance had been paved over later. The point to which this processional way led was, we suggest, the brick chapel to the east of the sanctuary proper. It is at the same time too big and yet of too

[1] The piles of inscribed and decorated stones which used to be a feature of the place were removed last summer by the villagers, but it is doubtful whether anything of value has been lost.

temporary an appearance to have belonged to the final period, though it was certainly incorporated in the final structure, as may be seen in the tomb drawings.

The original excavators had gone on the idea that a solid core of rubble was to be found and that this core would give the position of the walls. With our previous experience of Ḥat-Aten and Gem-Aten we realized that our only hope of recovering the plan lay in clearing everything down to the plaster bedding where the foundations had been or, if these had been broken away, down to virgin sand, where depressions would give the position of walls or offering-tables. This latter was by no means easy, since as in Gem-Aten the destroyers had filled in the area with clean sand and had run a layer of cement over the top about 40 cm. above the original level. Clean sand and virgin sand are exceedingly difficult to distinguish, and that we succeeded in doing so is again due to our senior company foreman 'Ali Sherraif, who as usual rose to the occasion and presented us with a clean and swept area.

Pl. xvii, 2, shows a view of the existing remains as seen from the north, while Pl. xv gives a plan of them. This must be taken in conjunction with Pl. xvi which gives Mr. Lavers' reconstruction, Pl. xiv, 2, which shows a restored perspective, and Pl. xiv, 1, which gives the drawing from the Tomb of Meryrēʿ.[1]

These really explain themselves, but it is worth pointing out a few details briefly. As was said above, the only evidence on which we have to go is the presence of depressions in the sand where foundations had once been, and occasionally fragments of the plaster in which the foundations had been set. This plaster occurred at two levels. The higher, which lay 30 cm. above the lower, must be taken as flooring, particularly since there are never any marks of stones on it.

The two outer sets of pylons are of brick, and were probably whitewashed to look like limestone. Within the first court lie what must have been priests' houses, built on the ordinary "County Council" plan seen in the workmen's village and elsewhere of an entrance hall, a main living-room, and two private rooms behind.

The pathway of stamped mud is slightly sunk to a depth of about 2 cm. within the second court as it approaches the Sanctuary proper. The two long spaces flanking the main building are shown in all the drawings, and in his perspective Mr. Lavers has restored at the back of one a room which is shown in the tomb of Aḥmose,[2] but of which no actual remains were found.

The stone foundations of the northern anta of the gateway still remain in situ. From here the main passage continued eastwards, in a fair state of preservation. It is 30 cm. above the level of such flooring plaster as has survived in the court, and probably therefore steps descended on either side as shown in the restored plan. This is the more probable from the fact that the flanking offering-tables cut into it on either side, whereas in Gem-Aten, where the central causeway showed no signs of stepping down, the offering-tables were set clear.

The exact position of the columns, of which huge fragments were found, is uncertain. That they must have stood here in this arrangement, with statues between them, is clear from the tomb drawings.

The small rooms to north and south of the court do not appear in the tombs, but their presence is clear from the occurrence of an obvious wall trench in the south-west corner and of slight depressions farther east.

Next comes the one point which we confess defeats us. We know from the pictures that the main pylons stood immediately east of the colonnade, and indeed we have the depressions in the sand which mark their presence and a straight edge along the side of the flooring

[1] Davies, *The Rock Tombs of El Amarna*, I, Pl. xxv. [2] *Op. cit.*, III, Pl. xxx.

plaster both at the east end of the causeway and immediately to the east of the southern pylon. This gives us the depth of the pylons. But on either side of the main axis over six metres apart are square sockets which at first appeared to be pivot holes with a heavy granite bearer at the bottom (Fig. 1).

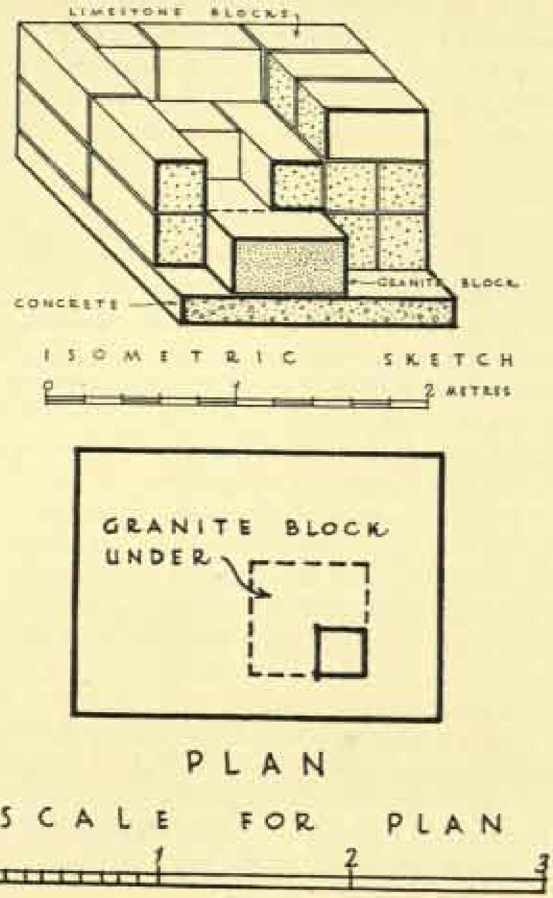


Fig. 1.

In the best preserved of these were traces of a green deposit, perhaps copper, which looked very much as if they had been lined to receive the pivots of the door. But a door 6 metres wide! A leaf of 3 metres! It is inconceivable. The mere weight of such a leaf would have made it, in the days before hinges, impossible to move and very nearly impossible to hang. The possibility of there having been two sets of double doors divided by a central post is ruled out by the tomb pictures, which show a single door with a double leaf, as well as by the awkwardness of such an arrangement. In default of a better explanation we have preferred to ignore these on the assumption that they may have been an architect's error in laying out the foundations, and to bring down the width of the door to a manageable size, *i.e.* to the width of the causeway. But it remains a definite problem.

The antae shown in the restored plan and in the perspective are taken from the picture in the Royal Tomb. In any case they are an architectural necessity.

Beneath the walls east of the Pylons are four circular pits, probably for foundation deposits. Fragments of gold leaf and painted wood were found in two of them, and the plaster above them having been hacked away in ancient times it would appear that objects of value were known to be there.

The entrance system into the Sanctuary court is elaborate. Being still on the high level of the causeway it is evident that the approach must descend to the level of the court. Steps have therefore been assumed and drawn in the only place where they will go. The foundations of the two walls which together screen off from the outer court all view of the inner, can be traced both by the trenches in the sand and by the plaster which remains. Every tomb shows them. The small room with the single offering-table has been added from similar indications, though it narrows down the entrance awkwardly.

In the Sanctuary court only just enough plaster remains to make our reconstruction certain. But enough does remain. The position of the offering-tables is sufficiently indicated by the pits in the sand, while the position of the chapels is also confirmed by a few marks of masonry on plaster. These chapels Mr. Lavers has restored as open to the sky, thus making them conform in spirit to the rest of the Temple.

The High Altar has totally disappeared. Fortunately, enough of the surrounding offering-tables remain to guarantee its exact position. It has been restored in the plan with no steps leading up to it, like the altars in the east court of Gem-Aten, and as it is shown in all the tombs. It is conceivable, however, that there were steps—indeed it is difficult to see how they could have managed without them—and that these steps were left out of the reproductions merely because they would take up room and because nobody was using them. They have therefore been included in the perspective view.

East of the Sanctuary, but approachable only from the courts to north and south, lies another series of buildings. The tomb pictures show us a passage, open at both ends and with a door in the middle, giving on to a court with an altar and offering-tables.

In the existing remains the north and south foundations of the Sanctuary are prolonged nearly 20 metres east, from which point the brick facing which begins on a level with the east end of the Sanctuary carries on to form a large enclosure. These walls stop dead at a point where, if they were joined, they would just enclose the mud-brick chapel or altar. No trace of any such cross-wall, however, could be found. It is possible, since it lay under Petrie's dump, that it has completely disintegrated. It has therefore been restored—as have the entrances from north and south—on the authority of the tombs. Perhaps we should also restore a cross-wall west of the chapel. Here again, however, nothing could be found.

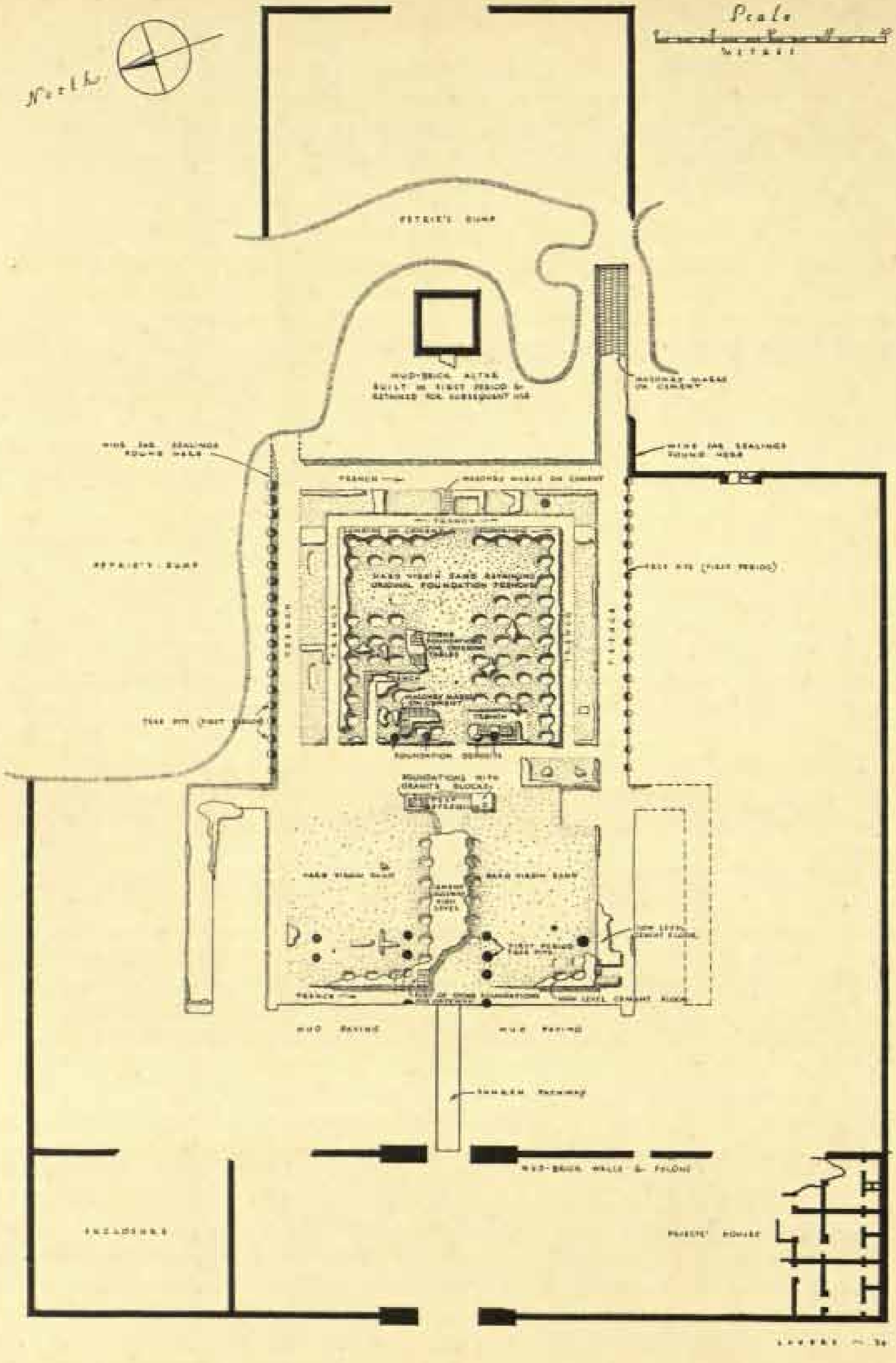
The Chapel or Altar, as we have said above, is assumed to be the point at which the foundation ceremony took place, since the avenue of trees, which now lies under the north and south walls of the Sanctuary, leads up to it. Evidently it was not pulled down but was incorporated in the scheme as a whole.

But besides these buildings there are a number of others shown in the Tombs. Most important of these is the great stela and, shown always beside it, the colossal statue of the king. The position of these is presumably some 30 metres west of the north-west corner of the Sanctuary, where fragmentary foundations of plaster were found some 50 cm. below the level of the desert. These formed a square and were evidently intended to receive some great weight. Fragments of purple sandstone from the stela itself were found scattered all round, for this spot had been partly excavated. Unfortunately the only pieces large enough to make sense seem merely to consist of a list of offerings. More information may, however, be obtained when we collate our fragments with those in University College.

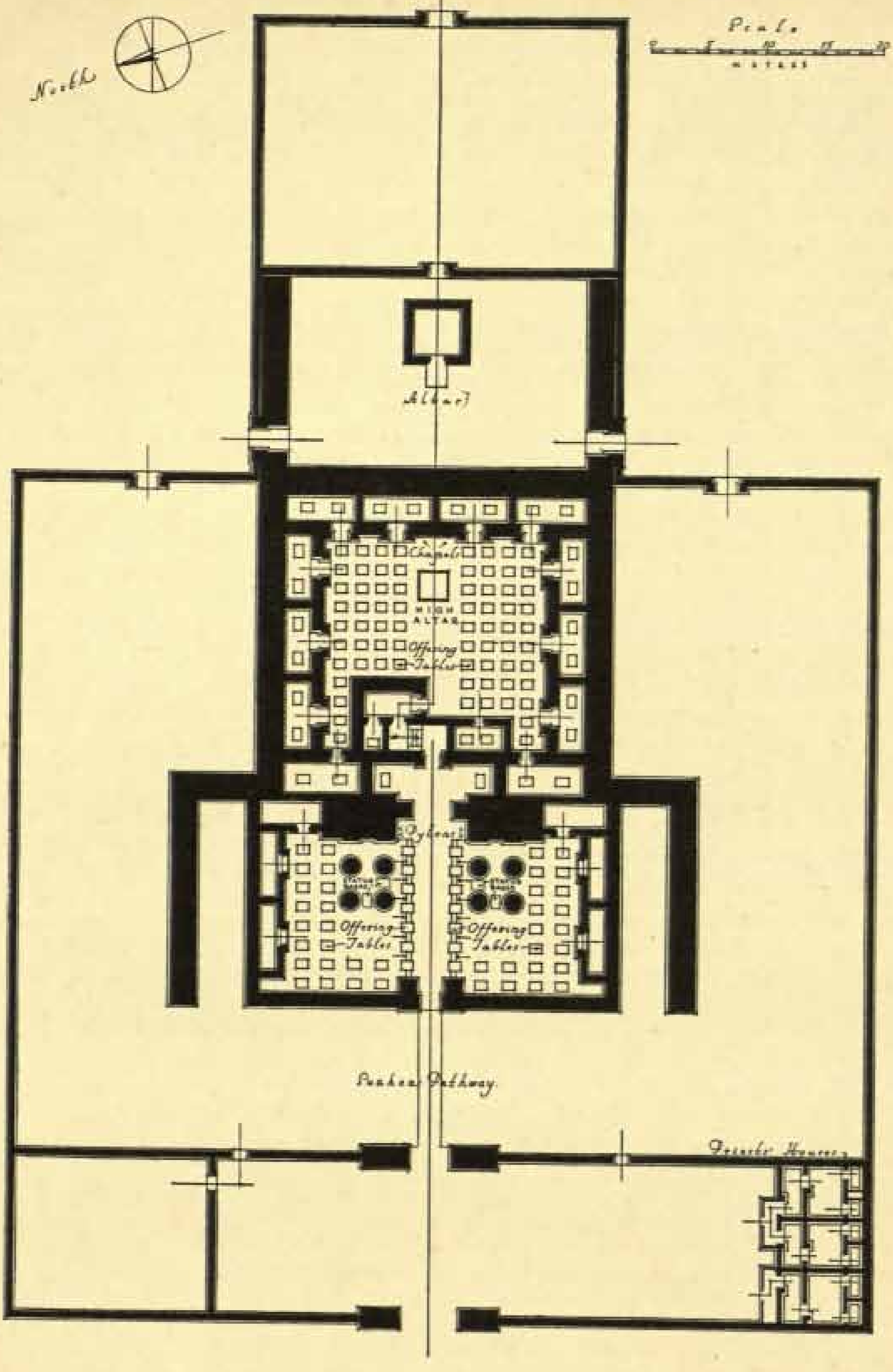
The site of the statue seems to be given by an oblong projection from the square on its south side. This also was evidently intended to support some heavy weight.

Plate XV

THE GREAT TEMPLE, TELL EL AMARNA
EXISTING REMAINS OF SANCTUARY



THE GREAT TEMPLE , TELL EL AMARNA
RESTORED PLAN OF THE SANCTUARY



West of these lies a large square enclosed by brick walls which have only survived to the height of one brick. This we tentatively identify with the slaughterers' yard shown in all the tombs.

The rest of the Temenos is bare except for a few walls in the neighbourhood of a stray Arab tomb on the south side of the Temenos. From here a great number of jar sealings were obtained. This then was the Aten Temple. Taking this year's work in conjunction with the clearance of Per-ḥai and Gem-Aten last year we feel a thrill of pleasure in being able to present the complete plan of a building so destroyed, a plan which fits in with the contemporary representations in practically every detail.

After ancient destruction, previous excavation, and the depredations of villagers in modern times we did not expect anything in the way of finds. We were fortunate enough, however, to discover the quartzite head (Pl. xviii, 4) which lay in the area occupied originally by the High Altar. This head, though badly battered, must have been a fine work. It resembles the heads found by Fisher at Memphis and certainly represents either Smenkhkarēʿ or Tutʿankhaten.

A much defaced head of a sphinx was found at the beginning of the prolongation eastwards of the south wall of the Sanctuary.[1] It is carved in limestone and the wig shows traces of blue and red paint.

The rest of the carved stone had apparently been carefully removed during last summer by the local population. Such inscribed pieces as were found repeated *ad nauseam* the royal names and the earlier name of the Aten.

By the kindness of ʿAbd el-Monim Eff. Mustapha, the Omda of Tell el Amarna, we were able to excavate a building lying in his family graveyard north of the Temenos wall. This building was remarkable chiefly for the number of jar sealings found there and also for the trial-piece found in one of the rooms (Pl. xviii, 5). This is evidently a portrait, and with its brutal chin and full lips it is very tempting to suggest that we have here a portrait of Maḥu—chief of police—whose features are shown in his tomb.[2] In the same house appeared fluted columns of mud surrounding a wooden core, similar to those found last year in the magazines south of the Temple.

West of this, from the excavation by a local worthy of a grave for a member of his family, came a set of painted and gilded wooden uraei from a cornice belonging to some important building. Considering the usual state of wood at Amarna, these uraei are in exceptionally good condition.

The Central City

After the Temple our work lay in the rest of the Central City which lies to the south. First we had to complete the excavation of the magazines which lie between the Royal Estate and the long rows of priests' houses immediately south of the Temple. The excavation of these was not a long job, and apart from the plan they were of little interest. The only object of interest was a small hand in bronze on to which had been riveted an incense-burner. A loop at the end had evidently received the long wooden handle.

Then work was switched over to the area east of the Royal Estate, where the Records Office lay. This was by all accounts worked out completely, and apart from accurate plans and photographs we had few hopes. The results, however, in mere objects were beyond our expectations.

[1] *Cf. Journal*, XIII, 210 for sphinx of Ḥaremḥab found in the temple sanctuary. Otherwise it would be tempting to regard it as a prolongation of the original avenue of sphinxes. *Journal*, XIX, 114.

[2] Davies, *El Amarna*, IV, Pl. xvi.

The area is laid out as regularly as may be expected in Egypt, with long streets dividing the various quarters. The plan will be given in *City of Akhenaten III*, but a few notes of the most important architectural features and of the objects may not be out of place.

The Records Office lies to the south of the western block. Its bricks are inscribed "Place of the Correspondence of Pharaoh (L.P.H.)". It has been much ruined, since the original discovery of the tablets, by the casual excavation of the villagers. Petrie's statement that it was built over earlier rubbish pits seems borne out, not only by the evidence here, but also by the fact that in the clerks' houses to the south earlier walls run below the present buildings, and bear stamped on their bricks the cartouche of Akhenaten. We may therefore probably see here the earliest settlement of officials and "Clerks of the Works", whose temporary houses were destroyed to make room for the later official quarters.

From a careful excavation of the Records Office we were able to recover not only the plan but also a number of tablets missed previously. These are described below in a report by Dr. Cyrus H. Gordon of the American Institute of Oriental Research in Jerusalem, who was kind enough to come over and examine the tablets in Cairo. The account which he gives is necessarily of a summary nature and aims mainly at presenting the results as soon as possible. A full treatment will appear in *City of Akhenaten III*.

East of the Records Office lies the University, ⊏☥⊐ as the bricks are inscribed. This is in a terribly ruinous condition, but the house to the north which seems to be connected with it is in a good state.[1] It provides us with another example of the official type of house where the domestic quarters are cramped and where the master's bedroom frequently opens directly off a living-room. Here we found a number of ostraca inscribed with lists of royal scribes—presumably the lecturers in the University.

North of the Records Office lies a very finely preserved block of offices. This consists of a number of rooms opening off a brick paved court, some of which seem to have a dais running round them. The west wall is double, having a narrow passage in the thickness to which access is gained by a small door in one of the rooms. Possibly valuables may have been stored here, and this passage enabled the night watchman to inspect them with greater ease, since a burglar could easily remove a few bricks with very little noise from the outer wall but would be immediately seen along the passage.

These official buildings are of particular interest in that many of the doors have been bricked up. This implies that even in official circles there was some doubt as to whether the move back to Thebes was going to be permanent. We know that the richer classes were uncertain and that they left their houses habitable. That is natural. They did not want the expense of transporting all their goods to Thebes before they knew that they would stay there. But this revelation of official uncertainty is very interesting. In connexion with this it may be worth while again to point out that the main source of Aegean pottery has always been this central part of the city. Not only are many sherds to be found by merely walking over the rubbish heaps which lie just to the south of the stables described below, but also the proportion of sherds found to buildings excavated is far greater in this part than in the domestic quarters of Akhenaten. Now from "squatters'" walls we know that the private houses were frequently taken over and inhabited by the poorer classes who could not afford to travel back with the court to Thebes. It is therefore just arguable that it is they who may have imported Aegean merchandise, though why this privilege should be denied to the wealthy original owners it is hard to see, and in any case this hypothesis could only bring down the date of the imports a generation at most. But, in the official quarters, only one

[1] Q. 42, 22. This should according to the report be Petrie's House 21. But neither this house nor any other house on the whole site corresponds to the plan given.

1. The Armoury, seen from the Commandant's house

2. The Sanctuary of the Great Temple, seen from the north

squatter's wall exists, in Q. 42, 7, the office block north of the Records Office. Yet many Mycenaean sherds were found. The official quarters must certainly have been the first to be deserted; they were never re-inhabited, yet they provide the greatest bulk of material. From the Aegean point of view all the pottery is of a single date. From the Amarna point of view it is also confined to about fifteen years. It is difficult to imagine a better synchronism.

Among the finds which come from this block the most important is a well-preserved hunting scarab of Amenophis III (Pl. xviii, 2) with the personal name of the king erased. Close by were found two lapis lazuli knobs—perhaps dagger hilts inscribed with the name of Tuthmosis I. Farther north appeared fragments of painted clay figurines representing Syrians in brightly painted robes (Pl. xviii, 3).

South of this area lie rows of clerks' houses. These are arranged back to back. The houses are of the ordinary "county council" type and are particularly badly built. The most important objects found here were the fragment of a tablet, part of a circular wooden lid for a box with a picture of cattle in the marshes and the cartouche of Amenophis III (Pl. xviii, 1), a small bronze weight in the shape of a bull, similar to the one found last year and weighing 1 *deben*, and an ivory chair-leg, while lying half under a wall was a hoard consisting of a gold ring—the bezel engraved with 𓄤 and an *udjat* eye—and thirty-six minute rings of faience.

This completes the "Foreign Office" block.

To the east lies a big block of magazines, from which came many fine fragments of wigs in blue faience to be inserted into inlaid scenes.

Farther east again lie more magazines, and in view of the character of the next building to be described it is interesting to note that the street separating the two parts of these magazines had a layer of horse manure some 10 cm. thick all along it. In this street was found a fine bronze dagger, the inlay for the hilt alone being missing; and close to it there came to light a small hoard of glass, some of the beads from which were engraved with the name of one of the Tuthmosides. The most important object from the magazines themselves was a beautiful knob from a box lid in dark blue faience with the names of Akhenaten upon it in light blue.

Last of all we tackled the area surrounding the deep pit which lies farthest east of all the buildings in the central city. This "Lake District", as it was known, proved to be either the head-quarters of the *Mazoi* or of the king's guard. A barracks it certainly is.

The great depression in the centre is a well which at some later period—after the destruction of the building—was dug out again, the sand from it being dumped over the fallen walls. No date, however, can be assigned to this re-digging.

The building is divided into two by the great square in which lies the well. The western half is for the accommodation of the men, while the eastern half is occupied by stables.

To take the western half first. The south side consists first of two armouries, in which the arm-racks can still be seen (Pl. xvii, 1). Next come the soldiers' quarters, in which were found quantities of fragments of leather collars. To the north and east lie other magazines, cornbins, and ovens.

In the centre, more or less, is the commandant's house, chiefly remarkable for the fact that in the inner sitting-room, the door of which was bricked up, were found a number of jar sealings painted blue with an inscription in yellow, "Wine, very very good". This inscription was surrounded by a royal cartouche. We think of Imperial Tokay! In this house was found part of a limestone slab engraved with the name of Tuthmosis IV.

From this part of the building a large gate led into the great square in which lay the well. To the well a flight of mud-brick steps led down, and although these are much broken it appears that there would have been plenty of room in which to manœuvre chariots all round.

In the south-west corner is a small house. All round the square is a series of mangers with tethering stones as if the "Flying Squad" was always kept ready. The exit lay to the north, through a massive door near which were found fragments of a limestone lintel on which could still be made out the plumes of horses and a kneeling figure.

Finally, to the east lay the stables. These were cobbled and had mangers and tethering stones at regular intervals. They appear somewhat narrow, and it cannot have been a very pleasant job to walk the length of one of them if the horses were restive.

The excavation of this building lasted us for the rest of the season. Next year we hope to finish off a few odd corners and to begin the huge task of re-excavating the palace.

Meanwhile Mr. Sherman has stayed at Amarna to tie the plan of the Central City accurately on to that of the South City and to supervise the new air survey which is being carried out by the Royal Egyptian Air Force, thanks to the kindness of Major-General Sir Charlton Spinks.

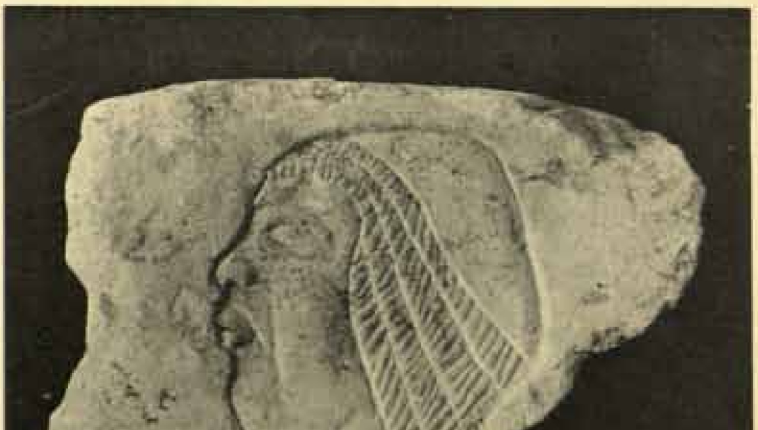
The acknowledgements we have to make are many. First and foremost to Professor Capart for his untiring help and his promise of continued support in the future; next to the Service des Antiquités and particularly to Mr. Engelbach; and finally to the Omda of Tell el Amarna.

1. Box-lid of carved wood

2. Scarab of Amenophis III

3. Figurines of Syriaus

4. Quartzite head



5. Limestone trial-piece

EIGHT NEW CUNEIFORM FRAGMENTS FROM TELL EL AMARNA

By CYRUS H. GORDON

DURING his 1933–4 campaign, Mr. J. D. S. Pendlebury, directing the excavations of the Egypt Exploration Society, unearthed eight cuneiform fragments at Tell el Amarna. All the tablets but one were discovered in the same Records Office that had yielded the famous original find. Fragment B, however, was found to the south of the Records Office in a clerk's house. In every case, of course, the inscriptions can date only from the reigns of Amenophis III and IV. The new fragments, though few in number, are of varied contents. They include royal letters, a list of gods, a vocabulary, and other "school texts". The following is a short, unannotated account of the inscriptions. A study of these tablets with transliteration, translation, notes, facsimiles, and photographs will appear later.

Fragment A

This tablet is a Records Office duplicate of a letter from the Pharaoh commanding Itia, the governor of Ascalon, to receive Iria, the newly appointed Egyptian commissioner to Ascalon. Itia is doubtless the same as Witia, the governor of Ascalon, of whose letters seven are extant (Knudtzon, nos. 320–6).

It is interesting to observe that Itia is a Hurrian name, found also in the tablets from Nuzi, near the modern Kirkuk, in Iraq.

Iria, the name of the hitherto unknown commissioner, may possibly be Egyptian, like many of the names borne by Egyptian officials holding posts in Asiatic provinces. However, it must be noted that the same name, syllable for syllable, is borne by a Hurrian witness to a business transaction in Nuzi. The Hurrians played so great a role in the destiny of the Near East during the second millennium B.C., and particularly during the Amarna Age, that we need not be surprised to learn that the governor of Ascalon, and perhaps the commissioner sent to him from the court of Pharaoh, were Hurrians.

Fragment B

This letter, written by a Syrian chieftain to the king of Egypt, makes mention of the city of Šeḫlal and its soldiers. We otherwise know of this town only from a single letter of Abdi-Aširta (Knudtzon, no. 62). Now the latter document, addressed to the Egyptian commissioner in Ṣumur, is an account of how Abdi-Aširta rescued that town from the invaders of Šeḫlal. Fragment B seems to be Abdi-Aširta's letter to the Pharaoh referring to the same incident. According to my restoration, Abdi-Aširta claims to be protecting Egyptian interests and defending Ṣumur. He reminds the Pharaoh that continued negligence will lay the district open to the raids of the Šeḫlal host. Had Abdi-Aširta not come with his chariots and men, the soldiers of Šeḫlal would have burned Ṣumur, including the commissioner's palace there, killed the occupants of the palace, and wrested the city from Abdi-Aširta, who was protecting it for the king of Egypt. Then follows a reference to some people of Ṣumur who were captured (or almost captured) and sold into slavery.

Fragment C

Part of a letter too fragmentary to be restored or interpreted.

Fragment D

This tablet is a vocabulary in three columns. The second column contains the sign to be explained; the first, the Sumerian reading; the third, the Akkadian values. This type of vocabulary is known to Assyriologists as *id* | *A* | *na-a-qu*. Some of the Akkadian values are new.

Fragment E

This fragment, for which we have no close parallel, is a list of gods. Anunîtu(m), Sibi, and Maštabba, deities mentioned in this list, are well known. However, there are others, like ^{d}*LUGAL-ŠUR*, that are quite new.

Fragment F

This fragment opens with ^{al}*ag-ga-ti* "the city of Akkad", which makes it likely that we are dealing with a part of the Epic of the King of Battle (*šar tamḫari*) celebrating the exploits of Sargon of Akkad in Cappadocia. It will be recalled that of the two *šar tamḫari* fragments so far published, the larger and more important one was found at Tell el Amarna (*M.D.O.G.*, 55, 69). Unfortunately, Fragment F is limited in extent and most of the signs are illegible.

Fragment G

This fragment seems to be a literary school text, *i.e.* a myth or an epic copied as a writing exercise by a student in the academy for cuneiform scribes. The bad state of preservation of this tablet makes it hazardous to attempt any further description of its contents.

Fragment H

Crudeness of texture marks this fragment as a school text, the royal letters being written on better-made tablets. It is too tiny to convey any meaning.

SOME ASPECTS OF AMŪN

By G. A. WAINWRIGHT

I have recently put forward in the *Journal* a number of studies of various meteorite- and thunderbolt-gods in Egypt.[1] In the *Annales du Service*, XXVIII, 175 ff., I drew attention to the aniconic form of Amūn at Thebes and pointed out that it gave many signs of being a meteorite. In the *Journal*, XVI, 36–8, the relationship between Amūn and meteorites was observed again in the extension of his worship to Greece at Cassandria and Gythion. In the former article it was shown that in numerous aspects Amūn was identical with Min,[2] who himself was a thunderbolt-god. In the latter, pp. 35, 36, it was pointed out that the well-known identification of Amūn with Zeus, the Greek sky- and storm-god, was no mere fancy of the classical philosophers. On the contrary it went back to about the year 900 B.C. at least, when it would have been due to similarity of nature. Sethe considers that Amūn was, or might have been, the original from whom Yahweh was derived.[3] This no doubt is unnecessary, but does emphasize the existence of similarities between them. In the beginning Yahweh himself had been yet another sky- or air-god like Amūn, and the present article adduces several remarkable coincidences between the natures and worships of the two gods. All this evidence goes to strengthen the belief that Amūn was one of those sky-gods who were so common in the Near East.

Min and Amūn make a pair of gods, as the following list of resemblances shows. They were neighbours, Min's centres being Akhmîm and Koptos, the two nome-cities next north of Thebes. Both the standing and striding representations of Amūn wear Min's cap, high feathers, and streamer. The figure that had been Min's from long before was very commonly given to Amūn,[4] and almost invariably to Amen-rēʿ-*Kꜣ-mwt·f*.[5] Senusret I gives the earliest pictures of Amūn and Amen-rēʿ. These show the simple Amūn with the old Min figure,[6] while the new compound god Amen-rēʿ sometimes keeps the old form[7] and sometimes takes the new striding one.[8] Not only does the ithyphallic Amūn wear Min's head-dress and raise his arm like him, but he even has Min's attributes of the lettuce-gardens behind the statue.[9] Both Min and Amūn enjoyed the title *Kꜣ-mwt·f*, "Bull of his Mother".[10] As *Kꜣ-mwt·f* Amūn had a priest with the rare title *smꜣty*,[11] which was that of Min's high priest at Koptos

[1] XVI, 35 ff.; XVII, 185 ff.; XVIII, 159 ff.; XIX, 42 ff.

[2] For an attempt to bring him from Hermopolis instead see Sethe, *Amun und die Acht Urgötter von Hermopolis*. For some of the many improbabilities of such a view see Wainwright in *Journal*, XVII, 151 f.; XIX, 160 ff.

[3] *Op. cit.*, §§ 258, 260, 281.

[4] *E.g.* L., *D.*, III, 167, 220 *e*, 221 *d*, *f*, *g*, 248 *a*, etc.

[5] *E.g.* C., *M.*, CCXI; L., *D.*, III, 119 *e*, 143 *d*, 167, etc.; Wainwright in *Ann. Serv.*, XXVIII, 177, Figs. 2, 3. The exception is L., *D.*, III, 250 *b*.

[6] Chevrier in *Ann. Serv.*, XXVIII, Pl. i = iv; XXX, Pl. ii, fig. P. 5.

[7] *Op. cit.*, XXX, Pl. ii, fig. P. 4.

[8] *Op. cit.*, XXVIII, Pl. i; XXX, Pl. ii, fig. P. 16.

[9] *E.g.* Naville, *Deir el Bahari*, I, Pl. XX; V, Pl. CXXXI.

[10] Min, L., *D.*, III, 212 *a*; C., *M.*, CCXI, CCXIV; Amūn, see notes 5, 11 of this page.

[11] Nineteenth Dynasty, Sethe, *Amun*, p. 20, § 27, where he proposes this reading; Bubastite and Saitic Period, Gauthier, *Cercueils anthropoïdes*, I, 388, and Moret, *Sarcs. de l'époque bubastite*, etc., I, 327, where this priesthood of *Kꜣ-mwt·f* is often given, though the name Amūn is not added. The other gods who had a priest with this title are Horus and Anubis, Murray, *Index of Names and Titles*, Pl. XIX.

and of one of his priests at Akhmîm.[1] The unique climbing ceremony was performed alike before Min, Amen-rēʿ, and the compound god Min-Amen-rēʿ.[2] Both gods participated in the aniconic fetish or meteorite.[3] While Min was painted black, Amūn was painted black at first and later blue, and black and blue are two colours which are often scarcely distinguished from each other.[4] Not unnaturally the two were sometimes united into a single god by a combination of their names, thus Min-Amūn,[5] Min-Amen-*Kɜ-mwt·f*, or Min-Amen-rēʿ-*Kɜ-mwt·f*.[6] As a matter of fact their names are not unlike in the forms in which we know them and , *Mnw* and *ʾImn*, and Sethe suggests that there might be an older variety of the name Min which would be Amin (?) and thus very like Amūn.[7] Plutarch preserves a record that Amūn was derived from Min. He says of Zeus that "his legs being grown together and being unable to walk he lived in solitude out of shame, but Isis, having cut through and separated those parts of the body, enabled him to walk freely".[8] Min and Amūn thus made a pair, and were related to those two gods well known as another divine pair, Horus and Seth.[9] The two together combined the two things which are often not distinguished the one from the other, that is to say the meteorite and the "thunderbolt". The former belonged to Amūn, while the latter was Min's.[10] Between the two of them they suffered both fates that were liable to overtake old sky-gods, for Min had already become a fertility god in the Archaic period, and Amūn was solarized by the end of the Eleventh Dynasty.

The other Egyptian air- and sky-gods who have been studied were largely connected with the bull, as indeed was Amen-rēʿ himself at least in his *Kɜ-mwt·f* form.[11] In due time these other gods mostly became absorbed by Horus. Min, however, though identified with him always retained his own individuality. So did Amūn, who in fact never seems to have been approximated to Horus in Pharaonic days.[12] In Amūn we approach another group of these air- and sky-gods. They probably differed from the others in some respect which at present escapes us, for their sacred animals are not bulls but rams, and like Amūn they also escaped absorption by Horus. The ram-gods whom Amūn resembles are Ḥeryshef, Khnum, and the Ram of Mendes.[13]

While the rams of the last three[14] belong to the original breed in Egypt, *Ovis longipes*

[1] *Journal*, XVII, 191.

[2] MIN, Max Müller, *Egyptological Researches*, I, 34, Ramesses II; AMEN-RĒʿ-Kɜ-MWT·F, F. Teynard, *Égypte et Nubie*, I, Pl. 58 = Champ., *Not. descr.*, II, 49, Seti I; MIN-AMEN-RĒʿ-Kɜ-MWT·F, Mariette, *Dendérah*, I, Pl. 23, Ptolemaic or Roman; a god whose name is lost, L., *D.*, IV, Pl. xlii *b*, Ptolemaic.

[3] MIN, Couyat and Montet, *Hammâmât*, Pls. xv, xxvii; AMŪN, *Ann. Serv.*, IX, 68; XXVIII, 181, and Figs. 2, 3.

[4] See p. 146.

[5] L., *D.*, III, 220 *e*.

[6] MIN-THE-KING-AMŪN-Kɜ-MWT·F, L., *D.*, III, Pl. 189 *h*, Ramesses II; MIN-AMŪN-Kɜ-MWT·F, L., *D.*, III, Pl. 220 *a*, Ramesses IV; MIN-AMEN-RĒʿ-Kɜ-MWT·F, L., *D.*, IV, Pl. 12 *a*; Piehl, *Inscriptions*, I, Pl. clxxx, *v*; Mariette, *Dendérah*, I, Pl. xxiii, all Ptolemaic.

[7] Sethe, *Amun*, § 30.

[8] Plutarch, *De Iside et Osiride*, § 62.

[9] MIN AND HORUS, *Journal*, XVII, 190 ff.; AMŪN AND SETH, pp. 147–50 *infra*.

[10] AMŪN'S METEORITE, *Ann. Serv.*, XXVIII, 175 ff.; MIN'S THUNDERBOLT, *Journal*, XVII, 185 ff.

[11] *Ann. Serv.*, XXVIII, 182, Fig. 6.

[12] For the association by the Graeco-Roman terra-cottas of Harpocrates with Amūn's animals, the goose and the ram, see p. 149.

[13] Naville, *Ahnas el Medineh*, 19, 20, shows that the Ram of Mendes was regularly called a goat by the classical writers. Was not this due to a misunderstanding of his horns, that breed of sheep having died out of Egypt?

[14] ḤERYSHEF, Newberry and Wainwright in *Ancient Egypt*, 1914, p. 151, Fig. 9, and *cf.* p. 150, Fig. 2, no. 9; Borchardt, *Grabdenkmal des K. Saʾḥureʿ*, II, Pl. xxviii, middle register; Petrie, *Ehnasya*, Frontispiece. KHNUM, *e.g.* Borchardt, *op. cit.*, Pl. xviii; Griffith, *Beni Hasan*, III, Pl. iii, 35; MENDES, Mariette, *Cat. mons. d'Abydos*, p. 573, no. 1464; Lanzone, *Diz. mit. eg.*, Pl. lxix.

palaeoaegypticus, that of Amūn is different, being *Ovis platyura aegyptiaca*.[1] This may perhaps represent a difference in nature between the gods, or, as is more likely, was due to Amūn's late appearance. During the Old Kingdom the flocks of sheep were composed of the one breed only, *longipes*,[2] but those of the Twelfth Dynasty and later include also the new importation, *platyura*.[3] Hence it so happens that the clear emergence of Amūn in the Eleventh Dynasty[4] practically coincides with the introduction of that new breed of sheep which was to become sacred to him. The new animal is the only sheep mummified in the New Kingdom and later.[5] In fact the late mummies of Khnum's sacred rams at Elephantine[6] show that at that time his priests had to content themselves with the new breed from which to find their sacred animals. Such a change perhaps indicates that the old type had died out. In any case it shows that the difference between Amūn and these old gods was one of detail rather than of kind.

Before entering further upon a study of Amūn it will be well to inquire what a sacred ram implied to the Egyptians. It transpires that he had a very definite connotation. The worship of the other ram-gods, Ḥeryshef, Khnum, and the Ram of Mendes, goes back to early times, for a tablet of the First Dynasty shows such a ram holding a *wꜣś*-sceptre.[7] By this time Ḥeryshef was already settled at Heracleopolis.[8] A record of the beginning of the Fifth Dynasty shows that the Cataract Region was then one of the chief centres of Khnum-worship.[9] At the beginning of the next Dynasty we know that the Ram had been installed at Mendes.[10] All this is long before Amūn had definitely appeared, hence doctrines regarding these rams are likely to be inherent in the ram of Amūn when at last he comes upon the scene.

It is therefore important for our argument that two of these ancient ram-sanctuaries were connected with the outpouring of waters. Ḥeryshef's was at Heracleopolis where the water pours into the Fayyum, and Khnum's was at the First Cataract where it pours through into Egypt itself. Ḥeryshef and Khnum were intimately related, for when the original district of the *nꜥr*-tree was divided into Upper and Lower, twentieth and twenty-first, nomes of Egypt, Ḥeryshef kept the Upper, Heracleopolis, while the Lower was given to Khnum.[11]

[1] Gaillard and Daressy, *La faune momifiée* (*Cat. gén. du musée du Caire*, 1905), pp. 30–2.

[2] *E.g.* Capart, *Primitive Art in Egypt*, Fig. 175; Bissing and Kees, *Das Re-Heiligtum des K. Ne-woser-re (Rathures)*, II, Pl. vi, 14; Borchardt, *op. cit.*, Pls. i, iv; Davies, *Sheikh Said*, Pl. viii; id., *Deir el Gebrawi*, II, Pl. viii.

[3] Newberry, *Beni Hasan*, I, Pl. xxx, bottom left-hand corner; Boussac, *Le tombeau d'Anna*, fifth plate (pubd. in *Mém. miss. arch. fr. au Caire*, XVIII, fasc. i).

[4] Petrie, *Qurneh*, Pl. x, no. B, 33 twice. Senusert I suggests his presence at Thebes under the monarch Antef-ꜥo, founder of the Eleventh Dynasty, whom he calls "revered before Amūn", Legrain, *Statues et statuettes*, no. 42005. On the stela Lange and Schäfer, *Grab- und Denksteine des mittl. Reichs*, no. 20512, ll. 1, 6, his names are all restorations.

[5] Lortet and Gaillard, *La faune momifiée*, II, pp. 69 ff.; III, pp. 89 ff. (pubd. in *Archives mus. d'hist. nat. de Lyon*, IX, X), and *cf.* Gaillard and Daressy, *La faune momifiée* (*Cat. gén. du musée du Caire*), nos. 29529, 29669, 29672; Schweinfurth in *O.L.Z.*, 1901, 114.

[6] Lortet and Gaillard, *op. cit.*, III, 89 ff. They are now in the Cairo Museum, numbered 39746.

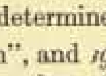
[7] Petrie, *Abydos*, II, Pl. v, 36 = Pl. i, and p. 25.

[8] Petrie, *Royal Tombs*, II, Pl. vii, 8. The Palermo Stone gives the name, see Newberry and Wainwright in *Ancient Egypt*, 1914, p. 150, Fig. 2, no. 9, and p. 151, Fig. 9.

[9] Borchardt, *Saḥureꜥ*, II, Pl. 18. Other early ones are Wenis, Sethe, *Urk.*, I, p. 69; Merenrēꜥ, *op. cit.*, pp. 110, 111.

[10] Gauthier, *Livre des rois d'Égypte*, I, p. 148, no. vii.

[11] Already at the beginning of the Twelfth Dynasty, *cf. Ann. Serv.*, XXVIII, Pl. i of Chevrier's article, pp. 114 ff.

Ḥeryshef's name is significant, for it means "He who is upon his Lake".[1] Khnum's name belongs to a root which gives *ḫnmt* "a spring or well of water".[2] One of his chief sanctuaries was at Elephantine where were situated the "pure water" and the Four Vases,[3] and later on the caverns whence the Nile-god poured out his vases.[4] A Twentieth-Dynasty story puts the Ram of Mendes at the First Cataract also, for it mentions him as dwelling at the Island of Sehêl near Elephantine.[5] In late times he is given the name of *ꜣgb-wr*, where, once at least, the ram is used to determine the word *ꜣgb* .[6] *ꜣgb* is an old word merely meaning "flood, inundation", and *ꜣgb-wr* was already deified in the Pyramid Texts.[7] The name of the Ram of Mendes, *ꜣgb-wr*, thus means nothing but "Great Flood, Inundation" and so brings him into the same group as the other divine rams. It is this which caused the Ptolemaic pantheistic hymn to Khnum to unite his four forms as the ram of Heracleopolis and the ram of Mendes.[8] The ram, therefore, was very generally held to be concerned with the outpourings of waters upon earth, whether he was called Ḥeryshef, or Khnum, or lived at Mendes.

It is probable that an animal so intimately concerned with the earthly waters would not entirely neglect the heavens whence they come, for the ancients realized that the waters above and those below were really one and the same.[9] Nor indeed does he. Thus, Roman terra-cottas of a god bearing the *labrys* or double axe come from Heracleopolis.[10] Ḥeryshef is thus a sky-god, for this is the regular weapon of such gods, being an equivalent of the meteorite or thunderbolt.[11] It also appears on the Roman coinage of Oxyrhynchus, the city of Seth the storm-god.[12] Other evidence for this nature of the ram-gods is to be found in the late statement that Khnum "puts Nut under the sky like a great pillar of air",[13] and in the fact that the ceremony of "Uplifting the Sky" was performed before him and Ḥeryshef.[14] In earlier days this had belonged to their relative Amūn[15] and to Ptah.[16] Ptah's role as creator of the sky is well known, and he is not uncommonly associated with the ram-gods. Thus, in the Nineteenth Dynasty, Ptah-tanen changed himself into the Ram Lord of Mendes,

[1] By the Middle Kingdom the Heracleopolitan lake had been doubled into "The Lake of Natron" and another whose name is explained as being "The Sea" *wꜣḏ-wr*, Grapow, *Urk.*, v, 23.

[2] Rather than to *ḫnm*, "to unite". Though *ḫnmt*, "a spring or well", is not known before the Middle Kingdom (*Wb. d. aeg. Spr.*, III, 382) a word *ḫnm* was used for the swamp-birds from the Old Kingdom onwards, p. 381. The other root *ḫnm*, "to form, create", does not occur until the Nineteenth Dynasty, p. 382.

[3] *Pyr.*, §§ 864, 1116. Compare the contemporary Babylonian pictures of gods holding vases from each of which two streams of water spring and fall to earth, Sargon of Agade, *c.* 2870 B.C., Gudea, *c.* 2600 B.C. (Ward, *Seal Cylinders of W. Asia*, Figs. 156, 650). Sometimes each is caught in a vase on earth which itself gives rise to two more streams, *op. cit.*, Figs. 650, 651 (= our Figs. 1, 2), and later in Assyrian days the four streams issue from a single vase, *op. cit.*, Figs. 662 *a*, *b*. Each heavenly vase thus gives rise to two or four earthly rivers. *Cf.* also Gen. ii. 10 ff., where the river of Paradise gives rise to the four earthly ones. In Egypt Nun also had Four Springs, Griffith, *Siût and Dêr Rîfeh*, Pl. xvii, l. 42.

[4] *E.g.* Gunn and Gardiner in *Journal*, IV, 245; Champ., *Mons.*, Pl. xciii, fig. 1; Herodotus, II, 28.

[5] Gardiner, *The Chester Beatty Papyri*, No. 1, p. 15 and note 1.

[6] Rochemonteix, *Edfou*, I, 488, no. 1; 519, no. 8, "*ꜣgb-wr*, the Ram living in the Mendesian Nome".

[7] *Pyr.*, § 559 = 565.

[8] Daressy in *Rec. de Trav.*, XXVII, 87, ll. 47–9.

[9] *Cf.* note 2 *supra* and pp. 143, 144.

[10] Petrie, *Roman Ehnasya*, Pls. xlv, 9; l. 110–12.

[11] *Journal*, XVII, 192, 193; *cf.* XIX, 42, 43.

[12] F. Feuardent, *Numismatique: Égypte ancienne*, II, 304, 305. He gives references to other specimens published elsewhere.

[13] Daressy in *op. cit.*, p. 87, l. 51; *cf.* p. 192, l. 1.

[14] KHNUM, L., *D.*, iv, Pl. lxxxi *d* (= our fig. 3) Vespasian. ḤERYSHEF, Brugsch, *Drei Fest-Kalender*, Pl. ii, l. 13.

[15] Daressy, *Notice explic. des ruines de Médinet Habou*, p. 178.

[16] Chabas, *Le calendrier des jours fastes et néfastes*, p. 75; Brugsch, *Matériaux du calendrier*, Pl. xii, l. 10; id., *Drei Fest-Kalender*, *ibid.*

and in the Twentieth they accompanied each other before the tribunal of the gods.[1] In late times the Ram of Mendes was not only said to be "the Life" of Gēb the Earth-god,[2] but also of Shu the Air-god.[3] These ideas are probably ancient, for in the First Dynasty the temple of Ḥeryshef was surmounted by the head of the bull,[4] himself an emblem of the sky. Again, the earliest representation we have of a sacred ram shows him holding the *wsś*-sceptre,[5] a heavenly symbol, and perhaps in those days not merely a sign of divinity. Yet again the Pyramid Texts (§ 1726) know of a gate in heaven which was called "The Double Ram Gateway".

Consideration of Amūn's ram shows that these rules hold good for him also, and that the heavenly side is much more apparent in him that it was in them. An oft-repeated classical story tells how Zeus (Ammon) saved Dionysus' army from dying of thirst in the Libyan desert. He did so by sending a ram who caused a spring of water to gush out by pawing the ground.[6] By attaching the general Egyptian belief to Amūn's own animal this tale provides the explanation of one of the meanings of his name, *rhny*.[7] The root *rhn* has two meanings, both of which prove eminently suitable for Amūn's incarnation. One will be discussed later, p. 145, and the other, which concerns us here, is "to wade in a lake, or through a flood" (*Pyr.*, § 1162). Thus, the *rhny*-ram was "The Wader in a Lake". In accordance with this view of him the ram's head was called "Amūn of the Lake" in the Nineteenth Dynasty.[8] Such names connect Amūn with the divine ram at the entrance to the Fayyûm Lake, whose own name *ḥry-š·f* similarly meant "He who is upon his Lake". They are fully justified by the above-mentioned views on the ram's abilities. These latter also qualified the ram to act as the sacred animal of such a god as Amūn proves to have been. The god was brought out to stop the flood at Thebes when it became dangerous,[9] and it was said of him: "*A water-charm is Amūn* (?), *when his name is on the flood; the crocodile* (?) *hath no power, when his name is pronounced.*"[10] Miraculous inundations of the Nile were also ascribed to him.[11] Clearly, then, Amūn controlled the earthly waters like any other ram-god.

But he by no means ignored the sky, its waters, and its other phenomena. The ancients very rightly drew no hard-and-fast line between the waters in the act of coming down from heaven as rain and those already fallen and forming rivers and seas. At the Creation God divided the waters from the waters by the firmament, calling the one Heaven and the other Seas (Gen. i. 6–10). In Mesopotamia from early days onwards the vases held by various gods above overflow into others below, whence rivers of water flow away, Figs. 1, 2.[12] In

[1] Gardiner, *The Chester Beatty Papyri*, No. 1, p. 15 and n. 2.

[2] Sethe, *Urk.*, II, 31, 49, 54.

[3] *Op. cit.*, pp. 31, 49, 53; Burton, *Excerpta Hieroglyphica*, Pl. xli. The other two identifications, with Rēʿ and Osiris, would be due to the well-known encroachments of these two religions.

[4] See p. 141, n. 8.

[5] Petrie, *Abydos*, II, Pl. v, 36 = Pl. i, and p. 25.

[6] For a collection of these tales see O. Bates, *The Eastern Libyans*, p. 189. See next page for a Pharaonic army which had been "caused to live" by a miraculous rainstorm and consequent bountiful Nile.

[7] Weigall in *P.S.B.A.*, XXII, Pl. i, facing p. 272; Legrain, *Statues et statuettes*, 42078; Lanzone, *Diz. mit. eg.*, Pl. xxiii = Maspero, *Bibliothèque ég.*, II, 399, 400; Petrie, *Koptos*, Pl. xxi, 9; L., *D.*, III, 249 f. = Maspero, p. 401; *cf.* Daressy, *Not. explic. de Médinet Habou*, p. 172, no. 5; Spiegelberg in *Rec. de Trav.*, XVII, 95; *Ä.Z.*, LVIII, 159.

[8] Spiegelberg in *Ä.Z.*, LXII, 26, Fig. 4.

[9] Daressy in *Rec. de Trav.*, XVIII, 181 ff., ll. 6, 31 ff.

[10] Gardiner in *Ä.Z.*, XLII, 29.

[11] *E.g.*, Vikentiev, *La haute crue du Nil et l'averse de l'an 6 du roi Taharqa* (Cairo, 1930), pp. 30, 49; *cf.* also pp. 56, 57.

[12] Figs. 1, 2 = W. Hayes Ward, *op. cit.*, Figs. 650, 651. *Cf.* Fig. 655 where the vase above empties itself into its counterpart beneath. In Fig. 653 the lower part has been broken off. The terrestrial vases may have been there, or the rivers may have flowed direct from the god's vases as in the earliest example, Fig. 156, dating from 2870 B.C.

Greece Poseidon, the sea-god, was only a specialized form of Zeus the storm-god.[1] The same idea was current in Egypt, where in the Twelfth Dynasty the Shipwrecked Sailor says: "*Then I heard the sound of thunder and thought it was a wave of the sea.*"[2] Earlier still the Pyramid Texts make the statement that "*The sky pours water*" using the word *ỉgp*, which is connected with *ꜣgb* "flood, inundation".[3] Similarly *ḥwt* or *ḥyt* originally meant "rain, storm and rain, rain water", but later on came to mean "the inundation of the Nile", etc. In the one inscription Taharqa refers "the *ḥwt* of the Nile", which threatened Thebes, to "the *ḥwt* of heaven in Nubia".[4] In the Eighteenth Dynasty it is "*a Nile in heaven which descends for them and makes waves on the mountains like the great deep, moistening their fields in their settlements*".[5] In the Twenty-Sixth Dynasty a miraculous rainstorm took place in Punt (the Sudan) resulting in a Nile which caused the army to live.[6] While part of the miracle was credited to Neith, the patroness of the dynasty, the record was dedicated in the temple of Min, Amūn's prototype.[7] Both Taharqa's rainstorm and consequent good Nile were attributed to Amūn, though this stela like the other was dedicated in the temple of Min.[8] The Greeks were therefore justified in attributing to Zeus-Ammon not only the production of the spring of water just described, but, to the divine influence also, the shower of rain which relieved Alexander on his way to the god's oracle at Siwah.[9] This transports us to the skies. Here again the ram befriends us, for, in late times at least, he represents the four winds,[10] just as the ram-god Khnum set up the "Great Pillar of Air".[11] In representing the winds the character of Amūn's ram is in keeping with the symbolism of the *smaragdus* of which the omphalos at Siwah was made, and with the nature of the sacred rock there also.[12] It is described as "a certain rock (rupes) sacred to the South Wind. When it is touched by the hand of man, that violent wind arises and, driving the sands like seas, rages as if with waves."[13]

FIG. 1.

FIG. 2.

Thus, besides being a god of the waters, whether earthly or heavenly, Amūn was also an air-god like Min[14] from whom he was sprung. This was his main characteristic, for like Min his regular head-dress consists of the two stiff feathers and streamer. The feathers Spiegelberg has shown to represent the air,[15] and Sethe has pointed out that Min's streamer sometimes flutters in the wind.[16] Association with the air was also an ancient quality of

[1] Cook, *Zeus*, II, 582–5, 786–98.

[2] Golénischeff, *Le conte du naufragé*, ll. 56–9 = Erman, *The Literature of the Ancient Egyptians* (trans. Blackman), p. 31.

[3] *Pyr.*, § 393, *cf.* Faulkner in *Journal*, x, 99.

[4] Vikentiev, *op. cit.*, p. 29, l. C 11, and p. 48, l. C 14, and the commentary, pp. 50–2.

[5] Davies, *El Amarna*, VI, Pl. xxvii, ll. 9, 10, and p. 30.

[6] Petrie, *Nebesheh and Defenneh* (bound with *Tanis*, II), Pl. xlii, ll. 12–15, and p. 107.

[7] *Op. cit.*, l. 17.

[8] See further p. 150.

[9] *E.g.* Arrian, *Anabasis*, III, 3, § 4; Q. Curtius Rufus, IV, 30.

[10] Brugsch, *Thesaurus*, pp. 847 ff.; Nash in *P.S.B.A.*, XXXII, 193, 194.

[11] See p. 142, n. 13.

[12] See p. 147, where *smaragdus*, sacred rocks, wind, and a sacred meteorite all occur together again—at Tyre.

[13] Pomponius Mela, I, 8. Pliny, *N.H.*, II, 45, explains the touching as sacrilege.

[14] *Journal*, XVII, 194, 195.

[15] *Ä.Z.*, XLIX, 127, 128.

[16] *Pyr.*, §§ 1928, 1948; Sethe, *Amun*, § 30.

Amūn's, being apparent in one of the oldest writings of his name. Sethe has shown that in the Pyramid Texts, §§ 399, 434, one of the determinatives used for this was the empty space. This he very reasonably supposes to represent the empty space occupied by the invisible air.[1]

This brings us back again to the sacred ram. One side of his nature has already provided one reason why he was called *rhny*. Another meaning of the root *rhn* is "to support". Among various things this word is used of Mount Bakhau which supported (*rhn*) the sky.[2] Hence it is important that Amūn, to whom the *rhny*-ram was sacred, enjoyed a festival of "Uplifting the Sky".[3] The Egyptians conceived the air as supporting the sky, for pictures often represent Shu, the air-god, holding it up.[4] It has just been seen (p. 142) how by late times at any rate the ram-gods Khnum and Ḥeryshef were concerned in the same thing.

FIG. 3.

FIG. 4.

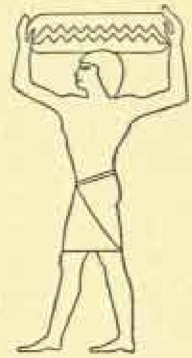


FIG. 5.

The Uplifting of the Sky was performed before both of them as it was before Amūn, while Khnum supported it "like a great pillar of air" as well. Hence, the name *rhny* "The Supporter" was suitable for a ram who represented the winds and was sacred to the air- and sky-god Amūn for whom the sky was uplifted.

Amūn's relationship to the waters and the supporting of the sky leads naturally to the consideration of the ideogram for his name ⊂⊃. Though not used in this way until the Twenty-Second Dynasty[5] the symbol itself is ancient, for it is already known in the Old Kingdom. At that time it appears in the Sed-festival. It is *a priori* likely that it should represent Min-Amūn there, for another of these symbols, the fan, specially belonged to him.[6] Actually the use of the sign ⊂⊃ as a hieroglyph for the name of Amūn is preceded by that of the full of the festival.[7] This occurred at least once in the Eighteenth Dynasty and, as Kees pointed out, shows that the ⊂⊃ of Amūn is indeed the symbol used in the festival. Hence a study of its treatment there should elucidate its meaning. At the Ḥeb-sed it is regularly held up on high just as is the sky itself, whether in the festival of the Uplifting of the Sky, Fig. 3, or by Nut, Fig. 4,[8] or by Shu. In the Old Kingdom it is brought by

[1] Sethe, *Amun*, § 153.

[2] Id., in *Ä.Z.*, LIX, 44*, l. 8*a* and p. 74.

[3] Daressy, *Notice explicative des ruines de Médinet-Habou*, p. 178, and another festival of his entry thereto a month later.

[4] Lefébure, *Le tombeau de Séti Ier*, 4me partie, Pl. xvii; W. Max Müller, *Egyptian Mythology*, Figs. 38, 39.

[5] Möller in *O.L.Z.*, 1921, col. 194.

[6] Jéquier in *Rec. de Trav.*, XXVII, 174; Kees, *Opfertanz*, 127, 128.

[7] Kees, *op. cit.*, p. 124. The papyrus is that of Userḥēt, B.M. 10009, copied by Naville, *Todtenbuch*, II, 213, no. Ad.

[8] *E.g.* Chassinat and Palanque, *Assiout*, Pl. xxv = our Fig. 4.

a man who carries it above his head,[1] Fig. 5, instead of on his shoulder or in his arms like other symbols. Later it is set on top of a *dad*-pillar that is given arms with which to hold it up as the man does.[2] Evidently, then, height is an important element in the symbolism, as it should be for a sign representing Amūn, in whose worship the Uplifting of the Sky took a prominent part. But what can the object represent? Actually it consists of a figure enclosing the sign for water. The water that is on high is of course the firmament of heaven. That the Egyptians did think of it as liquid has already been pointed out by Griffith, for when the word *biꜣ* is applied to the sky it is sometimes determined by a well of water and sometimes by a stream of water also.[3] The evidence of the festival suggests, therefore, that the ideogram for Amūn 𓏠 represented him as god of the watery abyss of heaven. Such a rendering would satisfy the conditions required by the Sed-festival, by an ancient explanation of the sign, and by Amūn's nature. The festival, or its group of symbols, was concerned with the sky, for it also included the door-pivots. These represented the *tpḥt* (*Pyr.*, §§ 810, 852, 1680). In the Pyramid Texts some of these are caverns of the *ptr* (§§ 852, 1078, 1680) representing the depths or lake of heaven. One belonged to Nun the watery abyss (§ 268), and one belonged to a bull (§ 444) who is a heavenly animal.[4] Later the word is used of "The Caverns of the Nile", and later again the word *ḳrty*, "The Double Sources of the Nile", is also sometimes spelt with these pivots.[5] Möller has already pointed out that the Tanis sign-papyrus, of Roman date, explains the hieroglyph 𓏠 by *im*, "sea". He also suggested that it had reference to the Libyan word *amân* meaning "water".[6] Amūn himself was a sky- or air-god who possessed a sacred meteorite.[7] Meteorites were made of *biꜣ*,[8] and *biꜣ* not only means "iron" but "the waters of heaven" also. Hence, 𓏠 is a suitable symbol for a meteorite god who controlled the celestial phenomena of rain and thunder.

The sky above, and expanses of water on earth, are blue. Hence blueness is characteristic of Amūn,[9] as well as of Khnum,[10] that other ram-god of the waters. Blue and black are colours which are often scarcely distinguished the one from the other.[11] Amūn, therefore, might be painted black[12] also, like his relative Min,[13] the god of the thunderbolt. Blueness is yet another feature which Amūn has in common with Zeus, for the Greek god also was given this colour whether as nimbus, globe, or mantle.[14] Blueness is also mentioned in the description of Yahweh, when the elders of Israel went up into the mount with Moses and Aaron and "saw the God of Israel: and there was under his feet as it were a paved work of a sapphire

[1] Bissing and Kees, *Das Re-Heiligtum des K. Ne-woser-re* (*Rathures*), II, Pl. 11, fig. 27; Pl. 13, fig. 33 *a*; Pl. 24, fig. 76, where he supports it on his head with one hand only.

[2] *E.g.* Petrie, *Koptos*, Pl. vi, fig. 5; Naville, *Deir el Bahari*, II, Pl. xxxiii, vol. IV, Pl. cx; Champ., *Mons.*, I, Pl. xlvii, 2; L., *D.*, III, Pl. xxxvi *b*; Kees, *op. cit.*, Pl. iii. For remarks on this sign see Griffith, *Hieroglyphs*, p. 59, no. 14, and *cf.* p. 32. Jéquier in *Rec. de Trav.*, XXVII, 175; Kees, *op. cit.*, pp. 124, 125.

[3] Griffith, *Hieroglyphs*, p. 34.

[4] *Journal*, XIX, 42–45.

[5] Kees, *op. cit.*, p. 130.

[6] *O.L.Z.*, 1921, col. 194.

[7] *Ann. Serv.*, XXVIII, 186.

[8] *Journal*, XVIII, 7–11, 13, 15; XIX, 50.

[9] AMENOPHIS II, Prisse d'Avennes, *Hist. de l'art ég.*, I, Pl. numbered 16 in the Cairo Museum copy; SETI, the Amen-rēʿ chapel in the Abydos temple; RAMESSES II, L., *D.*, III, Pl. 190 *c*; Champ., *Mons.*, I, Pls. 11, 35; PTOLEMAIC, Champ., *Not. descr.*, I, 316; id., *Mons.*, I, Pl. 91 *ter*. Dr. Nelson kindly informs me that Amūn is quite commonly blue at Medinet Habu.

[10] Champ., *Mons.*, Pl. lxxxi, figs. 2, 4.

[11] To-day Arabic still uses *azraq*, "blue", as a faint variety of *iswid*, "black". In Latin *caeruleus* not only meant the blue of the sky and sea, but also "dark-coloured" and even "gloomy", and the Greek *κύανος* is much the same.

[12] HATSHEPSUT, Baedeker, *Ägypten* (1928), p. 282, while Amūn of Karnak is coloured red in these paintings; TUTHMOSIS IV, where he is painted a greenish-bluish-black, Brit. Mus., Stela no. 1515; EIGHTEENTH DYNASTY, *B.M. Stelae*, V, Pl. xliii, no. 498 (358).

[13] Twelfth Dynasty, probably Senusret I, Petrie, *Koptos*, p. 11.

[14] Cook, *Zeus*, I, 33–62.

stone, and as it were the body of heaven in his clearness".[1] Again in his two visions of Yahweh Ezekiel saw "above the firmament" "the likeness of a throne, as the appearance of a sapphire stone".[2] It is noticeable that each of these passages connects the blueness with the heavens or the firmament. Hence, here again in his colour Amūn shows himself to be related to the neighbouring sky- and air-gods, and this must undoubtedly be derived from the colour of the sky which must force itself upon every one's notice.

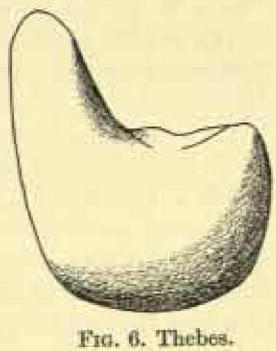


Fig. 6. Thebes.

In my original study of Amūn's sacred object at Thebes I pointed out that in various particulars it conformed to other sacred meteorites of which we know. For instance, at the subsidiary shrines it was replaced by man-made omphaloi. From Napata we have the object itself,[3] and for that at Sîwah we have the description "That which is worshipped as a god has not the shape that artificers have usually applied to the gods; its appearance is most like an umbilicus, and it is made of *zmaragdus* (beryl or emerald) and gems cemented together".[4] Its material, *smaragdus*, is indicative of its nature, for it was used again for one of the *stelae* at Tyre.[5] One of these was sacred to fire and the other to wind,[6] which are celestial phenomena. Tyre was specially concerned with the heavens, for it possessed a sacred meteorite, the "star fallen from the sky (ἀεροπετῆ ἀστέρα)" which Astarte had found and consecrated there.[7] Thus, *smaragdus* is associated once more with a meteorite and the sky. It is a translucent green stone, whether beryl or our emerald, and is thus very like glass. Hence, these ancient examples are parallel to the piece of glass which a modern tribe of Australians had picked up and were treasuring under the belief that it was a fallen star.[8] The omphalos at Sîwah was thus eloquent of the nature of the deity to whom it was sacred. Like the tales already recorded (pp. 143, 144) it shows him to have been a sky- and air-god. Hence it is that in the surrounding country of the Cyrenaica Ammon shared the affections of the people with Apollo.[9] The latter was the god of light, who in his own country was equally an omphalos-god. In Egypt the Greeks identified him with Horus who was also Min, the thunderbolt-god and Amūn's other self.[10] As a result, Cyrenaic coins with the head of either Apollo or Ammon are liable to show the thunderbolt on the other side,[11] for the thunderbolt in religion is the equivalent of the meteorite and the omphalos.[12]

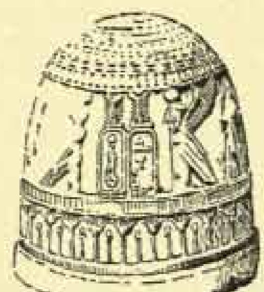


Fig. 7. Napata.

If Min was identified by the Egyptians with Horus, Amūn, his other self, had something in common with Seth. Seth was the storm-god, and at one of his centres, the Cabasite nome,

[1] Exodus xxiv. 10. As is well known the "sapphire" of antiquity was our "lapis lazuli".

[2] Ezekiel i. 26; x. 1. [3] Griffith in *Journal*, III, 255. [4] Q. Curtius Rufus, IV, 31.

[5] Herodotus, II, 44. They are no doubt the pair of stelae figured on coins of Tyre and there called "Ambrosial Rocks" (πέτραι), G. F. Hill, *Cat. Greek Coins of Phoenicia*, Pl. xxxiii, 14, 15, and *cf*. 13. Fig. 15 shows them as omphaloi. At Sîwah there was also a "rock" (rupes) sacred to the Wind, see p. 144 *supra*.

[6] Eusebius, *Praep. Evang.* (Teubner), I, x, 10. [7] *Op. cit.*, I, x, 31.

[8] E. M. Curr, *The Australian Race*, III, 29. Other tribes often believe falling stars to be quartz crystals, W. E. Roth, *North Queensland Ethnography*, Bulletin No. 5, p. 8. Quartz crystals are glass-like objects.

[9] E. S. G. Robinson, *Cat. Greek Coins: Cyrenaica*, Pls. xxvi, no. 23, to xxvii, no. 12 = pp. 64–7.

[10] *Journal*, XVII, 191, 192, *cf.* XVIII, 161.

[11] Apollo, Robinson, *op. cit.*, Pl. xxvii, 6, 7 = p. 66; Ammon, Pl. xx, 18–23 = pp. 49, 50.

[12] *Journal*, XVII, 188, 189.

he clearly had a sacred meteorite.[1] At another, Oxyrhynchus, the Roman coinage bore the *labrys* or double axe,[2] and this is only another interpretation of the thunderbolt or meteorite.[3] Thus, his sacred objects were either the same as, or a version of, Amūn's, for the latter's also appears to be a meteorite. Moreover, as has been seen (p. 142), the *labrys* related Seth to one of Amūn's relatives at Heracleopolis. Yet again, his other relative, Khnum, was god of the Hypselite nome[4] which bore the Seth animal as its standard.[5] Hence the further similarities between Seth and Amūn which are remarked below are no chance ones but full of significance. The *wꜣś*-sceptre belonged to Seth in a very special manner. Its head was made in the likeness of that of his sacred animal,[6] and it had very definite associations with the sky. Pictorially it might be used as a prop for the sky and magically it might be made of *dś*, flint, a primitive thunderbolt material.[7] The *wꜣś* finally absorbed another very similar sceptre, the *ḏꜥm*, and it was one of these latter with which Seth proposed to slay his opponents.[8] One of the earliest representations we have of the *wꜣś* shows it in the grasp of a ram such as Ḥeryshef.[9] A pair of *wꜣś*-sceptres stood on the standard of Oxyrhynchus [10]—Seth's sanctuary which in Roman times displayed the *labrys* on its coinage. A gigantic *wꜣś* of blue glaze was dedicated in the Seth temple at Nubt.[11] This is scarcely outside the nome of Thebes whose symbol was also the *wꜣś*, but distinguished by the addition of the feather and streamers.[12] On the one hand Seth-worship seems to have been peculiarly strong at Thebes,[13] and on the other Amūn not only established himself in that city but was given a place in Seth's own temple at Nubt (Ballâṣ). Here a priest of Seth dedicated a lintel on which he is shown adoring the pair of them.[14] Adoration was also paid to a group of deities consisting of Amen-rēꜥ as the ram, the Sethian goddess Ta-urt, and two forms of Seth himself appropriately figured as hippopotami.[15] On a Nineteenth-Dynasty sculpture in Karnak Seth is definitely introduced into Karnak "as Amūn", *m Imn*.[16] A splendid bronze statue of Seth had been altered in antiquity into that of Amūn.[17] A late polytheistic statuette unites the two, being a bifrons with the head of the ram in front and that of Seth behind. It is called Amūn, but with the epithet Horus the Child.[18] A plaque which shows Amūn's ram on the one side shows Seth on the other.[19]

[1] *Journal*, XIX, 49–52. [2] See p. 142, n. 12. [3] *Journal*, XVII, 193; XIX, 43.

[4] *E.g.* Griffith, *Siût and Dêr Rîfeh*, Pl. xviii often; Petrie, *Gizeh and Rifeh*, Pls. xiii G, H.

[5] *E.g.* Moret in *Comptes rendus de l'acad. des inscr. et belles-lettres*, 1914, 569, fourth vertical line; Ahmed Bey Kamal, *Tables d'offrandes*, II, Pl. ii, fig. D.

[6] Borchardt, *Saśḥureꜥ*, II, Pls. xviii, xxiii; id., *Grabdenkmal des K. Ne-user-reꜥ*, Fig. 69; Petrie, *Naqada and Ballas*, Pl. lxxviii; Lacau, *Sarcophages ant. au nouvel empire*, Pl. xlv, fig. 315; Mace and Winlock, *Senebtisi*, Pl. xxix c, and p. 89; Newberry in *Journal*, XIV, 211 ff., shows the animal to have been the pig.

[7] *Journal*, XVIII, 165. [8] Gardiner, *The Chester Beatty Papyri*, No. 1, Pl. v, l. 2.

[9] Petrie, *Abydos*, II, Pl. i = Pl. v, no. 36; Pl. x, no. 216, seems to show something similar.

[10] *E.g.* Murray, *Saqqara Mastabas*, Pl. i; Sethe, *Pyr.*, § 864; Fraser in *Ann. Serv.*, III, 76.

[11] Petrie, *Naqada and Ballas*, Pl. lxxviii, and p. 68.

[12] The Menkaurēꜥ triad now in the Cairo Museum, no. 40678; Moret, *Comptes rendus de l'acad.*, 1914, fig. facing p. 568, vertical column 4. In the Fifth Dynasty a fragment of a *wꜣś* with a feather on it appears, but unfortunately with no connexions whatever, Bissing and Kees, *Das Re-Heiligtum des K. Ne-woser-re (Rathures)*, III, Pl. 10, fig. 205, but *cf. Text*, p. 30.

[13] Roscher, *Lexikon*, s.v. *Set*, col. 737. [14] Petrie, *op. cit.*, Pl. lxxix, and p. 70, Ramesses III's date.

[15] Lanzone, *Diz. mit. eg.*, Pl. ccclxxx. [16] Champ., *Not. descr.*, II, 47.

[17] Legrain in *Rec. de Trav.*, XVI, 167 ff. = Mogensen, *La Coll. ég.: Glyptoth. Ny Carlsberg*, Pl. xxiv, no. A 99. [18] Brit. Mus. no. 16228, and described by Budge, *The Gods of the Egyptians*, II, 252.

[19] Griffith in *P.S.B.A.*, XVI, 89, and *infra*, p. 153.

Another suggestion of their relationship is provided by the associations of the *smon*-goose. It was connected with Amūn at least as early as the Middle Kingdom,[1] and, as is well known, was one of his embodiments from the New Kingdom onwards.[2] Anciently the *smon*-goose had possessed lakes (*Pyr.*, § 1530) and in this respect approximated to the various sacred rams (pp. 142, 143). One of them, Khnum, had a city which in late times at least was called Smon-Ḥor.[3] Yet the *smon*-goose seems to have been symbolic of Seth as well as of Amūn. Kuentz has collected a number of religious passages referring to the *smon*-goose.[4] From the Pyramid times onwards he is often grouped with the falcon in one way or another. Though they are not an exclusive pair, the various other associates and activities tend to drop out until in the New Kingdom expressions like "*I fly like a falcon, I cackle like a* smon-*goose*" have become common.[5] It may be that this has to do with the pairing of Horus and Seth which is so well known. If so, the goose would represent Seth. At any rate in a Twelfth-Dynasty text its head is brought as that of Seth.[6] In late versions of the Opening of the Mouth Ceremony the head is cut off this goose, which is described as "The Enemies",[7] in other words Seth and his companions. The statement about the *smon*-goose and the falcon is introduced into Ch. xcviii of the *Book of the Dead*. It also mentions the dew, the heavenly ladder, and the opening of the gates which are in Letopolis. Hence, whether by accident or by design, the *smon*-goose is associated here with a number of celestial phenomena. The history of another chapter, xcv, is in keeping with this, for it treats of the storm, and one version entitles it "The Making of Transformations into a *Smon*-goose" and includes the name of Amūn in its text.[8] There are little terra-cottas of the Graeco-Roman period consisting of Horus the Child riding on a goose. They seem to come especially from the Fayyûm, and, as Kuentz suggests (p. 51), probably have to do with the city of Smon-Hor which was near by. The bifrons of the last paragraph also comes from the Fayyûm. It probably originated in the same group of ideas, for it combines a number of the deities mentioned here, as no doubt did yet another terra-cotta group showing Horus the Child with the Amūn ram.[9] That they are assimilated to Horus is meaningless at this time, for even Seth himself may be so treated.[10]

The "roarings" (*hmhm*, *nhmhm*) of Seth are well known,[11] and "Great of Roarings (*hmhm*)" was the title of the ram-headed Amūn at El-Hîbah in the Twenty-second Dynasty and still as late as the reign of Darius I.[12] The relationship between the two gods is summed

[1] Kuentz, *L'oie du Nil* (pubd. in *Arch. du museum d'hist. nat. de Lyon*, XIV), pp. 54, 55.

[2] *Op. cit.*, pp. 48 ff.

[3] For the position see Dümichen, *Geogr. Inschr.*, I, Pls. lxxxi, fig. 20, lxxxvi, fig. 20. The city is named with its god, for example, in Breccia in *Ann. Serv.*, VIII, p. 65 twice; Brugsch, *Thesaurus*, p. 934; Prisse, *Mons. ég.*, Pl. xxvi *bis*, l. 4.

[4] Kuentz, *op. cit.*, pp. 44–8.

[5] *E.g.* Budge, *Facsimiles of the Pap. of Hunefer*, etc., *Nu*, ch. xvii, ll. 82, 83; ch. lxxxii, l. 2; ch. xcviii, l. 3; ch. cxlix, no. xi, ll. 7, 8; *cf.* id., *Book of the Dead* (1898), ch. clxix, l. 14.

[6] Sethe, *Untersuchungen*, X. 153, ll. 46, 47.

[7] Schiaparelli, *Il Libro dei Funerali*, I, 88; Dümichen, *Der Grabpalast des Patuamenap*, II, Pl. i, ll. 7, 9.

[8] Userḥēt, Eighteenth Dynasty, Naville, *Todtenbuch*, II, 213, no. Ad.

[9] Perdrizet, *Les terres-cuites de la Collection Fouquet*, p. 35, no. 108; Mogensen, *La collection ég. de la Glyptothèque Ny Carlsberg*, Pl. xlii, no. A. 267, and p. 43; W. Weber, *Die äg.-griech. Terrakotten*, nos. 94–6; C. M. Kaufmann, *Äg. Terrakotten*, p. 64, and Fig. 35, 1.

[10] Davies, *Bull. Metrop. Museum of Art*, New York, February 1928, Pt. ii: *The Egyptian Expedition*, 1925–7, p. 71, Fig. 15.

[11] *E.g. Pyr.*, § 1150; Lanzone, *Diz. mit. eg.*, Pl. ccclxxxi, l. 11; Brugsch, *Rec. de mon. ég.*, I, Pl. xlvi *a*, l. 1; de Rougé, *Inscr. hiérogl.*, Pl. cxliv, ll. 45, 46.

[12] Daressy in *Ann. Serv.*, II, 154, 155; Griffith, *Cat. Dem. Pap. in the John Rylands Library*, III, 108, 109 often.

up in the statement "*Amūn thunders in heaven and puts Sutekh in his vicinity*".[1] This takes its place alongside the much earlier statement which ascribes a miraculous rainstorm to his colleague Min "*. . . it poured with rain* (irt ḥw), *the forms of this god were seen, his might was shown in the floods, the desert was made into a lake, water welled up on the waterless rock, a well was found in the midst of the valley . . .*"[2] Later on, Taharqa set up a stela in the temple of Min at Koptos,[3] recording that he had asked a bounteous inundation from Amen-rēʿ and that it had come owing to great rains in the Sudan. Shortly after this, again, in the Twenty-sixth Dynasty, another phenomenal rainstorm in the Sudan (Punt) was recorded. The stela was once more dedicated to Min, Lord of Koptos.[4] The outpourings of the heavens were thus very definitely under the control of Min. Hence the statement that his other half, Amūn, controlled the thunder and even the storm-god himself is no vague attribution to him of power in general, but clearly has a definite implication.

Amūn's "roaring" provides yet another resemblance between him and Yahweh, and the storm-god Adad-Ramman as well. Amos i. 2 says, "The Lord will roar from Zion and utter his voice from Jerusalem", and the name Ramman is believed to mean "The Bellower" and to be derived from the Babylonian root *ramâmu* "to roar, bellow".[5] These roarings represent celestial phenomena, for when the Pharaoh "*roareth like Setesh*" it is also said that "*the Sky roareth at him*" in its turn (*Pyr.*, § 1150).

In the Nineteenth Dynasty it is said of Amen-rēʿ "*the mountains are moved beneath him at the time of his raging. The earth totters when he becomes frenzied* (?)".[6] As the statement is made in likening Amūn to the bull, the reader naturally thinks of the archaic statue of Min. This god is Amūn's other self, and here the mountains are shown being trodden by the bull,[7] Fig. 8, the usual animal of the sky- and storm-gods. In any case the idea is ancient in connexion with such gods and thunderstorms and shooting stars. When "*the guardians of the limbs of heaven open the gates of heaven for him*" the ascending Pharaoh "*roareth like Setesh*" and "*the earth trembleth at him*" (*Pyr.*, §§ 1149–51), or else "*the bones of the Earth-gods tremble*" (*Pyr.*, § 393). The same thing happened when Yahweh manifested himself to his prophets Moses and Elijah. In the first case "the whole mount quaked greatly" when "the Lord descended upon it in fire" in what was clearly a terrible thunderstorm (Exod. xix. 18). In the second "a great and strong wind rent the mountains, and brake in pieces the rocks before the Lord . . . and after the wind an earthquake . . . and after the earthquake a fire" (1 Kings xix. 11, 12). Psalm xviii. 7 describes the same phenomena at the appearance of the Lord to his suppliant. In the following cases these occurrences are associated with meteorites and shooting stars. In the Twelfth Dynasty the Serpent King comes to the sound of thunder and the quaking of the earth, and proceeds to tell his tale

FIG. 8.

[1] Golénischeff in *Rec. de Trav.*, XXI, 87, l. 19; late Twentieth Dynasty, about 1100 B.C.

[2] Couyat and Montet, *Hammâmât*, Pl. xxxvi, ll. 2, 3, Eleventh Dynasty.

[3] V. Vikentiev, *La haute crue du Nil*, etc., pp. 30, 49, and *cf.* pp. 56, 57. He also set up a copy in the temple of the little-known god *Ḥmn*, who clearly belonged to our cycle of gods. He was a mummified hawk. He belonged to a group including *Ḥʾ* the mountain-god, *Pyr.*, § 1013. This group once replaced his name with that of Min, which another version altered to Amūn (?), *Pyr.*, § 1712. Amūn finally replaced him as god of his own city of *Ḥfʾt*. *Ḥmn* also seems to come into connexion with the clouds or storm, *cf.* Vikentiev, *op. cit.*, pp. 67 ff.

[4] Griffith in Petrie, *Defenneh* (bound with *Tanis*, II), Pl. xlii, and p. 107, ll. 8, 13, 14, 17.

[5] Dussaud in Pauly-Wissowa, *Real-Encyclopädie*, s.v. *Hadad*, col. 2158.

[6] Gardiner in *Ä.Z.*, xlii, 38.

[7] Petrie, *Koptos*, Pl. iii, 3. The elephant and hyena (?) also do so. For the elephant again, see Quibell and Petrie, *Hierakonpolis*, I, Pl. xvi, 4.

of the fall of the star.[1] In the Arabian Nights during the duel with shooting stars of fire (*shihâb min nâr*) the king of the believing ginns cried out so terribly that "the mountains trembled at his voice".[2]

Seth was the storm-god, and *biꜣ* very particularly belonged to him and to Letopolis, a city whose gods were not unrelated to him.[3] *Biꜣ* was obtained from meteorites, being the thunderbolt material iron. The thunderbolt is a powerful agency for blasting open that which is closed, and was so used at Letopolis.[4] Thebes claimed a sky-god with his sacred meteorite for whom were celebrated the festivals of Uplifting the Sky and his entry thereto a month later.[5] The god's sacred ram himself was connected with heaven. The older ones were also, for a Double Ram Gateway is mentioned in the Pyramid Texts, § 1726. Heavenly gates were opened at Letopolis[6] which was a thunderbolt-city, hence the meteorite-city Thebes would be a suitable place for a mystical opening to be carried out, especially of gates. The high priest was "The Opener of the Gates of Heaven",[7] or "in Heaven",[8] "in order to see what is therein",[9] which was "Splendour" (*šps*).[10] The high priest's title cannot merely refer to the daily opening of the shrine. That had to take place in every temple in Egypt and could not be distinctive of Thebes.[11] Clearly the special mission of the high priest of Amūn was to gaze upon the splendour of his lord which was shut away from others and hidden in the depths of heaven. No doubt after having met his god face to face in this manner the high priest was in a position to interpret his glories and will to mankind. When Ezekiel was to see the glory of the Lord "the heavens were opened" unto him (i. 1). "Hereafter ye shall see heaven open, and the angels of God ascending and descending . . ." was the promise given to Nathanael (John i. 51). Again, "a door was opened in heaven" to St. John, when he was vouchsafed a vision of the throne out of which "proceeded lightnings and thunderings and voices" (Rev. iv. 1, 5). According to one account the Nativity was heralded by an appearance of "the glory of the Lord" and of "a multitude of the heavenly host" who went away "into heaven" (Luke ii. 9, 13, 15). The other describes the miraculous appearance as that of the "Star in the East" (Matt. ii. 2, 9). A very early revelation of Yahweh accorded in many details with the Egyptian evidence. It took place at the Bethel stone. The word *beth-el* "House of God" is accepted by many[12] as the origin of the Greek *βαίτυλος*. *Βαίτυλος* did not merely mean a sacred stone in general as modern scholars so often use it, but was regularly applied to sacred meteorites.[13] It is likely, therefore, that Jacob's stone was a meteorite, or its substitute an omphalos, especially as it had the effects that these so often have. It provided a ladder into heaven, as was done at the meteorite city of Letopolis in Egypt,[14] and as did Seth, the storm-god, who was not unrelated to

[1] Erman, *The Literature of the Ancient Egyptians* (trans. Blackman), 1927, 31 = Golénischeff, *Le conte du naufragé*, ll. 57, 60.

[2] Burton, *The Thousand Nights and a Night* (Benares, 1885), vi, 100 = W. H. Macnaghten, *The Alif Laila* (Calcutta, 1839, etc.), iii, 97.

[3] *Journal*, xviii, 170, 171.

[4] *Op. cit.*, 6, 7, 8, 11, 170, and *cf.* 168.

[5] Daressy, *Not. explic. des ruines de Médinet Habou*, p. 178.

[6] Budge, *Nu*, Pl. xviii, ch. xcviii, l. 10, *cf. Journal*, xviii, 168.

[7] Wreszinski, *Die Hohenpriester des Amon*, Berlin, 1904, pp. 49, 50.

[8] *Op. cit.*, no. 73.

[9] *Op. cit.*, no. 33.

[10] *Op. cit.*, no. 30.

[11] Moreover, the words of the service for Amūn spoke of the gates of earth as well as of heaven (Moret, *Culte divin*, p. 49) and of the *ḳbḥw* also (Mariette, *Abydos*, i, p. 59). Mariette here records the same words for four other deities besides Amūn.

[12] *E.g.* Lenormant, in Daremberg and Saglio, *Dict.*, s.v. *Baetylia*, p. 643; Muss-Arnolt in *Trans. Am. Philological Assoc.*, 1892 (*On Semitic Words in Greek and Latin*), pp. 51, 52, where he gives references to others. But neither Prellwitz nor Boisacq discusses it in their dictionaries.

[13] Wainwright, *Jacob's Bethel* in *P.E.F: Q.S.*, 1934, 32–44.

[14] *Journal*, xviii, 168.

Amūn. Jacob's bethel opened Heaven for him, so that he saw "the angels of God" passing on their way. He even saw God himself, for the ladder reached right up to the presence of Yahweh who spoke to him face to face. It might well be said of him, as of the high priest of Thebes, that he saw the Splendour within Heaven. Finally, Jacob said of his stone ". . . and this is the gate of heaven" (Gen. xxviii. 17). In so doing he used the same words about his probable meteorite and the opening it accomplished as the Egyptians did about the high priest of their very evident meteorite at Thebes.

Comparison with Letopolis carries us farther still, for the ceremony of opening the mouth peculiarly belonged to that thunderbolt-city.[1] Hence, the facts that the Theban high priest was an opener like the Letopolite and that Amūn's sacred object was presumably a meteorite suggest an explanation for one of the implements used in the ceremony. Originally this had probably been accomplished by the "thunderbolt" material flint,[2] and later the meteoric (thunderbolt) material *biꜣ* was used.[3] The newest implement to be employed was the *Wr-ḥkꜣw* "The Great of Magic". It was introduced in the New Kingdom when Amūn's influence was in the ascendant.[4] Illustrations show it as a curved handle, like that of an adze, ending in the head of an Amūn-ram at times surmounted by an uraeus.[5] Actual examples of this type are very rare, Cairo Museum possessing only the upper part of a single one.[6] There are on the contrary many in the form of a ram-headed serpent.[7] The *Wr-ḥkꜣw* no doubt represented the sacred ram himself who also wore the uraeus.[8] If Amūn possessed a meteorite, and his high priest could open heaven itself, it is likely that his sacred animal could open the mouth of the dead man.


Fig. 9.

Before closing we must notice a most peculiar form of Min-Amūn which at present is only known from the late New Kingdom and after. This appears in three statuettes[9] which show him with a head somewhat like that of Bes, wearing a species of white crown, with his arm raised like Min, but still more like Resheph, for with it he brandishes a club. In two cases the left hand is advanced as if to hold something. This might be a shield such as Resheph holds, or perhaps more probably the enemy whom the god slays. The inscription on the first of the statuettes calls this strange figure "Amūn-Slayer-of-Enemies" and on the third "Min-Ḥor-nakht", while the second is not inscribed. A Ptolemaic scene shows a god with the white crown whose face is unfortunately destroyed, and the rather damaged inscription seems to call him "Min-Slayer-

[1] *Journal*, XVIII, 6, 11, 163. [2] *Journal*, XVIII, 6, 7, 161, 165. [3] *Journal*, XVIII, 6 ff.

[4] It is named in Boeser, *Aegyptische Sammlung*, IV, Pl. xiv, where it is called a *nwꜣ* and its "blade" is said to be of *biꜣ*. For pictures of it see next note.

[5] Budge, *Facsimiles of the Papyri of Hunefer*, etc.: *Hunefer*, Pl. vii; id., *The Pap. of Ani* (1894), Pls. vi, xv. All of these are without the uraeus, but Dümichen, *Der Grabpalast des Patuamenap*, II, Pl. ii, shows it with the uraeus.

[6] No. 39742. It is of ebony, 15 cm. long, and has the hole in the head for the uraeus.

[7] Ebony, nos. 7/9/21/1, 34370, 34371, the first 13 cm. long, and the other two each 12 cm. No. 34370 still has the golden uraeus in place, but the other two have not even the hole for it; stone, no. 7662, only 4 cm. long, without uraeus or hole for it; heads only, faience, nos. 25744, 26189, 8 and 6 cm. long respectively, each with the hole. There is also an alabaster cylinder ending in a ram's head, 10 cm. long, without the hole, no. 6/9/21/19.

[8] *E.g.* Kuentz, *op. cit.*, Fig. 15; the uraeus is readily distinguishable from the sun's disk in Lanzone, *Diz. Mit. Eg.*, Pl. xix, 3; *Eg. Stelae, etc., in the Brit. Mus.*, VI, Pl. xlii; Caulfeild, *Temple of the Kings*, Pl. iv; L., *D.*, III, 256 *h*; for other Amūn-ram heads without the disk but with the uraeus see Davies, *The Tombs of Two Officials*, Pls. viii, x, xii, and p. 11; Gayet, *Louxor*, Pl. 1.

[9] Hilton Price in *P.S.B.A.*, XXIII, 35, 36, and Pls. i, ii; Daressy, *Statues de divinités*, no. 38836, and Pl. xliii. For the inscription on the first giving the name Amūn see Wilkinson, *Manners and Customs* (1878), III, 13.

of-Enemies-Resheph".[1] Resheph was the Syrian Apollo and lightning-god who often appears in company with Min-Amūn.[2] Even here we are brought back to Seth. Griffith has published a Nineteenth-Dynasty plaque bearing Amen-rēʿ as the ram on one side. On the other is a strange god who is clearly some form of Seth.[3] He wears a species of white crown, raises the right hand in attack though with a spear not a club, extends the left to grasp the enemy, and his features are described as being "those of Bes".[4] Actually he appears to be bearded in a naturalistic manner, a peculiarity which is also found with Resheph.[5] This Seth is thus closely allied to the figures under discussion. It seems likely, therefore, that the Slayer-of-Enemies presents an aspect of celestial gods not yet encountered in these pages. Though not prominent in the cases of Min and Amūn, it was in those of their relatives Adad, Teshub, Yahweh, and Zeus. That aspect is the dangerous nature of the sky, which casts not only hail and rain, but lightning-flashes and shooting stars, thunderbolts and meteorites as well.

Amūn was derived from the much older Min, with whom he had much in common. Yet they differed somehow. Min had the thunderbolt, while Amūn had the meteorite. Min became a fertility-god, while Amūn became solarized. Min belonged to the bull-gods and was related to Horus, while Amūn belonged to the ram-gods and inclined towards Seth. Amūn also differed somewhat from the other ram-gods, for their ram was not his. They were Ḥeryshef, Khnum, and the Lord of Mendes. They primarily controlled the waters on earth, a function not foreign to Amūn, who came to do so as well. But from the beginning he had been an air-, sky-, and weather-god. The sky was uplifted for him, after which he entered to it. He was the blue firmament, the heavenly counterpart of the earthly waters. His sacred object was clearly a meteorite which came to earth from his very self. Like other meteorites its representatives were omphaloi, of which one at least suggests a fallen star in its material. Again like other meteorites, that at Thebes was a powerful agency for opening. It opened heaven like Jacob's apparent meteorite, or the thunderbolt at Letopolis, and like the latter Amūn's sacred ram also opened the mouth of the dead man. Abroad Amūn was related to such gods as Zeus, Apollo, Yahweh, and Ramman. While Amūn was "Great of Roarings", Ramman was "The Bellower". Amūn was like Yahweh in his nature, in the powers of his meteorite, in roaring, and in causing the earth to quake. Amūn was an omphalos-god like Apollo, the light-god, with whom he was worshipped in the Cyrenaica. From before the classical period the Greeks had identified Amūn with Zeus their own storm-god. Finally, the more terrible aspect of such a god became emphasized in a compound form, which approximated Amūn more closely still to his less placid relatives of the more northern skies.

[1] L., *D.*, IV, Pl. 11 *a*.
[2] *Journal*, XVII, 192.
[3] As certified by his head-dress with the streamer and his slaying of the serpent. For this latter see Nagel in *Bull. inst. fr. d'arch. or.*, XXVIII, 33 ff.; Davies, *Bull. Metrop. Museum of Art*, New York, February 1928, Pt. ii; *The Egyptian Expedition*, 1925–7, p. 71, Fig. 15.
[4] Griffith in *P.S.B.A.*, XVI, 89.
[5] Prisse d'Avennes, *Mon. ég.*, Pl. XXXVII.

A STATUE OF A SERPENT-WORSHIPPER

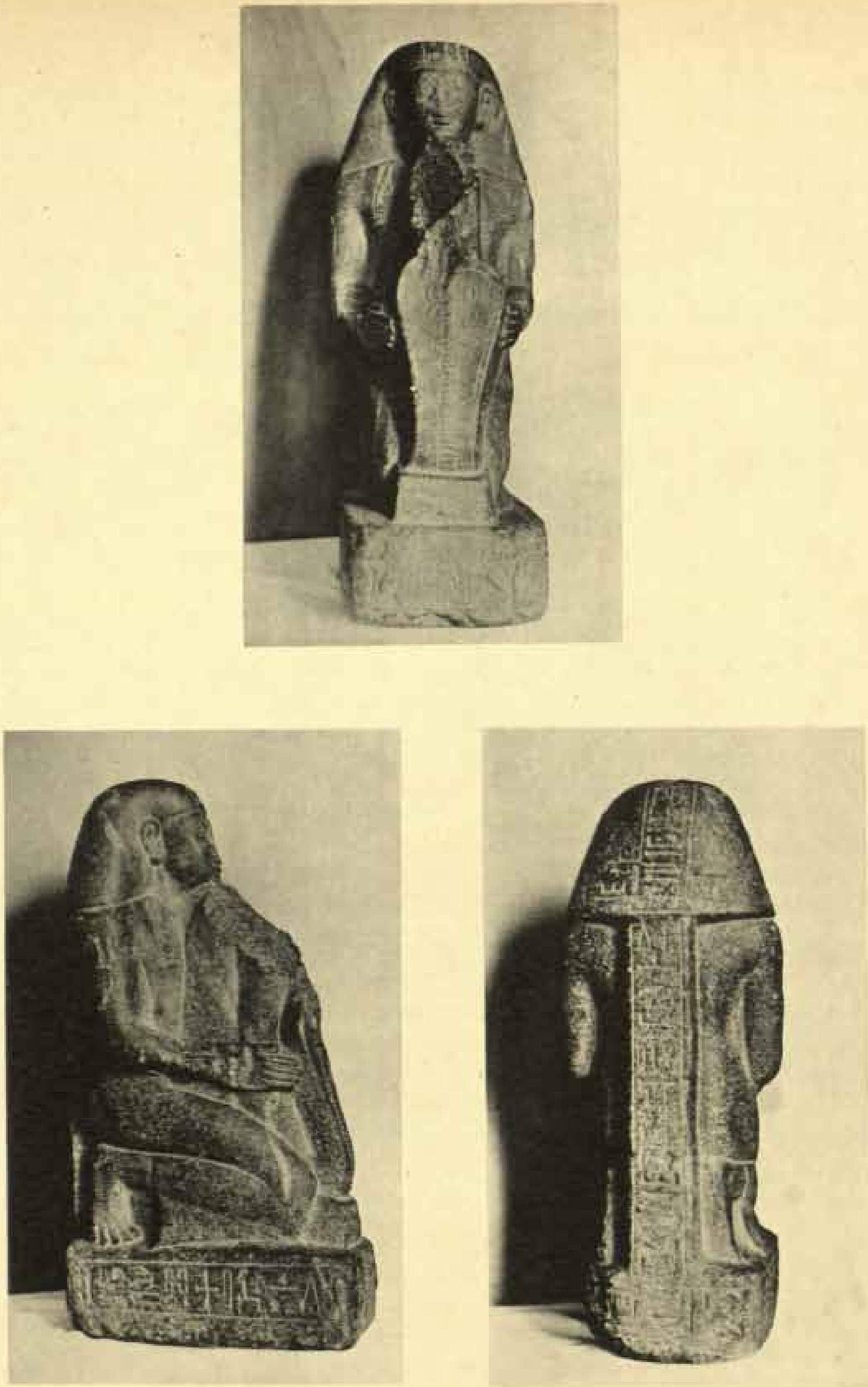
By R. O. FAULKNER

The small statue shown in Pl. xix was seen by Dr. A. H. Gardiner in the possession of Monsieur Tano, the well-known Cairene dealer in antiquities, who kindly supplied the photographs and granted permission to publish them. This permission Dr. Gardiner has generously surrendered to the present writer. The statue, which measures 17 inches in height, is cut in diorite, and is dated by the cartouche  of Amenophis II cut on both the right breast and the right arm of the figure. The cartouche, which is written vertically in both cases, is surmounted by the disk and plumes, while below it is, quite unexpectedly, a single bow. It is not quite clear how the latter is to be understood. It seems certain that it must refer to the military rank of the owner of the statue, but it is impossible to decide whether the bow stands for the collective *pḏt* "bowmen", "troop", in which case "*Troop of King Amenophis*" will be a name for the regiment in which the man served, or whether it is to be read *pḏty* "bowman", "trooper", in which case it will be an alternative title of the man himself, "*trooper of King Amenophis*". On the whole, the latter explanation seems the more probable.

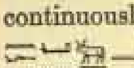
The *provenance* of the statue is not definitely known, but from the mention of Thoth and of "*Shepsy who dwells in Khemennu*" in the funerary formulae it seems probable that it was set up originally in Ashmunên. It represents the kneeling figure of a man holding before him a serpent which is shown by the inscription on the front of the base to represent the harvest-goddess Ernūtet. The general type, that of a kneeling worshipper holding either an image of his deity or a tablet bearing a hymn to the same, is common from the Eighteenth Dynasty onward, but statues of serpent-worshippers are rare, the only instances beside the present that I have been able to trace being a statue of a man with the serpent Nekhebet, in Bruyère, *Meret Seger*, 189, and another of a man holding a small naos containing a serpent in Borchardt, *Statuen und Statuetten*, III, Pl. 158 (Cairo 935).[1]

In addition to the above-mentioned cartouches of Amenophis II, the statue bears inscriptions around the base, down the plinth at the back, and on the head-dress. The front of the base, below the image of the serpent, is occupied by an inscription grouped thus, but in inverse direction:  and flanked on either side by the figure of a man in the attitude of worship ; it reads "*Adoration of Ernūtet by the standard-bearer of the Lord of the Two Lands, Nakht*". The word here rendered "standard" is not very clear on the original, the surface of the stone having been damaged at this point, so that might conceivably be read instead of , but the occurrence elsewhere of a fuller writing of what is obviously the same title indicates clearly how the present instance is to be understood. The rest of the base is occupied by an inscription which runs from right to left

[1] I owe this latter reference to Mr. H. W. Fairman.



STATUE OF A SERPENT-WORSHIPPER

continuously round the three sides: 
 "*A boon which the King and Shepsy who dwells in Khemennu grant of existence upon earth in the favour of the King, doing all that he commands, to the soul of the standard-bearer Nakht of the Bull in Nubia*". On the plinth at the back of the statue is a vertical line of hieroglyphs facing to the right:  "*A boon which the King grants* (*to*) *Thoth that he may give life stability and health to the soul of him who attended the King in every foreign land, Nakht*". On the back of the wig is an inscription facing right which consists of a vertical line down the middle and a horizontal line arranged symmetrically beneath it  "*The Captain of Nubians Nakht of the Bull in Nubia*". On the front of the wig, over the forehead, stands , which may perhaps be interpreted "*head-dress of* (*the royal*) *favour*", regarding the doubtful sign as a vague kind of ideogram for "wig" or the like. If this view be correct, the original head-dress of which we have here the representation in stone will have been a gift to Nakht from his royal master.

I have not been successful in making a certain identification of the owner of this statue with any other of his numerous namesakes, but he may possibly be the same person as the "*Captain of Nubians, Nakht*" who dedicated the British Museum Stela No. 300[1] to his brother Aḥmose. The expression "*of the Bull in Nubia*" which completes Nakht's titles of "*standard-bearer*", and "*Captain of Nubians*" might be regarded at first sight as referring to the King himself, but an investigation of numerous examples of the title *ṯꜣ sryt* shows clearly that it has nothing to do with attendance on the royal person, the amplifying phrase almost always having reference to either naval or military service.[2] The commonest form of the title is either "*standard-bearer of the ship X*"[3] or more fully "*standard-bearer of the sailors* (tꜣ ḫnyt) *of the ship X*";[4] on the military side we have standard-bearers of the "soldiery" (*iwꜥyt*),[5] of the "recruits" (*nfrw*),[6] and of specific "regiments" (𓋴).[7] From the absence of any ship-determinative and from Nakht's clearly military title "*Captain of Nubians*" it seems certain that "*the Bull in Nubia*" whose standard he bore was a regiment of soldiers rather than a ship; this view is confirmed by the cartouche-inscription discussed above, which, whatever may be its precise meaning, is certainly of military rather than naval significance.

A curious point in connexion with the dedications on this statue is that whereas the gods invoked in the funerary formulae are Thoth and Shepsy,[8] who are both especially connected with Hermopolis, the deity whom the man is represented as worshipping is the serpent-goddess Ernūtet, who appears not to have had any special local centre for her cult, and at any rate is not among the divinities traditionally associated with that city, although the

[1] *Hieroglyphic Texts from Egyptian Stelae, etc., in the British Museum*, v, Pl. 21.

[2] By way of exception, a *ṯꜣ sr(yt) n pr 'Imn* "standard-bearer of the temple of Amūn" occurs *Pap. Brit. Mus.* 10054, *rt.* 2, 14 = Peet, *Tomb-robberies*, Pl. 6.

[3] *E.g.*, Louvre C. 63; Spiegelberg, *Rechnungen*, 13, b. 22.

[4] *E.g.*, Turin, 100; Spiegelberg, *op. cit.*, 13, a. 3.

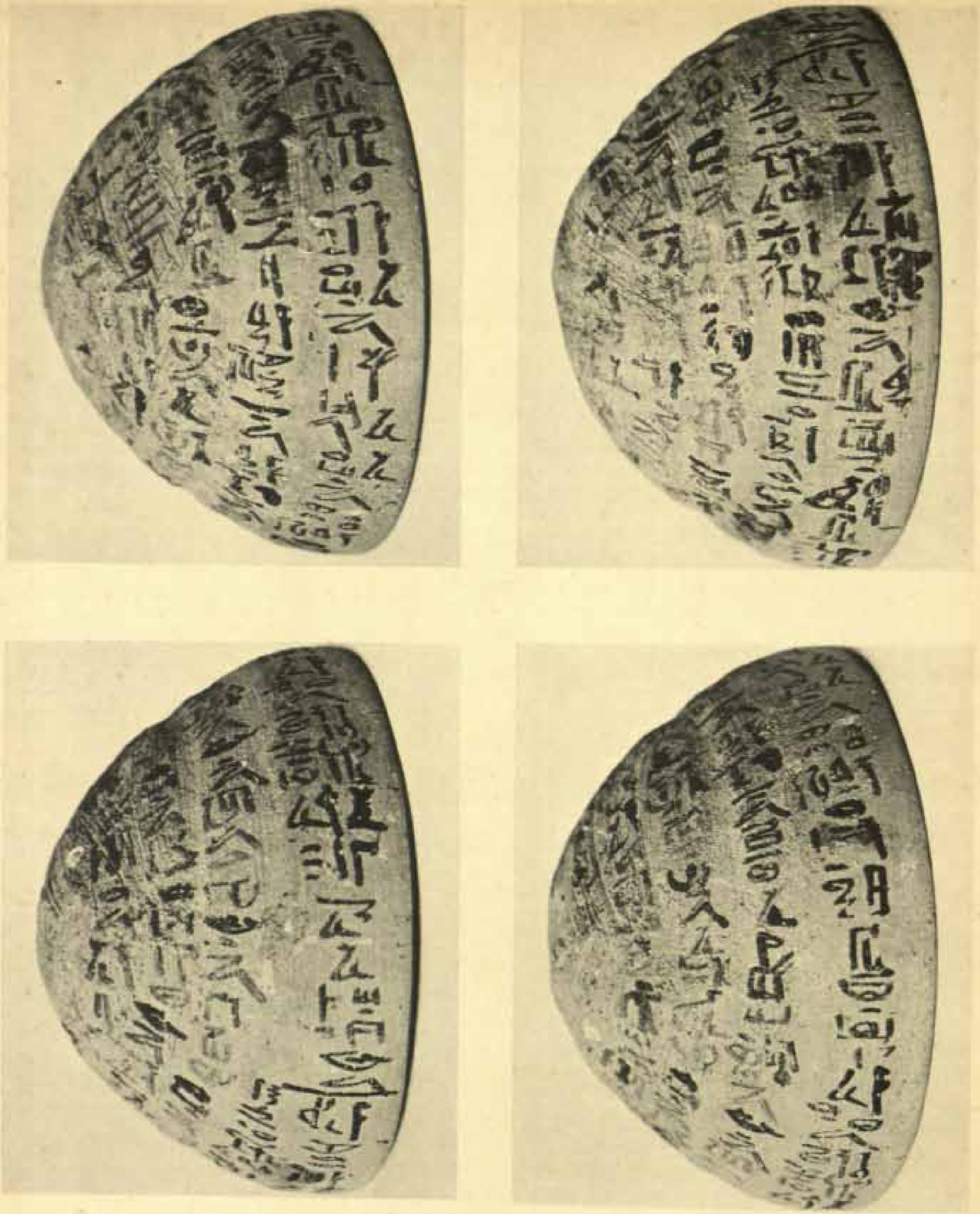
[5] *Pap. jud. Turin*, 2, 4; 6, 7.

[6] Spiegelberg, *op. cit.*, 9, III, 5.

[7] Turin, 166; *Rec. de Trav.*, IX, 45; Brit. Mus. 1210.

[8] On this divinity see Sethe, *Amun und die acht Urgötter von Hermopolis*, § 97.

mention of the specifically Hermopolitan god Shepsy leaves little doubt as to the *provenance* of the figure. One is tempted to conjecture that our "*Captain of Nubians*" may in later life have beaten his sword into a ploughshare and settled down as a farmer in the vicinity of Hermopolis, thus accounting for his special devotion to the goddess of the harvest as well as his formal supplications to the gods of his city.



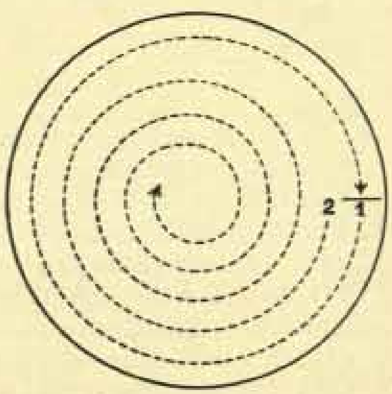
BOWL IN THE LOUVRE, E 6134

A LETTER TO THE DEAD ON A BOWL IN THE LOUVRE

By A. PIANKOFF AND J. J. CLÈRE

I. DESCRIPTION AND TRANSCRIPTION. (A. Piankoff)

The new Letter to the Dead which forms the subject of the present article is inscribed on a vessel of browny-red earthenware, like almost all other documents of this kind. It is in the possession of the Louvre Museum, where it bears the number E 6134, having been presented on the 1st of June 1869 by M. Fröhner, Conservateur des Antiques. It is not known how and where he acquired this bowl. The text has not been published hitherto. We have to thank M. Ch. Boreux for his kindness in permitting us to publish it. The bowl is briefly described by Th. Devéria in his *Catalogue des Manuscrits Égyptiens*, under vi, 3 (p. 165), and the author has even given a tentative translation of the first line [1–6].[1] This passage, however, conveyed no hint that the text was a Letter to the Dead.

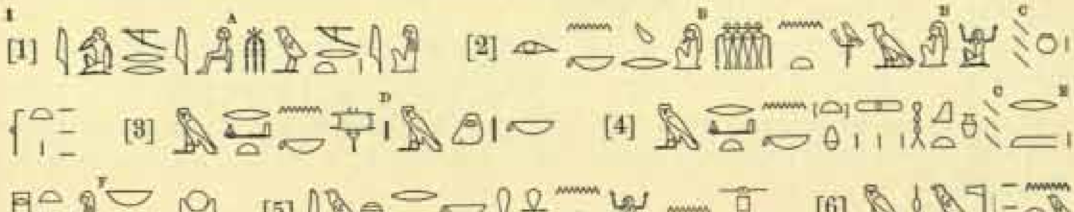


Like all other known examples belonging to the First Intermediate period—with but one exception[2]—the vessel is a bowl; it is nearly hemispherical in shape and measures 13·5 cm. in diameter, by a height of 7·5 cm. A coat of red paint covers the entire inside surface, and on the outside forms a margin of about 4 cm.; see the photographs in Pl. xx. The outside is almost completely occupied by a hieratic text written in black ink.

The inscription consists of a circular line (l. 1) running along the margin of the bowl, and continued in a spiral line (l. 2) of 3½ windings; see the accompanying figure. The writing is very careful, and there are few ligatures. These are throughout the text; in *Mrti* [1]; in *Wśir* [2]; in *ntw* [6]; in *mwt·k* [7]; in *ikr* [7. 8]; in *Mrr* [7]; in *ḥd·k* [13] and *ḫnt·k* [14]; in *rḫ·t(i)* [17]; in *dd·n·f* [17]; and in *ink* [18].

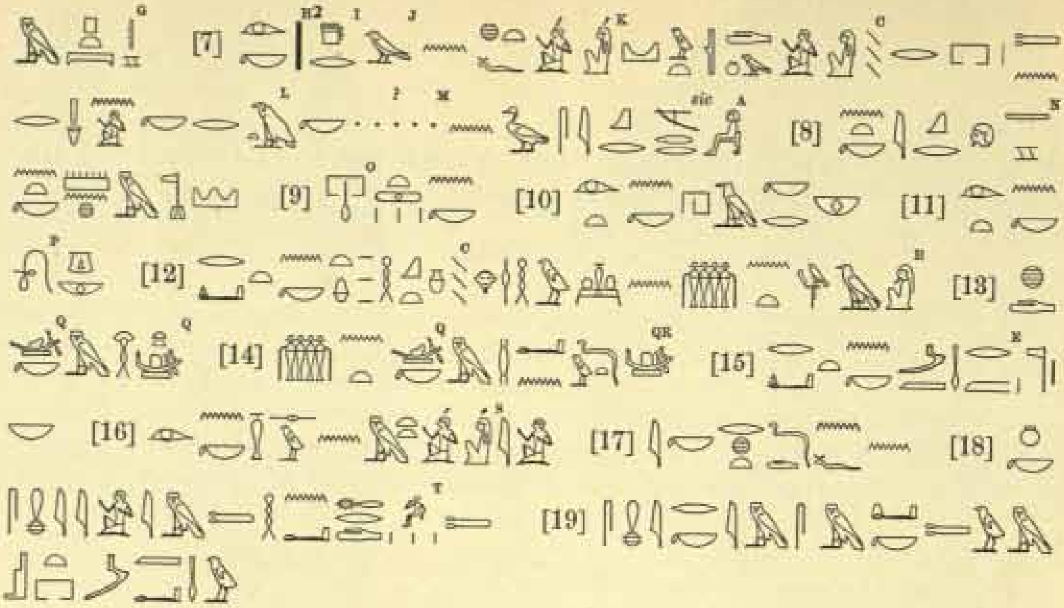
Some of the signs belong to the "halbhieratisch" type of writing—such are, for instance, [2. 12], *cf.* the identical sign in Steindorff, *Grabfunde des mittleren Reichs*, ii, Pl. vii, l. 1; Pl. xi, l. 11; Pl. xxi, and p. 34; [8], *cf. op. cit.*, Pls. xi, xx; Petrie, *Dendereh*, Pl. xxxvii a; and , the determinative of *wdḥw* [12], *cf.* Petrie, *op. cit.*, Pl. xxxvii a, l. 98 and xxxvii c, l. 407.

The writing belongs to the First Intermediate Period. The text (Pl. xxi) runs as follows:



[1] For convenience' sake the text has been divided into word-groups designated by numbers between square brackets.

[2] The Chicago letter written on a jar-stand; *cf.* Gardiner, *Journal*, xvi, 19 and Pl. x.



Notes on the reading

A [1. 7]. read by Gardiner. *Cf.* Möller, *Hieratische Paläographie*, I, 26.

B [2. 12]. For the determinative *cf.* Möller, *op. cit.*, I, 45 (Hatnub).

C [2. 4. 7. 12]. For oblique plural strokes in hieroglyphic *cf.* Louvre C. 3, 19, a stela of the Twelfth Dynasty, and *Bulletin de l'Inst. Franç. d'Arch. Or.*, XXI, p. 110, l. 6 of the text.

D [3]. The form of the sign for the sail is unique.

E [4. 15]. For the sign for *gś cf. Letters*,[1] II, 4; III, 3. It seems there is a blot, or perhaps a deleted sign, underneath; see facsimile.

F [4]. For the determinative of the name of Hathor *cf.* Möller, *op. cit.*, I, 61.

G [6]. The signs for *tꜣ* read by Gardiner; *cf.* Chassinat and Palanque, *Assiout*, p. 37 (), 120 (); *cf.* also and variants *op. cit.*, pp. 70, 108; also in Schack-Schackenburg, *Das Buch von den zwei Wegen*, p. 51 (chapter XVI, 10–18), l. 10. See below, p. 160, para. [6].

H [7]. Line of separation,[2] horizontal on the original. The scribe wrote the first line following the margin of the cup, and when he came to the end of it, made a transverse stroke to show that here ended the first line. The next line begins immediately to the left of this stroke.

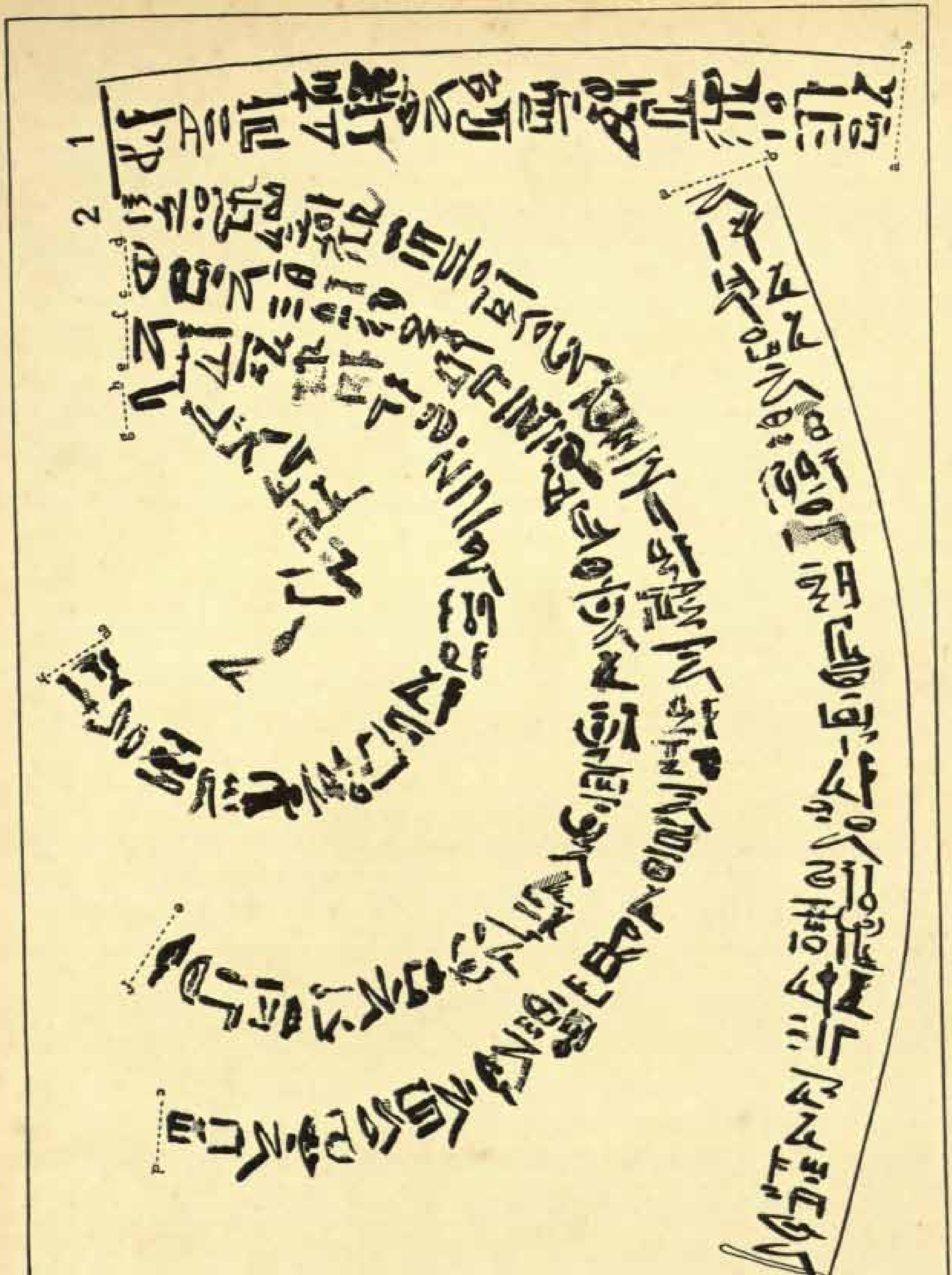
I [7]. For the form of the sign *ḏr* see Sethe, *Ächtung feindl. Fürsten*, Pl. 7.

J [7]. Palaeographically one could also read instead of , see below, p. 160, para. [7]. For *cf. Letters*, VI, 11.

K [7]. The determinatives of *ḫft* are differentiated from the ordinary by a tick indicating that they are hostile beings. This procedure is common for (*cf.* Möller, *op. cit.*, I, 34, and in hieroglyphic Louvre C. 1, 14, in); for the woman *cf.* Möller, *op. cit.*, I, 61. Our text differentiates between a hostile female indicated by a tick and a simple woman-determinative.

[1] *Letters* is used as an abbreviation for Gardiner and Sethe, *Letters to the Dead*.

[2] In the facsimile this line has been indicated twice, once in full black, and the second time simply outlined, to indicate its position relatively to both the beginning and the end of line 1.



BOWL IN THE LOUVRE, E 6134

L [7]. For the sign for *mwt cf. Letters*, III, 1.

M [7]. A smudged and corrected group, constituting the greatest difficulty which the text presents. I cannot transcribe it.

N [8]. *Tp tȝ* read by Gardiner.

O [9]. For the sign cf. *Letters*, V, 1.

P [11]. For the sign for *wȝ* in *wȝg cf.* the form from Elephantine (Möller, *op. cit.*, I, 524).

Q [13. 14]. For the signs of the bark *cf.* Möller, *op. cit.*, I, 374 (Hatnub).

R [14]. For the writing of *mʿndwt cf.* Steindorff, *Grabfunde*, II, Pl. viii, 6.

S [16]. For these determinatives *cf.* para. K[7] above.

T [18]. The reading of the signs is due to J. J. Clère. Gardiner recognizes in the determinative a "very badly made ".

II. TRANSLATION AND COMMENTARY. (J. J. CLÈRE)

[1] *O*[a] *Mereri,*[b] *born of*[c] *Merti!*[d]

[2] *Osiris-Khentamente*[e] *makes for thee millions of years*[f] [3] *by giving thee breath into thy nose,* [4] *by giving thee bread and beer at the side of Hathor, the Lady of the horizon.* [5] *Thy condition is like (that of one) who lives a million times*[g] [6] *by order of the gods who are*[h] *in heaven and on earth*[i].

[7] *Thou makest obstacle*[j] *to the enemies, male and female, of evil intent*[k] *against your*[l] *house, against thy brother, and against thy mother who . . .*[m] *for her excellent son Merer*(*i*). [8] (*As*) *thou wast excellent on earth, thou art beneficial in the necropolis*[n]. [9] *One makes for thee invocation-offerings;*[o] [10] *one celebrates for thee the* hȝkr-*festival;* [11] *one celebrates for thee the* wȝg-*festival;*[p] [12] *one gives thee bread and beer from the altar of Khentamente;*[q] [13] *thou sailest downstream in the* mśktt-*bark;* [14] *thou sailest upstream in the* mʿndwt-*bark;*[r] [15] *one gives thee justification near every god.*[s]

[16] *Be in thy own interest the most favourable one from among my dead, male and female!*[t] [17] *Thou knowest,*[u] *he said to me:*[v] [18] "*I will report*[w] *against thee and against thy children.*" [19] *Report thou against it!*[x] *lo, thou art in the place of justification.*[y]

Commentary

[a][1] The vocative +addressee's name occurs elsewhere in the Letters to the Dead only in a postscript on the Cairo linen (I, 13). See further Chicago jar-stand, l. 8*a*—again a postscript—where the writer began to address the deceased in this way, but wrote only the signs and then deleted them, being deterred by lack of space (*cf. Journal*, XVI, 20, 22). For +addressee's name in the text (not in the address) of ordinary letters, *cf. Urk.*, I (2nd edit.), 63, 10; 180, 2.

[b][1] For the name *Mrri cf.* Ranke, *Aegypt. Personennamen*, 162, 22. In [7] the same name appears under the form without final *i* (*cf. ibid.*, 162, 17).

[c][1] For *mśw* instead of the usual — to indicate the mother's name *cf.* (without *n*) common throughout the Eleventh Dynasty (Polotzky, *Zu den Inschr. der 11. Dyn.*, § 71). For the ending *-w cf. Wb. d. aeg. Spr.*, II, 137, 11.

[d][1]. The feminine name *Mrti* is not to be found elsewhere written in this way, but see *Mrti*, Ranke, *op. cit.*, 159, 20; the stroke | is meaningless.

[e][2]. The writing with for the name of Osiris is common in the Coffin Texts (see Gardiner, *Eg. Gramm.*, Sign-list, F 51), and does not occur before the M.K. (see *Ä.Z.*, xlvi, 94 and *Wb. d. aeg. Spr.*, I, 359).

[f][2]. Note the double sense of *irt*+*rnpwt*: (1) as in our text, with dative, "to make years (of life) for some one" (generally *rdi* "give" is used in this sense); (2) without

dative, "to pass (live) years", *e.g.* N. "this N. has passed millions of years", Lacau, *Sarcophages antér. au nouvel empire*, I, 221 (Cairo 28085), *cf.* also *Sin.* B 92, 100.

g[5]. The cliché *iw ḫrt·k mi ʿnḫ ḥḥ n zp* is met with word for word on the Cairo linen (*Letters*, I) of the Sixth Dynasty, and in five simple letters of the Eleventh; *cf. Letters*, I, 1, n. (p. 13). The following words, *m wḏ nṯrw*, etc., are met with after *iw ḫrt·k*, etc., only in the Louvre letter. According to Gardiner and Sethe (p. 13) *ḥḥ n zp* would be a reader's direction, "a million times (be it said)", *i.e.* "to be repeated a million times", and the authors have given evidence for the use of the words in this sense—one might add *Urk.*, I, 180, 2. But there are equally good reasons for considering *ḥḥ n zp* as a qualification of *ʿnḫ*, namely (*a*) that without such an addition the sense of *ʿnḫ* is very poor, as already remarked by Gardiner and Sethe themselves, and (*b*) that where *ḥḥ n zp* is missing in the cliché in question, there is always another addition which obviously qualifies *ʿnḫ*: "one who lives before old age", *Westcar*, 7, 17; "one who lives eternally", Lefébure, *Séti I*er, IV, Pl. XVII, under the cow (*cf.* Pl. XVI, 50)=Erman, *Die Märchen des Pap. Westcar*, I, p. 46. Besides, as we can infer from the following passage: "as lives one who lives by order of the gods, so livest thou", *Pyr.*, § 821*a*, the words "by order of the gods who are in heaven and on earth" of the Louvre letter must depend on "one who lives" and not on "thy condition is". Again, it seems to me unlikely that a reader's direction[1] would thus appear between *ʿnḫ* and an adverbial adjunct, and I think we must therefore understand "one who lives a million times (*i.e.* eternally) by order of the gods, etc." Note further that in the formulae of greeting in one of the still unpublished Ḥeḳanakht letters (Eleventh Dynasty) near the passage "May thy condition be like that of one who *lives a million times!*" stands "May the God Ptah south of his Memphite Wall, gladden thy heart as one who *lives long!*"[2]

h[6]. For =*ntyw* during the early M.K. *cf.* Cairo 20005, 5 (Tenth to Eleventh Dynasties); see Sethe, *Ächtung feindl. Fürsten*, pp. 16–18.

i[6]. Read: *nṯrw ntw m* (1) *pt* (2) *tꜣ*. At least the word *m*, but perhaps also *ntw* (if not more), must be read twice—once with *pt*, and the second time with *tꜣ*. See above, p. 158, para. G[6].

j[7]. For *irt ḏr* Gardiner suggests "make an end", "set a term". For *ḏr* with the determinative *cf.* the word *ḏri*, *Wb. d. aeg. Spr.*, v, 600, 1; it is probably only a writing of the word , *ḏr*, *ḏrw*, "end", "limit" (*op. cit.*, v, 585 ff.) in the sense of "obstacle", "obstruction" (*cf.* the verb *ḏr*, "fernhalten", *op. cit.*, v, 595). As Piankoff points out to me, this *ḏr* is met with in the Coffin Texts parallel to *ḫšf*, which has nearly the same sense: "there is no obstacle for my face, there is no obstruction for my arms", Chassinat and Palanque, *Assiout*, p. 64. As we have seen, p. 158, para. J[7], the reading *ḏr nn*, instead of *ḏr n*, is also possible, in which case the sense would be "thou makest obstacle (*or* an end), there being no enemy, etc." The first interpretation appears to me the better of the two, but remains rather doubtful.

k[7]. Read: *ir·k ḏr n* (1) *ḫfty ḏw-ḳd*, (2) (*ḫft*)⟨*t*⟩ (*ḏw*)*t*(-*ḳd*), *r pr·tn*, etc. In such an expression

[1] Indeed I do not know any case where *ḥḥ n zp* is really a reader's direction (like *zp* 2 "*bis*"), for in the text given by Gardiner and Sethe (=*Ḥeḳanakht*, 1, 32) and in *Urk.*, I, 180, 2 this expression is not used parenthetically but forms a part of the spoken words, as in French "*Je vous remercie mille fois*".

[2] *Ḥeḳanakht*, 3. The translation (the italics are mine) is that given in *The Egyptian Expedition* (*The Metropolitan Museum of Art*), 1921–2, p. 44, by Gunn and Winlock. I have not seen the text, and I do not know what Egyptian word or words is used for "long". In *Journal*, XVI, 150, Gunn translates "Your state is like one who lives! a million times!" which makes no sense.

one would expect either the plural or else a *nb* "every" following it. Probably the plural strokes ⫶ which determine the entire expression indicate that it was thought as a plural. It would be therefore, perhaps, better to transcribe *ḫft(yw) ḏw(w)-ḳd*, etc., and I have translated in this way. See further below p. 162, para. T[16].

L[7]. The suffix *·tn* in *pr·tn* "your house" is embarrassing. The letter being addressed to one person, the son of the sender (*cf.* below, p. 164), one would expect *pr·k* "thy house".[1] I think one should understand "the house of you two", *i.e.* "thine and his", the second person to whom the pronoun *·tn* refers being the brother[2] of Mereri mentioned in [7] by the word *sn·k* "thy brother" immediately after *pr·tn*. The difficulty is that this pronoun would refer to a person not yet named, but in a letter such a thing is not impossible. The result would be the following: Mereri, the eldest son of Merti, the woman who sent the letter, became head of the family after his father's death; when Mereri himself died his next brother stepped into his place and became the proprietor of the house. It is quite possible that the letter was written in the presence of Mereri's brother, so that Merti, who probably did not write it herself but dictated it to a scribe, found herself on the horns of a dilemma. Was she to write *pr·k* "thy house" (*i.e.* Mereri's) and risk angering the present proprietor of the same, or was she to write *pr·f* "his house" (*i.e.* Mereri's brother's) and to anger Mereri—for an Egyptian was used to be regarded as the proprietor of his house even after his death—which she would, of course, try to avoid at all costs? She chose therefore *pr·tn* "your house" (*i.e.* thine and thy brother's), an expression which certainly risked offending the persons concerned, but had at the same time a chance of satisfying both of them.

m[7]. Here an illegible word (adj. or partic.+dative) as an epithet to *mwt·k*—"thy mother who is (was) . . . for her son" or "thy mother who does (did) . . . for her son". See above p. 159, para. M[7]. Note the use of nouns instead of pronouns (and therefore of the 3rd pers. instead of 1st and 2nd) for specifying the relationship of sender and addressee. The sense is "I who . . . for thee", see below, p. 164.

n[8]. Lit. "thou (wast) an-excellent-one on earth; thou (art) a-beneficial-one in the necropolis". See *ntk ꜣḫ iḳr* "thou art an excellent spirit" used in the same way for propitiating the deceased (see below, p. 167) on the Chicago jar-stand, l. 4=*Journal*, XVI, 19, 20.

o[9]. Lit. "invocation-offerings are for thee" (*prt-ḫrw n·k*), but we should perhaps rather read *pr·t(w) n·k ḫrw* "one makes for thee invocation-offerings" (with ⌓ for *·t(w)* as in the following parallel formulae [10. 11. 12. 15]); *cf.* J. J. Clère, *Le fonctionnement grammatical de l'expression pri ḫrw*, Ex. 15, in *Mémoires Instit. franç. au Caire*, t. LXVI (*Mélanges Maspero*).

p[10, 11]. The expression *irt hꜣkr*+dative is met with in the biographies of the M.K. stelae from Abydos, and in some other texts, generally in the phrase  "I celebrated the *hꜣkr*-festival for its lord (*i.e.* Osiris)" Cairo 20539, II, 7 (var. or sim., M.K.: Cairo 20538, II, 4; N.K.: Sharpe, *Egypt. Inscrip.*, I, 105, 25; Naville, *Todtb.*, ch. 146, 36; etc.). The parallel expression with *wꜣg(y)* does not occur elsewhere. In our text we can also

[1] See *pr·k* "thy house" said by a widow and her son to the dead husband and father, *Letters*, I, 5, 7, 12, and by a widow to her dead husband, *Letters*, VI, 6, 8, 11. As our letter emanates from a woman we cannot expect *pr·i* "my house", for after the death of an Egyptian his eldest son, not his wife, inherited the house; early M.K. instances in Polotsky, *Journal*, XVI, 198. With *pr·k* just mentioned, said by widows in writing to their dead husband, contrast *pr(·i ?)* "my(?) house" said by a *widower* writing to his dead wife, *Letters*, V, 1, but perhaps *pr* "*the* house" must be read (so Gardiner-Sethe and Gunn, *Journal*, XVI, 152), at all events not "thy (fem.) house". The passage is not clear.

[2] One might also think that this person was Mereri's father, *i.e.* the sender's husband who was also deceased (otherwise Mereri would not have been regarded as proprietor), but the lack of any mention of him makes this explanation less probable.

translate "one says (*ỉr*) to (*or* for) thee *hꜣkr/wꜣg(y)*", for both terms were at the beginning parts of festival songs. *Hꜣkr* is not to be found before M.K.

[12]. Formulae of this type, *i.e.* where the deceased is described as taking, or being granted, offerings coming from the altar of some god, are very common; see (*e.g.*) British Museum 168 [575] (*šsp ꜥꜣbt šnṯr ḥtpw-nṯr ḥr wḏḥw n nb nṯrw*); "Rom 3"[1] (*šsp t ḥnḳt rꜥ-nb, prrt ḥr ḥtp-ꜥꜣ*); *Rec. de trav.*, III, 123 (*rdi·tw n·ỉ prt-ḫrw ḥr ḫꜣwt nt Wnn-nfr*). Note in our text the writing of *wḏḥw* with *wḏ*, which according to *Wb. d. aeg. Spr.*, I, 393 occurs only from the M.K. on; the O.K. has *wḏḥw* with .

[13–14]. *Cf.* the formula of the Abydos stelae of the Twelfth Dynasty "that he might sail (lit. direct the *ḥpwt*) in the *mśktt*-bark, that he might sail in the *mꜥnḏt*-bark", Berlin, 1192; varr. British Museum, 150 [567], Louvre C. 3; varr. Eleventh Dynasty from Thebes: Moscow, 4071; *Ann. Serv.*, VIII, 246. See also Lacau, *Textes religieux*, ch. 85, 57–64 (in *Rec. de trav.*, XXXII, 81—Twelfth Dynasty) (so text C; D:), where contrary to our text it is the *mśktt*-bark which is associated with the verb *ḫnti*, and the *mꜥnḏt*-bark with the verb *ḫdi*. This proves that from the M.K. onwards the Egyptians were not clear on this point, *cf.* Sethe, *Altäg. Vorstellungen vom Lauf der Sonne* in *Sitz. preuss. Akad. der Wissensch., phil.-hist. Klasse*, XXII (1928), 25–6. For the form *mꜥnḏwt* with the ending *-wt* of our text, *cf.* Moscow 4071, 9 (Eleventh Dynasty) and British Museum 150 [567], 8 (Twelfth Dynasty); *cf.* also the forms ending in *-yt*, *Wb. d. aeg. Spr.*, II, 48—exx. Louvre C. 3, 12; Mariette, *Catal. d'Abydos*, no. 602; Firth and Gunn, *Teti Pyr. Cemeteries*, I, 248; *Ann. Serv.*, XI, 37; *Rec. de trav.*, XIV, 165; Sethe, *op. cit.*, p. 8.

[15]. *Cf.* "(Osiris) to whom justification was given before the entire Ennead", Louvre C. 30, I, 8–9; varr. in Selim Hassan, *Hymnes religieux du M.E.*, p. 31. See also *Wb. d. aeg. Spr.*, II, 16, 2. For *r-gś* see *op. cit.*, V, 195, 9.

[16]. The last signs are to be read *mwt·ỉ* (*mwt*)*t*(*·ỉ*). About this phrase Gardiner remarks: "Is imperative + *n·k*, or *sḏm·n·f*-form? And again is active or passive participle? This yields four possibilities of translation: (1) 'Make for thyself (*i.e.* be) one favourable to my dead, male or female'; (2) 'Thou hast been (lit. made) one favourable to, etc.'; (3) 'Be one favoured by, etc.'; (4) 'Thou hast been one favoured by, etc.' I cannot choose with certainty between these, but my preference is for (1)." To myself also it seems better to consider *ỉr* as an imperative and *ḥzw* as an active participle, but I think we must explain the which follows *ḥzw* in a different way from that given by Gardiner. I believe it to be the *ny* of the indirect genitive used in the sense of the relative superlative (Gardiner, *Eg. Gramm.*, § 97). This yields: "the most favourable of my dead". The fact that $=$ *mwt/mwtt* is singular in form does not speak against this view, the sense being that of a plural, *cf.* above p. 160, para. [7]. If one translates "favourable to my dead" (or "favoured by my dead"), I do not see how to explain the presence of this sentence. On the other hand, "Be in thy own interest (*n·k.* as an 'ethic dative') the most favourable one from among my dead" is easily intelligible. Merti is about to ask her son to render her a service, and excites his self-love by asking him to be more favourable, more obliging than any other of her dead to whom she could apply. Besides, as this exhortation follows the sentences in which Merti describes the happy situation of Mereri, it is a way of telling him: "thou thyself hast every thing thou desirest, thou art not going therefore to refuse a service, otherwise there will be no excuse for thee". The same general interpretation, but with *ḥzw* as a passive, seems to me not so good; the sense would be the following: "it only depends upon thee to be the most favoured

[1] Published in H. W. Müller, *Die Totendenksteine des m. R.* in *Mitteilung. des deutsch. Institut für ägypt. Altertumskunde in Kairo*, IV (1933), p. 187.

among my dead (*i.e.* the one whom I shall favour the most), thou art only to render the service which I ask from thee".

[u][17]. *iw-k rḫ-ti.* The expression of the Louvre letter is met with in the same spelling on the Cairo linen, l. 10 (*Letters*, I, belonging to the Sixth Dynasty or a little later) and on the Chicago jar-stand, ll. 1, 6, *Journal*, XVI, 19, Sixth to Eleventh Dynasties. For instead of before a suffix, *cf. Letters*, I, 7, n. (p. 15), I, 10, n. (p. 16), and *Wb. d. aeg. Spr.*, I, 42. This rare writing, which is obviously to be explained by the fact that from this time on the *w* in *iw* was not pronounced any longer when preceding a suffix (*cf.* Coptic ⲉⲣ-, ⲉⲥ-), is met with during the M.K. in certain proper names, *e.g.* var. *iw-f-ꜥnḫ(w)* "he lives", Ranke, *Aegypt. Personennamen*, 14, 5 (sim. *ibid.*, 14, 9. 10. 11. 23), var. *iw-ś-n-i* "she is for me", *ibid.*, 15, 4 (sim. *ibid.*, 15, 2. 5). Note that in the Louvre letter the sentence depending upon *rḫ* immediately follows this verb, while in the Chicago letter (l. 1) the same is introduced by *ntt* in a passage exactly parallel to ours: *N.* "thou knowest that N. said in reference to his son".

[v][17]. Here the suffix *-i* does not appear in writing, while it does so in [16] (*mwt/mwtt-i*) and in [18] (*ink śmi-i*). *Cf.* Gardiner, *Journal*, XVI, 21.

[w][18]. *Śmi* "report" has here and in [19] the sense "make a report before a tribunal", "lodge a complaint"; *cf. Wb. d. aeg. Spr.*, IV, 128, 2 "eine Klage einreichen" (ex. Mes, N 7; *cf.* Gardiner, *The Inscr. of Mes* (*Untersuch.* IV), p. 14). I first thought that the preposition *m* which follows this verb (also in [19]) gave it *explicitly* the sense of "report *unfavourably* about", "report *against*" (*cf. m* in *mdw m* "speak against", Gardiner, *Eg. Gramm.*, § 162, 9), but this interpretation would need further proofs, and unfortunately no other M.K. examples of *śmi*+*m* are known. Later *śmi*+*m* is used with the same sense as *śmi*+*ḥr* (*e.g.* to make a report to [*śmi n*] the King about [*m*] all the victorious attacks of his army, and about [*m*] all the victories of His Majesty, *Piankhi* 23=*Urk.*, III, 13), and *śmi*+*r* is found for the sense of "report against", Naville, *Todtb.*, II, 317=ch. 125 Schlussrede, 12, *Aa.*[1]

[x][19]. The suffix *-ś* in *im-ś* is ambiguous; is it the feminine "her" or the neuter "it"? In the first case the sense would be "report thou against her", and the suffix would point to an unknown woman related to the accuser or to a parent of his. One could thus think that Merti asks her son to avenge her by accusing the mother of the accuser, just as this last would accuse the addressee's mother. But certainly the aim of this letter was the same as that of the other Letters to the Dead, namely not to secure vengeance, but to secure acquittal. Therefore the second interpretation "report thou against it", *i.e.* against the accuser's deposition, seems to me far better.

[y][19]. The exact sense of *śt mꜣꜥ-ḫrw* is not clear. *Mꜣꜥ-ḫrw* may mean either "justified" or "justification"; this last sense occurs in the expression "place (*śt*) of justification", which designates the tomb (*Wb. d. aeg. Spr.*, II, 16, 5). The phrase of our letter might thus mean nothing but "thou art in the netherworld". But obviously the writer used the last sentence of her missive as a final argument to induce her son to help her. I think therefore that here *śt mꜣꜥ-ḫrw* is more likely a term for "divine tribunal" or "place where the divine tribunal is". Thus Merti would say to her son that he can lodge a complaint very easily and without much trouble, being himself in the place where the divine tribunal is. *Mk tw* is perhaps to be translated "now that thou art" or "since thou art".

Those who have studied the Letters to the Dead hitherto known may, at the first reading of my translation, ask themselves whether the text of the Louvre bowl is a real

[1] The references in para. [w][18] were kindly given by H. Grapow.

"Letter to the Dead" or not. At first sight, indeed, the invocation at the beginning, the grant of offerings by the funereal deities, the final phrase mentioning the "place of justification", and especially the numerous funereal formulae—all these give the impression that the whole is a mere series of wishes for a happy *post-mortem* existence, like those found on the funereal stelae. But such doubts disappear when the text is studied more closely. In my view the following facts prove that the document is indeed a "Letter to the Dead". (1) At least one of the initial formulae [5] is epistolary in form; this proves that *the document was conceived as a letter.* (2) The name of the person to whom the letter is addressed is determined by the sign 𓀻 [1. 7] which, according to Gardiner, Sethe, and Gunn,[1] indicates that the person in question was dead. Moreover the same person is referred to as being in the "place of justification" [19], *i.e.* in the region or in the tribunal of the dead; this proves that *the addressee was a dead person.* (3) The sentence "report thou against it!" [19] indicates that the Louvre letter was not written merely to remain in communication with a deceased parent, but had a practical purpose as well; thus *the letter was intended to ask for help,* like all other Letters to the Dead, *cf. Letters*, p. 10.

The nature of the document being proved, we now intend to study that part of the text which is the most important in all Letters to the Dead, namely the passage dealing with the business that had inspired the writer. In our document it is contained in the last sentences of the letter. These sentences are very short and, though perfectly clear, unfortunately contain very little information—a natural consequence of their brevity. As in other documents of the same kind, our text describes neither the facts nor the *dramatis personae*, merely alluding to them and taking for granted that they are known to the addressee.

A few words must be said about the identity of the persons who appear in the text. The addressee is clearly indicated in the opening formula as being a certain Mereri, and the text shows that this Mereri was a man, the pronouns *·k*, *ntk*, etc., being used. The writer of the letter is not explicitly indicated, but is evidently the person referred to by the pronouns of the 1st pers. sing. in the text (*·i* in [16. 17]); with the exception, of course, of the pronouns *ink*, *·i* of the passage [18] which reproduces in *oratio recta* certain words spoken *to* the writer. From this passage in which the writer is indicated by a pronoun of the 2nd pers. we infer that the writer was a woman. Now the writer surely did not omit herself from the enumeration of the surviving members of the family that the deceased was protecting [7], and the only term which can suit the writer's sex is *mwt·k* "thy mother". Besides, the whole trend of the letter makes it almost certain that the entire passage "thy mother who . . . for her excellent son Mereri" must be understood as "I, thy mother, who . . . for thee, my excellent son Mereri". Thus the sender is the addressee's own mother, whose name Merti is given in the opening words of the letter: "O Mereri, born of Merti". We have thus a situation not met with in the other letters to the dead: a mother appealing for help to her deceased son. As I have remarked already (above p. 161, para. 1[7]), Mereri is likely to have been the eldest son, who was the head of the family after his father's death. Merti had a fresher memory of him than of her dead husband. The latter might have died long ago, and this was probably the reason why she preferred to write to her son.[2]

[1] *Cf. Letters*, p. 3 (§ 1) and Gunn, *Journal*, XVI, 150.

[2] I do not think the fact that Merti failed to write to her husband was simply due to him not being acquainted with the threats, for he was already dead when the accuser uttered it. It is well known that the Egyptians believed the dead could come back to earth and see and hear what happened there. I even think that the words "thou knowest that" of the letters to the dead are to be understood as indicating that the person to whom they are said was already dead when the fact to which they refer took place—they would thus mean "indeed thou (though dead) must not ignore that, etc."

Another person who plays an important part is evidently the accuser. It is against him that Merti asks her son to intervene. But unfortunately our text gives no information about him. It indicates only that he was a man (*·f* in [17]). We know neither his name nor whether he was a parent of Merti. He is simply mentioned in [17] as having said threatening words reported in [18]. Other people of lesser importance are the brother of Mereri mentioned in [7] as "thy brother" (*śn·k*) and whose name remains unknown to us (*cf.* p. 161, para. [1][7]), and the children of Merti referred to as "thy children" (*ḫrdw·ṭ*) in the reported words of the accuser [18]. Whether these words "thy children" denote merely Mereri and his brother mentioned in [7], or whether they refer to these two and to some other children of Merti, or whether they allude to Mereri's brother and to some other children of Merti, leaving Mereri out as being dead, our text does not enable us to decide. Lastly, for completeness' sake, one must mention the sentence "my dead (men and women)" in [16], words which denote in a general way the deceased parents of Merti.

One question may now be asked: What exactly do the words of the accuser mean? As we have seen already (p. 163, para. [w][18]) the verb *śmi* is clear, having certainly here the sense "to lodge a complaint". But what needs to be elucidated is the nature of the court to which the accuser intended to appeal. In the Egyptian view, the dead could indeed bias the opinion of a living person and force him to act against his will. Therefore a living person could write to a dead one in order to ask him to prevent another living person from lodging a complaint before a human tribunal. In the present case, however, the terms of the text are against such an interpretation; Merti does not ask her son to oppose the project of the accuser, but simply to lodge a complaint in his turn. Moreover, the last sentence of the text, "lo, thou art in the place of justification", does not leave any possible doubt about this point; it was before a *divine* court that Merti asked her son to intercede and to lodge a complaint. Now since it seems improbable that the Egyptians should think that the action of a dead person before a divine court could have any influence on the acts of a human court, one is forced to the conclusion that the whole affair was to be judged before one and the same court, namely the tribunal of the dead. This conclusion is in accordance with what may be deduced from the study of other Letters to the Dead; as Gardiner and Sethe have said, "where one of the parties was no longer alive . . . the mere fact of death made no difference with regard to the possibility of such litigious relations. The only difference it made was that the judges had likewise to belong to the region of the dead" (*Letters*, p. 12). But this is no reason for thinking that the attack against Merti was made by a person already deceased, and consequently that the menacing words which she mentions were not really said, but were imagined by her as having been said by the accuser. Here again the terms of the text leave no possible doubt; the accuser had really, *while still alive*, threatened to lodge a complaint against her *at a divine court*. This would not seem strange to an Egyptian. Many similar facts are given by the texts referring to the preservation of the funereal property, these being so well known that there is no need to specify them. But in the case of the Louvre letter there appear two possibilities: either (*a*) the accuser had the intention of lodging a complaint before a divine court just at the moment of his death, when he himself would be "in the place of justification"; or else (*b*)—our acquaintance with the Letters to the Dead makes this second explanation possible—the accuser, while saying that he was going to lodge a complaint, had only the intention of writing at the first possible occasion to a dead parent or friend in order to ask the latter to represent him before the divine tribunal. In any case, such an action which involved Merti and her children might bring the divine wrath on her and on her family. This is why she was afraid, and asked her son to appear as witness for her before the divine court and to clear her of the charge. The case of a living person appealing to a dead relative to defend him before the divine tribunal is not unique; the same situation is met with in other Letters to the Dead. Such a legal action was favourably looked upon by the Egyptians, who had a great respect for order and law, even when dealing with a spirit (*cf. Letters*, pp. 2, 11).

In the Louvre letter, though the attack was originally intended by a living adversary, it was finally against some dead person that help was asked by the writer. Thus our letter does not differ from the other Letters to the Dead, which are characterized by the fact that they "seem to throw the blame on some dead person" (*Letters*, p. 3, § 1).

The letter of the Louvre reveals, however, a state of things rather different from that of the other documents. It is not an appeal for immediate help against some real evil from which a living person is suffering and which was believed to have been effected by some dead person; it is merely a preventive measure intended either to combat the effects of a complaint to be made when the adversary in question should be dead, or at least to obtain protection against a legal action to be instigated by some dead person at the request of the living. Be this as it may, it is clear that the sender had not suffered any evil at the moment when she wrote the letter. This novel situation is reflected in the form given to the text. The Louvre letter, almost entirely composed of formulae of greeting and of phrases borrowed from funereal texts, appears even less personal than other Letters to the Dead, conventional in expression though these are. The present text lacks that "tinge of bitterness" alluded to by Gardiner and Sethe (*Letters*, p. 2), the appeal for help consisting in a few short sentences, or indeed a few words, written in a very calm style. We find here none of those repeated and almost despairing appeals met with in other documents, nor do we meet with sentences intended to soften the reader by reminding him of the good terms on which the writer was with him, or by the description of the distressed state in which the letter was written. It is only a reminder of the facts followed by a request, the whole written in the shortest and driest style possible.

The main question one would like to ask about the passage of the Louvre letter just discussed is: What incident induced the accuser to make his threat? This question is unfortunately unanswerable owing to a complete lack of indications. One thing can be asserted, however: his case was one that could not be decided by human justice, otherwise he would have appealed to this.

Let us study now the external form of the Louvre text. Although a superficial reading might induce us to think that this document differs from other documents of the same kind, it will be found on closer examination to present precisely the same constitutive elements. A Letter to the Dead is composed theoretically of five sections, of which the last three are the most important and constitute the main part of the letter: (*a*) address; (*b*) formulae of greeting; (*c*) sentences or formulae, these differing in different cases, destined to compel the deceased to perform the required office; (*d*) statement of the injury; and (*e*) appeal to the deceased to rise up in judgement against the offender (see *Letters*, p. 4). One or both of the first two sections, borrowed from the epistolary style, might be missing, while the last three might be more or less blended. In our letter the five sections are present, and they occur in the order indicated above.

But where our letter differs from all other documents of the same kind is in the great length of the sections *b* and *c*, and in the peculiar nature of the sentences of the section *c*. These are flattering eulogies deprived of all personal character, blended with the formulae of greeting belonging to the section *b*, and occupying together with these nearly the whole of the text. Thus the statement of the facts and the request are confined to a very few words.

while in other documents these constitute the main bulk of the letter and make it the more interesting for us.

Strictly speaking, our letter lacks the address, but the first sentence [1] may be considered as in lieu of such, for it gives the name of the addressee. This sentence is in the vocative and forms part of the text itself, while an address is characterized by its being, so to say, outside the text, and by its using the third person. In the Cairo text on linen (*Letters*, I), which has formulae of greeting similar to those of the Louvre letter, a real address precedes them just at the same place as the vocative sentence in this one. For the use of the vocative-word, see above p. 159, para. [a][1]. Another fact differentiating the initial formula of the Louvre letter from the majority of real addresses is that it does not identify the sender. For, even if the name of the addressee's mother is mentioned intentionally (for it was from her that the letter emanated), we cannot consider this indication as an explicit identification of the writer.[1]

The Letters to the Dead, owing perhaps to their more intimate character, usually lack the stereotyped formulae of greeting characteristic of the Egyptian epistolary style. Hitherto such formulae were known only from the Cairo linen, belonging to the Sixth Dynasty or a little later. It is therefore interesting to find another instance of them in the Louvre text, *i.e.* on a document belonging to the early M.K. In this document they appear in a rather developed form [2–6], consisting of two quite long sentences which, so far as I know, are not to be found elsewhere, except for the passage [5] of the second one which occurs also on the Cairo linen and on ordinary letters of the Eleventh Dynasty, see above p. 160, para. 2 [5]. The formulae of greeting in the Louvre letter as well as those of the Cairo linen are for obvious reasons funereal in character, *cf. Letters*, pp. 1 and 13.

In our text the formulae of greeting are followed by a series of sentences [7–15] similar to the funerary wishes and self-laudation of the stelae. These form the third of the five sections discussed above—that which is normally the most interesting one in the Letters to the Dead, from the psychological point of view. The thought underlying this section is as follows. People "sending" Letters to the Dead were never quite sure that they could expect to be helped by persons who, being in a quite different situation, might have lost all interest in the fate of the survivors. Hence they included in their letters sentences intended to stimulate or to oblige the dead to grant the required help. In order to attain this aim all means were good. Sometimes the living person made an appeal to the pity of the deceased, to his gratitude, to his mercy, to his friendship, or to his love towards his relatives and his home. At other times the living person promised a reward to the dead or alternatively pointed to the fact that the celebration of the funerary cult depended on their good will. In the lack of a better term such sentences may be called "formulae of propitiation". As already pointed out, these formulae are, in the Louvre letter, of a special type and confer upon the document its peculiar character. They are laudatory sentences extolling the bounty of the deceased and alluding to the favoured position enjoyed by him in the other world. The demarcation between them and the formulae of greeting is not clearly defined, since the latter were also designed to propitiate the addressee. Nevertheless there is an appreciable change in tone after the sentence [6], so that this sentence, as well as those following, cannot be considered as formulae of greeting, while the preceding sentences belong to that type owing to the presence of the characteristic cliché [5] *iw ḥrt·k mi ꜥnḫ*, etc. The formulae of propitiation in our document are of two kinds. Some [9–15] are impersonal sentences obviously borrowed from the funereal formulary, and show the deceased as a favoured being; the others [7–8] are more personal, and refer to the actual state of the deceased, depicting him as capable of bestowing favour. The sentences

[1] See the Cairo bowl (*Letters*, VI, 1), where the name of the mother is also given, although she is not the sender: X. — Y. — Z. "Given by X. to Y. born of Z."

[7] and [9–15] which use the *sḏm·f*-form may be translated as wishes or as statements, but since the two phrases of [8] consist of an independent pronoun+an adjective used as a substantive, the whole is probably to be regarded as statements. Thus the author of the letter does not ask the deceased to be of service to her. She is too much of a diplomat for that. She shows no doubt that the deceased will benefit her, and her tactics consist in implying that he is an excellent spirit who watches over his own and to whom the gods are favourably inclined. It suffices her to point out that she is being attacked and he will naturally defend her. Thus in [7–8] the deceased appears as the protector of his home, as no less a beneficent being when dead than he was when alive. The deceased is described in [9–15] as possessing all the privileges of a god, as receiving the offerings, as having rites celebrated in his honour like a prominent divinity, as travelling in the solar barge, and so forth. The reason why these sentences were used as formulae of propitiation is evident: they were intended to exhibit the high opinion that the writer had of the deceased. This was a clever move. The dead addressee, in order to save his face, cannot fail to make a slight effort by answering the entreaties expressed in the last part of the letter. Moreover, the fact of treating him as a god would certainly strengthen in him the feeling of obligation. But other more general reasons are to be added: the formulae which the Egyptians used to write on their funerary monuments have exactly the same drift as those of our letter; they are either self-laudations enumerating the accomplishments which the dead possessed during their life, or else they describe the conditions in which they would like to be after death. It was desirable that these formulae, as numerous texts show, should be read by the living as often as possible. This was a practice from which the dead expected the greatest possible tangible results, and in exchange for which they held out to the living the hope of help and protection. It was quite natural, therefore, that the author of the Louvre letter, bearing all this in mind, should use the same formulae and expect by their help to obtain the assistance of the deceased. This way of propitiating the deceased has not been met with in the Letters to the Dead known hitherto. The only fact which might be quoted as a parallel is the use of the *ḥtp-dỉ-nśw*-formula—again a characteristic funereal formula—on the Berlin bowl (*Letters*, v).[1] The study of the funereal expressions of the Louvre letter is very interesting, but would lead us far outside the limits of the present article. We are here interested in the reason why these formulae were used rather than in the facts they refer to, and in the reactions which such or such other expression produced in the mind of the author. The fact that the writer has chosen one formulae rather than another was probably due to personal taste, to the fashion of the period or to that of the locality. I should like only to observe, in addition to what was said in pp. 161–2, paras. [o][9]–[s][15], that I have found no quite similar parallel to any of these formulae elsewhere.

We come now to the last sentences of our text, which have already been studied above. The sentence [16]—if my interpretation of it be correct—should be considered as a transition between the formulae of propitiation and the appeal to the deceased. The first rather vague appeal—"be propitious"—cleverly prepares the reader to the precise final request, "lodge thou a complaint about it", another instance of the precautions taken by the writer to avoid a refusal.

With regard to the date and the provenance of the Louvre bowl we have no direct indications. The palaeography, the orthographic details, and the vocabulary[2] all point to the

[1] See also para. [n][8] above, p. 161.

[2] See especially above paras. G[6], B[14], and [c][1], [e][2], [p][10, 11], [q][12], [r][13–14]; for some facts which at first sight seemed rather characteristic of the O.K., early M.K., or M.K. instances have been given, see paras. [h][6], [u][17].

early Middle Kingdom, *i.e.* to the end of the First Intermediate Period, or to the Eleventh Dynasty. As regards the provenance of the bowl, the divinities and the feasts mentioned in the text suggest that it came from Middle or Upper Egypt. The type of funereal formulae employed reminds us of Abydos, but the possibility of a more southern locality such as Denderah, Thebes, or Gebelên is not excluded, since the Abydos formulae were at this period in general use in those regions.

PETTIGREW'S DEMONSTRATIONS UPON MUMMIES. A CHAPTER IN THE HISTORY OF EGYPTOLOGY

By WARREN R. DAWSON

The year 1934 is the centenary of the publication of a very remarkable work, the *History of Egyptian Mummies* of Thomas Joseph Pettigrew, F.R.S. The work is really, for its time, a very learned and valuable contribution to science, and it was, in fact, the first book on Egyptian archaeology published in this country. In making this statement, I of course exclude the fantastic attempts at decipherment and other works of the pre-Champollion era, and likewise books of travel and descriptive works. Thus qualified, Pettigrew's book stands as the first British scientific contribution to Egyptian archaeology, for it covers a considerably wider field than its title suggests and ranges over the entire domain of funerary archaeology so far as it was then known and understood. In my biography of Pettigrew,[1] I have, of course, dealt with his researches into mummification, but as a considerable volume of new information has come into my possession since the biography appeared, the present is an appropriate occasion to summarize more fully Pettigrew's contributions to the study of Egyptian embalming.

Pettigrew's interest in Egyptology began when he met Belzoni in England in 1820. The explorer had enlisted his help, as a medical man, in the examination of some mummies he had brought from Egypt. Pettigrew soon afterwards became acquainted with Wilkinson, Burton (Haliburton), Hay, Lee, Madden, and others who had travelled in Egypt or interested themselves in Egyptian antiquities. He followed the progress of decipherment of Champollion and Young, and made himself thoroughly acquainted with all the available literature of the subject. Whilst taking the greatest interest in Egyptology generally, Pettigrew, as an anatomist and surgeon, was not unnaturally particularly attracted by the technique of mummification, and sought every possible opportunity of making original research upon actual mummies.

The first opportunity that presented itself was the acquisition by Pettigrew of an Egyptian mummy that had been brought to England by the physician and traveller Charles Perry in 1741. This mummy came from Saḳḳârah, and its cases are described and figured in Perry's *View of the Levant* (1743). Perry died in 1780, and the mummy subsequently passed into the possession of Richard Cosway, R.A. (1740–1821), after whose death it came again into the market and was purchased by Pettigrew. When unrolled, it proved to be in poor condition, and although Pettigrew made the fullest use of it for investigation, little was to be learned from it. From such indications as exist, we can gather that it was a late Dynastic or early Ptolemaic mummy, prepared according to the decadent methods of the time. This mummy was examined by Pettigrew privately and at leisure in his own house (then in Spring Gardens), but most of the later specimens he examined were ceremonially unrolled in the presence of audiences, and Pettigrew became famous for these public demonstrations.

[1] *Memoir of Thomas Joseph Pettigrew, F.R.C.S., F.R.S., F.S.A.*, New York, Medical Life Press, 1931. (Hereinafter quoted as *Memoir*.)

THOMAS JOSEPH PETTIGREW
(1791–1865)
Drawn and lithographed by CHARLES BAUGNIET

It would appear that no further opportunities for the examination of actual mummies occurred until 1833. In March of that year the third collection of Henry Salt was sold at Sotheby's,[1] and there were several mummies amongst the lots. Pettigrew purchased a fine Ptolemaic example for £23, and at the same sale his friend Thomas Saunders, F.S.A., secured another for £36 15*s*. Pettigrew was anxious to unroll his specimen and to make a thorough examination of its method of treatment, and as Saunders, who owned the other specimen, had similar wishes, Pettigrew undertook to unroll and examine both. As there was no convenience in his house for an operation of this kind, the mummies were unrolled in the lecture-theatre of Charing Cross Hospital (where Pettigrew was at the time Professor of Anatomy) on Saturday, April 6, 1833, in the presence of a select gathering that included Prince Cimitilli, Lords Boringdon, Hotham, and Henley, and the physicians Sir Henry Halford (President, R.C.P.), Sir David Barry, William Shearman, James Copland, Augustin Sayer, Stewart Crawford, Robert Richardson, John Elliotson, Henry Clutterbuck, and Benjamin Golding. There were also present many archaeologists, travellers, and other distinguished persons, including John (later Sir John) Barrow of the Admiralty, John Gibson Lockhart (the biographer of Scott), Edward Hawkins (Keeper of Antiquities, British Museum), and many others.

This ceremonial mummy-demonstration was the first of many, and witnessing the unrolling of mummies became a fashionable pastime amongst antiquaries, dilettanti, and even with the public. Not long afterwards, Pettigrew's friend, Dr. John Lee of Hartwell House, who had also bought a mummy at the Salt Sale, offered it for examination. Pettigrew gave a demonstration on this mummy (which was that of a priestess of the Twenty-first or Twenty-second Dynasty) on June 24, 1833. There were present the Bishop of Chichester, Viscount Ossulton, Thomas Phillips, R.A., the antiquary Francis Douce, the Rev. George Cecil Renouard, Dawson Turner, F.R.S., F.S.A., Edward Hawkins, Captain Dillon,[2] the excavator Rifaud, and many others.

This demonstration led to another, for a few weeks later John Davidson,[3] who had been present on this occasion, decided himself to unroll a mummy in his own possession, and requested Pettigrew to assist him. Accordingly on July 13, 1833, Davidson and Pettigrew appeared in the lecture-theatre of the Royal Institution, and under the presidency of the Duke of Somerset and before a distinguished audience, unrolled and lectured upon a fine Twenty-first Dynasty mummy, an account of which, with coloured plates, was afterwards published.[4]

This mummy, and another of the same period, had been brought from Thebes in 1821 by John Henderson (1780–1867), a well-known archaeologist and collector. Henderson's

[1] Salt made three main collections of Egyptian antiquities. The first was sent to England in Belzoni's charge and offered to the British Museum. The Trustees, after a vexatious delay of several years, bought it for £2,000—one-half the sum it had cost Salt to collect it, and rejected the finest piece (the Sarcophagus of Seti I); the second collection he sent to his brother-in-law Pietro Santoni at Leghorn, who, on the recommendation of Champollion, sold it to the French Government. (Salt had learned his lesson and did not offer it to the British Museum.) The third collection was brought to England after Salt's death by Giovanni d'Athanasi, and was disposed of at Sotheby's in a nine days' sale in 1833, realizing the sum of £7,168.

[2] Afterwards Admiral Sir William Henry Dillon. He married Pettigrew's eldest daughter in 1843 (*Memoir*, pp. 94, 117).

[3] Born 1797. Studied medicine at Edinburgh and St. George's Hospital, London. His health failing, he gave up practice and settled in Naples, from which centre he travelled extensively in the Near East. F.R.S., 1832; died, 1836.

[4] *An Address on Embalming generally, delivered at the Royal Institution on the Unrolling of a Mummy*, London, James Ridgway, 1833.

second mummy went to the Royal College of Surgeons, and Pettigrew, who had in the meantime written his book on Egyptian mummies, was anxious to examine it before the publication of his work (which was by that time already printed off). He accordingly approached the Court of Assistants for permission to investigate the mummy, and the very fine and accurate coloured drawings of its case which had been made by William Clift, Junior, and which are still preserved at the College.[1] Two letters from Pettigrew on this matter are in existence, and by the kind permission of Sir D'Arcy Power, F.R.C.S., Honorary Librarian of the College, I reproduce them here:

My dear Sir,

Will you do me the favor to lay before the College of Surgeons a request on my part to be permitted to have the loan for a few days of some drawings made by Mr. Clift Jun[r] of Two Cases which contained mummies. My desire is to make out the Hieroglyphics and the pictorial representations upon those cases. I need not tell you that these things are not to be accomplished without much time and labour and reference to various works which it is not possible for me to take to the College and there make the investigation. The drawings are certainly not likely to be wanted by any other member and I therefore venture to solicit the loan of them for a few days for the purpose I have mentioned and to be noticed in my forthcoming work. I wish also to be permitted to take the facial angle of the Egyptian skull in the Museum.

Yours very truly

T. J. Pettigrew.

Saville Row

Dec. 5. 1833.

The Secretary of the College, to whom the above letter was addressed, wrote on the following day informing Pettigrew that he would lay his request before the Court, and again on December 23 to say that permission had been granted to borrow the drawings for a fortnight, subject to acknowledgement of the source if any information were published. Pettigrew then wrote to the President, as follows:

Saville Row

Dec. 30. 1933.

My dear Sir,

May I beg of you to communicate to the Council of the Royal College of Surgeons my thanks for their obliging attention to my request and for their munificence in the loan of the Drawings of the Mummy Cases which shall, agreeably to specification, be returned at the period mentioned. I will, however, take this opportunity of acquainting you that I have already been able to make out the name and occupation of the Egyptian and that I find him to have been one *Horsiesi, the son of Naspihiniegori, an incense-bearing Priest in the Temple of Ammon* and that he has been brought from *Thebes*. It would be very satisfactory to have the mummy unrolled and this may be done without any injury whatever to the case. I should be happy to undertake this task or to assist any one in the performance, and should the Council think fit to direct this to be done, I should further be obliged by their appointment of an early day for the purpose, as my work is now in the Press and it is probable I might meet with something new in illustration of my subject.

Believe me to be,

Your very faithful Serv[t]

T. J. Pettigrew.

G. J. Guthrie Esq.

Pres[t] Roy. Coll. Surgeons

&c. &c. &c.

Pettigrew's request was granted by the Council, and preparations for the unrolling of the mummy were put in hand. For this event we are not dependent upon newspaper reports,

[1] Victor G. Plarr, *Cat. of the Manuscripts in the Library of the Royal Coll. of Surgeons*, 1928, p. 47.

for the diary of William Clift,[1] the Conservator of the Museum, affords much interesting information, and shows us that the Council of the College expected a large and important concourse of visitors. Under date Monday, January 13, 1834, Clift writes:

Preparing the Theatre &c. against the meeting on Thursday. Assisting in answering the numerous applications for Tickets:—folding and sealing up visitors tickets.

On the next day the mummy itself was made ready:

Tuesday 14 Jan. Sawing open the case containing the Mummy of Horsiesi; preparatory to unrolling on Thursday.

Assisting in folding and sealing letters sent out to Visitors for Thursday; and receiving and answering applications.

On sawing open the case [i.e. cartonnage], which is composed of many layers of linen or cotton cloth, firmly cemented together with gum or glue, or possibly white of egg and lime, or plaister of Gypsum, the body was discovered in its envelope in excellent preservation, but without any ornament whatever. The case had evidently been formed on a Mould of clay, with straws &c., probably to give it tenacity,—some of which still adheres to the inside of the case:—on which mould the cloth was pressed while wet, in a manner similar to the present method of making masquerade Masks. A filet passed across the eyes round the head and tied behind:—another with an Inscription on it, was tied round the legs at the ankles. The outer envelope one large smooth piece tied behind with pieces of similar cloth.

The Council evidently foresaw, from the large number of applications for tickets, that it would be impossible to accommodate all the would-be spectators. Clift relates how it was proposed to deal with the situation:

Wednesday, 15 Jan.—Prepared *large* Notices against the Meeting to-morrow, to obviate as much as may be the effects of disappointment to those who will not be able to gain admission:

"Gentlemen who may be disappointed in witnessing the unrolling of the Mummy this day, will have an opportunity of viewing it in the Museum every Monday, Wednesday, and Friday, from 12 till 4 o'clock. Jan. 16. 1834."

"The three lower [tiers of] seats are reserved for Trustees of the Hunterian Collection and British Museum, Visitors and Members of the Council."

On Thursday the great day came. The meticulous Clift entered in his diary a list of distinguished visitors who were happy enough to gain admission, as well as a list of those who were not so fortunate. There is also extant another list, drawn up by the Secretary of the College.[2] These lists are too long to print here, but it may be noted that they contain the names of a Prince, several Peers, Bishops, Statesmen, Diplomats, Members of Parliament, as well as all the leading physicians and surgeons of the day, and many artists, authors, military and naval officers, and others. Many were doomed to disappointment; so thick was the press of eager spectators within the theatre that even such august personages as the Archbishop of Canterbury[3] and the Bishop of London were obliged to retire from lack of room. At one o'clock precisely the buzz of conversation ceased, and the company, who had filled the theatre since noon, rose to their feet as the President and Council followed the mace-bearer into the theatre, and Mr. Pettigrew, and his two assistants, William Clift and Richard (later Sir Richard) Owen,[4] brought up the rear. At this point we will allow Clift to resume his diary:

[1] I hereby express my grateful thanks to Mr. R. H. Burne, F.R.S., of the Royal College of Surgeons, for his kindness in providing me with copies of all the relevant passages in Clift's diary.

William Clift, F.R.S. (1775–1849) had formerly been assistant to John Hunter, and was conservator of the Hunterian Museum from 1793 to 1844.

[2] Edmund Belfour.

[3] The Archbishop at this time was William Howley; born 1766; Primate 1828–48; died 1848.

[4] Owen's name is not mentioned either in Clift's diary or in any published report, but I have information from Pettigrew's papers that he assisted on this occasion.

Thursday, 16th Jan.—This day, at twelve o'clock, the doors of the Theatre were opened from Lincoln's Inn Fields, and from Portugal street; and all the seats were very soon occupied, and the greatest good order and regularity prevailed. The windows were soon obliged to be further opened to admit cool air, and all were perfectly satisfied, though great numbers were obliged to stand.

Visitors in considerable numbers arrived very early and filled all the Seats; many were obliged to stand; and many others retired from all the doors who could not find admission.

The president took the Chair precisely at One o'clock, the time appointed. Mr. Pettigrew immediately began his address, describing the various methods employed from the earliest periods downwards—exhibited various parts of his own mummy—and a portrait copied from an original lately discovered on opening a Mummy in the British Museum sent by the late Henry Salt Esq. which is executed in a very superior manner, considering the period. It lay on the face and breast—and was painted in water colours, chiefly of vegetable pigments, on cedar wood:—and probably the oldest Portrait in existence: the lights are heightened on the side of the forehead, nose, and pupils of the Eyes:—the skin reddish copper colour.[1]

The bandages were now removed as carefully as circumstances and time permitted. The outer smooth cloth being removed, exposed the circular hand-breadth rollers, which extended from head to foot several times in succession:—others oblique and diagonal very neatly but without much regularity or uniformity till we reached the very innermost layer or two which firmly adhered to the surface by a coat of asphaltum. On the breast, near the situation of the zyphoid cartilage, was a small protuberance, which when divested of the bandage, exposed a small carved Scarabous [*sic*] of a pale semi-transparent white colour—and on the upper part of the Sternum a cluster of four or five small Tally-shaped bodies enveloped in, and sticking to the body by, asphaltum. Part of the face was exposed, and showed that a pair of artificial eyes, apparently of enamel, had been placed on or substituted for the natural ones. Here the examination of this part ceased for the present. In removing the crumpled wadding between the thighs, a small clay model of an outer Mummy case[2] rudely made and imperfectly if at all vitrified, and now partly decomposed was found behind or beneath the Scrotum, but no Coins, ornament, or Papyrus was discovered. An inscription was discovered on the filet surrounding the ankles (said to be descriptive of the name and quality of the Mummy) similar to that on the outside of the painted case. After many of the folds of the roller had been removed, another inscription on the end of a roller, which had been coarsely hemmed, was met with; and a third, on the edge of a large piece folded and placed behind the right Thigh.

Most of the bandages were of rather coarse texture, but very regular manufacture. One piece, nearly a yard wide, had on one side a selvage, the other had a torn edge, showing that it had been of still greater breadth; and one piece had many portions of thread in it that had evidently been a seam ripped open like that of a sheet that had been in use. Many pieces have Thrums or loose threads at their terminations as when cut from the loom or pad on which it was woven. All the cloth used appears to have been prepared by some process similar to Tanning for its preservation from decay or Insects: some much more rigid and brittle than others. Beneath or behind the body lay a kind of mattress of many folds of a finer and softer quality than the bandages, which extended very nearly the whole length of the body: and also underneath the feet were many folds of similar material.

N.B. A piece of modern Calico that had been pasted under the foot board to keep it secure, since the mummy was brought into England, was completely filagreed by Insects while the adjoining mummy cloth remained untouched.

This long and interesting account, although a century old, compares very favourably with the inadequate descriptions of many later writers. The mummy and its case are still preserved in the Museum of the Royal College of Surgeons.

In the meantime another opportunity of witnessing the unrolling of a mummy had presented itself to Pettigrew, when he was invited to be present at the unrolling of a specimen belonging to Mr. Reeder, which took place at the Mechanics' Institution in 1833. From the brief description of this specimen left by Pettigrew, it appears to be a Middle Kingdom mummy.

[1] This is the portrait-panel of Roman period reproduced in Pl. vi of the *History of Egyptian Mummies*.

[2] A *shawabti*-figure. Clift has made three diagrams of the mummy in various stages of its unrolling, showing the position of the amulets, etc.

Pettigrew's *History of Egyptian Mummies* was now ready for publication, but even after the completion of the Introduction, in which all the mummies hitherto mentioned had been recorded, yet another specimen presented itself for examination, and Pettigrew delayed the publication of his book for a few days in order to include a notice of it. This was a mummy presented to the Museum of London University by James Morrison, M.P., which evidently belongs to the Twenty-sixth Dynasty or thereabouts. A few years earlier (in 1827) Morrison had presented another mummy to the City of Norwich, a description of which I published in this *Journal* in 1929 (vol. xv, pp. 186–8).

The *History of Egyptian Mummies* appeared early in 1834, dedicated by permission to William IV and illustrated with plates by Cruikshank. For an account of it I must refer the reader to the relative passage in my *Memoir* of Pettigrew, pp. 72–4. The book was certainly a success and it created and stimulated a great interest in Egyptian antiquities. Pettigrew was frequently invited to lecture, and before long another mummy was placed at his disposal by Dr. John Lee of Hartwell House. This mummy had originally belonged to Pettigrew himself, and it was enclosed in a cartonnage case within three coffins, the two inner ones being of anthropoid shape, the outermost a rectangular sarcophagus with a vaulted cover. Salt sent this "lot" to England several years before his death and Pettigrew bought it from Salt's London agent, Bingham Richards of Lamb's Conduit Place. Owing to its perfect condition Pettigrew did not unroll it, but, after keeping it and its cases in his house for some years, he sold the whole to Dr. John Lee for his museum at Hartwell House, where it became one of the most prominent exhibits. In 1837, however, Lee, whose interest had been much stimulated by Pettigrew's mummy-demonstrations, decided that the mummy ought to be unrolled and sent the body to London, but he retained the cartonnage case and the three coffins. These cases were lithographed by Joseph Bonomi and published with descriptive letterpress by Samuel Sharpe in 1858.[1] They remained in Lee's possession till his death (in 1866), when they were acquired, together with the rest of Lee's museum, by the late Lord Amherst of Hackney. They were sold once more in 1921 when the Amherst Collection was dispersed at Sotheby's (Lot 352).

The mummy was unrolled in the lecture-theatre of the Royal Institution on Friday, May 27, 1836, in the presence of a crowded and distinguished audience, Lord Prudhoe[2] being in the chair. The lecture, which lasted three hours, was reported in the press at length, and from this report the following extracts are taken:

> On Friday evening Mr. Pettigrew unrolled an Egyptian mummy at this institution. Previous to doing so, he delivered a lecture on the mode of embalming, as performed by the Egyptians. [*Here follows a long report of the introductory lecture.*] Mr. Pettigrew then proceeded to unroll the bandages. Most of them were about four yards in length, and four inches in breadth, and were rolled around the dead body with such accuracy, that hardly a wrinkle was to be seen. The lecturer observed that it was evident that they were put on in a damp state, and they were dried after the process of rolling was completed, by exposing the body to a high temperature. A number of linen compresses were also found at various parts of the body; these were

[1] *The Triple Mummy Case of Aroeri-Ao, in Dr. Lee's Museum at Hartwell House.* Published for the Syro-Egyptian Society of London.

[2] Algernon Percy, first Baron Prudhoe, was born in 1792 and succeeded as fourth Duke of Northumberland in 1847. He was a great traveller and a generous patron of science. He explored Egypt with Major Orlando Felix in 1827–9, penetrating as far as Senaar, and visiting Sinai. He met Champollion in Nubia in 1828. In 1834 he accompanied Sir John Herschel's expedition to the Cape; D.C.L. (Oxon.), 1841; F.R.S.; F.S.A.; F.R.A.S.; financed Edward William Lane's Arabic Lexicon and sent Lane to Egypt to collect the materials; made a large collection of Egyptian antiquities, of which Birch published a catalogue in 1880. The Duke was First Lord of the Admiralty, 1852–3, a Vice-Admiral in 1857, and Admiral in 1862. He died at Alnwick, February 12, 1865, and was buried in the Percy Chapel in Westminster Abbey.

about four yards in length and two feet in breadth, and were folded with great care. Mr. Pettigrew several times exhibited pieces of the linen, with the name of the deceased inscribed on them. This he observed had evidently been done after the bandage had been applied, as in one instance the ink or colouring matter had penetrated to the roller beneath. An enormous quantity of linen was removed from the body, and Mr. Pettigrew remarked that he had measured the length of the linen removed from the mummy which he had opened in 1833, and found that it exceeded 2000 yards, and that upwards of 60 yards had been drawn from the nostrils which had been forced into the cavity of the head. The body was found enveloped in four large linen sheets. It then appeared that the viscera had been removed by an incision in the flank, and were rolled up and placed between the legs. The liver was also found placed in the abdomen. Portions of the innermost cloths adhered so closely to the body that they could not be removed in consequence of the bituminous matter used in the operation, and great time and care were required to complete this part of the operation. There was no hair on the head, which proved that the body was that of a priest, for the Egyptian priests always shaved their heads. The beard, however, was clearly made out. The arms were swathed separately. The body was evidently that of an aged man, and in some parts of it, portions of gilding were visible. . . .[1]

Pettigrew now decided to give a course of public lectures, and to unroll a mummy as a dramatic wind-up to the course. Arrangements were made in 1837 for the delivery of six lectures in the Exeter Hall, Strand,[2] and a printed syllabus was issued, a copy of which is reproduced in Pl. xxiii, left. At the termination of the last lecture the public unrolling of a mummy was carried out, and was thus reported:[3]

At the close of a series of six interesting and instructive Lectures on Egyptian Antiquities, delivered at Exeter Hall, by Mr. Pettigrew,—which it is a good sign of the taste of the times, and the increasing desire for information, to notice, were well attended by persons of both sexes, and of various ranks of life,—that gentleman, on Monday evening last, [March 6, 1837], summed up his remarks, and unrolled a mummy, most liberally presented for the occasion by Mr. Jones, of the Admiralty. The operation excited a marked feeling throughout the whole of the numerous auditory, including many individuals of distinction in the literary circles. In the commencement, Mr. Pettigrew, referring, with just eulogy, to Mr. Wilkinson, who was present, noticed that the inscription on the outer case differed from that on the inner case containing the mummy. Both stated the party to have been a female; but the names and genealogies were different, and the latter stated the mother of the deceased to be living when her daughter died. It might be that the wrappings would settle the point; which, however, they did not,—for no name was found on them, as often occurs. The mummy was Greco-Egyptian, and embalmed after the ancient manner; the bowels being extracted by an incision on the left flank, and the brains, probably, through the nostrils, as the nose was much broken. The legs were separately bandaged, and the ankles bound by stripes of painted linen, about half an inch in breadth. The figures were not hieroglyphic, but simply ornamental. Bands of the same kind surrounded the arms, which were crossed upon the breast; and a similar circle went round the neck, with a thin golden scarabeus [?] in front. On each knee was also a thin piece of gold, resembling the lotus-flower; over each eye the providential eye of Osiris, of the same material; and another golden ornament upon the top of the ridge of the nose. There were rings on the fingers; but the opportunity was not sufficient for examining them, nor time for proceeding to the careful and laborious unrolling of the body to the end. The upper wrappers were not voluminous, and of coarse nankeen-coloured linen. Then came a complete envelope of asphaltus [*sic*], and below that the usual disposition and extent of linen rolls. On the soles of the feet were slight sandals, transversely striped black, white and red, exactly like those painted on the bottom of the inner case. The finger and toe-nails were gilt; and, altogether, the subject presented many objects for further investigation and study.

At the conclusion of his discourse, which was much applauded, Mr. Pettigrew . . . intimated that

[1] *Morning Chronicle*, May 30, 1836, p. 5, col. 5; also reported in the *Gentleman's Magazine*, 1837, N.S., vol. VI, p. 82. Pettigrew himself published a very full account of this mummy, "Account of the Unrolling of an Egyptian Mummy, with incidental notes on the Manners, Customs, and Religion of the Ancient Egyptians", *Magazine of Popular Science and Journal of Useful Arts*, vol. II, pp. 17–40.

[2] The Strand Palace Hotel now occupies the site.

[3] *Literary Gazette*, March 11, 1837.

SYLLABUS OF A COURSE OF LECTURES ON EGYPTIAN ANTIQUITIES,

More especially as connected with the Processes of Embalming;

BY T. J. PETTIGREW, F.R.S. F.S.A. F.L.S., &c. &c. &c.

Author of a "History of Egyptian Mummies," &c.

These Lectures will be delivered at the EXETER HALL, STRAND, at Half past Eight o'Clock in the Evening precisely, copiously illustrated by Specimens and Drawings,

AND IN THE FOLLOWING ORDER:

Monday, Feb. 13.—LECTURE I. INTRODUCTORY. ON THE FUNERAL CEREMONIES OF DIFFERENT NATIONS. Reverence paid to the dead—Burial in the earth—Earliest example on record—disposal of the dead by fire, a practice among the ancient Greeks, Romans, Germans, Gauls, &c.—Roman Urn—Ashes of the dead dispersed to the winds, or taken in the beverage of the living—Burial in water, in snow, and ice—Perfuming of bodies by the Romans—Painted bodies of the Macrobians and Ethiopians—Preservation of the Persians, Syrians, and ancient Arabians, by honey and wax—Chinese method of treating their dead. Guanches of the Canary Islands—Mode of preservation—Examples—Peruvian Mummies—chiefly desiccated bodies, not embalmed—Articles found in the Mummy Pits—Examples of the Ancient Peruvians—Desiccated bodies of Palermo—their arrangement—mode of preparation—Examples of great preservation from burial in sawdust—Burman Priests—singular account of their mode of embalming—exhibition—destruction—curious ceremony on the occasion.

Thursday, Feb. 16.—LECTURE II. EGYPTIAN TOMBS. Wisdom of the Egyptians—Antiquity of the Egyptian Mummies—extraordinary perfection of the art to be accounted for by referring to their theology—immortality of the soul—transmigration—Mummies as guests at feasts—as pledges for the loan of money—deposit of treasure in the tombs—various articles found—examples of several—earliest tombs—pyramids—Architecture and Sculpture of the Egyptians—Temple of Karnack—bears the name of Osirtesen I. the cotemporary of Joseph—Monotony of Egyptian buildings—colossal character—Head of Rameses the Great—Subjects represented in the temples and in the tombs—their variety—Egyptian Funeral Procession—ceremonies—instances of the denial of sepulture—examination of the characters of the dead—Assessors—Sacred Boat or Bari—QUEENS' TOMBS—Tombs of the Valley of Deyr el Medeeneh—under the protection of the Goddess Athor—invention of the arch—Amunoph I. Catacombs and pits of Abd el Qoorneh and Drah Aboo Negga—Gate or Gates of the Kings—ROYAL TOMBS—number known—Tomb of Osirei, commonly known as Belzoni's tomb—Alabaster sarcophagus—not likely to have been the receptacle of the body of a monarch—Some of the representations given in this tomb—Tomb of Rameses III. The Harper's—illustration of Egyptian manners and customs—Tomb of Rameses V. Astronomical subjects—Tomb of Rameses VII.—peculiar character of its sculptures—Tomb of Rameses II. the supposed Sesostris of the Greeks—Tomb of Pthah-Septhah—Western valley—Tomb of Amunoph III.—TOMBS OF PRIESTS AND PRIVATE INDIVIDUALS.—Largest sepulchre hitherto discovered, that of Petamunoph—Sale of tombs by the Priests—CATACOMBS.—At Alexandria—Saccara—Silsilis—Goorneh or Qoorna—Thebes—Mummy pits—Position of the Mummies. Concluding remarks on the Representations in the Tombs.

Monday, Feb. 20.—LECTURE III. ON MUMMIES, AND THE PROCESSES OF EMBALMING. Etymologies of the term Mummy—various applications of it—Natural Mummy of the Mountains—its scarcity and value—Mummy used in medicine—introduced by Elmagar—generally employed in the 15th and 16th centuries—cessation of the practice. EMBALMING—definition—art now unknown to the Egyptians—accounts given by Herodotus and Diodorus Siculus—variations in the modes—principal kinds—order pursued—peculiarities observed—substances employed—Mummies of the poor Nubians—Finest specimens of embalming—Destruction of Mummies in the search for treasure—Mummies of Thebes—Abydus—Memphis—The embalmers—the swathers—Extraction of the brain and other viscera—instruments employed—Account by Porphyry, supported by Plutarch—its improbability—Aromatics—Resinous substances—application of heat—Gilding of Mummies—Tongue plate—Body of Alexander furnished with a covering of gold chased work—Staining of the nails with henna—Position of the Mummies—horizontal—arms crossed—Preservation of the hair—plaited—examples—rarity of the Mummies of Children—Mummy of a Fœtus—its case—Cessation of the practice of embalming—Christian Mummies—Insects found in the head of a Mummy—Medicaments employed in embalming—resinous and bituminous matter—asphaltum—Cedria—Balm—different kinds: of Judæa—Syria—Egypt—Mecca—Colocynth—Myrrh—Aloes—Cedar dust—Natron—its analysis—Honey—Wax.

Thursday, Feb. 23.—LECTURE IV. BANDAGES, CASES, AND SARCOPHAGI. Necklaces in contact with the body—Scarabæus—Rings—Enamelled eyes—Mouthpiece of the time of Rameses the Great—Ear-Rings—Silver nails—Deities of the Amenti—Bandages of different colours—Græco-Egyptian Mummies—covering of painted cloth—Bandages formed of linen—satisfactory proofs—researches of Dr. Ure and Mr. Thomson—different substances with which the bandages are coloured—Bitumen—Aloes—Goudron—Tannin—Soot—Carthamus—length of bandages—compresses—all applied wet—limbs sometimes separately bandaged—quantity of bandage varies greatly—Hieroglyphical characters impressed upon them—generally at the end—Articles of dress occasionally found—old linen, mended and darned—Hieratic and Enchorial and Greek inscriptions—Splendid Mummy from Memphis, in Signor D'Athanasi's collection—Amulets—leathern Straps—ornaments in the Leeds Mummy—Garlands of flowers—Sandals—painted ones, with hieroglyphics—Symbolical representations under the heads of some Mummies—Varnished bandages—Portrait over the face of a Mummy—Idols and ornaments placed between the first and second layers of the bandages—great variety of necklaces—golden ornaments—quantity of gold in Egypt—metallic mirror, wooden chairs, alabaster vases, &c. found in a mummy case—Funeral tablets—breast-plates of kings—The Genii of the Amenti—Idol found in the mummy of Horsiesi—Bulbous roots—Rosemary—Eye of Osiris—Bracelets of gold and other materials—Diadem of gold and silver—Mosaic work—No money discovered in the tombs—Egyptian commerce—Rings of gold and silver—Medals struck under the Greeks, Romans, and Arabs—First current coin of Egypt—Coin of Ptolemy in a Mummy—Leaden Medals affixed to a Greek Mummy.—CASES: The Cartonage—its manufacture—beautifully painted—subject of the representations—Wooden coffins—sycamore—cedar—formed occasionally out of a single trunk—outer cases—hard wood—inscriptions—SARCOPHAGI. Lapis sarcius—different materials and forms—ordinary shape—rose-coloured granite—marble—limestone—alabaster—Egyptian breccia—basalt—slate—baked earth—wood. Sarcophagus of Amyrtæus (Alexander's tomb) in the British Museum—"Lover's Fountain"—Alabaster Sarcophagus in Sir J. Soane's Museum—Description of the Wooden Sarcophagus of Osiri.

Monday, Feb. 27.—LECTURE V. ON THE PAPYRI, AND THE HIEROGLYPHICAL LANGUAGE AND LITERATURE. Natural History of the Papyrus—its manufacture into paper—Egyptian literature—Rosetta stone—labours of Dr Sacy—Akerblad—Young—Salt—Champollion—Wilkinson—Burton, &c.—Hieroglyphical characters—Hieratic—Enchorial—Bilingual MSS.—Papyri—their contents.

Thursday, March 2.—LECTURE VI. Sacred Animals—Worship of various Animals throughout Egypt—difficulty of the enquiry—Egyptian Mythology—Embalming of the Sacred Animals—Quadrupeds—Birds—Amphibious Animals—Fishes—Insects—Embalmed Vegetables.

Monday, March 6.—LECTURE VII. RECAPITULATION—UNROLLING OF AN EGYPTIAN MUMMY.

Tickets of Admission to the Course, to which Ladies will be admitted, to be had of the Lecturer, No. 8, Saville Row; Mr. LEIGH SOTHEBY, Wellington Street, Strand; and at the Exeter Hall. Front Seats and Gallery, One Guinea. Back Seats, Half-a-Guinea.

SYLLABUS OF PETTIGREW'S LECTURES, 1837

GIOVANNI D'ATHANASI

Respectfully informs the Public, that

On the EVENING of MONDAY, the 10*th of APRIL NEXT,*

AT SEVEN O'CLOCK,

THE

MOST INTERESTING MUMMY

That has as yet been discovered in Egypt,

WILL BE UNROLLED

IN THE LARGE ROOM AT EXETER HALL, STRAND.

WHICH MAY BE NOW SEEN

At the House of MR. LEIGH SOTHEBY, Wellington Street, Strand.

"Every Traveller who has visited Egypt, and indeed all those who have taken an interest in the Antiquities of that Country, are fully aware of the difficulty—nay, almost impossibility—of discovering at Memphis a Mummy in any thing like a perfect state, owing to the general destruction occasioned by the search of gold that took place in the Tombs during the period when Cambyses invaded Egypt. Though many of the most beautiful objects of antiquity, such as the minute Figures in Porcelain, the Alabaster Vases, and MS. Rolls of Papyrus, have been discovered at Memphis, yet, it is well known, that in no museum in Europe does there exist a perfect Mummy from that city.

"The circumstance, therefore, of this Mummy coming *from* Memphis, and being in so perfect a state, alone renders it very valuable; but it is now, arising from a discovery made since its arrival in this country, rendered of the highest interest and importance.

"On removing the covering of fine linen which was placed on the body of this Mummy, it was observed, from a small piece of linen which obtruded through a fracture in that which appeared a thick layer of asphaltum, that it had on it some inscription. On a more minute examination, it was discovered that the folds of linen, then perceptible, were all written upon in the same manner, and that the layer of asphaltum was merely intended for their preservation. This thin layer of asphaltum was immediately removed from the upper part and sides of the body, leaving only, as now seen, a small portion towards the feet, as a specimen of its original state; and the appearance which the Mummy now presents is such as has never been before seen. The numerous folds of cloth with which the body is surrounded are covered with HIERATIC, ENCHORIAL and HIEROGLYPHICAL INSCRIPTIONS and DESIGNS of all the Funereal Ceremonies. The piece of linen now placed round the Mummy is above eight feet in length; it was taken from around the feet, and from the mark or character at the end, it would appear that the pieces placed on the breast and other parts of the body were a continuation of it—thus forming the subjects which are usually found in the MS. rolls of Papyrus. It is believed, that these, with the other inscriptions with which the whole of the bandages are covered, include the ENTIRE RITUAL of the ancient Egyptians.

"It would be difficult to enter into a description of the numerous designs with which the folds of linen are decorated. There is a greater variety of subjects here given than is to be found in any of the Funereal Manuscripts on Papyrus. On the piece of linen taken from around the feet, is a representation of a funereal ceremony, wherein the body of the deceased is being conveyed to its resting place on a *four-wheeled carriage*. This circumstance was particularly reverted to by Mr. Pettigrew, in the second of his very interesting course of Lectures on Egyptian Antiquities, at Exeter Hall, *Feb.* 16; when he observed, and supported in his opinion by the authority of Mr. Wilkinson, whose valuable researches into the history and customs of the ancient Egyptians cannot be too highly appreciated, that this, the representation of a carriage on *four wheels*, as used by the ancient Egyptians, was the first that has been discovered.

"The Sarcophagus, which is 5 *feet* 9½ *inches long*, 1 *foot* 8 *inches broad, and* 1 *foot* 3 *inches deep*, is, with the exception of the three lines of Hieroglyphics on the exterior of the cover, and a representation of the Four Deities of the Amenti at the head, without any ornament; it is singularly shaped, yet more resembling the coffins of the present period. The Hieroglyphics alluded to are found to give the name of the deceased, and make mention of the City of Memphis; thus corroborative of its having been found in that place."—*Extracted from Mr. Leigh Sotheby's Catalogue of Giovanni D'Athanasi's Collection of Egyptian Antiquities.*

Tickets, as under, with a description of the Mummy, may be now had of GIOVANNI D'ATHANASI, at No. 3, Wellington Street, Strand.

A limited number of Seats will be reserved, immediately around the Tables on which the Mummy will be placed, at *Six Shillings*.

Seats in the Balconies and Platform, *Four Shillings*.

All the other Seats in the centre of the Hall and Gallery, *Two Shillings and Sixpence*.

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ANNOUNCEMENT BY D'ATHANASI, 1837

Mr. Athanasi's[1] splendid mummy, from Memphis, would be unrolled on the 10th of April, in Exeter Hall: a notice which has excited a strong sensation among lovers of Egyptian lore and antiquities; for, hitherto, those which have been examined in this country are from Thebes and other places, and we have had no opportunity of seeing the generally richly ornamented mummies of Memphis.

D'Athanasi seems to have made the unrolling of his mummy a commercial speculation, and issued a handbill advertising the event, a copy of which is reproduced in Pl. xxiii, right. The unrolling was duly carried out by Pettigrew on April 10, 1837, before a crowded audience, and the following report of it appeared in the press:[2]

Unrolling a Memphis Mummy.—On Monday, Mr. Pettigrew unrolled the Mummy from Memphis, belonging to M. Athanasi, in the Great Room at Exeter Hall, which was, however, too large, and not well adapted to the purpose; as the spectators were not only too far distant, but all around the space enclosed for the operation: and thus many of them were precluded from having a good view of Mr. Pettigrew's skilful process. From the case, and numerous inscriptions on the wrappings, the corpse was pronounced to be an eminent priest of Phra, chief of the spirits, prophet &c. &c. The linen was in narrower strips than we have ever seen before; and there were various peculiarities which rendered this specimen interesting. All down the front of the body, longitudinally, were laid pieces of linen, covered with figures and inscriptions; some of the former altogether new. These were delicately executed in lines. On the head was a species of helmet-mitre, much gilt; and below a human face was rudely traced on the bandages above the original countenance. After some travel [*sic*], Mr. Pettigrew came to a complete asphaltic envelope, of extreme hardness and tenacity, into which the body had been plunged; and which resisted hammers, knives and chisels. By much perseverence it was partially removed; and about the neck scarabei, cornelians and other stones were found. The toe-nails were gilt, the legs separately bandaged, and the arms crossed over the breast; the whole indicative of the Greco-Egyptian period. The mummy was, therefore, about 2200 or 2300 years old. Finding it impossible to make greater way in removing the obstacles interposed by the preparation, it was announced that the task would be carefully completed elsewhere, and the results submitted to the view of the public. We should guess that there were five or six hundred persons present.

Pettigrew's fame as an unroller of mummies was now at its height. Sir George Staunton (1781–1859) was present at the lecture on D'Athanasi's mummy, and he then informed Pettigrew that he knew of another mummy that might with advantage be unrolled and examined. This was the specimen, afterwards famous as the 'Jersey Mummy', which had been brought from Egypt in 1835 by John Gosset, F.S.A., who travelled in Egypt with Edward William Lane, but died in Paris on his way home. The mummy was presented to the museum of Jersey by his father, Isaac Gosset. Pettigrew at once communicated with his friend J. Hodges of Jersey, by whom he was invited to visit the island and to deliver a course of lectures on Egyptian antiquities. Pettigrew accordingly visited Jersey, spending the first week of September there, and repeated the lectures he had delivered earlier in the year at Exeter Hall. After the final lecture, Gosset's mummy was unrolled. The lectures were very fully reported in the *British Press* of Jersey, September 8, 1837, from which the following extracts are taken:

Mr. Pettigrew's last lecture, combined as it was with the unrolling of the Mummy, which has served as a nucleous [*sic*] and ornament of our infant Museum, attracted, as might have been expected, on Saturday last a greater concourse of spectators than on any previous occasion: the room was literally crowded with

[1] Giovanni d'Athanasi, the son of a merchant of Lemnos who settled in Egypt, was born in 1799. He was taken to Cairo in 1809, and when a boy entered the domestic service of Col. Missett, British Consul-General, who, on his retirement, recommended him to his successor, Henry Salt. D'Athanasi (who was known in Egypt as Yanni) was employed by Salt as a servant and as an excavator until his death. After Salt's death, Yanni built a house at Thebes (near Tomb No. 52) and collected antiquities which he brought to England in 1836, and which were sold at Sotheby's in March 1837. Some of his best specimens were engraved by Visconti and published in 1837.

[2] *Literary Gazette*, April 15, 1837.

the first families of the island, and all who had any pretensions to fashion, science or literature attended on this interesting occasion. The learned lecturer assumed with an air of modest triumph his station at the table on which the Mummy was placed: behind him were ranged its several cases, and the wall was covered with sheets of paper on which were delineated accurate copies of the Hieroglyphical inscriptions referring to the subject of the day's lecture, now about to be divested of the bandages which had enveloped it untouched for many centuries. Extreme attention was apparent throughout the numerous audience, and eager curiosity was visible on every countenance as Mr. Pettigrew commenced his lecture, of which we offer to the public the following very inadequate sketch.

[*Here follows a long report of the lecture.*]

The learned lecturer now commenced unrolling the mummy, which bore, he said, a striking resemblance to the one opened at Leeds some years ago.[1] On the body was laid a garland of lotus and other flowers: the leathern strap contains emblems indicating a king, and is probably a description of Amenoph. When the flowers and fillets were removed the whole body appeared covered with a sheet that was laced at the back, in a manner, said Mr. P., which might give a lesson to our modern stay-makers (laughter). The sheet was tied in a knot at the back of the head, and when it was renounced [*sic*] the multitudinous rolls of bandages came into view. . . . as the unrolling went on, the room became filled with a strong but not very disagreeable odour, arising probably from the resinous materials used in the process of embalming. . . . The operator now came to a layer of bandages entirely covered with asphaltum which could not be unrolled: it was therefore picked off, and was composed of a common kind of cloth. After removing this a layer of bandages appeared with a coloured border, in accordance with specimens Mr. Pettigrew had exhibited to the audience (applause). . . . The lecturer now exclaimed "Here at length is something to repay one's caution (applause): in a preceding lecture I mentioned the scarabeus as an ornament found frequently between the bandages: I will now lift this portion of the covering, and you will see a very fine one". Here the mummy was carried round, and every one rose to see the ornament on the breast, which was a fine scarabeus formed of greenish porcelain. The work of unrolling now again proceeded until the joyful announcement was made that something new was discovered which had never before been found on a mummy. Mr. P. now exercised his scissors very freely, and soon released the scarabeus which was found to be fixed above a plate of metal . . . found to be fashioned in the form of a hawk. . . . The wings of the hawk were expanded, and he held in his talons the emblem of eternal life; it was handed round for inspection and excited much applause and admiration. A new description of bandage now appeared, and the arms and legs were shown to be separately bandaged. . . . At length the left foot was displayed to sight, and though black and shrivelled, it excited much applause. . . .

[*Here follow some more general remarks, a description of the amulets found, and a general conclusion to the whole discourse.*]

Further Discoveries:—Since the unrolling of the Mummy on Saturday, Mr. Pettigrew has made a further examination of the body, which, though satisfactory in a certain degree, has not enabled him to approach in the remotest manner a knowledge of the name of the person, or the period of his death. He is, however, of opinion that the cases are of much greater antiquity than the Mummy, which seems to refer to the Greco-Egyptian period of the Ptolemies. On opening the head, Mr. Pettigrew found the space once occupied by the brain, filled with a sandy earth, which appears to have been lodged there by means of an incision in the throat, through which, and not through the nostrils (as was usual) the brain appears to have been extracted. The body was found to contain the intestines also contrary to custom, as they were generally placed in the Canopic vases. After having been cleansed and purified they were made up into four parcels . . . [and] replaced in the body. . . .

The Jersey Mummy is one of particular interest. Pettigrew was wrong in assigning it to the Ptolemaic period. The very good description of it which he afterwards published leaves no doubt that it should be assigned to the Twenty-second Dynasty. Pettigrew was supplied with good drawings of the mummy-case and amulets, made by Col. John Oldfield

[1] *An Account of an Egyptian Mummy presented to the Museum of the Leeds Philosophical and Literary Society by the late John Blayds, Esq. drawn up at the request of the Council*, by William Osburn, Junior, F.R.S.L., Secretary to the Society, etc. Leeds, 1828. 52 pp. and 5 plates. The mummy belongs to the reign of the last of the Ramessides.

(1789–1863). On his return, he went carefully over his notes and wrote a detailed description of the Jersey Mummy, which he read before the Society of Antiquaries on November 23, 1837, and the paper, which was afterwards published, is one of the most valuable contributions to the literature of mummification.[1]

Between 1837 and 1840 Pettigrew was busily engaged in the preparation of his great biographical work, *The Medical Portrait Gallery*, and this, in addition to his professional practice, apparently left him no leisure for further demonstrations upon mummies. In January 1840, however, he was in the arena once more and unrolled a mummy at the Islington Literary and Scientific Institute. A short account of the lecture appeared in the press:[2]

> At the Islington Literary and Scientific Institution on Monday evening, Mr. Pettigrew unrolled a Mummy in the presence of a numerous audience. The inscriptions on the outer case, consisting of prayers for, and the pedigree of, the departed, announced its occupant to have been Ohranis daughter of the Priest of Mandoo, Bal Snauf, Son of the Priest of Mandoo Bakenasht, son of the priest of Amun-Re, King of the Gods, Esaintmi. Ohranis was born of the Lady of the House of [*sic*] Nasmaut, daughter of the priest of Ammon Re, King of the Gods, Nashtafmaut. This pedigree Mr. Pettigrew considered a further proof of the statement made by Herodotus that the priesthood amongst the Egyptians was hereditary. The only ornaments found on the antiquated dame were a few common beads and a ring. That she was old before she died the state of the teeth gave proof. The Mummy had been brought from Thebes, and presents the characteristics usually observed in the embalming of that locality.

"Mandoo" is evidently Pettigrew's reading of , Menthu, or Month, and the titles borne by this mummy show that it belongs to the series of mummies of which Mariette in 1858 found a great *cache*, and of which I have given some account in this *Journal* (XIII (1927), pp. 158–60).

In 1843 the British Archaeological Association was founded, and Pettigrew played a prominent part in its establishment and in its progress for the rest of his life. In the summer of 1844 the Association held the first of its annual congresses, Canterbury being selected as the place of meeting. The assembled archaeologists enjoyed a busy week of lectures and excursions, and the culminating excitement at the close of the congress was the unrolling of a mummy by Pettigrew in the Canterbury Theatre. I extract the following paragraph from the interesting and entertaining account of the Canterbury Congress recently published by the late Mr. E. Reginald Taylor, F.S.A.,[3] in which he quotes from contemporary accounts:

> "At eight o'clock the theatre presented a gay appearance, being well filled with a most respectable audience; the leading families of the neighbourhood were present. All the boxes were filled" (the pit had been boarded over), "and the most intense interest prevailed throughout these altogether novel proceedings." The *Pictorial Times* says that "the stage decorations were got up with great care, Mr. Pettigrew and the mummy being in the centre, supported on either side by antiquarians tastefully arranged so as to give full effect to this imposing scene". There was first a lecture by T. J. Pettigrew on mummies generally, which lasted an hour, and then Pettigrew, assisted by his son, Dr. W. V. Pettigrew,[4] began the unrolling. "This was a task of no ordinary difficulty, as a great quantity of bituminous matter had been used in the embalmment." The mummy was said to have been brought from Thebes by Captain Needham, being purchased by Pettigrew in London, and to have lived about 500 B.C. Pettigrew read his name as HAR son of UNEFER.

[1] *Archaeologia*, XVII (1837), pp. 262–73, and 2 plates.

[2] *Buckinghamshire Gazette*, January 25, 1840. This notice was doubtless communicated by Pettigrew's friend Dr. John Lee.

[3] *Journ. of the Brit. Archaeological Assoc.*, N.S., XXXVIII (1932), 212.

[4] William Vesalius Pettigrew, M.D., F.R.C.S. (1814–74), the eldest surviving son of T. J. Pettigrew. See *Memoir*, pp. 33, 86, 87.

As the unrolling proceeded the cloth became more and more difficult to unroll, being impregnated with bituminous matter, and it had to be cut away with knives. After working hard for about an hour, the face was uncovered, showing a "complacent smile" on the mouth, and enough of the body to reveal its form. The greatest interest was evinced by the spectators, "and from time to time pieces of the bandages were handed to the ladies in the boxes", although the cloth "had a peculiar and disagreeable smell". "The dust pervaded the atmosphere and was inhaled by all persons near." Dr. Pettigrew then sawed off the back part of the skull, to see what was inside, and found that the brains had been replaced by pitch. After an hour and a half "the mummy, which proved to be that of a young man, was raised to its feet, and presented to the company, and was received with enthusiastic applause". The audience did not leave the theatre till 11 p.m., having had three solid hours of mummy study.

The Canterbury ceremony was repeated a few years later, when, at the Worcester Congress of 1848, in the Shire Hall, Pettigrew unrolled a mummy that had been specially presented for the occasion by Joseph Arden, F.S.A. (1800–79). He delivered a preliminary lecture, and then, assisted by his son, unrolled the mummy before a crowded audience. The ceremony lasted, like that of Canterbury, three hours.[1]

The last mummy unrolled in public by Pettigrew, so far as I have been able to trace, was a specimen belonging to the United Service Institution. A printed notice announcing the ceremony was issued to the members.

The demonstration took place on May 23, 1851. The mummy is evidently one belonging to the period intermediate between the Twenty-second and Twenty-sixth Dynasty, for the viscera were found wrapped in parcels with wax effigies of their guardian deities in the style of the former, but were placed, not inside the body but between the legs, after the manner of the latter dynasty. Pettigrew afterwards published an account of the viscera and their genii.[2]

Such are the public demonstrations that Pettigrew gave on Egyptian mummies, or, at least, all of which I have been able to find any record. His frequent performances earned for him the nickname of "Mummy Pettigrew", and afforded many opportunities to wits and lampoon-writers. *Punch* parodied the well-known Latin proverb *Crescit amor nummi, quantum ipsa pecunia crescit* into *Crescit amor mummi, quantum ipse Pettigrew crescit*. The performance in the theatre at Canterbury called into existence the following bad, but amusing, verses:[3]

> E'en on that sink of all iniquity, the Stage,
> The sacrilegious monsters dared engage
> On Friday evening to strip a corse—
> A Mummy called they it—and what was worse,
> Sawed through the head—as it had been a cheese;
> (Praise be where due, the powder made them sneeze)
> Then placed upon its feet the insulted dead,
> Gave three wild yells, called cheers—and went to bed.

The following story is told by Pettigrew's grandson.[4] Pettigrew was one day unrolling a mummy in his house in Saville Row before some friends, and was just remarking that he had come to some hieroglyphics which would give the name of the mummy, when a maid-servant came in and overheard the remark. She went back to the kitchen and told the others that the master had just found out the name of the mummy, and that it was 'Harry Griffiths' (Hieroglyphics).

[1] Pettigrew published a full account of this mummy in the *Journ. Brit. Arch. Assoc.*, IV (1849), 337–48. It belongs to the Twenty-first Dynasty.

[2] *Archaeologia*, XXXIV (1852), 392–3.

[3] Quoted by E. R. Taylor, *op. cit.*, p. 213.

[4] *Ibid.*, p. 212.

In concluding these remarks on Pettigrew's work on Egyptian mummies, I will add two instances in which he was concerned with mummies of post-Egyptian date.

On January 20, 1852, a special committee was appointed by the Council of the Society of Antiquaries to investigate the circumstances attending the discovery that had been made a few days earlier, of an embalmed body in St. Stephen's Chapel, Westminster. This had come to light unexpectedly during some structural repairs, and as the committee considered that an examination of the body, which exactly resembled an Egyptian mummy, might be helpful in their researches, Pettigrew was invited to join their number and unroll the body. This he accordingly did, assisted by his son. A full account of the whole proceedings was afterwards published, and the evidence seemed to establish that the body was that of William Lyndewode, Bishop of St. Davids, who died in 1446.[1]

Finally, Pettigrew instead of, as so often before, unrolling a mummy, was called upon to roll one. On August 18, 1852, Alexander, the tenth Duke of Hamilton, died in his London house in Portman Square. The Duke had left directions during his lifetime that on his death his remains were to be mummified and deposited in an Egyptian sarcophagus that he had caused to be sent from Egypt many years before for that purpose. An enormous mausoleum was built in the grounds of Hamilton Palace, and the sarcophagus was placed therein to await its noble tenant. Pettigrew fulfilled the function of the Egyptian embalmer, and also that of the Chief Ritualist at the funeral. The following extracts are taken from *The Times* of Tuesday, September 7, 1852:[2]

On Saturday last the remains of Alexander, tenth Duke of Hamilton, who died in Portman-square, London, on the 18th of August, were deposited in their final resting-place, for it cannot be said they were buried. On the preceding Thursday, the body having previously been embalmed by Mr. Pettigrew of London, was transmitted from London to Hamilton Palace. . . . On Saturday the interment took place in the new mausoleum, situate in Hamilton grounds, about 300 yards to the south-west of the palace, and which, though it has been in the course of construction for the last four years, is not yet entirely completed. This is believed to be the most costly and magnificent temple for the reception of the dead in the world—always excepting the Pyramids. . . . The interior is approached by a great flight of steps, and presents a stone chapel of great altitude, which is to be lighted from above by a single circular plate of polished glass fourteen feet in diameter. . . . Below the floor of the chapel . . . are situated the vaults or catacombs for the interment of the members of the noble family of Hamilton. Here have been deposited within the last four months the bodies of 12 members of the family which formerly lay in the vaults of the old Hamilton Church. . . . The late Duke Alexander, however, is not destined to lie in the same vault with his noble kindred, but in the chapel above, and in a most costly and unique sarcophagus which his Grace procured about 30 years ago from the Pyramids of Egypt, and which was at one time destined for the British Museum. The sarcophagus is made of hardest basalt, and is literally covered with the most exquisitely carved hieroglyphics, which are almost as fresh as the day they were executed. The lid contains a most beautifully chased female face, and it is believed that it originally contained the body of an Egyptian Queen or Princess, but the late Duke had the cavity chiselled out and extended so as to serve as the sepulchre for his own body. Everything had been prepared by the orders of the late Duke before his death, and the sarcophagus rested in the niche of the chapel opposite the entrance, upon two splendid blocks of black marble, which already contained an inscription, complete with the exception of the day of death. . . . [*Here follows an account of the funeral and a list of those present.*] . . . The company retired, leaving the body resting on a dais in front of the sarcophagus. The workmen, headed by Mr. Pettigrew, the embalmer, and Mr. Bryce, the architect, then took possession of the chapel, when the coffin was opened and the body placed in the sarcophagus. The lid, which weighs 15 cwt., was then lowered, and the world and all its concerns closed for ever on Alexander, the tenth Duke of Hamilton. The empty coffin was removed to the vaults below. . . .

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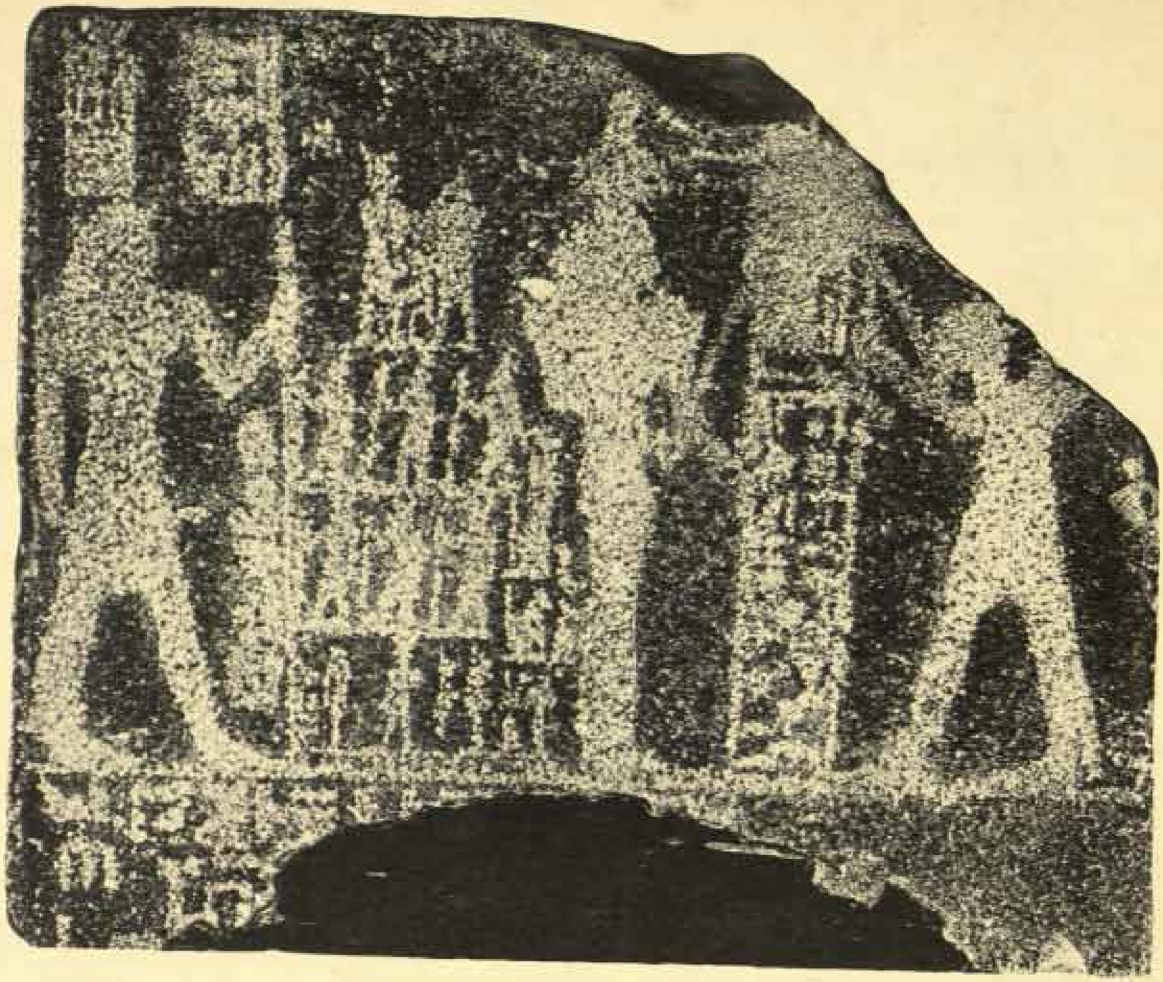
[1] *Archaeologia*, XXXIV (1852), 406–30, Pls. 30–4; *Journ. Brit. Arch. Assoc.*, VIII (1853), 62–3, 70–2, Pls. 14, 17.

[2] This account is too long to print in full, but the elaboration of the ceremonies it describes recalls the well-known wall-paintings on the walls of the Theban tombs.

Pettigrew's *History of Egyptian Mummies* and his various separate papers on mummies were not his only contributions to Egyptology. In 1842 he projected the publication of an Encyclopaedia, alphabetically arranged, of Egyptian archaeology, history, and geography. A prospectus was issued inviting subscriptions to the work, which was to appear in parts. In 1842 the first part was issued, containing an introductory essay and the commencement of the alphabetical portion from AAH to ABO. This first part of the work, a large octavo, contained thirty-two pages and two engraved plates (one coloured) and was published by Whittaker & Co. at the price of three shillings. It also contained a list of 151 subscribers, but the number was insufficient to justify the cost of production, and no further parts were issued.[1]

[1] *Encyclopædia Ægyptiaca, or a Dictionary of Egyptian Antiquities.* Part i, General View of Ancient Egypt forming the Preliminary Discourse; AAH–ABO. London, 1842.



Partly erased scenes on a face of the Kha'sekhemui gate-jamb from Hieraconpolis

A FOUNDATION SCENE OF THE SECOND DYNASTY

BY R. ENGELBACH

PART of a pink granite gate-jamb, dating to the reign of King Khaᶜsekhemui, was discovered by Mr. J. E. Quibell in 1897[1] at Hieraconpolis and was registered at the Cairo Museum in 1899.[2] One side bears the titulary of the king in relief, while the other and larger side appeared to be quite plain.

In 1928, while Mr. Battiscombe Gunn and I were experimenting with a new system of illuminating monuments for photography, it chanced that a very raking light fell on the larger face, which is now placed with its back to a window, and we were surprised to observe that it was covered with scenes and inscriptions, almost wholly erased, which obviously represented a foundation ceremony. We studied the face under various lights, had casts made of it, and finally rubbed chalk powder over it, which adhered to the rough parts but could be rubbed off the smooth background. The result is shown in Plate xxiv. We showed the photograph to a large number of archaeologists, but none of them had been aware of the existence of any reliefs on this face. We also supplied photographs to several scholars who expressed a desire to study the scenes with a view to publishing them, but nothing has appeared from them up to the time of writing.

It was only this year that I found out that our "discovery" was not new except as regards the nature of the scene, for, in the English translation[3] of Maspero's Guide, dating to 1906, the blocks, which are mentioned as lying on the right and left of the window in Gallery A (now G 36), are described as follows: "On the face there was originally a complex scene in relief, with inscriptions, the whole of which was chiselled out at the time when the block was re-used; only the indistinct outline of figures and hieroglyphs is now to be seen. On the extreme left was an upright figure of the king with the staff of authority in his hand; his face was turned towards a goddess, who is also standing. Smaller figures carrying emblems completed the scene." In the 1914 guide, the exact position of these blocks is omitted, though the description of the erased scenes is practically the same as that in the earlier editions. It seems that, about this time, a rearrangement of the blocks was made, rendering the erased scenes invisible. On the 1915 guide going out of print, a smaller one was published (1922) which omitted this monument, with the result that all memory of its peculiarities was seemingly lost.

The face bears two scenes relating to foundation ceremonies. In the first the king, on the left, holding a stick and mace, stands before his people. On his head is the *serekh* name of King Khaᶜsekhemui, surmounted by the falcon (on the right) and the Seth-animal. The arrangement of the hieroglyphs appears to be the same as that on the more perfect face.[4] In front of this name is a square frame, which no doubt enclosed another royal name, but I have not been able to recover with certainty any of the signs which

[1] Quibell, *Hierakonpolis*, I. Pl. ii. In the description of this face it is not noted that the Seth-animal, which with the Horus hawk surmounts the *srḫ*-name, has been partially erased, as is the case with the stelae of Peribsen (Petrie, *Royal Tombs*, II, Pl. xxxi). [2] *Journal d'Entrée*, no. 33896.

[3] The French edition, from which this is translated, is missing from the Museum library.

[4] Quibell, *loc. cit.*

composed it. Between the king's body and his stick is what appears to have been a vertical line of inscription, not a sign of which is recognizable. The smaller figures before the king are arranged in four ranks. At the top two figures appear to be facing each other and grasping some object. Of this, however, I am not certain. Under them are two ranks of three men each, holding sticks and facing the king. Below and behind them are six or more smaller figures. Under the whole scene were three or more lines of horizontal inscription, now illegible.

The second scene represents the king, on the right, and the goddess Sesheshet hammering in boundary poles.[1] Between the poles is a vertical inscription of which I can make nothing.

The face of the block has been left chalked in the manner shown in the Plate, and casts are also available for students who may wish to attempt to extract further information from this important document, which bears by far the most ancient foundation scene known.

[1] For a late example of this scene see Rochemonteix-Chassinat, *Le Temple d'Edfou*, Pl. xl *d*.

STUDIES IN THE EGYPTIAN MEDICAL TEXTS—IV

By WARREN R. DAWSON

(Continued from *Journal*, xx, 41–6)

15. The affection called

This word has generally been translated "swelling" and sometimes "boil", "ulcer" or the like, but I believe it to mean a sharp or acute *pain*, popularly a "shooting pain".

B. Ebbell (*Ä.Z.*, LXIII, 115) came somewhat nearer the truth when he proposed "rheumatism" as the meaning of *štt*, but his rendering does not fully account for all the occurrences of the word in the medical texts, although it may be appropriate to some few of them. The following are the instances of the word in the medical papyri:

1. E 51. 15 (294). "Beginning of the remedies for reducing ( ) *štt* in the groins." An external remedy in which a plant (which I shall attempt to identify in § 17) is applied to the affected region, "then it (the pain) subsides immediately". There is a duplicate of this remedy in H 3. 4 (35), where is corruptly written for *štt*. Perhaps hernia.
2. E 51. 19 (295). For *štt* in the neck which causes pain when the head is inclined. External remedy. This oft-quoted passage is generally understood to refer to boils, but it is clearly a case of fibrositis, or "stiff-neck".
3. E 52. 6 (296). Here *štt* is a symptom of some stomach trouble which makes the abdomen rigid. There is a duplicate in E 25. 3 (102), where *štt* has wrongly the additional determinative , doubtless borrowed from . In both passages *štt* is qualified as , the meaning of which is unknown to me.
4. E 52. 7 (297). For *štt m ḫt*, pain in the belly. The remedy is an internal dose containing figs, cumin, and other sedative and carminative drugs. Duplicate in B 11. 5 (136), which adds "and in all other parts of the body". Probably colic, or some other form of acute "stomach-ache".
5. E 52. 15 (300). Similar to No. 4, but adds to title "of a man or of a woman".
6. E 52. 10 (298). For *štt* in the front of the head and in the neck. External application to the head. Probably neuralgia or similar.
7. E 52. 13 (299). The same, but treated by an internal dose.
8. E 103. 12 (856 *f.*). Pain in the arm and trembling of the fingers diagnosed as *štt*. The Berlin duplicate has *štt* of the fingers, instead of "trembling". This may be paralysis agitans.
9. B 4. 9 (48). *štt* of the sides (, "costal cage"). Internal dose.
10. B 11. 7 (138). For all kinds of *štt* which come and go (*ḫtḫt*) in a man's flesh. Internal dose. Shooting or intermittent spasms of pain.
11. B 11. 11 (139). For *štt* which are painful in summer and in winter in all parts of the body. External remedy applied to the thorax.
12. B 11. 12 (140). For *štt* which are painful in winter in all parts of the body. External remedy.
13. B 12. 1 (141). Similar to No. 12.
14. B 12. 2 (142). For *štt* which gives pain under the right or left breast (i.e. in the R. or L. hypochondrium). External remedy.

15. B 12. 3 (143). For *śtt* in the bladder or uretha (painful micturation). Internal dose. Perhaps inflammation of the prostate gland. B 12. 4–5 (144–7) are other remedies for the same.
16. B verso 2. 9 (201). For *śtt* in the ear. Remedy applied to ear. Acute *otitis media* or some other form of ear-ache. B. verso 2. 12 (203) is similar.
17. Edwin Smith 15. 1. Dislocation of the ribs causes acute pain (*śtt*) in the costal cage (). In this papyrus *śtt* is written .
18. Ed. S. 16. 18; 17. 2. A wound in the shoulder causes *śtt* in the scapula (i.e. in the nerves and muscles of the scapular region).

From an examination of the above-mentioned cases it will be seen that there is not one in which the meaning "swellings" or "boils" is necessary or even probable, and to many such a significance is wholly inappropriate. The sense in every case is satisfied by the translation "acute pain", or "shooting pain". In some cases the pain might be of a rheumatoid character, but such cannot be the meaning in Nos. 1, 4, 6, 15–18. In the numerous remedies for pains and stiffness in the muscles and joints which are undoubtedly rheumatoid or arthritic, the word *śtt* is never once used.

It may be added that the meanings "swellings" or "rheumatism" are quite inapplicable to the sense in Pap. Bremner-Rhind, 5, 26.

16. The plant

This herb, "Thoth's feather", or "ibis-wing", is thus employed in the medical papyri:

External Uses

Mouth-wash for teeth: E 89. 9 (745).
For pain in right side: E 90. 9 (758).
Emollient for stiff joints: E 83. 15 (669).

Internal Uses

Vermifuge: E 22. 12 (79).
For pain in head and neck: E 52. 13 (299).
For pain in left side: E 79. 11 (631).
For pains in stomach or belly: B 13. 9 (155); B 14. 1 (157); B 14. 5 (160).

Apuleius Barbarus (*Herb.*, ii) gives *Ibeos Pteron* as one of the synonyms of his *Herba quinquefolium*. This is the πεντάφυλλον of Dioscorides (*De Mat. Med.*, iv, 42), which is one or more of the many species of *Potentilla*, probably *P. reptans*. The Egyptian uses of "Thoth's feather" are consistent with those of Dioscorides, from whom Apuleius borrowed. The striking and unusual vernacular name given by the latter suggests that identification of this plant with a species of *Potentilla* is very probable.

17. The plant

This herb is not of common occurrence in medicine, but a gloss in a passage of the Ebers Papyrus defines its nature. The prescription, which is repeated in Pap. Hearst [E 51. 15–20 (294) = H 3. 4–6 (35)], is for acute pains in the iliac region (), and it begins thus: "There is a herb, *śnwtt* is its name; it grows on its belly like the *kꜣdt* and its flowers are like the lotus. Its shoots are found like 'white-wood' (). Gather it and smear it on the groins, then it (the pain) subsides immediately. Its seeds, made into a cake, are given for (i.e. to relieve) the pain."

The herb is also taken internally as a vermifuge [E 22. 19 (83)], and applied externally for pain in the right side [E 90. 11 (759)].

The description of the herb, a trailing plant with bell-like flowers, suggests a kind of *Convolvulus*. There is a species, *C. hystrix*, that is common in Egypt at the present day, and actual specimens of it were found amongst the floral remains discovered by Petrie at Illahun (P. E. Newberry in Petrie's *Kahun, Gurob and Hawara*, 1890, p. 47). The plant was also used for making garlands, a use to which it is well adapted.

Naville attempted to show that the magical plant of Nefertum, , is a lotus, and that the plant described above is identical with it.[1] His demonstration is, however, unconvincing and rests, in my opinion, upon a mistranslation of the phrase "it grows upon its belly", i.e. trails, which phrase he renders "elle croît sur son bulbe"—a general character applying equally to every species of bulbous plant whatsoever.

Many of the *Convolvulaceae* are important in medicine, the seeds and roots secreting powerfully active juices. The *kꜣdt*, the plant to which *śnwtt* is likened, will be dealt with in a future paragraph of these notes. The Common Bindweed of Egypt (*Convolvulus hystrix*) appears to me a probable identification of this herb.

18. The Beetle in medicine

The beetle, which in the medical texts is always written simply , without phonetic complements, is always employed externally. The wings and body of a beetle are used in an emollient for stiff joints [H 8, 15 (115)]; to promote delivery of a child the *ḥkw* (? wing-cases) of a beetle are used in an ointment [E 94. 21 (807)]; and in a prescription for expelling the "artifice of spells" a large beetle, the head and wings of which have been cut off, is to be burned, put into fat, and applied [E 81. 13 (733) = H 11. 12 (159)].

Now the word, written simply in the medical texts, is always read *ḫprr* as it is in the Pyramid Texts, for instance, where the phonetic complements are added (e.g. § 697), but it seems to me likely that this is not the true reading, and that , or , is used as the word-sign for . This creature is represented in the Book of the Dead (§ 32) as a large beetle or cockroach. In the Berlin Med. Papyrus, in a fumigation to expel "influence" (), a beetle, corruptly written , is one of the ingredients used [B 5. 11 (59)]. In the Demotic Magical Papyrus (*verso*, 2. 17), in a recipe to drug an enemy, a beetle is burned in styrax and medicated. Here the word is written in cipher **ⲉⲛϣⲉ**, but it is doubtless the same as . These two cases, which prove that the beetle used for medico-magical purposes was called *ʿpšy*, suggest that the same reading should be applied to the beetle when written simply and put to similar uses in the Ebers prescriptions.

19. The animal

This word occurs once only, so far as I am aware, in the medical papyri, and that is in a remedy to prevent *kkt* from devouring corn in a granary [E 98. 7 (849)]. As the remedy is a fumigation with gazelle's dung, it would seem, on the face of it, more likely that *kkt* is not a "rat", as usually translated, but "weevil", a much more serious pest for which fumigation is appropriate. On the other hand, *kkt* would seem to have been a mammal, or at least some animal larger than a weevil, as its brain is mentioned in a spell in Pap. Leiden I. 345. G 1. 8, . One can hardly imagine the magician reciting his spell over the brain of a weevil—an impossibility! As, however, there is a large lacuna after *kk* in the Leiden papyrus, the word is not certainly the same as that in Ebers.

[1] *Revue de l'Ég. anc.*, I, 31–44.

20. The mineral

This drug, which is of frequent occurrence, occurs in the medical texts as follows:

External Uses

For eyes: E 56. 2 (336*c*); E 57. 14 (354); E 57. 18 (356); E 59. 15 (371); E 59. 17 (373); E 59. 18 (374); E 62. 12 (410); E 62. 13 (411); E 62. 15 (413); E 63. 1 (417); E 63. 5 (419); E 63. 8 (421); E 63. 9 (422); to prevent growth of lashes: E 64. 2 (429); for of the eyes: E 57. 4 (346); E 62. 8 (407).

For burns: E 67. 21 (482*e*); E 69. 8 (501); E 69. 13 (505)=L 15. 11 (57).

For wounds: E 70. 11 (521); L 14. 3 (43).

For herpes or similar: E 64. 16 (439); E 64. 19 (442); E 65. 7 (450); for alopecia: E 92. 8 (772); E 92. 15 (776); for acne or similar: E 87. 16 (721).

For ears: E 91. 2 (764); discharge of ears: E 92. 5 (770).

For toes and toe-nails: E 78. 13 (620)=H 12. 14 (175); E 78. 16 (621)=H 11. 17 (173); H 12. 11 (184); H 12. 17 (190); H 13. 2 (193); H 13. 5 (196); H 13. 9 (202).

For bite of a pig: H 16. 6 (242).

To draw out a thorn: E 88. 15 (731).

For joints and muscles: E 83. 7 (663); E 83. 21 (673).

For trembling fingers: E 79. 1 (624).

For hardness of stomach: E 43. 20 (213).

For the "Bedouin disease": L 10. 13 (28).

For various unidentified diseases: : E 27. 5 (121) and see "eyes"; for : E 24. 8 (96); for : L 3. 6 (7); for : H 11. 9 (166).

Internal Uses

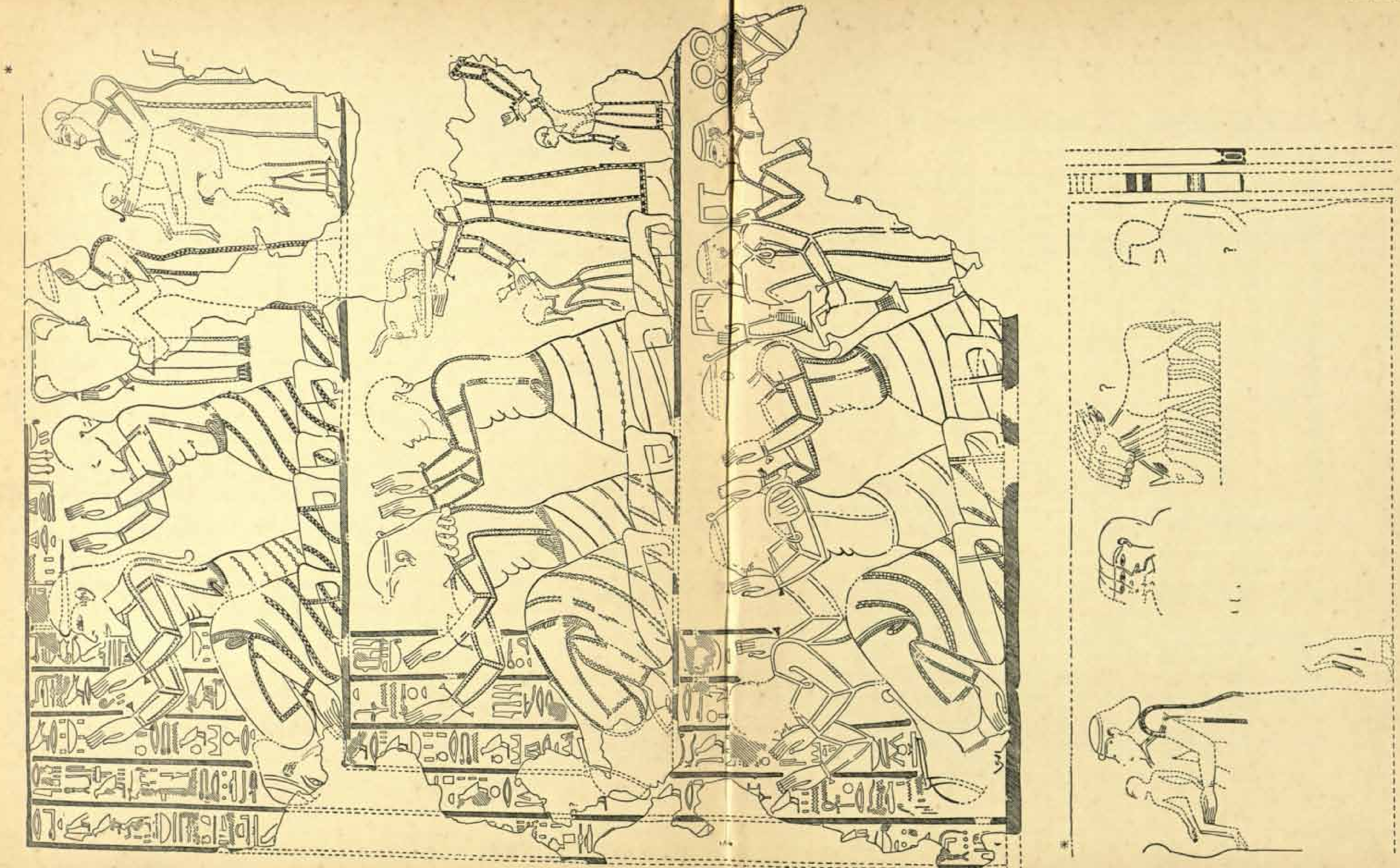
As vermifuge: E 22. 7 (76); E 22. 19 (84).

This word is usually translated "minium". Not only is the name of this mineral known to be , but minium (red oxide of lead) is highly poisonous and could never be taken in internal doses.[1] *Mnšt* was used by the Egyptians as a yellow pigment for colouring sculptured reliefs.[2] Lucas has stated that two yellow pigments were used by the Egyptians—orpiment and yellow ochre. Orpiment (sulphide of arsenic) is again excluded in the present case as being highly poisonous.[3] *Mnšt* is therefore most probably yellow ochre, a soft argillaceous earth impregnated with ferric oxide. The uses generally agree with those mentioned by Dioscorides (*De Mat. Med.*, v, 108), but the Egyptians employed the drug for more purposes than did the Greeks. It is stated by Dioscorides to be astringent and good for tumours and abscesses, and that it removes hair from ulcerated areas. Like orpiment, ochre is much used for eye-complaints in the East.

[1] The identity of *prš* will be dealt with in a future section of these Notes.

[2] *Wb. d. aeg. Spr.*, II, 89.

[3] *Cf. Journal*, XIX, 135, § 6.



FOREIGNERS IN THE TOMB OF AMENEMHAB (NO. 85)

FOREIGNERS IN THE TOMB OF AMENEMḤAB (NO. 85)

BY N. DE G. DAVIES

THE Theban tomb of the army lieutenant Amenemḥab is known chiefly for the long text which gives a vivid account of his military career in Syria under Tuthmosis III and Amenophis II.[1] This text is set over an almost completely destroyed figure of the gallant officer standing before a similarly unfortunate figure of his enthroned sovereign, Tuthmosis III, and presenting to him the tribute of northern Syria. Most of the lower half of the wall is stripped of its scenes. Apparently this injury is accidental; but, if so, it has miraculously stopped short horizontally at the bottom of the long text and vertically at a panel on the right which presents tributary peoples of the north in three rows. What is lost between the figure of Amenemḥab and this panel of Syrians probably comprised another and smaller figure of the hero giving audience to the visitors or leading them, and an array of the Syrian tribute.[2] Of the latter there remain fragments of three sealed jars on the extreme right (Fig. 1), and slighter traces of others at a little distance to the left of them. Of course, the whole space may have been occupied by such gifts.

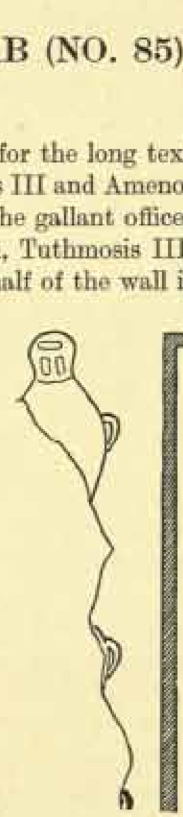


FIG. 1.

Virey, the only Egyptologist who has had the courage to publish this large, greatly injured, and on the whole not very attractive tomb,[3] was one of the worst of copyists, and as the scene has been cited as a witness in the perennial lawsuit Historical Fact *versus* Ancient Picture, it seemed to me desirable that a more careful copy should be published (Pl. xxv). This did not prove easy in the case of the accompanying text. The blue signs have faded to almost nothing in places and had been preceded by a version in red line which differed in scope and arrangement from the final one, sometimes confusing it. Sethe, in publishing this text,[4] did not perceive that all the columns read from top to bottom even when interrupted by the base lines, being misled by the scribe, who cleverly arranged that the parts of the third column falling within any section could form, and were apparently meant to form, a description of the men in that section, so that the remaining texts in it seem at first sight also to belong to it exclusively. The meaning yielded by the text when it is read through all interferences justifies this procedure. It then reads:

"[*The chiefs of every foreign land*] *giving praise to the Lord of the Two Lands and homage to Kha-em-wēsě* (Tuthmosis III) (*with*) *their tribute on their backs, consisting of* [*silver, gold, lapis-lazuli*], *turquoise in blocks*(?), *lead, oil*(?),[5] *wine, raiment, cattle, incense. They beg for . . .* (*and*) *peace from* [*His*] *Majesty in the hope that there would be given* [*to them*][6] *the breath of life*

[1] The whole tomb has just been photographed by Mr. Burton for the Metropolitan Museum of New York (nos. 2566–2627).

[2] So in tombs 40, 86, 100.

[3] In *Mémoires de la Mission Archéologique au Caire*, v. 224.

[4] *Urkunden*, IV, 907–8.

[5] Reading (?) (?), or something very similar. The determinative I thought to see to *ḏhti* must surely be a smudge. "Oil" is to be expected, but *bḳ* is a strained reading.

[6] Reading . This spelling recurs in the tomb, see Sethe, *Urkunden*, IV, 924, 3.

in their(?) nostrils. All the chiefs of Upper Retnu, all the chiefs of Lower Retnu, Keftiu-land and Mennus (and?) every (other) foreign country uniting say 'How great is thy fame, victorious king, sovereign beloved of Rēʿ! Thou hast set fear of thee in all the lands and awe of thee throughout all foreign countries(?). Behold us then beneath thy sandals.'"

The chief gain in this version of the text is that I have been able to decipher the name Mennus (Menus?) with practical certainty after the mention of Keftiu-land and in the same register with this and "all (other) countries". This conjunction of Retnu, Keftiu, and Mennus occurs again, though in reversed order, in another tomb of the same period.[1] Too much stress must not be laid on this, for it may only indicate a rough sequence in situation for one who, in his enumeration of the chief peoples, moves in imaginary travel from Syria to its neighbours westwards. The Egyptians at this date had never met any equals within the bound of their expeditions, and hence never spoke of allied or friendly, but only of inferior nations. Those who were beyond the reach of their weapons they might speak of without unfriendliness; those they had crushed into submissiveness were "contemptibles". Hence the frame of mind which could add Mennus and Keftiu to the subject peoples arranged symbolically beneath the feet of Pharaoh, though armed Egyptians had never crossed the Amanus range into Asia Minor. Yet, understanding this, one still wonders to find Keftiu, and still more Mennus, included in this list. The only clue to the identity of the latter is to equate it with the city Mallus, close to the coast of East Cilicia. As the neighbour people to those well known to the Egyptians it would stand for the lands to the west of Syria, though it might be only a city state of no extended sway. That it is not to be considered as a city of the Keftiu or subject to them is shown by its inclusion in a separate compartment of the nine. The sequence affords no ground for placing Keftiu on the coast farther to the west as against a position on a neighbouring island such as Cyprus or Crete. Rather, one name seems sufficient to cover unknown Asia Minor. The omission of the great and important island of Crete, which must have been comparatively well known to the Egyptians, seems inexplicable by contrast. For "The isles of the Sea" never find mention among these nine subject peoples, those placed outside the pure Egyptian stock, unless the island peoples are to be found under the vague half-mythical Hau-Nebu, the men overseas. This term seems to be a convenient *et cetera*, though wont to be placed at the beginning instead of at the end of the list of nine.[2] The inclusion of "*Keftiu, Mennus, and every (other) foreign country*" in one group (judged by the text falling within it) demonstrates, not the close relationship of the two named peoples, but their small importance in the role of tributaries.

The scene before us is disappointing. Amenemḥab, who had fought with distinction so often in the Syrian wars, would, we might suppose, have taken as much interest in the aspect of his enemies as would lead him to insist on an accurate presentation of them on the walls of his tomb. It seems clear to me that the curious picture of the combat of an unknown man with a female hyena of fantastic size amid an imaginary flora is the artist's pictorial commentary on the biographical text opposite it, in which Amenemḥab records his adventures with the elephant whose trunk he cut off and the decoy mare whose body he ripped up. If so, its inclusion among the scenes illustrates the attitude of the draughtsman to historical correctness.

[1] Davies, *Tomb of Ḳenamūn*, Pl. xii, where the ethnical types to which the names are attached are very similar, if not identical.

[2] In tombs 48, 55, 57, 74. The apparently close resemblance between the man of Keftiu and him of Mennus in the tomb of Ḳenamūn may be disregarded, since it is not closer than that shown in the same scene between the inhabitants of the Delta and of Nubia, or again between a dweller in the Arabian waste and one whose home is on the upper Euphrates.

It is not surprising, therefore, that the pictures of the foreigners whom Lieutenant Amenemḥab met with in his wars, though they come off better than this, are far from satisfactory, if the explanatory text is an original accompaniment of the scene.[1] For when we examine the men shown in the three divisions no difference is to be found between them; all are as Semitic-looking as possible, all bearded, all in Syrian dress. Every point that might be one of differentiation is common to all, or occurs in the wrong group. A long pigtail ending in a curl is peculiar to a Hittite, if to any race; it is found in all three registers.[2] The shaven head is unknown outside Syria; but it recurs in all three groups. Nor are the objects they bring better discriminated. The bull with forward-pointing horns is more common, and probably more original in Keftiu, especially when the whole animal is shown. Here it is in Lower-Retnu hands. Gold was certainly not native to Keftiu, whether it be island or mainland; but gold rings are only shown in the lowest register.[3] True, the vessels held by the men in this row might pass as of Keftiu origin; it is the one appropriate feature. The artist then, if he is responsible for the assignment of the three rows to three sets of peoples, could not distinguish between Syrians of the mountain and of the plain, and had not the slightest idea of what any one else in the north looked like or wore, or what was his characteristic handicraft. Everything northern was Syrian to him. The massed gifts, had they been preserved, might have improved the matter, but must have left it hopelessly bad. The evidence of this tomb then cannot be adduced in any of the many important questions at issue. The only thing it demonstrates is the independence of each Egyptian artist, generally speaking. Our draughtsman might have gone to the contemporary tombs of Rekhmirēʿ, Menkheperraʿsonb, or Amenuser for a model of what was unfamiliar to him, but did not do so. Such independence is shown also by Puyemrēʿ in his Cretan(?) figure. The costume depicted in the scene is interesting in so far as it affords perhaps the earliest occurrence of the swathed Syrian gown,[4] which is here given to the three chiefs in front, while other members of the delegation only wear the long Syrian dress. This swathing, as shown in Tomb 63,[5] is clearly only a thin broad scarf or sash wound three or four times round the hips and thighs over the ordinary gown, and adorned along one selvedge. For in that scene the sash always contrasts in colour with that of the dress over which it is cast. In our picture the folds are increased to six or seven and reach almost to the ankles, like an Indian woman's *sari*. The dress thus approximates to that of the women, where the folds are worn looser and in horizontal falls, and perhaps already form a made-up gown. The tasselled sash brought in the hands in the top register, as often elsewhere, is probably this addition to the simple gown. The bordering is always in blue and red, in varying combinations,[6] and is usually edged by red lines, but sometimes by blue. Occasionally it is simple blue (possibly with black spots). Generally there is a single or double row of spots (in needlework?). These spots may be in dark red on light red or white, blue on white with a red line between double rows, or even dark red on blue. The sash has narrower edgings, generally blue spots strung along a red line, once dark red on blue. Where there is a double row of spots those in one row may be red; in the other, blue.

The complexions of the men in the two upper registers are an impure yellow, except in one or two cases; in the third they are yellow and red alternately. The black of the hair has faded out. The beards are now all reddish. The shaven crowns are purplish. The colour of

[1] See, however, the closing paragraphs of this article.

[2] Perhaps a memory of the *coiffure* of Syrian women.

[3] They are coloured a light pinkish yellow and might be an alloy.

[4] But see *Theban Tombs Series*, v, 30, footnote.

[5] Steindorff, *Blütezeit*, p. 31.

[6] Perhaps in one case red on yellow.

the eyeballs is indeterminate; one in the lowest row I have noted as red, one in the uppermost as blue(?). The fillets are white.

The vases in the lowest register are blue; two of them have yellow feet (lapis-lazuli cased in gold?).[1] What is visible in the hands of the two last figures is light yellow. The fourth man in the middle row brings a blue bull on a platter (a red leg of beef in Virey's plate!). It is certainly recumbent. Such an object is again seen in the fragment from Tomb 63 in the British Museum (an early acquisition). There it is yellow with blue quatrefoil spots in the Egyptian style.[2]

The men are followed, in the topmost row at least, by a group of their women and a drove of asses. The latter are so nearly lost as to be recognizable only by their ears and their mouse-grey colour. Asses were, we know, transported in considerable numbers from Syria, the home of a wild breed; those in our picture, however, may be the riding animals of the deputation.

The first draft of the text in red line was apparently a longer form of the speech of the delegation and was perhaps confined to the top register. It seems to have run: "*How great is thy fame, O victorious king, sovereign. . . . Thou hast set fear of thee in all the lands . . . and awe of thee throughout all foreign countries. Now, lo, we are beneath thy sandals . . .*". The enumeration of the peoples represented may have had a place over the lost scene. Or else there was no mention of them originally and the triple division was an afterthought, unprovided for by the draughtsman, who had only meant to show Syrians. In that case much of our adverse criticism is unjust. It may be that there was a second, but still not final version which wrote , for "upper" and "awe" respectively.

Thus the scene in Tomb 85, when probed, does not add much, if anything, to our knowledge. But it is well that the reference to Keftiu in connexion with Mennus should be put in its proper setting.

[1] *Cf.* the vase in the Mediterranean tribute in Virey, *Tombeau de Rekhmara*, Pl. v and in Pl. ii of my forthcoming volume of the colour work in the same tomb.

[2] I owe this parallel to my wife. The scene is appearing in colour in a volume of her paintings to be published before long by the Oriental Institute of Chicago. The animal is visible in Steindorff (*ibid.*). *Cf.* the recumbent ram brought by Syrians in Tomb 78, Wreszinski, *Atlas* I, Sheet 248.

"PHOCAEAN GOLD" IN EGYPT

BY J. G. MILNE

IN *P. Tebt.* 739, ll. 21–3, there is a reference to a payment made εἰς διάφορα τοῦ ἀποδοκιμασθέντος ὑπὸ τῶν πρὸς τῇ γάζῃ χρυσίου οὗ ἔφησαν εἶναι Φωκαΐδος. Further details of the transaction are lacking, except that from the two lines which follow, unfortunately mutilated, it would appear that the gold in question had been bought in Alexandria; but the description of the metal as Φωκαΐς gives the clue to the trouble.

In the fifth and fourth centuries the "electrum" coins of Cyzicus, Phocaea, and Mytilene had played an important part in the international trade of Greece. Cyzicus supplied the bulk of the staters, and the other two towns struck almost exclusively sixths of the stater; at one period certainly, if not always, there was a formal agreement between Phocaea and Mytilene to regulate the issue of the coins in alternate years. These pieces were so familiar that the terms Κυζικηνοί and Φωκαΐδες were used without further qualification to denote "electrum" staters and sixths respectively; the individuality of Mytilene seems to have been sunk in that of its partner. The metal of which they were composed was the natural alloy of silver and gold from the Lydian area, known officially as λευκὸς χρυσός; the proportions of these two components varied, but there is no evidence that there was any grading of values according to this variation, and probably the alloy was simply regarded as a distinct metal, or an inferior type of gold.

The production of staters and sixths at these centres ended with the establishment of the imperial currency of Alexander the Great, which removed their main utility as a medium of international exchange; but they continued to circulate, and are found in hoards mixed up with pure gold coins. As they had never had any fixed denominations assigned to them, but had been taken at their metal value according to local prices—in other words, as definite quantities of a certain commodity—the disappearance, as minting authorities, of the states which had produced them made no difference to their status in the market. So the Cyzicenes and Phocaeans could go on being traded under the old conditions until they were worn out.

Mentions of Φωκαΐδες occur in a Delian temple-inventory of about 179 B.C. (Durrbach 442), which is not very long before the date of the Tebtynis papyrus—either 163 or 145; and it is not impossible, especially if the sum was a small one, that the disputed gold may have been actually a parcel of Phocaean sixths. But there seems some reason to think that Φωκαΐς may have become a popular name for alloyed gold; in a Delian list of about 279 there is a separate heading for χρυσίον λευκόν, in which appear στατῆρες Κυζικηνοί and Φωκαΐς; but a hundred years later, in the list previously quoted, Φωκαΐδες are tacked on at the end of the χρυσοῖ without further specification.

It would not be strange to find such an archaistic term used in Egypt; a much longer survival, also in the field of coinage, occurs in *P. Oxy.* 2113, of A.D. 316, where certain payments are said to have been made in Ἀττικαί, clearly intending the drachmas which had been superseded about twenty years earlier, under the monetary reform of Diocletian, by denarii. These drachmas might naturally enough have been described as Greek; but to call them Attic, when no Attic drachmas, in the strict sense of the words, had been coined for over three and a half centuries, and no drachma that could be said to be on the Attic standard had been struck in Egypt for over six centuries, implies a remarkably persistent tradition.

The meaning of the passage in the papyrus, however, is clear: the man had to make a payment into the Treasury, and offered a quantity of metal as gold, which the Treasury officials refused to accept at full gold value on the ground that it was alloy of the kind which had been used for the well-known Phocaean currency before the time of Alexander the Great; the information given is not sufficient to show whether it actually consisted of coins from that mint.

I

2

3

COPTIC MAGICAL TEXTS ON LEATHER

1. Brit. Mus. no. 10414 (lower part).
2. " " " 10122, recto (upper part).
3. " " " 10122, verso (upper part).

MAGICAL TEXTS IN COPTIC—II

By W. E. CRUM

The further texts here published all belong to the same group as that in the preceding article, are all on leather and are all made legible by infra-red photography. All are by one scribe though his hand varies much in regularity.

A. (no. 10414), $11\frac{1}{8} \times 4\frac{3}{4}$ in. Recto.

+ⲧⲓⲭⲁⲣⲓⲥ ⲛⲧⲁⲩⲧⲁⲁⲥ ⲁⲡⲟⲛⲏ ⲛⲡⲟⲣⲟ ⲥⲟⲗⲟⲙ[ⲱⲛ]
ⲉ̣ⲧ̣ϥ̣ⲓ ϩⲁⲣⲁⲩⲡⲉ ϩⲓⲙⲉ ⲛⲥⲓⲙⲉ ⲭⲁϩⲏ ϣ(gap)ⲁⲛⲧⲟⲩϫⲓ̣
ⲛⲧⲟⲩⲙⲛⲧⲡⲁⲣⲑⲉⲛⲟⲥ ⲧⲟⲩⲛⲁϫⲟⲩ ⲁ(gap)ⲃⲟⲗ ϩⲓϫⲛ-
ⲡϩⲟ ⲙⲡⲕⲁϩ ⲥⲉϫⲉ ⲁⲥⲥⲱⲃϩ ⲙⲉⲛ ⲁⲥⲁⲡⲁⲗⲗⲉ ⲙⲁⲓ ⲙⲁⲓⲉϩ.
ⲡⲉ ⲙⲁⲓⲕⲁⲧ ϣⲁⲛⲧⲁϯϣⲓⲡⲉ ⲛⲡⲟⲩⲓⲁⲧⲉ ⲕⲟⲕ ⲧⲡⲁⲣⲕⲟ
ⲕⲟⲕ ⲡⲁⲓ ⲉⲡⲉⲣⲉϫⲱϥ ϩⲁⲡⲡⲟⲛ ⲉⲣⲉⲣⲁⲧϥ ϩⲓⲁⲙⲛⲧⲉ
ⲁⲛⲉⲓ ⲉϫⲱⲕ ⲛⲡⲟⲟⲩ ⲁⲛⲕⲁⲓⲗⲉ ⲉⲣⲟⲕ ⲉⲧⲃⲉⲇ̅ⲁ̅ ⲡ-
ϣⲁⲛⲧⲉⲕϯ ⲛⲁⲥ ⲛⲧⲉⲕⲛⲟⲩⲱⲙ ⲧⲁⲉⲓⲣⲉ ⲉⲃⲓⲱ̅
ⲛϩⲏⲧⲥ ⲙⲁⲛⲛⲁ ϩⲓⲛⲉⲥⲗⲁⲥ ⲛⲥⲟⲩⲁϩⲧ ϩⲛⲛⲣⲏ
ⲛⲥⲙⲉ ⲙⲙⲟⲓ ⲛⲑⲉ ⲛⲛⲟⲟϩ ⲛⲥⲉⲓϣ ⲉⲃⲟⲗ ⲛⲥⲱⲓ ⲛⲑⲉ
ⲛⲟⲩⲧⲗⲧⲓⲗⲉ ⲙⲙⲟⲟⲩ ⲉⲥⲁϩⲉ ⲛⲥⲁⲟⲩⲕⲁϫⲟⲥ ⲛⲉⲣ ϩⲛ-
ⲟⲩⲃⲓⲱ ⲉⲥϣⲓⲛⲉ ⲟⲩϩⲟⲟⲣ ⲉⲥⲗⲉⲗⲉ ⲟⲩⲉⲙⲟⲩⲉ ⲉⲥⲃⲱⲕ̣
ϩⲛⲟⲩⲏⲓ ⲁⲩⲏⲓ ϩⲛⲟⲩⲧⲱⲣⲉ ⲉⲥⲃⲱⲕ ϩⲁⲛⲉⲧⲟⲃⲗⲉ ⲉⲧ(ⲓ ⲉ)ⲧⲓ
ⲧⲉⲛⲟⲩ ⲧⲁⲭⲏ ϩⲓⲧⲛⲧϭⲟⲙ̅ ⲧⲏⲣⲥ ⲛⲁⲙⲛⲧⲓ ⸗

ⲕⲟⲕ ⲕⲱⲭⲁⲣⲱⲧⲱⲭ ⲡⲁⲣⲥⲟⲃⲟⲗ ⲁⲛⲁⲏⲗ ⲁⲓⲏ-
ⲧⲉ ⲙⲟϥ ⲁϥϫⲟⲟⲩ ⲛⲟⲩⲇⲉⲙⲟⲛⲓⲟⲛ ⲉⲛⲉϥⲣⲁⲛⲛⲉ
ⲑⲉⲩⲙⲁⲑⲁ ⲉⲣⲉϫⲱϥ ϩⲁⲡⲡⲟⲛ ⲉⲣⲉⲣⲁⲧϥ ϩⲓⲁⲙⲛ-
ⲧⲉ ⲧⲕⲉϩⲉⲛⲛⲉ ⲛⲥⲁⲧⲉ ⲁϥϫⲓ ⲛⲁϥ ⲛϩⲉⲛϣⲗⲓⲕ ⲛⲕⲱ-
ϩⲧ ϥⲛⲁϯ ⲉϩⲣⲁⲓ ⲉϫⲛⲧⲁⲡⲏ ⲛⲇ̅ⲁ̅ ϣⲁⲛⲧⲉⲥⲉⲓ ⲛⲁⲓ ⲉ-
ⲙⲁ ⲛⲓⲙ ⲉⲓⲟϣⲉ : ⲁⲥⲱⲕ ⲛⲧⲉⲥϩⲟⲓⲧⲉ ⲉⲛⲉⲥⲙⲟ̅ⲧ̅
ⲥⲁⲙⲟⲩⲧⲉ ⲉⲣⲟⲓ ϫⲉⲗⲙⲟⲩ ⲛⲏⲕ ϩⲓⲧⲛⲧϭⲟⲙ ⲛ-
ⲁ̅ⲇ̅ⲁ̅ⲏ̅ⲗ ⲉⲧⲓ ⲉⲧⲓ ϯⲛⲟⲩ ⲧⲁⲭⲏ ⲧⲁⲭⲏ̅ =

Here a clumsy human figure, with extended arms (Plate xxvi, no. 1). Below each arm an animal, facing inwards, while above and to right and left a row of ⲛ's. His right hand appears to hold a seven-leafed (?) branch. Bottom of picture lost. The fragment at present attached below the main sheet is presumably in its right position. On it are legible, after some magical letters, ⲧⲓⲭⲁⲣⲓⲥ ⲛⲧ̣....ⲛⲉ ⲛⲓⲙ ⲧϣⲉⲣⲉ ⲇ̅ⲇ̅ ϹΙƎ ⲥⲱⲛϩ ⲛⲛⲇ̅ⲇ̅ ⲛⲧⲱⲱⲧϥ ⲇ̅ⲇ̅. The lost side of this fragment presumably bore the opening words of the text on the *verso*.

VERSO.

ⲙⲙⲱⲧⲛ ⲛⲡⲟⲟⲩ ⲉϫⲛⲧⲉⲕⲁ(gap)ⲗⲁϩⲧ ⲙⲙⲟ-
ⲟⲩ ⲡⲁⲑⲉⲗⲉⲕⲟⲛ ϩⲛⲧⲉⲟⲩ ⲛⲟⲩ ⲉⲧⲉⲛⲁⲛⲟⲩ-
ϫⲧ ⲙ(gap)ⲙⲱⲧⲛ ϩⲛⲛⲙⲁ ⲛϣⲱⲡⲉ ⲛⲧⲉⲧⲛ-
ⲥⲱⲟⲩϩ ⲛⲁⲓ ⲉϩⲟⲛ ⲛⲡⲕⲉⲛⲟⲥ ⲧⲏⲣϥ ⲛⲁⲇⲁ̅ⲙ̅
ⲙⲛⲛϣⲏⲣⲉ ⲧⲏⲣⲟⲩ ⲛⲥⲱⲛ ⲉⲩⲉⲓⲛⲉ ⲛⲁⲓ
ϩⲁⲇⲱⲣⲟⲛ ⲛⲓⲙ ϩⲁⲇⲁⲉⲓⲟ ⲛⲓⲙ ⲉⲩⲉⲥⲱⲟⲩϩ
ⲁⲣⲟⲓ ⲧⲏⲣⲟⲩ ⲛⲑⲉ ⲛⲟⲩⲁϥ ⲛⲉⲓⲃ̄ⲱ ⲉϩⲟⲛ
[ⲉ]ⲡⲣⲟ ⲛⲟⲧⲛ̣ϩⲙⲉϥ ⲁⲓⲟ ⲁⲓⲟ ϫⲉϯⲱⲣⲕ ⲉⲣⲱⲧⲛ
ⲛⲛⲉⲧⲛⲣⲁⲛ ⲙⲛⲛⲉⲧⲛϭⲟⲙ ⲙⲛⲛⲉⲧⲛⲫⲩ-
ⲗⲁⲕⲧⲏⲣⲓ̈ⲟⲛ ⲙⲛⲛⲉⲧⲛⲧⲟⲡⲟⲥ ⲉⲧⲉⲧⲛϣⲟⲛ
ⲛϩⲏⲧⲟⲩ ϫⲉⲉⲧⲉⲧⲛϯ ⲛⲁⲓ ⲛⲟⲩⲭⲁⲣⲓⲥ ⲙⲛ-
ⲟⲥⲙⲟⲩ ⲙⲛⲟⲩⲱϣⲉ ⲛⲙⲁ ⲛϣⲱⲡⲉ ⲙⲛⲁ-
ⲥⲱⲟⲩϩ ⲁϩⲟⲛ ⲛⲡⲉⲁⲁⲗⲕⲁⲥⲧⲓⲣⲓⲟⲛ ⲛⲡⲟⲟⲩ
ⲛϩⲟⲟⲩ ⲙⲛⲛⲉϩⲟⲟⲩ ⲧⲏⲣⲟⲩ ⲛⲧⲉⲛⲁⲥ̣ⲏⲩ
ⲉⲧⲛⲁϣⲱⲡⲉ ⲛⲏⲓ ⲁⲓⲟ ⲁⲓⲟ ⲧⲁⲭⲏ ⲧⲁⲭⲏ

ⲧⲉϥϭⲓⲛⲣ ϩⲱⲃ ⲧⲏⲣⲥ ⲥⲧⲟⲣϩ̣ ⲡⲁⲛⲟⲕⲁⲗ-
ⲁⲙⲱⲛ ⲙⲟⲥⲭⲁⲧⲱⲛ ⲥⲛⲟϥ ⲛϭⲣⲟⲙⲡⲉ
ⲛⲗⲉⲩⲕⲟⲛ ⲙⲉⲗⲁⲛⲟⲥ ⲥϩⲁⲓ ⲛⲉⲥⲱⲇⲓⲟⲛ
ⲉⲛⲉⲥⲏⲧ ⲉⲧⲕⲁⲗⲁϩⲧ ⲛⲃ̄ⲣⲣⲉ ϯ ⲡⲙⲟⲟⲩ ⲡⲁ-
ⲑⲉⲗⲉⲕⲟⲛ ⲉϫⲱϥ ⲛⲧ̣ ? ⲛⲥⲛⲁ̣ϥ
ⲛϭⲣⲟⲙⲡⲉ ⲛ.....ⲙ̣ⲉ ⲛⲉⲕⲣⲁⲛ ⲉⲕⲟ ⲛ-
? ⲃ̄ⲟⲗ ⲉⲡⲣⲟ ⲛⲧⲁⲡⲟⲑⲏ-
[ⲕⲏ ? ⲛⲥⲱⲇⲓⲟⲛ ⲉϩⲟⲩⲛ ⲡⲣⲟ ⲛⲛⲉⲑⲟⲩ-
ⲁⲓ̣ ⲛⲛϣⲟⲩⲁ . ⲥϩⲁ . ⲧ̣ⲉ ⲧⲏ̣ⲣⲟⲩ ⲉⲛ̣....
ⲉⲣⲟⲕ ⲡⲉ ? ϩ ⲉⲥⲩ̣ⲛⲁⲙ
? ϯⲁⲛⲟⲥ ⲙ..ⲉⲣⲟⲕ
? ⲓ̣ⲟⲛ (blank)

]ⲙⲁⲛⲛ ⲫ̅ⲟ̅ⲣ̅ⲁ̅ⲛ̅ⲧ̅ ⲯ̅ⲟ̅ . ⲣⲁ . ⲛ̣

broken off

On the small attached fragment a few letters are visible, but yield no sense. Below them, rough human figures.

RECTO.

The favour (χάρις) *that was given to the* . . . .[1] *of king Solomon, which* (or *who*) *beareth off* (?) *the virginity and love of women*, Chahê,[2] *so that they take their maidenhood*[3] (-παρθενος) *and cast*

[1] This scribe rarely writes ⲏ for ⲉ, oftener ⲟ for ⲟⲩ, not, I think, ⲟ for ⲱ, so that it is hard to recognize the word for which ⲟⲛⲏ is miswritten. I can only suggest ⲱⲛⲉ (*Aegyptus*, VI, 190, l. 164), which appears to translate φιάλη. But such a misspelling seems unlikely; moreover the genders do not agree. The scribe sometimes leaves words incompleted (*e.g.* Kropp, M 3, 26, 29, 53, 68); he may have done so here. I have not found Solomon elsewhere in an ἀγωγή.

[2] A magical word. A rubric?

[3] The next words suggest "maidenhead".

them forth upon the face of the earth . . . .[1] *I will not* . . . . .,[2] (5) *I will not sleep until I put to shame their parents.* Kok Tparkokok, *he whose*[3] *head is in the abyss, his feet in hell; we are come to thee this day, we put trust*[4] *in thee for So-and-so* (δεῖνα), *that thou mayest give her the food,*[5] *that I may become honey in her belly, manna upon her tongue, and that she desire me as it were*[6] *the sun* (10) *and love me as it were the moon and wait for me* (lit. *hang upon me*) *like a drop of water hanging upon a jar* (κάδος)[7] *and that she be like unto a honey(-bee)*[8] *seeking (honey), a bitch prowling, a cat going from house to house, like unto a mare going beneath horses in heat.*[9] *Now, now* (ἤδη ἤδη), *now, quickly* (ταχύ), *by all the might of hell!*

(15) Kok Kôcharôtôch Parsobol[10] Anaêl. *I asked* (αἰτεῖν) *him and he sent a demon* (δαιμόνιον) *whose name is* Theumatha, *whose head is in the abyss, whose feet are in hell,*[11] *the Gehenna of fire. He took fiery prongs, wherewith to smite the head of So-and-so* (δεῖνα), *until she came to me, to* (20) *any place that I wish. She shall*[12] *draw her garment up to her neck and shall call to me saying, "Come hither". By the might of* Adaêl! *Now, now* (ἤδη ἤδη), *now, quickly, quickly* (ταχύ)*!*

VERSO.

. . . *summon] you this day, upon this pot of* . . . . .[13] *water. At the time when ye shall besprinkle yourselves in the dwelling*[14] *and gather to me the whole race* (γένος) *of Adam* (5) *and all the children of Zoe,*[15] *they bringing me every gift* (δῶρον) *and every present; they shall all gather unto me, even as a honey-bee upon the mouth of a hive. Ho, ho! I adjure you by your names and your might and your* (10) *charms* (φυλακτήριον) *and your places* (τόπος) *wherein ye are, that ye give me favour* (χάρις) *and blessing and love, in the dwelling*[16] *and the assembly and the workshop* (ἐργαστήριον),[17] *this day and all the days of my life* (15) *that I am to have. Ho, ho! Quickly, quickly* (ταχύ).

Its complete procedure:[18] *styrax of* (sic) *opocalamôn,*[19] *moschatôn,*[20] *blood of a white* (λευκός) *dove,*[21] *ink* (μέλαν). *Draw the figure* (ζώδιον) *on the bottom of the new pot; put the* . . . . .[22] *water therein and* . . . . . *dove's blood* . . . . . *names, whilst thou* . . . . *at the door of the storehouse* (ἀποθή[κη])[23] . . . . . *the figure* (ζώ.) *within the door of the portal of the* . . . . *to thee* . . .

B. (no. 10122). A strip of leather, 14×3¼ in. (Plate xxvi, no. 2).

ⲁⲛⲁⲛⲓⲁⲥ ⲁⲍⲁⲣⲓⲁⲥ ⲙⲓⲍⲁⲏⲗ | ⲥⲉⲇⲣⲁⲕ ⲙⲓⲍⲁⲕ ⲁⲇⲉⲛⲁⲕⲱ | ⲗⲁⲗ ⲙⲟⲩⲗⲁⲗ ϣⲱⲗⲁⲗ |
(4 lines of magical signs) | . . ⲡⲉⲫⲏⲗⲁⲕⲧⲏⲣⲓⲟⲛ | (5) ⲛⲥⲛⲟϥ ⲛⲛⲕⲁⲙⲟⲗ ⲛⲁⲗⲉⲩ [ⲛ-] |
ⲥⲱⲟⲩϩ ⲁϩⲟⲛ ⲛϭⲣⲟⲙⲡⲉ ⲕⲁⲕⲟϥ | ⲙⲁϩⲟⲩⲏⲗ (signs) | (signs) ⲛⲥⲟⲩⲟⲩϩ ⲁϩⲟ[ⲛ]

[1] Of the rest of l. 4 I can make nothing. Gardiner suggests ⲥⲱⲃϩ = ? *called out.*

[2] Possibly an angular letter after ϩ; if not, the verb is ⲉϩⲡⲉ, unknown elsewhere.

[3] Read ⲉⲧⲉⲣⲉ-. [4] For ϭⲟⲉⲓⲗⲉ. [5] For ϭⲓⲛⲟⲩⲱⲙ or ⲧⲉⲕϭ. "thy food".

[6] ϩⲛ apparently for (ⲛⲧ)ϩ(ⲉ) ⲛ-; also in 11, 13. [7] *Cf.* Is. xl. 15. [8] Unlikely.

[9] For ⲉⲧⲗⲟⲃⲉ. [10] *Cf.* ? Βεελζεβούλ. For *Kok* see *P.G.M.* II, 159.

[11] *Cf. Griffith Studies*, 163, for a comparable phrase.

[12] For ⲉⲥⲁⲥⲱⲕ; next line ⲉⲥⲁⲙⲟⲩⲧⲉ.

[13] ⲁⲑⲉⲗⲉⲕⲟⲛ and in l. 20. In Kropp, F 50 ⲁⲑⲩⲗⲓⲕⲟⲛ, where it is taken as ⲁⲧ-ϩⲩⲗⲓⲕⲟⲥ. Prof. Preisendanz suggests modern Greek ἀθέλκτος "unbewitched". [14] *I.e.* at home.

[15] These phrases in *B.K.U.* 10, 6; *ibid.* 8, 15; Kropp, F 26, H 52. "Daughters" of Zoe would be expected, but ϣⲏⲣⲉ is always written. [16] As above.

[17] Spelt as in Kropp, M 86. May mean "brothel". [18] As Kropp, M 10. *Cf.* ποίησις *P.G.M.* I, 114.

[19] Ὀποκάλαμος. [20] *Μοσχάτον*, "muscat wine". [21] As Kropp, H 113. [22] *V.* verso l. 2.

[23] These words refer presumably to the placing of the charms at the woman's door whom it is desired to enchant.

ⲡⲥⲟⲩⲟⲩϩ ⲁϩⲟⲩⲛ ⲛⲛⲁⲅⲅⲉ- | ⲗⲟⲥ ⲉⲡⲁⲥⲡⲁⲥⲙⲟⲥ ⲛⲡⲓⲱⲧ | (10) ϯⲛⲁϫⲱ ⲛⲧⲁϯ ⲉⲟⲟⲩ
ⲛⲧⲁϩⲙⲛ- | ⲡⲉⲩⲉ ⲡⲉⲧⲟⲩⲁⲁⲃ ⲡⲉⲧⲟⲩⲁⲁⲃ | ⲫϯ ⲡⲡⲁⲛⲧⲟⲕⲣⲁⲧⲱⲣ ⲡⲇⲏ- | ⲙⲓⲟⲣⲕⲟⲥ ⲡⲁⲧⲛⲁⲩ
ⲉⲣⲟϥ | ϩⲱⲣⲙⲟⲥⲓⲏⲗ ⲡⲁⲅⲅⲉⲗⲟⲥ ⲡⲁⲓ | (15) ⲉⲧⲉⲣⲉⲧⲥⲁⲗⲡⲓⲝ ⲛⲧⲟⲧϥ | ⲉϥⲥⲱⲟⲩϩ ⲉϩⲟⲩⲛ
ⲛⲁⲅⲅⲉⲗⲟⲥ | ⲉⲡⲁⲥⲡⲁⲥⲙⲟⲥ ⲛⲡⲓⲱⲧ ⲛⲡⲉ- | ⲭⲉⲣⲱⲥⲓⲁ ⲧⲏⲣϥ ⲛⲡⲓⲱⲧ | ⲁⲛⲁⲃⲟ(sic)ⲏⲗ ⲡⲉⲡⲓⲧⲣⲟⲥ
ⲛⲡⲓⲱⲧ | (20) ϯⲉⲕⲕⲗⲏⲥⲓⲁ ⲡ̣ⲁ̣ⲕⲱⲑⲁⲛ ⲗⲉⲣⲉ- | ⲕⲓⲏⲗ ϯⲥⲟⲡⲥⲛ ϯⲡⲁⲣⲁⲕⲁⲗⲉ | ⲙⲙⲟⲕ
ⲙⲡⲟⲟⲩ ϩⲱⲣⲙⲓⲥⲏⲗ | ⲡⲁⲅⲅⲉⲗⲟⲥ ⲉⲧⲉⲣⲉⲛ̣[ⲥⲱⲟⲩϩ] | ⲁϩⲟⲩⲛ ⲛⲧⲟⲧϥ ϫⲉ[ⲕⲁⲥ ⲉⲕⲉ-] | (25) ϯ
ⲛⲟⲩⲥⲱⲟⲩϩ ⲁϩⲟ[ⲩⲛ ⲙ-] | ⲡⲟⲟⲩ ⲙⲡⲓⲕⲉⲛⲟⲥ [ⲧⲏⲣϥ ⲛ-] | ⲁⲇⲁⲙ ⲙⲛϣⲏⲣⲉ[ⲧⲏⲣⲟⲩ] |
ⲛⲍⲱⲏ ϩⲓⲧⲛⲧϭⲟⲙ ⲛⲛ̣[ⲛⲟϭ] | ⲛⲣⲁⲛ ⲛⲁⲱⲣⲁⲧⲟⲥ ⲉⲧϩⲁ- | (30) ϩⲟⲟⲧⲉ ⲁⲣⲓⲏⲗ ⲱⲣⲓⲏⲗ |
ⲉⲙⲓⲏⲗ ⲑⲓⲙⲓⲁⲏⲗ ⲑⲁⲛⲁⲏⲗ | ⲡⲁⲧⲣⲓⲏⲗ ⲛⲉⲧⲥⲱⲟⲩ- | ϩ ⲁϩⲟⲛ ⲙⲡⲕⲟⲥⲙⲟⲥ | ⲧⲏⲣϥ ⲙⲛⲡⲉⲧⲛ- |
(35) ϩⲏⲧϥ ⲧⲏⲣϥ | ⲙⲛⲓⲥϫⲛ ⲙⲙⲁ ⲛ- | ϣⲁ ⲛⲡⲣⲏ ϣⲁⲡⲉϥ- | ⲙⲁ ⲛ̣ϩⲱⲧⲡ ϯ- | ⲥⲱ̣ⲡⲥⲉⲡ |
ϯⲡⲁⲣⲁ- |(40) ⲕⲁⲗⲉ | blank |

Recto.

Ananias, Azarias, Mizaêl; Sedrak, Mizak, Adenakô; Lal, Moulal, Shôlal.[1] (Magical letters.[2]) *The phylacteries:* (5) *blood of white camels, flock*[3] *of doves,* . . . . . , *nest* (signs). *The assembly of the angels* (ἄγ) *for the salutation* (ἀσπασμός) *of the Father.*[4] (10) *I will sing and give glory and will hymn* (ὑμνεῖν), (*saying,*) *Holy, holy, God Almighty, the Creator* (δημιουργός), *invisible.* Hôrmosiel,[5] *the angel* (ἄγ.) (15) *in whose hand is the trumpet* (σάλπιγξ), *who gathereth the angels* (ἄγ.) *for the salutation* (ασ.) *of*[6] *the whole council* (? γερουσία) *of the Father.* *Anaboêl, the Father's steward* (ἐπίτροπος). (20) *The Church* (ἐκ.).[7] Pakôthan,[8] Lerekiêl. *I beg and entreat* (παρακαλεῖν) *thee, this day,* Hôrmisêl, *the angel* (ἄγ.) *in whose hand are the* [*assemblies ?*],[9] *that* [*thou mayest*] (25) *assemble this day the* [*whole*] *race* (γένος) *of Adam and* [*all*] *the children of Zoe, by the might of the* [*great ?*], *invisible* (ἀόρατος) *and* (30) *terrible names:* Ariêl, Ôriêl, Eoniêl, Thimiaêl, Thanaêl, Patriêl, *they that gather together all the world* (κόσμος) *and all that* (35) *are therein, from the rising of the sun unto the going down thereof. I beg and entreat* (παρακ.)[10] (blank).

Verso (Plate xxvi, no. 3).

In top register, three standing figures, each with cross in right hand, to the right of them ⲡϩⲏⲧ, *the north*; beneath them respectively ⲃⲏⲑ, ⲃⲏⲑⲁ, ⲃⲏⲑⲉⲓⲁⲗ. In next register, three similar figures; beneath them ⲁⲃⲓⲟⲩⲧ.[11] ⲕ[. In the third register, three more cross-bearing figures; to the right of them ⲡⲣⲏⲥ, *the south*. Below a dividing line a column of angel-names ϩⲣⲁⲫⲁⲏⲗ, ⲥⲣⲁⲅⲟⲩⲏⲗ, ⲣⲁⲅⲟⲩⲏⲗ ⲧⲁ . ⲏⲗ, ⲡ . . . ., ⲥⲟⲩⲣⲓⲏⲗ, ⲁⲅⲟⲩⲏⲗ, ⲥⲣⲁⲫⲟⲏⲗ, ⲣⲁⲅⲟⲩⲏⲗ, ϩⲣⲁⲅⲟⲩⲏⲗ, ⲙⲓⲭⲁⲏⲗ, ⲏⲗ, ⲙⲁⲓ̣ⲏⲗ, which is continued beyond a figure, apparently standing below a cross: ⲟⲩⲩⲣⲓⲏⲗ, ⲟⲩⲥ̣ⲓⲏⲗ, ⲟⲩⲣⲁⲏⲗ, ⲙⲓⲭⲁⲏⲗ, ⲉⲓⲁⲏⲗ, ⲁⲏⲗ, ⲏⲗ, ⲗ. In the upper right corner here, magical letters. After another dividing line, a charm for a woman with disordered menstruation (?).

[1] *Cf.* Berlin P. 11347 (Kropp's copy) Lal, Moulal, Boulal, following same names as here.

[2] Here more intelligible than usual: ⲥⲁⲃⲁⲱⲑ at beginning and end, ⲧⲏⲣⲟⲩ in second, ⲉϥⲉⲱϣⲙ ⲉⲣⲙⲝⲝ in third, and perhaps ⲁⲓⲟ in fourth lines.

[3] This and next words unclear. One might expect ⲥⲟⲟⲩϩⲉ "egg", instead of ⲥⲱⲟⲩϩ.

[4] *Cf.* Kropp, E 9, 10.

[5] Recurs, *Ann.* 27, 64. *Cf.* Kropp, iii, § 51 ff.

[6] Taking the first ⲛⲡⲓⲱⲧ as superfluous.

[7] "Of" or "for the church"?

[8] Reading uncertain.

[9] "The trumpet" cannot be read, though probably intended.

[10] Perhaps continued on another piece, not preserved; or abruptly broken off owing merely to the usual carelessness of "magical" scribes.

[11] Recurs in Kropp, M 4.

ⲟⲩϩⲓⲙⲉ ⲟⲩⲉⲛⲟϥ ⲥϩⲁⲓ ⲁⲩ·
ⲟⲩ ⲛⲟⲛⲁⲙ ⲛⲥⲁⲛⲁϩⲧ ⲛ̄ⲕ̄ⲗⲱ
]ϣⲧⲉⲛⲉⲓ ⲛⲁⲧⲛⲟⲩ
]ϩⲉⲥⲓⲙⲉ ⲛⲧⲉ ⲛⲕⲓⲗⲁⲙⲓ
]ⲥⲱⲁⲓⲱⲛ ⲧⲓⲥ ⲉⲩ
]ⲕ̄ⲱⲥ ⲟⲩϩⲥ ϩⲓⲣⲙ̄ⲡⲣⲟ ⲛ
] (blank)

whereof the last words "*lay it at the door of . . .*"

Below this, a figure, presumably of a woman, underneath which ⲛⲛⲟⲃ[1] ⲛⲧⲥⲓⲙⲉ *the sin* (?) *of the woman*, followed by some magical signs. Then

ϩⲣⲏ- | ⲣⲉ ⲛ̄ϣⲟⲛⲧⲓ ⲁⲥⲛⲁ- | ⲣⲧⲟⲛ ϫⲁⲣⲃⲁⲛⲏ | ⲛⲉⲣⲉⲕⲟⲩ ⲕⲟϣ ⲛⲗⲉⲩ- | ⲕⲟⲛ ϣⲟⲩⲣⲏ ⲛⲟⲙ | ⲣⲁ ⲧⲏⲥ ⲉⲩⲛⲏϩ ⲛ- | ϫⲁⲕ ϩⲛⲟ· ⲛⲁϩ[...] | ⲙⲉⲣⲉⲛⲉ[| ⲧⲏⲣⲓ·[| ⲣ̄ⲏⲛ[|

Flower of wild (ἄσπαρτος[2]) *acacia, ashes* (καρβώνιον, -βούνι[3]) *of* . . . . .,[4] *white* (λευκός) *reeds*,[5] *an earthen censer*,[6] . . . *Put it*[7] *in* . . . . . *oil*. The rest unintelligible.[8]

C. (no. 10434), 6×2⅜ in.

RECTO.

+ ⲡⲫⲩⲗⲁⲕⲧⲏⲣⲓⲟⲛ | ⲛⲁⲛϩⲟⲩⲣⲓⲧⲏⲉ[9] ϫⲉ | ⲙⲉⲣ ⲡⲙⲉⲩⲉ ⲛⲧⲁⲟⲃⲟⲕϥ | ⲛⲙⲙⲁⲁⲩ ⲛ̄ϣⲟⲣⲡⲛⲉ | then six lines of magical letters and signs; below them two animal figures, upon the left of which—something like a cat's mummy within a circular frame—ⲓⲁⲱ ⲥⲁⲃⲁⲱ, while to the right of them ⲛⲉⲉⲃⲧ, *the east*. The bottom of this piece is lost.

VERSO.

ⲛⲧⲱⲧϥ ⲛ̄ⲇ̄ⲇ̄/ | (magical letters) ⲙⲓϫ | ⲁⲏⲗ ⲧⲓ ϫⲁⲣⲓⲥ ⲅⲁⲃ | ⲣⲓⲏⲗ ⲙⲁⲧⲁⲛϩⲱ | ⲥⲟⲩⲣⲓⲏⲗ ϯ ⲧⲁⲉⲓⲱ | ⲣⲁⲫⲁⲏⲗ ⲧⲁⲛϩⲟ | ⲥⲉⲃⲑⲱⲣ ⲧⲓ ϫⲁⲣⲓⲥ | ⲁⲛⲁⲏⲗ ϯ ⲧⲁⲓⲱ ⲃⲁⲑⲟ | ·ⲩⲏⲗ ϯ ⲙⲟⲩⲱϣⲉ ⲛⲛ̄ⲇ̄ⲇ̄ | ⲉϩⲟⲩⲛ ⲉⲇ̄ⲇ̄/ ⲛⲛⲉϩⲟⲟⲩ | ⲧⲏⲣⲟⲩ ⲙⲡⲉϥⲱⲛϩ

To So-and-so. Michaēl, give grace (χάρις). *Gabriēl, make alive. Souriēl, give honour. Raphaēl, make alive. Sebthôr*,[10] *give grace* (χ.). *Anaēl, give honour. Bathoriēl, put the desire of So-and-so into So-and-so, all the days of his life.*

After a dividing line ⲡⲁⲓ ⲡⲉⲫⲩⲗⲁⲕⲧⲏⲣⲓⲟⲛ ⲛⲧⲉⲩⲭⲏ ⲛ̄ϩⲏⲗⲓⲁⲥ *This is the phylactery of the Prayer* (εὐχή) *of Elias*,[11] followed by a line of magical signs. After this a dividing line and ⲫⲗⲉⲙⲛⲉⲕⲟⲛ ⲁⲫⲏⲛⲧⲟⲣ | ⲃⲁϫⲁⲙⲟⲥ ⲛⲛⲓϫⲁⲗⲓⲛⲟⲥ | ⲥⲧⲟⲙⲁⲩⲥ ⲛⲓⲕⲁⲣⲧⲓⲁⲛ | ⲛⲉⲟⲩⲉⲥⲧⲱ · ⲉ ⲛⲕⲁⲕⲁ | ⲙⲉⲥⲧⲟⲕ̄ⲟⲥ· ⲗⲁⲛⲓⲥⲛ | ⲕⲁϫⲁⲙⲏⲕⲟⲛ ⲇⲁ | ⲙⲛⲇⲁ· ⲁⲛⲟⲩⲕ̄ⲗⲉ ..ⲥ | ⲛⲛ[

[1] This scribe's orthography might suggest ⲛⲟⲩⲃ "gold".

[2] Or possibly for ἀσφαλτος; *cf.* Kropp, K 77. Acacia flower: Pap. Méd. p. 172.

[3] *V.* Ryl. Cat., no. 109 n., Kropp, J 46, R preamble 8.

[4] *Cf.* ? Dem. Mag. Pap. *V* XXII, 5 ⲉⲣⲉⲕⲟⲥ (in cipher).

[5] For ⲕⲁϣ ?

[6] *Cf.* Kropp, D 144 (=B.M. Cat., p. 420 *b*), where ⲃⲁ should correspond to ⲣⲁ here.

[7] Or ⲧⲏⲥ. *Cf.* ⲧⲓⲥ in the charm preceding. See *Epiphanius* I, 246.

[8] For ⲁϩ read ?ⲁⲧ.

[9] ϩⲟⲩⲣⲓⲧ in Kropp, M 2, 4. Equivalent there to δεκανός, *ibid.* 19. I cannot translate the following words. The last but two ? for ⲛⲧⲁⲩⲃⲟⲕϥ.

[10] *Cf.* ? Σαβρωθ, *P.G.M.* I, 14, though this seems to be but a variant of Σαβαωθ.

[11] A "Prayer of Elias" in Stegemann, *Kopt. Zaubertexte* (1934), 73. The prayer here may consist of the magical signs only, or it may include the lines following, which appear to be mainly deformed Greek with a few Coptic words. The Prayer mentioned in Budge, *Misc.* 506 refers merely to 1 Kings xvii. 1, Luke iv. 25.

D. (no. as last).

Another piece, numbered and framed with the preceding and measuring 5¼×3¼ in., has on one side ⲁⲑⲁ ⲁⲑⲁ ⲁⲑⲁⲣⲓⲙ ⲡⲃⲁⲗ ⲛⲁⲧⲁⲩⲟⲛ | ⲡϩⲏⲧ ⲛⲁⲟⲩⲱϣ, Atha, Atha, Atharim. *The eye shall tell* (?),[1] *the heart shall desire*; then two cross-like signs, then ⲑⲙⲓ, followed by two more such signs and, after a dividing line, ⲓⲑ ⲛϣⲟⲣⲥⲑⲓ. After which two more lines of signs, ending with ϫⲑⲏ. The other side is blank.

The above group of manuscripts, together with Fr. Kropp's *M*, may be compared with the supposed wizard's library from the Fayyûm, now in Berlin.[2] But whereas these—a much larger number—are written by a variety of hands,[3] our five are all the work of one scribe. In date the two groups lie perhaps not far apart; the fact that, among the Berlin texts, some were written down in (early) Muslim days,[4] while in ours there is no evidence of that, need not separate chronologically the periods at which the originals were composed. The present series is, on the whole, the less interesting: the ancient gods, who reappear in several of the Berlin texts,[5] are absent from ours; the persons here named are exclusively biblical, or, if one includes the angel-names, rabbinical. It will further be noticed that none of ours (nor any of the Berlin texts) was intended for the use of a particular individual, whereas in another series of magical pieces—Kropp's *E* to *J*—three were written for one and the same person.[6]

[1] Assuming ⲛ at the end of the line to be superfluous, ⲧⲁⲩⲟ seems a strange verb with "eye", but I see no alternative.

[2] *B.K.U.*, I, no. 1 ff. [3] *Aeg. Z.*, XXXIII, 44. [4] *Op. cit.* 43.

[5] And elsewhere, *e.g.* that published by Lange in *Griffith Studies*, 162, and in a highly interesting text in the Michigan collection.

[6] Kropp, I, p. xi. Again Schiller's MS. (*Journ. Soc. Or. Res.*, 1928) and Stegemann's no. 45 are probably by the same scribe, but name no individual.

PS. In the previous article, p. 53, l. 8, before "*like*", insert "*and set love of me in the breast of So-and-so, the daughter of So-and-so*".

CHRISTIANITY AND THE ḲURA'ÁN

By L. P. KIRWAN

The following passage from the Chronicle of John, Abbot of the Monastery of Biclarum in Spain, adds yet another to the number of barbarian tribes, south of the Egyptian border, who were converted to Christianity in the sixth century A.D.:

Anno III Justini Imp.

"Garamantes per legatos paci Romanae rei publicae et fidei Christianae sociari desiderantes poscunt, qui statim utrumque inpetrant."[1]

The Garamantes were well known to the historians and geographers of the classical period,[2] and seem to have been a nomad race extending from north of Fezzan (the ancient Phazania) as far south as Nubia, including that area now known as the Bayûda Desert.

In the sixteenth and seventeenth centuries A.D., the Bayûda Desert was still known as the Desert of Goran, Gorham, or Gorhan; a name, as McMichael has shown, connected with Ḳura'án and with Garama and Garamantes.[3]

According to Leo Africanus, speaking of the negro kingdoms which he visited in 1513–15, "Nubia . . . is enclosed on the southern side with the desert of Goran . . . the king of Nubia maintaineth continuall warre . . . against the people of Goran."[4]

The Ḳura'án of to-day, occupying much the same territory as did the Garamantes in ancient times, are a mixture of Tibbu and negro; a nomadic race occupying the deserts north of Dárfûr and Wadái.[5]

Such, then, were the people converted to Christianity in the third year of Justin II; 569 or, perhaps, 568.[6]

The sixth century was marked by great activity in the direction of the conversion to Christianity of the pagan tribes beyond the frontiers of the Empire. Justinian was especially zealous in this respect, and his reign saw the conversion of the Heruli on the Danube, and a number of native peoples in the Caucasus, North Africa, and the Nile valley.[7]

The country beyond the First Cataract, too, became a fruitful field for missionary enterprise. The story of the conversion of the Nubian tribes has been told in detail by the contemporary monophysite historian, John of Ephesus.[8] Between 540 and 545 Julian, the emissary of the pious Theodora, converted and baptized the Nobatae.[9] In 569 Longinus, disciple of the exiled patriarch Theodosius, disguising his baldness with a wig and thus

[1] *Chronica Joannis abbatis monasterii Biclarensis*, ed. Th. Mommsen in *Monumenta Germaniae Historica, Auctores antiquissimi*, XI, 207–20. Berlin, 1894. Also ed. Henricus Capisius, Ingoldstadt. 1608.

[2] See Dessau in Pauly-Wissowa, *Real-Encyclopädie*, VII; under Garamantes.

[3] McMichael, *Tribes of Northern and Central Kordofan*, Cambridge, 1912, pp. 235–41.

[4] Leo Africanus, *History and Description of Africa*, Hakluyt Soc., p. 128.

[5] McMichael, *ibid.*

[6] Cosmas Indicopleustes, writing about 547, suggests that the Garamantes had already been converted. Speaking of the diffusion of Christianity among the pagan tribes of the East, he says, "Among the Nubians and the Garamantes, . . . there are everywhere churches of the Christians, and bishops, martyrs, monks and recluses, where the Gospel of Christ is proclaimed." *Cf. The Christian Topography*, ed. McCrindle, Hakluyt Soc. 1897.

[7] Vasiliev, *Histoire de l'Empire byzantin*, I, 203.

[8] *Ecclesiastical History*, Bk. IV.

[9] Maspero, *Hist. des Patriarches d'Alexandrie*, 233–6.

escaping the vigilance of the Melkite spies at Constantinople, set sail for Nubia and not only completed the work begun by Julian but, after an adventurous and thirsty journey through the wilderness of the eastern desert, succeeded in conveying the Word of God to the southern peoples of Alodia.[1] The story as told by John of Ephesus is the story of the triumphs of his own party and the discomfiture of the Catholic missionaries. That there is another side, conveniently suppressed by the monophysite historian, we learn from the Chronicle of John of Biclarum.

Joannes Biclarensis, by birth a Goth, had embraced the Catholic faith. As a young man he had come to Constantinople to study, and remained there from 567 until 576. Returning to his native land, Lusitania, he became the founder and Abbot of the monastery of Biclarum in Spain, whence he derived his name. He was banished by the Arian King Leovigild and died in 610. Thus, like John of Ephesus, he was contemporary with the events he relates.[2]

In his Chronicle, under the year 569–70, he records[3] the conversion to Christianity of the Maccuritae—the *Μακκοῦραι* of Ptolemy,[4] the Makoritae of John of Ephesus—who inhabited the country immediately to the south of the Nobatae.[5] In the same year the Garamantes, the modern Ḳura'án, were also converted. To John of Biclarum, a Catholic bishop, the "Fides Christiana" could have been none other than Christian dogma as interpreted by the orthodox or Melkite theologians.

Between 570 and 580 the orthodox patriarch of Alexandria, hearing that the people of Alodia were eager to receive baptism, sent two bishops to that country for the purpose.[6] It is conceivable that they, on their way south, had already implanted the seeds of Catholicism among the Makoritae and the Garamantes. According to the account of John of Ephesus, their mission to Alodia failed; for the princes there, forewarned by the monophysite king of the Nobatae against the heretical teachings of the Council of Chalcedon, drove them from the country under threat of death and would have none but Longinus as their pastor.[7]

A reminiscence of the activities of the Melkite missionaries among the peoples of Nubia is found in the writings of the twelfth-century (monophysite) historian, Michael the Syrian.

"Il y avait donc en Syrie et en Arménie, de même qu'en Palestine et en Égypte, outre le patriarche et les évêques de notre nation (syrienne), de nos frères les Égyptiens, et des Arméniens, ceux aussi des Grecs chalcédoniens, qui troublaient autant qu'ils pouvaient ces trois nations et même, quand l'occasion s'en présentait, les Nubiens et les Abyssins. . . ."[8]

The knowledge that the Melkite Church had thus gained a footing in Nubia may help to solve an outstanding problem in Nubian archaeology of the Christian period.

Junker has divided the Greek inscribed tombstones from Nubia into four classes[9] and has noted, following Weissbrodt,[10] the resemblance between his Formula A and the Byzantine prayers for the dead. If Nubia, as John of Ephesus would have it, was uniformly monophysite, such a connexion with the liturgy of the Orthodox Church seems hard to explain.

[1] John of Ephesus, IV, 8.

[2] See Mommsen, *op. cit.*, Praefatio.

[3] *Chronica Joannis abbatis monasterii Biclarensis*, ed. Mommsen, 207–20.

[4] Ptolemy, *Geograph*, IV, 2. 19. For the identification *cf.* Duchesne, *L'Église au sixième siècle*, 300. Mommsen, *ibid.*

[5] *Cf.* John of Ephesus, IV, 51.

[6] In 580. The date is given *op. cit.*, IV, 53.

[7] *Op. cit.*, IV, 50.

[8] Ed. Chabot, III, 226.

[9] Junker, *Die christlichen Grabsteine Nubiens*, *Ä.Z.*, LXI, 124 ff.

[10] W. Weissbrodt, *Ein ägyptischer christlicher Grabstein mit Inschrift aus der griechischen Liturgie im Kgl. Lyceum Hosianum zu Braunberg.*

This resemblance, as Junker has pointed out, does not occur in the case of the Christian funerary inscriptions from Egypt.[1] It is, then, to Byzantium and not to Egypt that we must look for the introduction of this formula. The successes of the Melkite missionaries from Byzantium in the Nubian field, as disclosed by John of Biclarum, may afford a possible solution of the problem.[2]

[1] Junker, *op. cit.*, 136.

[2] *Cf.* the learned thesis by P. Kraus, *Die Anfänge des Christentums in Nubien*, 1930.

ARTHUR SURRIDGE HUNT

By J. G. MILNE

The death of Professor Hunt, which followed so closely on those of Professors Peet and Griffith, widens grievously the breach in the ranks of Egyptian archaeologists. In his own branch of the science he was an unquestioned master, and all papyrologists in England regarded him as their leader. He was too young to be called a veteran; indeed, no one who knew him would have dreamt of applying the term to him. But his forty years of work on papyri began when the study was still in its infancy, and he had taken no small part in setting it on its feet and ordering its goings.

He came up to the Queen's College, the nursery of Egyptology in Oxford, from Eastbourne at a time when the interest of scholars in the documents of the Graeco-Roman period found in Egypt was newly roused; and before he took his degree another member of the College, B. P. Grenfell, had definitely set himself on the path of their decipherment. This was the foundation of a partnership in learning which has proved singularly fruitful. His election to the Craven Fellowship in 1894, followed by a Senior Demyship at Magdalen and a Fellowship at Lincoln, enabled Hunt to associate himself with Grenfell in a life of research in Egypt and Oxford, till as a Fellow of his old College he settled down to the task of editing the masses of material which they had collected at Oxyrhynchus and other sites, and producing the stately row of volumes for the Graeco-Roman Branch of the Egypt Exploration Society.

The partnership was of the closest and most intimate kind, till it was interrupted by Grenfell's illness. The two scholars worked together at every stage, and even one who had frequently seen them both in Egypt and at Oxford could not assign any special part of the results to either hand, so completely were they blended in unison. A comparison of the earlier volumes of the series, in which both were equally concerned, with those prepared by Hunt with the aid of Grenfell's notes, or the latest for which Hunt was solely responsible, will show no difference in style or in quality. The plan was settled, the aim was single, and the pursuit was faithfully followed to the end.

Appreciation of the merits of their work is unnecessary here. Its value is well known to all the world of learning. But it may be noted that the recognition was given ungrudgingly. Hunt had no academic enemies, and it is hardly conceivable that he could have had. He placed his wealth of knowledge at the disposal of his brother scholars fully and freely, and, if he differed from any one of them on a point of reading or interpretation, his criticism was in a kindly and helpful tone. Public acknowledgement of his services was given by honorary doctorates at universities so far afield as Koenigsberg, Graz, and Athens, as well as nearer home. But as deep, though less ostensible, gratitude is felt for him by numbers of students who benefited by his guidance and advice in their difficulties, given without a trace of intellectual superiority.

In private life he was a delightful companion, with the tastes rather of a country gentleman than of a learned Professor. He enjoyed a day's shooting, and was devoted to his garden. During the War he held a commission in the 4th Oxfordshire and Bucks Light Infantry and, after a period of home service and War Office work, went to France on

Lafayette, Ltd.

ARTHUR SURRIDGE HUNT
1871–1934

"Intelligence" duty. In January 1918 he married Lucy Ellen, daughter of Surgeon Major-General Sir A. F. Bradshaw, and they made a most attractive home at Chadlington Road in North Oxford, the happiness of which was sadly clouded during the last few months by the death of their only son.

In Professor Hunt the Egypt Exploration Society has lost an officer whose loyalty and devotion to its interests were as conspicuous as the learning which entitles him to be ranked amongst the foremost of the many able scholars who have united to maintain its reputation.

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By DE LACY O'LEARY, D.D.

The following abbreviations are used in this Bibliography:

A.B. = *Analecta Bollandiana, Brussels.*
Archiv = *Archiv für Papyrusforschung.*
A.S. = *Annales du Service, Cairo.*
Ä.Z. = *Zeitschrift f. ägyptische Sprache.*
B.I.F. = *Bulletin de l'Inst. français d'Arch. orient. au Caire.*
B.J.R.L. = *Bulletin of the John Rylands Library, Manchester.*
B.N.J. = *Byzantinisch-Neugriech. Jahrbuch.*
B.Z. = *Byzantinische Zeitschrift.*
D.L.Z. = *Deutsche Literaturzeitung.*
E.L. = *Ephemerides Liturgicae, Rome.*
G.G.A. = *Göttingische Gelehrte Anzeiger.*
H.T.R. = *Harvard Theological Review.*
Journal = *Journal of Egyptian Archaeology.*
J.A. = *Journal asiatique.*
J.R.A.S. = *Journal of the Royal Asiatic Society.*
J.T.S. = *Journal of Theological Studies.*
O.C. = *Oriens Christianus.*
O.L.Z. = *Orientalistische Literaturzeitung.*
P.W. = *Philologische Wochenschaft.*
R.B. = *Revue Biblique.*
R.E.A. = *Revue de l'Égypte ancienne.*
R.H.E. = *Revue d'histoire ecclésiastique, Louvain.*
R.O.C. = *Revue de l'Orient Chrétien.*
T.L.Z. = *Theologische Literaturzeitung.*
W.Z.K.M. = *Wiener Zeitschr. für die Kunde des Morgenlandes.*
Z.D.M.G. = *Zeitschr. d. Deutschen Morgenl. Gesellsch.*
Z.N.T.W. = *Zeitschr. f. neutestamentliche Wissensch.*

1. Biblical.

On the Chester Beatty papyri we now have Sir F. G. Kenyon, *The Chester Beatty Biblical Papyri. Descriptions and Texts of twelve Manuscripts on papyrus of the Greek Bible*, fasc. I, general introduction, with 12 plates; fasc. II, Gospels and Acts, London (1933), xxi+52. The Gospel text of this edition is reviewed by C. Schmidt in *Z.N.T.W.* (1933), 225–32, and by R. P. Lagrange in *R.B.*, XLIII (1934), 4–41; these texts are also discussed by F. C. Burkitt in *J.T.S.*, XXIV (1933), 363–8, and by G. Ghedini, *Nuovi codici biblici*, in *Scuola Cattolica* (1932), 156–8. P. L. Hedley, *The Egyptian Texts of the Gospels and Acts*, in the *Church Quarterly Review*, CXVIII (1934), 23–39, takes account of the Chester Beatty papyri as well as of the published Coptic editions of Horner and Sir H. Thompson.

W. Grossouw, *De koptische Bijbelvertalingen*, in *Studia Catholica*, IX (1933), 325–53, is an excellent study on the Coptic versions of the Old and New Testaments in the several dialects. The author presents a general summary, made methodically, of Coptic Biblical literature and gives a résumé of current theories on the two leading problems, the dates of the different Coptic versions, and the texts on which they are based. These pages are supplemented by an abundant bibliography, carefully chosen and thoroughly up to date.

P. L. Hedley, *Three Graeco-Coptic Biblical Texts*, in *J.T.S.*, XXXV (1934), 58–60, gives an account of the three texts (i) Vatican Borgia xlvi = Gen. i–xv in Boh., (ii) Vatican Borg. lxxviii = Gen. Exod. in Boh. and Arabic, and (iii) Bruxelles, Mus. Nat., Dr. Capart's collection of ostraça, no. 10,952 = Ps. cix. 1–4, in Greek, with opening words also in Sa'idic.

W. Till, *Ein sahidischer Baruch-Fragment*, in *Muséon*, XLVI (1933), 35–41, 1 pl., gives the first-known Coptic text of Baruch iii. 6–30.

H. Hebbelynck, *Ce qui a été publié des versions coptes de la Bible, 3ᵉ groupe, Textes en Moyen Égyptien*, in *Muséon*, XLVI (1933), 299–313, is exhaustive and indispensable.

2. Apocryphal, Gnostic, etc.

(*a*) *Apocryphal.* F. H. Hallock, *Coptic Apocrypha*, appears in *J. of Bibl. Lit.*, New Haven, LII (1933), 163–78.

An interesting study on the Gnostic and Manichaean elements in the apocryphal Acts appears in

G. Bomkamm, *Mythos und Legende in den apokryphen Thomas-Akten. Beiträge zur Gesch. der Gnosis und zur Vorgeschichte des Manichäismus*, Göttingen (1933), viii+124. It is reviewed by A. Faux in *R.H.E.*, xxx (1934), 376–7.

E. A. Wallis Budge, *One Hundred and Ten Miracles of Our Lady Mary*, Oxford (1933), lviii+355, 64 pls.; and *Legends of Our Lady Mary the Perpetual Virgin and her Mother Ḥanna*, Oxford (1933), lxx+314, 33 pls., are cheap editions of works which appeared in 1922 and 1923. The text (translated from Ethiopic MSS.) and the illustrations (Ethiopic miniatures) are carefully reproduced, but the size is reduced. The editor has added two pages of introduction to each volume.

(*b*) *Gnostic*. C. A. Baynes, *A Coptic Gnostic Treatise contained in the Codex Brucianus* (Bruce MS. 96, Bodl. Libr. Oxford), translation, transcript, commentary, Cambridge (1933), xxvi+228, 117 collotype reproductions of the text and transcript. The text is that of the second part of the codex, the 32 folios following what Dr. C. Schmidt calls "the first and second books of Jeou". The commentary deals with Gnostic doctrine, etc. The editor seems convinced that the work was of Christian authorship.

F. Lexa, *La légende gnostique sur Pistis Sophia et le mythe ancien égyptien sur l'œil de Rē*, appears in *Egyptian Religion*, i (1933), 106–16. The author's theories will not command universal assent. *Egyptian Religion* is a new (1933) periodical subsidized by the Alma Egan Hyatt Foundation of New York and directed by S. A. B. Mercer of Toronto; it replaces the *J. of Soc. of Orient. Research*, which has now ceased. The article is the account of a lecture by Lexa which is more briefly summarized in *Archiv Orientalni*, Prag, v (1933), 131 (one page only).

(*c*) *Manichaean*. The recent Mani-find still occupies the first place in recent study of the Manichaean religion. The find is described by J. Bidez, *La bibliothèque d'un manichéen d'Égypte*, in *Bull. Ac. R. de Belgique* (Cl. Lettres), xviii (1932), 462–9; by F. Cumont in *La bibliothèque d'un manichéen découverte en Égypte*, in *Hist. des Relig.*, cvii (1933), 180–9; by W. Seston, *La découverte des écritures manichéennes*, in *Bull. de l'Inst. belge de Rome*, xiii (1933), 250–61; by Lüders in *D.L.Z.*, liv (1932), 1772; by W. Henning, *Neue Quellen zum Studium des Manichäismus*, in *Forschungen u. Fortschritte*, ix (1933), 250; and by C. Schmidt, *ibid.*, viii (1932), 354–5, and by the same author in *Neue Originalquellen des Manichäismus aus Aegypten*, in *Z. f. Kirchengesch.*, iii (1933), 1–28, this being the report of a lecture in which C. S. treats Mani as the last of the Gnostics: this is reviewed by H. W. Bailey in *Bull. School Orient. Langs.*, London, vii (1934), 412. G. Messineo, *Manicheismo, Gnosi orientale e Cristianismo*, appears in *Civiltà Cattolica*, lxxxiv (1933), 115–26.

H. J. Polotsky, *Manichäische Homilien* (vol. i of *Manichäische HSS. der Sammlung A. Chester-Beatty*), Stuttgart (1934), xxi+96+22* gives texts, often fragmentary, in the sub-Akhmimic dialect, with German translation and indices. The *Κεφάλαια* are announced for this summer. Sir H. Thompson's generosity has made this publication possible.

Schmidt-Polotsky, *Ein Mani-Fund . . .* (*cf. Journal*, xix (1933), 178) is reviewed by W. E. Crum in *Journal*, xix (1933), 196–9; by H. H. Schaeder in *Gnomon*, ix (1933), 337–62; by P. P(eeters) in *A.B.*, li (1933), 396–401; by F. Z(ucker) in *B.Z.*, xxxiii (1933), 413; by J. Lebreton, *Mani et son œuvre d'après les papyrus récemment découverts*, in the Jesuit *Études*, 217 (1933), 129–42; and by F. C. Burkitt in *J.T.S.*, xxxiv (1933), 266–7. E. Peterson in *Hochland*, Munich (1933/4), 402–10, writes on Mani texts, referring to various articles and reviews, including Schmidt-Polotsky's *Mani-Fund*. H. J. Polotsky, *Manichäische Studien*, in *Muséon*, xlvi (1933), 247–71, is not directly concerned with the Coptic texts but rather with the Chinese and Persian forms of the religion.

Casey, *Serapion of Thmuis "Against the Manichees"* (*cf. Journal*, xix (1933), 179), is reviewed by K. Jüssen in *Theol. Rev.*, xxxii (1933), 188–90.

W. Henning, *Ein manichäischer kosmogonischer Hymnus*, in *Nachr. von d. Gesellsch. d. Wissen. zu Göttingen*, Ph.-Hist. Kl. (1932), 214–18, gives a Manichaean fragment in Middle Persian.

3. Liturgical.

O. Burmester, *The Canons of Gabriel ibn Turaik, LXX Patriarch of Alexandria*, in *Muséon*, xlvi (1933), 43–54, deals mainly with questions of liturgy, the conduct of priests in church, etc.

O. Burmester–E. Porcher, *Le lectionnaire de la Semaine Sainte* (Patrol. Orient., xxiv), Paris (1933), 173–294, in Bohairic, from Brit. Mus. Addit. 5997 (No. 1247 in Coptic Catalogue), with French translation by E. Porcher.

J. W. McPherson, *The Coptic Mandatum*, in *Pax*, xxii (1932), 83–5, is a brief description of the ceremony of the foot-washing on Maundy Thursday amongst the Copts of Cairo, at which the writer was present. *Pax* is the review of the Benedictines of New Caldey Abbey.

O. Löfgren–S. Euringer, *Die beiden gewöhnlichen äthiop. Gregorius-Anaphoren*, in *Orientalia Christiana*, xxx, 2, Rome (1933), 82, has a certain bearing on the Coptic anaphora. It is reviewed by J. Simon in *Aethiopica*, ii (1934), 32.

D. O'Leary, *Difnar* . . . Part iii (*cf. Journal*, xvi (1930), 251), is reviewed by R. Anthes in *O.L.Z.*, xxxvi (1933), 736–7.

D. O'Leary, *A Greek Hymn in a Coptic Manuscript*, in *Orientalia*, iii (1934), 201–4, gives an alphabetical hymn in very corrupt Greek which appears in one of the Sa'idic manuscripts classed as Copte 129[20] in the Bibliothèque Nationale.

4. Literature.

G. Bardenhewer, *Gesch. der altchristlichen Literatur*, Bd. v, Freiburg i/B. (1932), xi+428, deals with the seventh to eighth century last period and so includes a good many authors who figure in Coptic translations. It is briefly noticed by Dolger in *B.Z.*, xxxiii (1933), 376.

W. E. Barnes, *Leaders of the Ancient Church*; IV. *The Third Century and its greatest Christian*, in *Expository Times*, xliv (1933), 245, is an essay of popular character dealing with the life and work of Origen. R. Cadiou, *Dictionnaires antiques dans l'œuvre d'Origène*, appears in *Rev. des études grecs*, Paris, xlv (1932), 271–85. The large edition of Origen's works is continued in E. Klostermann, *Origenes Werke*; XI. *Origenes Matthäuserklärung*, ii, Leipzig (1933), xi+304. It is reviewed by J. Lebon in *R.H.E.*, xxx (1934), 374–6.

On St. Cyril we have A. Deniple, *Der dogmatischer Wert Anathematismen Cyrills*, in *Schol.*, viii (1933), 203–16. P. Galtier, *Les anathématismes de S. Cyrille et le concile de Chalcédoine*, appears in *Rech. Sci. Relig.*, xxiii (1933), 45–57. We may note here E. Schwartz, *Concilium universale Chalcedonense*, Berlin, i, ii (1933), xii+163, which is reviewed by P. P(eeters) in *A.B.*, li (1933), 401–5, and by G. Soyer in *P.W.*, liii (1933), 1137–9. Papadopoulos, 'Ὁ ἅγιος Κύριλλος . . . (*cf. Journal*, xix (1933), 181), is reviewed by G. Papamikhail in *Theol.*, xi (1933), 356–7. J. Lebon, in *Muséon*, xlvi (1933), 237–46, gives an Armenian fragment of Cyril of Alexandria's commentary on the Hebrews, text and translation.

L. Th. Lefort, *Le copte source auxiliare du grec*, in *Annuaire de l'Institut de Philologie et d'Histoire Orientales*, ii (*Mélanges Bidez*), Bruxelles (1934), 569–78. The many Greek words in Coptic of all kinds indicate familiarity with Greek long before the advent of Christianity. Whilst Hellenists ignore Greek words found in Coptic, Coptic dictionaries exclude Greek, so we fall between two stools. The treatment is based on statistics relating to the Pachomian texts.

V. Fradinski, *Der hl. Neilos Sinaïtes. Sein Leben, seine literarische Tätigkeit und seine moralasketische Lehre* (in Serbo-Croat), in *Bogoslooje*, viii (1933), 45–60, 222–41, is reported.

A. Mingana, *Woodbrooke Studies*; V. *Theodore of Mopsuestia on the Creed*; VI. id. *on the Lord's Prayer*; and VI. *On early Christian Mystics*, Cambridge (1934), vi+320, have no particular bearing on Christian Egypt.

O. Burmester, *Coptic and Arabic versions of the Mystagogia*, in *Muséon*, xvi (1933), 203–35, gives texts in both languages with translations and notes.

O. Grohmann, in *Archiv Orientalni*, Prag, v (1933), 315, reviews H. A. Winckler, *Salomo u. die Karina*, referring to several points of contact with Coptic literature.

In Theology we may note G. Méautis, *L'origine égyptienne de l'idée de transsubstantiation*, in *R. Hist. Relig.*, cvii (1933), 5–7, which compares Matt. xxvi. 26–8, with Greek magical formulae. E. van der Leeuw, *The ΣΥΜΒΟΛΑ in Firmicius Maternus*, in *Egyptian Religion*, i (1933), 61–72, is a study of the pagan *Symbola* of which Firmicius Maternus treats in his "de errore profanarum religionum". On the periodical *Egyptian Religion*, see sect. 2 above. F. H. Hallock, *Christianity and the Old Egyptian Religion*, in *Egyptian Religion*, ii (1934), 6–17, deals with similarities of various sorts, the author rejecting any idea of the influence of the Old Religion on Christianity.

Jugie, *Theologia dogmatica*, . . . (*cf. Journal*, xiii (1927), 254), is reviewed by R. Draguet, in *R.H.E.*, xxx (1934), 134–5.

There is always a doubt as to the bearing of Ethiopic on Coptic literature, but we may perhaps add E. A. W. Budge, *The Queen of Sheba and her only son Menyelek (I), being the "Book of the Glory of Kings" (Kebra Nagast)*, Oxford (1932), xcvi+243, 32 pls., which is reviewed by J. Simon in *Biblica*, xiv (1933), 374–6.

5. History.

(*a*) J. Simon, *Voor den bloei der Missien onder Kopten en Egyptiërs*, in *Bode van het Heilig Hart*, Alken (March 1934), 124–6, gives a brief outline of the history of Christian Egypt.

Précis de l'histoire d'Égypte par divers historiens et archéologues, vol. II, Le Caire (1932), vi+414, contains two parts; I. H. Munier, *L'Égypte byzantine de Dioclétien à la conquête arabe* (1–106); II. G. Wiet, *L'Égypte musulmane de la conquête arabe à la conquête ottomane* (107–294). At the end a select bibliography for each part: no references at the foot of the pages. Three appendices: I. List of Byzantine emperors, prefects of Egypt, and patriarchs of Alexandria (297–301), by H. Munier; II. Lists of rulers from the Arab conquest to the Ottoman conquest, by G. Wiet (303–31); III. Index to volumes I and II (335–410). Short preface (v–vi), by S. E. Mohamed Zaky el-Ibrachy Pacha. Good general summary. It is reviewed by W. Schubart in *Gnomon*, X (1934), 172–4.

G. Hanotaux, *Histoire de la nation égyptienne* . . . (*cf. Journal*, XVIII (1932), 184), III, Paris (1932), 569, contains two parts: H. Jouguet, *L'Égypte alexandrine*, and M. C. Diehl, *L'Égypte chrétienne jusqu'à la conquête arabe*. It is reviewed by H. Grégoire in *Byzantion*, VIII (1933), 733–8.

Strothmann, *Die koptische Kirche* . . . (*cf. Journal*, XVIII (1932), 184), is reviewed by W. E. Crum in *J.R.A.S.* (1933), 209–11.

M. Chaine, in *R.O.C.*, VIII (1931/2), 390–405, writes on the oriental chronicle of Butros b. ar-Rahib and the history of Girgis el-Makim, mostly on chronological details.

A. A. Vasiliev, *Histoire de l'empire byzantin*, trans. from the Russian by P. Brodin and A. Bourguina, Preface by Ch. Diehl, Paris (1932), 2 vols., ix+498, 482, 30 pls., 7 maps. An excellent manual of Byzantine history. Chap. ii, *L'empire d'Orient du IVe siècle au début du VIe siècle*; chap. iii, *Justinien le Grand et ses successeurs immédiats* (518–610); chap. iii, *L'époque de la dynastie d'Héraclius* (610–717), are particularly useful.

Ch. Diehl, *Histoire de l'empire byzantin*, Paris (1934), xi+247, 15 pls., 4 maps, 12e édition, revue et corrigée, is only distinguished from preceding editions by a few additions to the bibliographies at the end of the volume (239–40).

K. Piper, *Atlas orbis christiani antiqui* (*cf. Journal*, XIX (1933), 181), is reviewed by H. G. Opitz in *Gnomon*, IX (1933), 620–1.

Gaudefroy-Demombynes et Platanov, *Le monde musulman et byzantin jusqu'aux croisades*, Paris (1931), 591, is VII, 1, of a *Histoire du Monde*, published under the direction of E. Cavaignac. It gives a good summary.

A. Blundau, *Die ägyptischen Libelli und die Christenverfolgung des Kaisers Decius*, Freiburg i/B. (1931), 79, is reviewed by M. van Cutsem in *A.B.*, LII (1934), 36–8.

G. Ghedini, *Due presunti documenti della persecuzione di Diocleziano*, appears in *La Scuola Cattolica*, LXI (1933), 382–5. According to the author nothing supports the opinion that the Greek letters published in 1929 by H. Frisk (*Papyrus grecs de la bibliothèque municipale de Gothembourg*, v, 11) and re-published by C. Schmidt in *T.L.Z.* (1930), 227–9, as well as the Greek document edited in 1897 by Grenfell–Hunt (*Greek Papyri*, 2nd series, no. 72), re-edited by A. Deissmann (*Ein Original-Dokument aus der diokletianischen Christenverfolgung*, Tübingen), can be documents of Diocletian's persecution in Egypt.

On the modern Copts we have H. A. P. Khoury et E. Rigaud, *Chez les Coptes du Caire*, in *Nuntii de Missionibus*, VI (1934), 236–47; and V. Chevrey, *Les Coptes de Haute-Égypte*, *ibid.*, 225–35.

On the closely allied Ethiopic Church we have J. M. T. Barton, *The Ethiopic Churches, Monophysite and Catholic*, in *Thought*, New York, VIII (1933), 431–43, brief and popular in character. E. Cerulli, *L'Etiopia del secolo xv. in nuovi documenti storici*, in *Africa Italiana*, v (1933), 57–112, five notes on the politico-religious history of Abyssinia in the fifteenth century, with various unpublished Ethiopic texts and numerous illustrations. Note I. "La partecipazione etiopica al Concilio di Firenze del 1441 e due bassorilievi del Filarete" (57–80). We find also the same writer's *Eugenio IV. e gli Etiopi al Concilio di Firenze nel* 1441, in *Rend. della R. Ac. Nazionale dei Lincei* (Cl. di Sci. morali, storiche, e filologiche, ser. VI, vol. IX (1933)), 347–68, complementary to the preceding: careful and useful work, with distinct bearing on the religious history of the Copts in the fifteenth century.

J. Simon, *Le culte des XL. Martyrs dans l'Égypte chrétienne*, in *Orientalia*, III (1934), 174–6, deals with the widespread cult of the Martyrs of Sebaste in its Egyptian extension.

(*b*) *Monastic*. H. Leclercq, *Monachisme*, in Cabrol-Leclercq, *Dict. d'Arch.*, XI, fasc. cxxiv (1933) and cxxv (1934), especially sections xvi (1802–4), life of St. Antony; xvii (1804–8), his work; xviii (1808–11), life of Pakhom; xix (1811–13), his work; xx (1813–17), his rule; xxiv (1821–2), monasticism in Egypt; and xxv (1822–4), oriental monasticism.

H. Koch, *Quellen z. Geschichte der Askese und des Mönchtums in der alten Kirche*, Tübingen (1933), xii+196.

M. Heimbucher, *Die Orden und Kongregationen der katholischen Kirche*, I, 3, Paderborn (1933), 831. New edition, not adequately to date, especially as regards the origins of monasticism. It is reviewed by A. de Meyer (and L. Th. Lefort) in *R.H.E.*, xxix (1933), 422–3.

F. Halkin, *S. Pachomii vitae graecae* . . . (*cf. Journal*, xix (1933), 181), is reviewed by L. Th. Lefort in *R.H.E.*, xxix (1933), 424–8, and by A. Leroy-Molinghen in *Byzantion*, viii (1933), 359–62. Boon, *Pachomiana latina* . . . (*cf. Journal*, xviii (1932), 185), is reviewed by A. Souter in *J.T.S.*, xxxiv (1933), 433–4.

Gradenwitz, *Ein Schlaglicht auf den Artikel: Textschichten in der Regel des hl. Benedikt*, in *Z. f. Kirchengesch.*, li (1932), 228–37, continues an examination of the Pakhomian rule.

L. Th. Lefort, *S. Pachomii Vitae, Sahidice scriptae* (*C.S.C.O.*, Scriptores Coptici, ser. iii, tom. viii, seq. no. 99), Paris (1933), xiii+258, is the long-awaited edition re-editing all published texts and adding many new. This is Part I only, more to follow.

G. Zananiri, *Trois anachorètes d'Égypte*, Le Caire-Alexandrie (1933), 77, gives descriptive accounts of Paul the first hermit, Mary of Egypt, and Pisentius; it is inspired by the *Romans* of Amélineau and has no historic value.

H. J. Polotsky, *Ephraems Reise in Aegypten*, in *Orientalia*, ii (1933), 269–74. The author seeks the origin of the legend of a visit of St. Ephraem to the monk Pshoi in Egypt. The Syriac recension of the "Life" of St. Ephraem, which relates this episode, has borrowed it from the Syriac "Life of Pshoi". In the Greek original of the "Life" of Pshoi the name of the monk who visited him is not given. A later editor, or the Syriac translator, has identified this visitor with the great Syrian saint.

J. Simon, *Saint Samuel de Kelamon et son monastère dans la littérature éthiopienne*, appears in *Aethiopica*, i (1933), 36–40.

(*c*) *Canon Law*. A. Raes, *Le consentement matrimonial dans les rites orientaux*, appears in *E.L.*, vii (1933), 36–47.

Codificazione canonica orientale sotto gli auspici della S. Congregazione per le Chiese Orientali, Cité du Vatican (1930–2), fasc. 1–18, is reviewed by A. P(elzer) in *R.H.E.*, xxix (1933), 560.

6. Non-Literary Texts.

Amundsen, *Ostraca Osloensia*, iv (1933), 83, is briefly noticed by F. Z(ucker) in *B.Z.*, xxxiii (1933), 412–13.

Bell, *Christian Stele* . . . (*cf. Journal*, xix (1933), 183), is noticed by F. Z(ucker), *ibid.*, 231–2.

Bell–Nock–Thompson, *Magical Texts from a bilingual Papyrus in the Br. Mus.* . . . (*cf. Journal*, xix (1933), 182), is reviewed by H. I. Rose in *Class. Rev.*, xlvi (1932), 180; by W. T. P., in *J. Hell. Stud.*, lii (1932), 146; by K. Preisedanz in *Gnomon*, ix (1933), 509–10; by Ch. Josserand in *Antiquité Classique*, i (1932), 475–6; and by N. J. Reich in *Mizraim*, i (1933), 193–4.

Eitrem–Amundsen, *Papyri Osloenses* . . . (*cf. Journal*, xvii (1931), 251, and xix (1933), 182), is reviewed by H. I. Bell in *Mizraim*, i (1933), 190–1; by M. Hombert in *Rev. Belge philol. et hist.*, xii (1933), 662–4; and by P. Collart in *Rev. Phil.*, vii (1933), 328–9.

B. Olsson, *Die verschlungenen Buchrollen*, in *Z.N.T.W.*, xxxii (1933), 90–1, uses evidence from magical papyri to explain Apoc. x. 9, etc.

A. A. Schiller, *The Coptic* ⲗⲟⲅⲟⲥ ⲙⲡⲛⲟⲩⲧⲉ *documents*, in *Studi in memoria di Aldo Albertoni*, i, Padua (1933), 303–45, is a very interesting study on the form of safe-conduct given to fugitives promising them immunity from pecuniary liabilities in the event of their return.

V. Stegemann, *Die koptische Zaubertexte der Sammlung Papyrus Erzherzog Rainer in Wien* (Sitz. d. Heidelberger Akad., Phil. Hist. Kl., 1934), 96, 3 pls. Some fifty small texts, partly re-edited after Krall, with elaborate commentaries and full indices.

Mercati, *Osservazioni* . . . (*cf. Journal*, xix (1933), 183), is reviewed by P. M(aas) in *B.Z.*, xxxii (1932), 423–4.

S. H. J. Polotsky, *Berichtigung zu O.L.Z.*, 1933, 418, appears in *O.L.Z.*, xxxvi (1933), 765.

D. SCHÄFER, in *Philologus*, LXXXVIII (1933), 296–301, deals with Greek legal formulae, incidentally criticizing the work of Schiller. An important article.

SCHILLER, *Ten legal texts . . .* (*cf. Journal*, XIX (1933), 182), is reviewed (with several corrections) by W. TILL and STEINWENTER in *Aegyptus*, XIII (1933), 305–22.

H. HYVERNAT et E. PORCHER, *Analyse des manuscrits coptes* 131^{1-8} *de la Bibliothèque Nationale, avec indications des textes bibliques*, in *Rev. d'Égyptologie*, I (1933), 105–60 (to be continued). This will prove an important article as no description of the contents of these manuscripts has been available hitherto. The new review, *Rev. d'Égyptologie*, is published by the "Société française d'égyptologie".

G. GABRIELI, *Documenti orientali nelle Biblioteche e negli Archivi d'Italia*, in *Academie e Biblioteche d'Italia*, VII (1933), 287–304. A supplement to the author's inventory of oriental manuscripts in Italy, *Manoscritti e carte orientali nelle Biblioteche e negli Archivi d'Italia*, Firenze (1930), viii+89; the additions relating to Coptic and Ethiopic manuscripts are all taken from the *Répertoire . . . MSS. Coptes*, and the *Répertoire . . . MSS. éthiop.*, of J. SIMON, and from fasc. ii of the *Bibliografia etiopica* of S. ZANUTTO (*cf. Journal*, XVIII (1932), 186, and XIX (1933), 183).

D. S. MARGOLIOUTH, *Catalogue of the Arabic Papyri in the John Rylands Library* (1934), xxiv+242, 40 pls., describes Arabic papyri of the eighth to twelfth centuries. The introduction appears also in *B.J.R.L.* (1934), 140–55.

GROHMANN in *Archiv Orientální*, Prag, V (1933), 273–84, deals with problems in the study of Arabic papyri, but very little has any bearing on Christian material.

S. GRÉBAUT, *Inventaire sommaire des manuscrits éthiopiens (Ge'ez) de la Mission Griaule*, in *Aethiopica*, I (1933), 23–35, and II (1934), 16–32, is an inventory of the Ethiopic manuscripts brought back by the two Griaule expeditions of 1928/9 and 1932, some of which tend to illustrate Coptic material. The manuscripts are deposited in the Bibliothèque Nationale. Part I gives an account of 25 manuscripts, chiefly liturgical and hagiographic; Part II, manuscripts 26–40, of similar character. No. 37 (fifteenth century) gives a "Life" of St. Takla Hâymânot.

S. ZANUTTO, *Bibl. etiopica*, fasc. ii (*cf. Journal*, XIX (1933), 183), is reviewed by J. SIMON in *Aethiopica* I (1933), 81.

7. PHILOLOGY.

On phonetics we have H. J. POLOTSKY, *Zur koptischen Lautlehre*, II. *Zum "Murmelvokal"*, in *Ä.Z.*, LXIX (1933), 125–9, and W. H. WORRELL, *Syllabic Consonants in Sahidic Coptic*, *ibid.*, 130–1. In this latter article the writer cites several words from Egyptian vernacular Arabic, but does not distinguish between the vocalization of those words in pause and in consecutive speech. The article is valuable in its treatment of the "helping vowel" in tone, and the meaning of the supralinear line in Coptic manuscripts.

W. H. WORRELL, *Coptic Sounds* (Univ. of Michigan Studies, Humanistic Series, XXVI, 1934), xv+186, reprints part I and adds part II (relations of dialects, their phonetic character, evidence from Arabic transcriptions, etc.). Appendix on biological facts in Coptic sound changes by G. SHEHARA. Highly interesting.

M. CHAÎNE, *Éléments de grammaire copte*, Paris (1933), lii+511 (lith.), with treatment of dialectal differences and very clear appreciation of the place of Coptic in the history of the Egyptian language.

W. TILL, *Koptische Dialektgrammatik . . .* (*cf. Journal*, XVIII (1932), 186), is reviewed, somewhat severely, by S. H. J. POLOTSKY in *G.G.A.* (1934), 58–67, the reviewer pointing out several inaccuracies.

W. F. EGERTON, in *Ä.Z.*, LXIX (1933), 123–5, writes on the Demotic predecessor of the verbal prefix ⲙ̄ⲡⲁⲧⲉ-.

H. RANKE, *Die ägyptischen Personennamen*, Hamburg (1934), 240.

MURRAY-PILCHER, *A Coptic Reading Book . . .* (*cf. Journal*, XIX (1933), 183), is reviewed by J. SIMON in *Orientalia*, III (1934), 214–16, who makes certain suggestions and notes some errors; "l'accentuation de nombreux mots grecs demande à être corrigée".

G. F. LEXA in *Archiv Orientální*, Prag, VI (1934), 161–72, deals with the question of dialect in Demotic, but comes to the conclusion that dialectal distinctions in Demotic are not yet capable of identification.

8. EXPLORATION, ARCHAEOLOGY.

(*a*) *Exploration*. JOH. GEORG HERZOG ZU SACHSEN, *Neueste Streifzüge . . .* (*cf. Journal*, XVII (1931), 253), is reviewed by J. LEIPOLDT in *O.L.Z.*, XXXVI (1933), 610.

H. E. White, *Monasteries of the Wadi 'n-Natrûn*, ii (*cf. Journal*, xix (1933), 183), is reviewed by F. C. Burkitt in *J.T.S.*, xxxiv (1933), 188–93.

(*b*) *Sculpture, Textiles, etc.* Pauty, *Les bois sculptés . . .* (*cf. Journal*, xvii (1931), 253), is reviewed by S. Flury in *Syria*, xiii (1932).

G. Duthuit, *La sculpture copte . . .* (*cf. Journal*, xviii (1932), 187), is reviewed by J. H. Schmidt in *D.L.Z.*, liv (1933), 738–42.

A. Apostolaki, *Τὰ κοπτικὰ ὑφάσματα τοῦ ἐν Ἀθήναις Μουσείου κοσμητικῶν τεχνῶν*, Athens (1932), 203, 2 pls.

In the *Bull. of the Metrop. Museum*, New York, xxvii (1932), we find three notes of recent acquisitions, (i) by M. S. D(imand), *A recent accession of Egypto-Arabic textiles* (37); (ii) by J. P. G., *Coptic textiles acquired* (112), these textiles of the fourth to seventh centuries; and (iii) by M. S. D., *A gift of early Egypto-Arabic textiles* (113). S. E. A., in *Orientalia*, iii (1934), 209–10, reviews *Metropolitan Museum Studies*, iv, 2, New York (1933), which includes the description of these articles.

R. Byron, *First Russia, then Tibet*, London (1933), xvi+328, contains (part i, chap. vii) a careful study of "Early Russian Painting" which refers to the three oldest existing icons (ninth century) brought from Sinai in the eighteenth century and now in the Museum of the Pechersky Lavra in Kiev, which the author considers as having "a close relation to the Fayum and Coptic tradition of portraiture".

NOTES AND NEWS

The black year of Egyptology has continued to exact its toll, taking from us, since these "Notes" were last written, two scholars of world-wide fame. The Egypt Exploration Society has lost in Professor A. S. Hunt one of the most eminent of its helpers, the joint-founder, with the late Professor Grenfell, of the Graeco-Roman branch, to which, partly in collaboration and partly alone, he contributed no less than twenty-two volumes. It would not be fitting here to repeat or to amplify the account given in the memoir printed elsewhere in this number of the *Journal*. Others are better able to testify to Hunt's extraordinary powers of decipherment, to his profound knowledge of Greek and of Egypt throughout the Hellenistic and Roman periods. But none who knew him well or even superficially could fail to be a witness to his great charm. It was impossible not to be won by his good looks and kindly smile. Of athletic build, away from Oxford he would have passed, as the notice in *The Times* remarked, more easily for a country gentleman than for the profound scholar he was. And indeed his proficiency in games and his delight in sport were alike great. Let it not be supposed, however, that his distinction as a man lay all on the surface. Hunt's gentleness of manner and reticence covered a deep refinement and warmth of feeling. On the last occasion when the present writer met him his mind was much preoccupied with a kind action involving a very considerable amount of trouble on his part; and that at a moment when his health was obviously at a low ebb. It is pleasant to have been left with so gracious a memory.

It is inevitable that full-length obituaries printed in this *Journal* should be confined to scholars whose work has been particularly connected with our Society, or at least with British Egyptology. Were it not so, many pages would have had to be accorded to Kurt Sethe, the Professor of Egyptology at Berlin, who succumbed to a heart attack on July 6th last, at the early age of sixty-four, and whose achievement was great enough to be comparable to that of Brugsch or even of Champollion himself. For whole-hearted devotion to his science, tireless energy, and complete honesty of purpose, Sethe ranks with the very highest, these moral qualifications being combined with a marvellous memory, a sledge-hammer power of logic, and a *Gründlichkeit* (the German word is required to describe his peculiarly German type of profundity) beyond all praise. His sphere was Egyptian philology in all its ramifications. Starting from epoch-making contributions to grammar and *Lautlehre* (the work on the Egyptian Verb was fundamental) he made discovery after discovery in the most varied fields covered by the inscriptions and papyri, laying bare many a new corner of Egyptian history, geography, religion, mathematics, and chronology. His range was from the earliest hieroglyphic monuments down to Coptic, and his studies in Demotic, started relatively late in life, were all the more remarkable since carried on simultaneously with his work on the Pyramid Texts, the undertaking, unhappily left unfinished, which absorbed most of his later years and loomed largest in his own eyes. So greatly was Sethe identified with his researches that it seems almost superfluous to dwell upon the externals of his career. A pupil of Adolf Erman, he became associated with him and with Georg Steindorff in building up those grammatical doctrines which are the very foundation of Egyptian philology as we now know it. From Berlin promotion to a professorship took him to Göttingen, and it was here, in the quiet seclusion of a provincial university town, that his talents unfolded to their fullest extent. Here it was that the immensely lengthy Pyramid Texts were committed to paper, that fascicule after fascicule of the *Urkunden* was completed, and that the many valuable articles which often nearly filled the *Zeitschrift für ägyptische Sprache* were conceived and born. The longer he lived, the broader became Sethe's outlook on his subject, the greater his desire to trace the spread into our own culture of concepts originating in Egypt. Hence those admirable monographs on numbers and words for number, on the origin of the alphabet, and on the reckoning of time which are perhaps the most attractive among his essays. On Erman's retirement from the Berlin professorship Sethe returned to Berlin, but not without regretting the quiet of Göttingen. A few years later the death of his wife threw him back more and more upon his own resources, until he complained in his letters how much of a hermit he had become, and how little he felt in tune with the great city where now he was compelled to live. Both in earlier and later days it was an inspiration and delight to work with him, for if perhaps over-tenacious of his own ideas, he was none the less ever ready to listen and welcome well-founded views propounded by others. No one was ever more ready to help his colleagues and to place both his knowledge and his materials at their disposal. Lest the picture here drawn of him by one of his closest foreign friends be deemed too brightly coloured, let it be conceded frankly that his theories have not always proved right, and that he was prone to accept his own reconstructions with too great alacrity, to adhere over-pertinaciously to them. Perhaps therein, however, lay the mainspring of his strength. An almost Hindenburg-like loyalty to his ideal of work, to his friends, and indeed in all relations of life—such was his outstanding characteristic. His premature death is an irremediable loss.

The vacant Chairs of Egyptology have at last been satisfactorily filled, Mr. Battiscombe Gunn obtaining the Oxford post and Dr. Blackman that in Liverpool. Both scholars have merited their advancement by admirable contributions to our science, and their colleagues will join in wishing them every success in their new spheres of labour. Great efforts will be necessary if the high standard hitherto attained in British works on Egyptian philology is to be maintained. The ground still to be covered is enormous, and a rich harvest remains to be garnered. But the workers are few, and likely to remain so as long as the British Government continues to do so little to encourage them. The French have many well-paid Egyptological posts, besides a very flourishing school in Cairo. The Germans also have their school, despite all economic difficulties. The support of American Egyptologists comes, it is true, not from the government, but from its institutions and its wealthy men; but these have subsidized the subject so splendidly that there is no need for government help. Here things are different; apart from one notable exception, which the Egypt Exploration Society has the best of reasons for remembering, the wealthy men of England have done little to support Egyptology on a large scale. Nor indeed could it be expected from them. Hit by death duties on the one hand, and perplexed by the immense variety of calls upon their generosity, they cannot be fairly reproached for neglect of what is, after all, a somewhat remote field of research. Furthermore, scholars of independent means are likely in the future to become rarer and rarer. England has closer political interest in Egypt than any other of the Great Powers, but its Government does next to nothing to encourage those workers from whom, nevertheless, this country has gained some measure of prestige. Is it impossible that now, at the eleventh hour, we should obtain practical assistance in official quarters?

Mr. Pendlebury writes as follows with regard to the excavations at Tell el Amarna: "A most successful Exhibition was held in the rooms of the Palestine Exploration Fund by kind permission of its Committee from September 17 to October 13. Plans, drawings, and photographs, as well as the objects and the casts of objects retained in Cairo, were displayed. The cases were kindly lent by the Director of the Wellcome Historical Medical Museum, to whom our thanks are due. At the same time some of Mrs. Brunton's pictures of the jewellery from the tomb of Tutᶜankhamūn were shown, and a selection from the drawings, paintings, and photographs from the survey of the Temple of Sethos at Abydos.

"Mr. J. W. Crowfoot exhibited in the adjoining room a collection of antiquities from his recent excavations at Samaria.

"Thanks to a grant by the Brooklyn Museum, acting on the advice of Professor Capart, further work on the site is planned for the present winter. The staff will consist of Mr. and Mrs. J. D. S. Pendlebury, Mr. R. S. Lavers, Mr. H. W. Fairman, Mr. S. R. Sherman, and Mr. C. O. Brasch. It is intended to continue with the excavations of the central city and to concentrate mainly on the Great Palace with a view to recovering a satisfactory plan, and to fitting the remains in with the representations of the Palace shown on the walls of the tombs."

Miss Calverley and Miss Broome are starting for Abydos in the middle of October. A full season of work is in prospect, and it is expected that the recording of the Temple of Sethos I will make even greater headway than in the past. The complex of chambers lying westward of the seven central Chapels and approached through the Chapel of Osiris is to be published as Volume III, and Volume IV will contain the first half of the Hypostyle Hall in front of the Chapels. The material for Volume III ought to be complete soon after the beginning of 1935, leaving the ground clear for further progress. The staff will comprise Ingeniör-Doktor Otto Daum of Vienna, for some years an assistant in Professor Junker's excavations; Fraülein Pfaff, also of Vienna; Miss Gertrude Clark, for photographic and general work; and Miss Bridson.

The second volume of *Temple of Sethos I at Abydos* is nearly ready for publication, and will presumably be available to members of the Society on the same terms as its predecessor. The four remaining Chapels of the seven constituting together the inner Sanctuary will here be reproduced in full. Of these only the Chapel of Amen-Rēᶜ is painted, so that the volume will contain only four coloured Plates. One of these, however, is a triple one and will be one of the most magnificent coloured facsimiles ever published of an Egyptian monument. It shows Sethos worshipping before the barks of Amen-Rēᶜ, Mut, and Khons.

Two publications of our Society have just appeared. The first is the memoir on *The Bucheum*, by Sir Robert Mond and Oliver H. Myers, together with Mr. H. W. Fairman for the hieroglyphic inscriptions. The three stately volumes, including two hundred Plates in collotype and line, offer a most full and elaborate account of the five years' excavations at Hermonthis, and by the generosity of our President are offered to Members and Associates at two guineas, which is less than cost price. The second publication, no less important in its own field, is the memoir on *Greek Shorthand Manuals*, edited from papyri and waxed tablets in the British Museum and from the Antinoe papyri in the possession of our Society. Here the author is H. J. M. Milne, Assistant Keeper of the MSS. Department of the British Museum. This is offered to Members and Associates at one guinea, half the price charged to the general public.

Dr. Jaroslav Černý of Prague has come to England to assist Dr. Alan Gardiner in a comprehensive publication of hieratic ostraca, of which there are many in this country. The nucleus of the publication will consist of Dr. Gardiner's own large collection and of the almost equally large collection entrusted to him for publication by Sir Flinders Petrie. An attempt will be made, however, to incorporate all hieratic ostraca that are available, the more so since Dr. Černý has been singularly successful in piecing together ostraca of which portions are preserved in different places. Private collectors or museums having specimens of the kind will render a great service in communicating with Dr. Gardiner, at 9 Lansdowne Road, London, W. 11.

The late Sir Arthur Cowley and Professor Sayce would both have been deeply interested in the inscribed ewer found by Mr. J. L. Starkey, of the Wellcome Archaeological Research Expedition, at Tell Duweir in southern Palestine. This *Journal* also has a considerable interest in the find, since it was here (III, 1–16) that Dr. Gardiner first propounded his theory of the origin of the alphabet from the script found at Serâbîṭ el-Khâdim in Sinai. Mr. Starkey dates his ewer, on archaeological grounds, to the early part of the reign of Ramesses II, between 1295 and 1262 B.C. The original, which was on exhibition at the Palestine Exploration Society's rooms this summer, shows ten well-preserved signs (a few more are lost) running, apparently from left to right, above a scene of animals and trees. It needs no great knowledge to be certain that the script in question is intermediate between the Sinai writing and the earliest known Phoenician. The individual characters have already ceased to be pictorial, but have not yet acquired the stereotyped forms of the earliest Phoenician and Greek alphabets. The likelihood of an ultimately Egyptian origin (*via* Sinai) of our own alphabet is greatly enhanced by this discovery, though much more material of the kind will be needed before certain decipherment can elevate the theory to the level of ascertained fact.

Every one interested in Egyptian philology will rejoice at the welcome news that the first fascicule of references to the Berlin Hieroglyphic Dictionary has just gone to press. There is reason to hope, as we learn from a letter of Professor Steindorff's, that the entire work will be completed within two years. No greater impetus to progress in the field could be given than the appearance of this work, without which the Dictionary, for all its five volumes, would be the merest torso.

On October 31 Professor Adolf Erman of Berlin will celebrate his eightieth birthday, not, unfortunately, without afflictions both bodily and otherwise. Blindness has put an end to the active researches of this great scholar, by far the most eminent of living Egyptologists. Comment is needless with regard to the folly which has deprived him, at the end of a long life of devotion to academic interests, of a seat on the Faculty of Berlin University. Such is the penalty paid for having a non-Aryan grandmother!

From Mr. Ralph Lavers, the architect of our Amarna Exhibition, the following note has been received: "Pendlebury has written to me to say that an objection has been raised to our use of the term 'concrete' applied to the foundations of the Great Temple at Amarna, and he has asked me either to change the expression or to justify its use. The foundations referred to are composed of an aggregate of sandstone and limestone chips bound together with a matrix of gypsum and sand. This mixture has always been known as 'concrete', although in recent years there has been a tendency to confine the use of the word more narrowly to a mixture in which cement is used. The terms 'cement concrete' and 'lime concrete' are sometimes used to differentiate between types, but this is not strictly necessary.

I am ignorant of the practice in America, but it is possible that there the word 'concrete' is applied only to that mixture in which cement is used as the matrix. An American dictionary (Webster) defines 'concrete' as follows: 'A mixture of gravel, pebbles, or broken stone with cement, tar, etc., used for ... foundations, etc.' I should think that the Amarna mixture would be covered by this definition, which seems to me to be even more elastic than our own. In any case, in my opinion and in the opinion of several other architects to whom I have spoken, we are right as regards the English definition of the word."

We welcome our new contemporary *Iraq*, the organ of the British School of Archaeology in Iraq, which is to appear in two annual parts, and will doubtless supply for Mesopotamian archaeology much the same needs as does our *Journal* for Egyptian. The purpose is described by the prospectus as to comprise "studies of the history, art, archaeology, religion, social life, law, geography, and natural history of Iraq, and to a less degree of the neighbouring countries, Persia, Armenia, Anatolia, Syria, and Arabia, from the earliest times down to about A.D. 1700. Texts dealing with these subjects, with translations and comments, will be published; exclusively philological articles will not be accepted." The first number, which is printed and published by the Oxford University Press (Humphrey Milford, Amen House, E.C. 4), makes an admirable impression, consisting of 110 pages of letterpress and fourteen excellent photographic plates. The contributors, apart from a brief introductory quotation from the late Gertrude Lowthian Bell, are Dr. Frankfort, Messrs. Harden, Gadd, Creswell, Dr. Campbell Thompson, and others. The new periodical is published at the moderate price of £1 6*s*. annually.

NOTICES OF RECENT PUBLICATIONS

Étude sur le Conte du Fellah Plaideur, récit égyptien du Moyen-Empire. By ÉMILE SUYS, S.J., Professeur à l'Institut Biblique Pontifical. Pontifico Istituto Biblico, Rome, 1933. L.it. 95.

Professor Suys has evidently devoted much time, thought, and trouble to the writing up of this study on the *Eloquent Peasant.* Consequently a reviewer feels reluctant, especially in view of the disarming modesty with which the author speaks of his work in the Introduction, to criticize the book adversely. But a careful and impartial reading of Professor Suys's notes and of his hieroglyphic transcription of the hieratic text brings one inevitably to the conclusion that he has added little of value to the work of his two chief predecessors, Vogelsang and Gardiner.

Twice only has his examination of the manuscripts in Berlin led, in the writer's opinion, to an improvement of Gardiner's version of the text as revised in this *Journal*, IX, pp. 22 ff.

Suys rightly points out that Gardiner's reading *sḫty* (B1 87) is incorrect, but his own is not accurate either, i.e. *sḫty pn* . As Gardiner now agrees, these groups of signs should be transcribed and translated "30 bushels of barley", though, as he points out, the variation between "30 bushels" and the "½ bushel" of R 135 is very strange. Suys' is just possible, but looks more likely; either is anyhow an odd writing of *it.* The sign after *it* is clearly . Suys' strange evidently represents an attempt to retain in the transcription what he considers to be an unusual hieratic form of .

The other improvement is to be found in the transcription of R 101. Suys cleverly suggests for Vogelsang and Gardiner's . This gives excellent sense, for the verb, used of ships, means "fall to pieces", "break up", and though it has only been found hitherto in L.-E. texts, it might well be a good M.-E. word.

The following examples of his translations and transcriptions should be sufficient to show a student of the Egyptian language how far Suys is to be regarded as a satisfactory interpreter of the difficulties and obscurities in which the peasant's discourses abound.

R 5. Clearly *m·k* "behold" is to be read here.[1] The perverse rendering "protège" (sc. *mk*) and so many other—as they appear to me—serious mistranslations occurring elsewhere throughout the book, are due to Suys' conviction that we have all hitherto been wrong in thinking that "le juge est traité par le plaideur, et depuis sa seconde harangue jusqu'à la fin, comme un prévaricateur et un criminel" (p. xviii). But it was surely this treatment of the judge by the peasant that made the latter's speeches so entertaining to the Egyptians, who, it must never be forgotten, were essentially a pleasure- and laughter-loving people.

B¹ 102/3. *Dr sšr m wḏ ir·tw·f dmi m wḏnw·f ḥsf iw ḥr irt iyt.* "He who should destroy need is one who commands it to be made; the town is its own flood; the redresser of wrong makes trouble", is transcribed thus by Suys, *dr sš* *m wḏ-irr·f dmi* (no determinative!) *nty m wḏn, ḥsf iw,* &c., and translated, "Éloigne la détresse en chef qui dirige par ses ordres la cité qui est sur sa voie; empêche le mal de causer la détresse".

The reading instead of is surely impossible palaeographically, and *m wḏnw·f* cannot have the idiomatic meaning of *ḥr mw·f.*

B¹ 108/9. Gunn's brilliant reading *ḫ(w)r* ( ) *ḥsf sw iyt,* and his translation, "Redress is short, trouble is long" are rejected. Retaining the old reading , and beginning with the previous sentence *itr gm·k r·k n·k,* Suys renders "Ah! ne trouves-tu donc pas un châtieur pour punir le malfaiteur?"

B¹ 119/20. Instead of accepting Gunn's reading *m·k tw swr·t(i) ḥr nbt idw,* "Behold, thou surpassest Our Lady of Pestilence", Suys reads *nbt idw* and translates, "en mission de la part de la dame de la peste"!

[1] The same mistake occurs again in the translation of *m·k dmi·k šnw,* "Behold, thy haven is infested" (B¹ 130), which he renders "Prends garde! ta cité pâtit".

Two more examples of strange mistranslations, and misreadings of hieratic signs, will suffice.

B[1] 168–171. Suys transcribes the corrupt as , which he regards as a writing of the word , the name for a particular form of the royal kilt! This kilt, to which a lion's tail was attached, was covered with, or composed of, strings of many coloured beads (see Steindorff, *Grabfunde d. mittl. Reiches*, I, Pl. xxi). Occasionally found in the burial outfit depicted on the inner sides of coffins of the First Intermediate Period, it was quite possibly obsolete as a royal garment by the time this tale was written, and could certainly not have been part of the dress of a non-royal living person. But what an unlikely and unsuitable garment to entrust to the tender mercies of a washerman! To suppose, as Suys does, that in a carefully written Middle Kingdom text like B[1] could stand for is incredible. Why, although the reading *mḥnk* is as certain as can be, does he transcribe *mrʿ ḥnkyt·f*? In a manuscript such as this is an impossible writing of or .

The whole passage, which should probably be rendered somewhat as follows, "Behold, thou art a wretch of a washerman, eager to damage a companion, deserting (*bṯ* or *btš*) his partner (?) for the sake of his client, (for) he who has come and brought him (something) is his brother", is translated by Suys, "Vois, tu es comparable au petit du lessiveur, zélé pour le lin blanc du compagnon, et le pagne colorié avec (?) son drap *ḥnkit* (?) pour son client, son second, qui vient et lui apporte"!

B[2] 98–103. The passage *ir šm grg—r dmi·s* is free from obscurities except for which may be a miswriting of *šts·f*, and is rightly translated by Gardiner as follows: "If falsehood walk (abroad), it strayeth, it doth not cross in the ferry-boat, it maketh no progress (?). As for him who grows rich through it, he hath no children, he hath no heirs upon earth. He who sails with it (for a cargo) reaches not land, his boat does not moor at its city."[1]

The signs *ir* [2] (is placed beside in the margin as a correction, so evidently *ḫr·f* not *ḥr·f* is to be read) are quite clear. Suys, however, transcribes them as *ir* and renders the whole above-quoted passage, "Mais quand vient le menteur, qui s'est dévoyé, il ne fait pas la traversée sur la barque, il n'approche pas du trône où Râ est élevé, il n'a pas d'enfants, pas d'héritiers sur la terre, celui qui navigue avec lui n'arrive pas à terre, et sa barque n'aborde pas à son port".

It is hardly necessary to point out in these days that *iw·f sḏm·f* does not represent a virtual relative clause, but is the form used so frequently in generalizations and proverbial sayings (Gardiner, *Eg. Grammar*, § 463). *ʾIr* would surely never occur in a M.-E. literary text in place of the prep. *r*, even in order that it might "contribuer à donner de la solemnité à ce passage"! The reading = *ḥndw* is quite out of the question, as an examination of the photograph of the hieratic text will immediately show, and even less likely is the reading *wṯs Rʿ r·f*. *Wṯs* is either written , (with slight variation in determinatives) or occasionally (*Wb. d. aeg. Spr.*, I, 382). The second consonant always appears as , never as , and, if written, is always followed by or .

Suys has the strange idea, so it would seem from the accompanying commentary, that "la barque" is the solar bark of Rēʿ, and that by "celui qui navigue avec lui" is meant "la barque qui porte le méchant vivant ou qui est hantée par son âme damnée".

These criticisms are made with considerable reluctance, as has already been pointed out. It is, however, highly important that scholars interested in the Ancient World, but having no knowledge of the Egyptian language, should not be led, for lack of due warning, to accept doubtful guidance in the interpretation of this most interesting ancient Egyptian treatise on social, administrative, and juridical morality.

AYLWARD M. BLACKMAN.

The Dawn of Conscience. By J. H. BREASTED. Charles Scribner's Sons, New York and London, 1933.

The history of the gradual growth in man of that faculty known as "conscience" is a matter which concerns not only the moralist and the student of ethics but also the historian of religion, and in the work under review Professor Breasted reveals the earliest stages of that history as they appear to him. His view is that the consciousness of the antithesis between right and wrong in the moral sense (as distinct from unreasoned subservience to customary tabus) and the recognition of moral obligations arose earlier and developed further in Egypt than in the contemporary civilizations, and that the Hebrew prophets and moralists were largely

[1] I prefer "haven", which seems often to be the meaning of *dmi*.

[2] For the use of here, see Gardiner, *J.E.A.* IX, 24.

influenced by Egyptian teaching, so that we of to-day are the heirs of a morality which attained its first tentative growth in the land of Egypt.

To demonstrate his thesis the author has devoted the main part of his book to an account of the development of moral ideas in Egyptian religion, in this respect covering much the same ground as his earlier work, *The Development of Religion and Thought in Ancient Egypt*. Since that book is doubtless familiar to all readers of this *Journal*, it will suffice to summarize Breasted's main argument very briefly. He points out that the idea of right and justice appears in texts dating back to the beginning of the dynastic period, and shows how it gained ground during the Old Kingdom under the influence of the current conception of the sun-god Rēʿ as the type and embodiment of kingly virtues, of which justice came to be considered the chief, although this function of Rēʿ was later usurped by Osiris, the great judge before whom all mankind must answer for their deeds. In this connexion it may be remarked that while Breasted rightly makes great play with the aspects of Osiris as Nile- and vegetation-god, ever waning and reviving, he does not discuss Sethe's view that Osiris was originally an ancient king, although it would seem that the royalty of Osiris would be a considerable factor in enabling him to supplant Rēʿ as the embodiment of righteousness and justice.

As in his earlier work, Breasted goes on to suggest that the wreck of the monuments of the great men of old after the fall of the Old Kingdom demonstrated to the thinkers of the time the futility of material means for ensuring existence after death, and drove them more and more to the view that only right living and just conduct could provide a passport to the hereafter, the outcome of this new attitude being the well-known admonitory compositions of the Middle Kingdom and the stress laid upon good treatment of the poor and needy in the biographical inscriptions of this period. The imperial expansion of Egypt in the Eighteenth Dynasty brought with it the conception of a world-god, who cared for all his creatures alike, whether in Egypt or abroad, a conception which culminated in the Aten faith, and indeed to some extent outlived it, and which ushered in a phase of personal piety and a sense of personal contact with a loving God. Owing, however, to the baneful influence of the universal belief in magic, which could enable an evil-liver even to circumvent the final judgement, and to the political domination of the priesthood, Egyptian religion gradually lost its spiritual content and degenerated into the formal religiosity of the late period.

Broadly speaking, it is clear that the author has described correctly the course of development of the moral consciousness in Egypt, and it is undoubtedly true that Egypt was further advanced ethically than her Mesopotamian sister, for, as Breasted does not fail to point out, the axiom that justice must be impartial had already been grasped by the Egyptians at a date when the famous Babylonian lawgiver Hammurabi still regarded social rank as a ruling factor in the administration of law, while even in the heat of battle the Egyptian never descended to the bestial savagery of the Assyrian. At the same time it is impossible to escape the feeling that here and there Breasted has laid on the colour a little too thickly, especially with regard to the Middle Kingdom. Without denying that there was a definite advance at this period, it seems an exaggeration, for instance, to speak of the "Tale of the Eloquent Peasant", the "Admonitions", and the other texts of like tenor as pamphlets in "a crusade for social justice". Admittedly these writings inculcate a standard of conduct admirable at so early a date, but to speak of a "crusade" summons up a vision of an organized drive for a cleansing of the social fabric, a vision which in the reviewer's opinion was entirely beyond either the Egyptian or his contemporaries elsewhere. Again, to speak of the "Admonitions" and the utterances of Neferroḥu as Messianic and to suggest that the Hebrew prophecies of a Messiah to come were largely derived thence is to protest too much. In times of trouble and despair it is but natural to hope for a saviour who shall right all wrongs, whether one is Egyptian or Hebrew or English, and if the "Admonitions" had survived from Ancient Mexico instead of Ancient Egypt I doubt if it would have occurred to any one to describe it as "Messianic". Apart, however, from these enthusiastic exaggerations, the author has made out a very good case for the Egyptians as the pioneers of moral ideas, and in judging their achievements in this direction it must not be forgotten that they were indeed pioneers, and too much must not be demanded of them.

From an historical account of the development of ethics and morality within the borders of Egypt itself, the author turns to a consideration of the influence of Egyptian teaching on the Hebrew nation as exemplified in the Old Testament and thus ultimately on ourselves. Leaving on one side such vexed questions as the origin of the doctrine of a Messiah, there is no doubt that the Egyptian influence on Hebrew thought was very great indeed; how great it was had not been fully realized until a few years ago, when the discovery was made that large portions of the Egyptian "Teaching of Amenemope" had been transplanted bodily into the Book of Proverbs. Breasted finds echoes of Amenemope not only in Proverbs but also in other Books of the Bible, and the whole of this section of his work is worthy of close attention. Here and there, again, one may suspect that the picture is too highly coloured, but its lines, at any rate, seem substantially correct. In dealing with such abstract matters there is always room for differences of opinion on individual points, but regarding this book as a whole, the conclusions reached therein are entirely worthy of acceptance, even when allowing for certain reservations in respect of the natural enthusiasm of the author for his subject.

In an Epilogue Professor Breasted abandons his office of historian to discuss the message which the story of the dawn of conscience in the far distant past has for the modern world. With this discussion a review in a scientific journal is not concerned, but it is impossible to read it without sympathy and regard for one who has evidently pondered deeply on these matters; and indeed, considered from one point of view, it may be regarded as a vindication of the study of archaeology from the charge of being the dry-as-dust pursuit remote from human affairs which so many people suppose it to be.

R. O. FAULKNER.

Lebensregeln und Lebensweisheit der alten Aegypter. Von RUDOLF ANTHES. (Der Alte Orient, Band 32, Heft 2.) J. C. Hinrichs'sche Buchhandlung, Leipzig. 1933.

We are constantly being told in Egyptological publications that there was little intellectual development in Egypt after the Old Kingdom, that religion, mathematics, medicine, and art had then assumed forms which were handed down to succeeding generations with but little alteration. The generalization contains more than a germ of truth, but Anthes in this excellent little paper furnishes us with an admirable introduction to one of the most remarkable and most characteristic products of Ancient Egypt, one, moreover, which shows a definite development—the so-called "Wisdom literature".

Very briefly, and with well-chosen quotations, Anthes summarizes the characteristics of the three main groups of the Old Kingdom, the Middle Kingdom, and the late New Kingdom. In the Old Kingdom the stable and rigid organization of the land found its expression in severely practical advice. Ptaḥḥotpe has no concern with ethics and morality, "god" occurs only as a distant and supreme being who is pleased if certain rules of life are carried out. To the young man are held out definite rules of conduct which, if obeyed, will lead inevitably to success, and he is taught to bow down to the established order.

In the Instructions of Merikarēʻ and Amenemmes I in the Middle Kingdom we see the effect of the collapse of Egypt after the Old Kingdom, and the rise of the worship of Osiris. The teaching as a whole is still practical, but a new note appears, the omnipotence and omnipresence of god is recognized, the necessity of doing good and of worshipping the gods, and hope for a life after death, though, as in Amenemmes, we find at the same time deep and bitter pessimism and a complete distrust of one's fellow men.

In the New Kingdom, however, we find a remarkable and definite advance. It is true that the general tone of the teachings of Ani and Amenemopet is essentially practical, but that was the peculiar genius or nature of the Egyptians. But, on the other hand, there are many notable developments. In the first place, the authors are commoners and neither viziers nor kings. The moral and ethical bent of the teaching is much more obvious. Noteworthy is the injunction to reverence the gods and their images, side by side with which is evidence for the quiet and personal religion and piety that shows itself in the New Kingdom. What a difference between Ani's gratitude to his mother for all that she had borne for him, and Ptaḥḥotpe's "love thy wife . . . she is a fruitful field for her lord"!

The consideration of these three main periods raises a point which is not discussed by Anthes, and which indeed hardly comes within the scope of his work—why is there such a complete lack of this sort of teaching from the Eighteenth and Nineteenth Dynasties? Were the claims of empire too overbearing and absorbing? Even Akhenaten produced nothing. He talked loudly and at length of his "teaching" and his way of life, and the terms are repeated *ad nauseam* by his courtiers, but not a shred of teaching, no real moral concept has survived. We are not really surprised, for the more the Amarna Period is studied the more it becomes clear that it was definitely a non-moral age, pretty poems, lofty concepts, but no translation of good intent into good works, but that the rest of the early New Kingdom should have been equally barren still remains a puzzle. Let us hope that Anthes's paper will serve to stimulate further and more detailed study of these most interesting and important texts.

H. W. FAIRMAN.

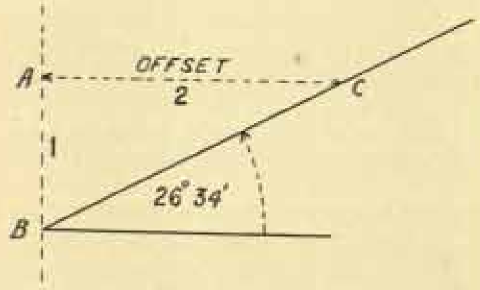
L'Astronomie égyptienne, depuis les temps les plus reculés, jusqu'à la fin de l'époque alexandrine. By E.-M. ANTONIADI. Small 4to. xii + 158 pp., 50 text-cuts, 7 plates. 40 fr. Paris, Gautier-Villars, 1934.

M. Antoniadi has produced an attractive and readable little book, well arranged and referenced. It will repay careful study and, at the same time, provoke discussion. A special feature is the large number of quotations from Greek writers. From these, the reader may gain a good idea of what the Greeks thought about Egyptian learning—in particular, knowledge of astronomy. A study of these quotations, however, leaves the reader wondering how far they are to be taken literally. The debt of Greece to Egypt is no easy study. The Greeks were immensely impressed by the civilization of Ancient Egypt—a civilization, evidently, of great antiquity and great achievements—in many respects superior to their own, and to their alert inquisitive minds, full of fascination and mystery. Accurate knowledge was difficult to obtain except through personal contact with the priesthood. In their enthusiasm, the Greeks were inclined (as others have been since) to trace the source of all knowledge back to Egypt. Perhaps they did not realize, as we do to-day, the essential difference between the Egyptian mind and outlook and their own.

The Egyptians were an intensely practical people, and had accumulated a large amount of practical, and mostly unco-ordinated, knowledge. The sources of our knowledge of Egyptian mathematics and science are admittedly meagre, but what we do know is all in keeping with the Egyptian mentality. The Greeks came into contact with this knowledge and found it entirely novel and of entrancing interest. It stimulated their intellectual curiosity. They applied to it that freshness and independence of outlook characteristic of the Greek spirit, and breathed new life into the raw material they found in Egypt. Their natural genius for co-ordination and generalization created the science of geometry from the mensuration and surveying data in use in Egypt. They rescued astronomy from the deadly grip of the astrologer. The debt of Copernicus to the Greek astronomers is convincingly set out by M. Antoniadi in parallel passages and he concludes that Copernicus failed to acknowledge the inspiration he gained from Greek sources.

M. Antoniadi, a modern Greek by birth, shares the enthusiasm of the ancient Greeks for all things Egyptian. He sees Egypt through Greek spectacles, and in his enthusiasm he has not succeeded in sifting out what the Greeks really owed to the Egyptians from what they had already absorbed and impressed with their own individuality. He does not "get back behind the Greeks and see his subject as the Egyptians saw it" (the phrase is Peet's). For this reason, the summary (on p. 28) of "what the Greeks owed to Egypt" is not altogether convincing. Quotations are given from classical, medieval, and modern writers, but it is disappointing to find hardly any mention of sources of information in Egyptian inscriptions and literature. Much importance is attached to the Denderah zodiac, but this is very late and too much influenced by Greek thought to be of value as a record of Egyptian astronomical knowledge. The very interesting star maps—the earliest known—in the Eighteenth-Dynasty tomb of Senenmut are entirely ignored.

A special chapter is devoted to the "Astronomy of the Great Pyramids" and suggestions are made as to the methods of setting out the work and the instruments employed. The inclinations of the descending passages in the three principal pyramids at Gizeh are 26° 31′, 26° 30′, and 26° 2′, approximating to the supposed altitude of the pole star of the period at inferior culmination. It is difficult, however, to see how this proves that the builders had at their disposal an accurately divided scale for setting out any desired angle with an error less than 30′. It seems more probable that they were attempting in each case to produce a simple 2:1 slope, determined in Egyptian fashion, not with reference to any measured angle, but by the horizontal offset per unit vertical height. For a 2:1 slope the angle is almost exactly 26° 34′ (Cotan. 26° 33′ 54″ = 2). The slope (*seked*) of pyramids was actually measured in this way, as we know from the Rhind Mathematical papyrus.



In the sketch, *AC* is "offset" from the vertical *AB*.

The author assumes that the builders intended to place the Great Pyramid precisely in latitude 30°, and proceeds to discuss how nearly they achieved this. But there are other and simpler reasons for the choice of site. A useful summary of the geometrical relationships includes some remarkable coincidences if they were not intentional. The Great Pyramid presents many problems still unsolved. The use of water clocks is suggested for determining hour-angles and thence deducing the right ascensions of stars and planets, but the errors of the water clocks would introduce grave inaccuracies. Until more evidence is forthcoming, many of the author's conclusions will be open to question.

There still remains a fruitful field of work for an astronomer who will collaborate with an Egyptologist in a comprehensive study of astronomical reference in papyri and inscriptions, and in this connexion Mr. G. A. Wainwright's suggestive philological studies should not be forgotten.

R. W. Sloley.

A Family Archive from Siut, from Papyri in the British Museum, including an Account of a Trial before the Laocritae in the Year B.C. 170. Edited by SIR HERBERT THOMPSON. 2 vols.: Vol. I, pp. xxiii+148; Vol. II, 31 Pls. Oxford: The University Press, 1934. Price 42*s.*

It would be difficult to exaggerate the importance for the study of Egyptian legal procedure in the Ptolemaic period (and doubtless earlier) of this publication of a group of papyri extending over the twelve years from 181 to 169 B.C., and mostly connected with a lawsuit about land heard by the native court of Siût on June 22nd, 170.

The documents number fifteen, and are inscribed in demotic on nine extremely well preserved papyri purchased by the British Museum late in 1923. (The fact that they must have come from Siût, taken with the date of purchase, makes a shrewd guess possible as to the exact spot at which they were found.) By far the most important document is the recto of No. 10591, which in ten columns records the entire judicial proceedings of the lawsuit. Nothing like it, apart from the much earlier Inscription of Mes, has previously been known. A brief introduction gives the date, and the titles and names of the three priestly judges, before whom the *isagogeus* lays the "complaint" (*smy*).[1] The latter consists of four pleadings which had previously been made in writing by the plaintiff and defendant alternately, and are now submitted to the Court; each one but the first is largely a reply to the preceding one, statements by the other party being quoted at length and disputed. These pleadings are read to the judges by their scribe, and the parties, asked by the judges if the copies are correct, answer that they are. At this point the judges briefly examine both parties on certain matters, the plaintiff, a woman, being now represented by a man, Ouertes. Both parties then apparently declare that they have no more to say, upon which their pleadings and evidence are formally terminated by the Court.[2] Of the documents cited by the parties, and offered as evidence in support of their claims, those considered by the judges to be really material are demanded and produced; the record of proceedings quotes them in full. After this the judges give their "decree". First they run over the material points in the pleadings, mention the documents produced, and quote the law relating to the matter at issue; they then deliver their verdict, stating their reasons for it, and give directions for carrying it into effect. The signatures of the court scribe and of the judges are appended to the document, copies of which were presumably (on payment of a statutory fee) supplied to both parties.

Another document contains a somewhat obscure "decree" of the judges of Ptolemais (?), perhaps in connexion with an appeal to the higher court there by the plaintiff; and there is also a letter to those judges. The rest is of more familiar nature: petitions, deeds of apportionment and gift, a marriage settlement accompanied by an acknowledgement of receipt of dowry, two farming leases and a receipt for grain, most of these being connected with a long-drawn-out quarrel of which the lawsuit was the outcome. Petetum, a lector-priest of the Necropolis of Siût, had assigned a number of properties[3] to his two sons by successive wives, Tuot (the elder son) and Tefhape, most of these properties, including 10 arurae of land, being assigned in shares of two-thirds and one-third respectively, a proportion apparently fixed by law. After their father's death Tuot seems to have refused to divide the properties with Tefhape, who consequently brought an action against his half-brother and won it, Tuot being obliged to make a deed of assignment to Tefhape of the latter's share. For some time things apparently ran smoothly, but in 170 B.C. we find Tefhape sending a petition to the royal *epistates*, complaining of his brother and asking that the land be divided. At about this point Chratianch, Tuot's wife, intervened by starting legal proceedings against Tefhape, claiming the whole of the 10 arurae as her own; and it is of her process that we have the complete record described above. Chratianch contended firstly that the whole 10 arurae had been pledged by Petetum as security for the dowry of his first wife, and that it had therefore descended from that woman to her and Petetum's son Tuot; and secondly that Tuot had pledged the same land to herself, his wife Chratianch, as security for her endowment deed. Tuot's assignment to Tefhape was, she says, made as a result of bodily coercion by Tefhape's agents, and she invokes "the law of year 21" (of Epiphanes) as providing that a man's endowment of the wife or children of a second marriage is not valid if he has previously endowed with the same goods his first wife, having had issue by her, and that in such a case the property goes after his death to the issue by the first marriage. Therefore, she claims, Petetum's assignment of a third part of the land to his younger son Tefhape was invalid. In quoting the law she had, however, omitted the important point that by that law the later endowment would not be

[1] Throughout this review the transliterations used are those found in the work reviewed.

[2] See below, note to B vi 15. 19.

[3] Not "all his property" (p. xiii, *c*, *d*); he made the assignment on the same day (not "4 days later") that he assigned property to his second wife and their daughter.

invalid if the first wife or her eldest son had assented to it. In this case Tuot had confirmed Petetum's assignment to Tefhape, and further Tuot's own assignment to his half-brother had been confirmed by herself, Chratianch. These were the decisive factors in a tangle of conflicting testimonies and secondary or irrelevant statements, and the judges accordingly found for the defendant.

The content of the documents—vastly more complex than the above bald summary indicates—has been most skilfully set out and evaluated by the Editor in the Introduction, which deals also with many of the problems and novelties that occur. That the action should have been brought by Chratianch in her own name while her husband was alive does not seem so "remarkable" to the reviewer as to the Editor (p. xvi). The fact that she claims ownership of the land is surely sufficient reason; indeed, in note 27 on p. 14 the Editor seems to answer his own difficulty quite satisfactorily. Statements that she appears in her husband's name are made only by her opponent, and are perhaps intended to impugn her *locus standi*.

The documents are all given in both transliteration and translation, accompanied by valuable footnotes which it was, however, unnecessary to give twice over in so many cases. The method of transliteration—that introduced by Professor Griffith—is briefly defended by the Editor[1] in a prefatory note, which also contains the debatable statements "the sole object of transliteration is, in my opinion, to make a difficult script accessible to those who are not yet experts in it" and "as soon as the majority of Egyptian scholars are as familiar with demotic as they are with hieroglyphic and hieratic writing, there will be no further need of transliteration". The comparison with hieratic is not very happy, for what transliteration is to demotic, transcription is to hieratic; publications of even very legible hieratic texts are regularly accompanied by transcriptions, and with many other hieratic documents transcription is more than half the battle, translation being relatively easy once the text is thus established. And in grammatical and lexicological works and studies transcription is the obvious form in which to quote from hieratic documents. These two functions of transcription, the interpretative and the reproductive, which Dr. Gardiner discussed very ably in this *Journal* a few years ago (xv, 48 foll.), seem to apply equally to the transliteration of demotic. Not only will individual hands of new demotic documents probably always give some difficulty, but a transliteration often records the result of an editor's painful study of damaged or otherwise difficult places which cannot well be studied on photographs. And will not transliteration always be a necessary substitute for the text in grammatical works? How will students learn demotic without it? The exact opposite of the Editor's statement may easily take place: as Egyptian scholars become more familiar with demotic, and more certain of their readings, editors of normal demotic texts will perhaps often dispense with reproductions of the original text, and rely on transliteration only, following the method employed for many years past in the interests of economy and clarity, and to the satisfaction of all parties, in editions of cuneiform texts. Thus transliteration, so far from being merely an *ad interim* affair, may acquire more importance, and so to speak more responsibility, in the future than it has now.

Just how demotic should be transliterated is a question on which scholars have hitherto by no means been in agreement. Of recent years we had seen three methods: those of Griffith, Spiegelberg, and Sethe. The first of these attempts to reproduce the consonantal structures of many words as spoken at the time, writing *ḫp* "become", *wḥ* "put", *rm* "man", *mꜥ* "truth", for older *ḫpr*, *wꜣḥ*, *rmt*, *mꜣꜥt*. One might expect to find also *nf* for "good", *nt* for "god", *ḥ* for "face"; but consonants are not suppressed in some forms of words if they are found to have survived in other forms (ⲛⲟϥⲣⲉ, ⲛ̄ⲧⲏⲣ, ϩⲣⲁϥ). It also includes many vowels, either (*a*) by transferring them from Coptic or Greek into words whose writings have no indication of a vowel, *e.g.* *pe*, *te*, *ne*, copulae, *wbe* "opposite", *Ne* "Thebes", *pa* "he of", or (*b*) by always reproducing a common group by *e*, which often gives a form corresponding closely to the Coptic of perhaps seven hundred years later, but sometimes does not, *e.g.*, *pe* "my" (ⲡⲁ), *špe* 'dowry' (ϣⲁⲡ), *qre* "river-bank" (ⲕⲣⲟ). Finally, it reproduces the feminine ending when written out, although this was lost in the spoken language (with nouns in *status absolutus*) as far back as the Old Kingdom. It is thus, as its originator freely admitted, a compromise.

Spiegelberg's method was mostly historical. Words the writings of which can be traced back to hieratic he reproduced with all their consonants: *ḫpr*, *wꜣḥ*, *rmt*, *mꜣꜥt*, *pꜣj-f*; and he included (with few exceptions) feminine endings whether written or not. With *pꜣj-f*, for example, he quite wittingly disregarded the facts that the word as spoken had lost half its consonants, and that the scribe—at least from the Ptolemaic period onwards—was unconscious of writing *pꜣj-f* or indeed anything but *pef* or the like. But he also rendered the group referred to above, when final, by *e*, which led him into such anomalies as those mentioned in the last paragraph.

Sethe's method goes further than Spiegelberg's; it is purely historical and therefore purely consonantal.

[1] It is not clear to me why he uses *ḏ* in *ḏn* 'share,' *ḏnw* 'basket', *ḏd* 'say', but *t* for old *ḏ* in all other words.

It has the merit of consistency, and enables the reader with a knowledge of earlier Egyptian to distinguish the words, and so to know what the text is about, more easily than with either of the other two methods. It has, however, an aspect of unreality, as who should render a spoken *je ne l'ai pas vu* in writing as *ego illum non habeo passum visum*.

The passage "they are thine, thy possessions as above; I concede them to thee; I have no claim whatever against thee in respect of them from to-day onwards" is here transliterated according to the three methods, to illustrate them:

Griffith:	*mte-k*	*s,*	*ne-k*	*nk*	*nt*	*ḫry;*	*te-y*	*wy*	*ar-k*	*n'm-w;*	*mn*	*mte-y*	*mt n*	*p*
Spiegelberg:	*mtw-k*	*s,*	*nꜣj-k*	*nkt*	*ntj*	*ḫrj;*	*tw-j*	*wꜣj*	*a-'r-k*	*n-'m-w;*	*mn*	*mtw-j*	*md n*	*pꜣ*
Sethe:	*mtw-k*	*st,*	*nꜣj-k*	*nkt*	*ntj*	*ḫrj;*	*tw-j*	*wꜣj*	*r-r-k*	*im-w;*	*mn*	*mtw-j*	*md n*	*pꜣ*

Griffith:	*t*	*e'rn-k*	*rn-w*	*ṯ*	*p*	*hw*	*a*	*ḫry*
Spiegelberg:	*tꜣ*	*'-'r-n-k*	*rn-w*	*(n) ṯꜣj (n)*	*pꜣ*	*hrw*	*a*	*ḫrj*
Sethe:	*tꜣ*	*i-ir-n-k*	*rn-w*	*ṯꜣj(-n)*	*pꜣ*	*hrw*	*r*	*ḫrj*

The following are philological notes on some of the remarkable documents published by Sir Herbert Thompson:

B.

i 1–2: "the judges (of) the priests of Wepwoi" (p. 12). A note mentions Mr. Glanville's suggestion that *n* here is not genitival but is "a form of expressing apposition". This interesting use is certain in many phrases in these documents, of the types *Twt s P-te-'tm n pe hy* "Tuot son of Petetum, my husband", *P-'gš n p sẖ* "Pegosh the scribe", where a name is followed by an expression of relationship or a title in apposition, and there can be no doubt that we have the same thing in *n wpty-w n n w'b-w n Wpwy* "the judges, the priests of Wepwoi", for these judges have priestly titles. *N* in this use evidently represents Late Egn. *m* (*cf.* the examples of its appositional use in Erman, *Neuäg. Gramm.*, § 702, where an improbable derivation from *in* is proposed), and is not connected with Mr. Glanville's note in *Ä.Z.* LXVIII, 16, cited here, on a use of the genitive *ni* before the names of ships in Middle Egn., a familiar example of which is *pꜣ wiꜣ* (?) *ni pꜣ Smꜣ* "the ship of 'The Bull'" (*cf.* our "the city of Westminster", "the name of Jones"). *Urk.*, IV, 2. 12–13.

i 6–8. "The endowed woman . . . who speaks . . . (saying)" should be either "It is the endowed woman . . . who says" or merely "The endowed woman . . . says", for the original has *shm-t n s'nḫ . . . t nt ḏd*, and *ḏd* means "to say", and only exceptionally "to speak". Similarly in ii 13–14, v 11.

i 14. Not "Petetum came to die; he made an apportionment . . ." but "Petetum, being about to die, made an apportionment . . ." So also in ii 17, v 14. *Cf.* p. xii and Spiegelberg, *Demotische Grammatik*, § 508.

i 24; iii 8. I translate "Dionysos, who was his herd (or better, whom he had as herd) . . . sueing, they . . .", similarly to v 1, 24; not "D. was his herd".

i 24–5. I translate "Tefhape . . . whom I sue *above*", referring to "I bring complaint against Tefhape", i 8. So also in ii 17, iii 9, v 14. See the next note.

ii 6–7. Instead of ". . . they (being) security for the endowment deed as regards (?) Tefhape, and I claim from him the lease of the said lands (made) to Heraclides", I read ". . . they being security for the endowment deed. Tefhape, whom I sue above, had leased the said lands to H", reading the sign before *Tef-ḥrpe* as *wḥ*, not *ḥr*. "As regards (?) Tefhape" seems to give no sense, and Heraclides (if that is the name) has not been mentioned before. This passage is quoted by Tefhape in iii 25, and these two passages seem to be the only ones to which the "direct object" of n. 32 on p. 15 could refer. *Mte-y* must here be relative, as in i 25, iii 25 (*cf.* ii 17, iii 9, v 9, 14).

ii 12 (transliteration). For 24 read 22.

iii 25: see the last note but one.

iv 17. The explanation of *py* (var. *p*) *hb-y n'm-f* given in n. 74, p. 20, as surviving from a construction in which a relative sentence is treated as a substantive with the definite article before it, is not very happy. The relative form here stands in apposition to the demonstrative, sometimes written like the article, as in Late Egn. (see Erman, *op. cit.*, §828) and Coptic (ⲡⲉⲧϣⲟⲛ : ⲫⲏ ⲉⲧϣⲟⲛ), and is by no means uncommon in demotic (Spiegelberg, *op. cit.*, §§ 553, 557). *N'm-f* here cannot be direct object; for *hb n* (= *m*) "to write about" *cf.* Spiegelberg, *op. cit.*, § 273.

v 9–10. Instead of "I pray that you . . . will not let Tefhape . . . have access to it (the property in dispute ?), him whom I am sueing as regards (?) property which belonged to Petetum", I read "I pray that you will not let Tefhape . . . whom I sue above have access to property which belonged to P." The *s* after *hn* is reflexive.

vi 6. For "the share $\frac{1}{3}$ of the lands in question, this I made a lease (thereof)", I suggest "it is the $\frac{1}{3}$ share of the lands in question that I leased", the original being *t dn* $\frac{1}{3}$ *n n yḥ-w rn-w te 'r-y sḥn* ⟨*ar-s* ?⟩.

vi 10: not "They said to them these things; 'Are these your words which you said ?'", but "They said to them: 'These things (*i.e.*, the written pleadings), are they your words which you said ?'" For *ny 'n-ne ne-tn mt-w a-ḏd-tn ne* cf. *ny mt n ʿḏ ne* "these things, they are falsehood", iv 25.

vi 11. The ⟨*-ne* ?⟩ after *'n* is unnecessary; *cf.* Spiegelberg, *op. cit.*, § 485 αα.

vi 15. 19. At the end of the final pleadings of the two parties (Chratianch being represented at this point by a man) are the words *mn mt ḫtm-w r-f* and *mn-mte-y ge a-e-y ḏd-t-s ḫtm-w r-f* respectively. In the translation these passages appear as "There is no closure of the mouth" and "I have no other (man) of whom I will say: His mouth is closed". But *mt ḫtm-w r-f* cannot mean "closure of the mouth", for it is with the infinitive, not with *sdm-f*, that *mt* is compounded to form abstract nouns; and it is difficult to see how "there is no closure of the mouth" could mean "I have no other witnesses to call" as is suggested on p. xviii (a different interpretation, "there is no deprivation of free speech or denial of hearing", however, in n. 114, p. 24). The second passage must surely be translated "I have nothing more that I shall say" (insert *mt* after *ge* ?), this being the end of the pleader's speech, followed by "his (the pleader's) mouth was closed". That this is correct is made practically certain by the fact that three out of the four preceding pleadings end with *wn-mte-y ge mt e-y ḏd-t-s* "I have other matter that I shall say" (ii 12, v 10–11, vi 8). In vi 15 we have only *mn mt* "there is no matter" (at the end of a line), followed by "his mouth was closed"; there seems to be a considerable omission here. Evidently pleadings that were not final were carefully so characterized by a statement that the pleader had more to say, and the final pleading ended with a statement that he had no more to say, after which "his mouth was closed", perhaps referring to the Court's formally inhibiting him from further speech.

vi 25. *a-ms-t* "whom thou hast borne" must not be emended to *a-ms-t-w*, for it is the relative form.

vii 4 is omitted from the transliteration.

vii 15 foll. The Editor assumes that the same three properties are divided in shares of two-thirds and one-third as items [iv], [x], and [xi] of all the apportionment documents (here; A; Vo v–vii); he implies that the documents show puzzling variations at these points, and regards the names Gemmis and Gur as belonging to the same man in clause [xi] of the three documents (see p. 27, n. 134; p. 28, notes 145, 147; pp. 37, 38; p. 44, notes 26, 27; p. 57, n. 4=p. 59, n. 5). But the properties conveyed to the two sons in clauses [iv], [x], [xi], are not, like most of the other properties and revenues, divided between them in $\frac{2}{3}$ and $\frac{1}{3}$ shares, but are given whole, and in a division of goods of this sort the same complete property could not be given to each son separately. They are different properties that are given. To Tuot Petetum gives [iv] the new grange, [x] the house of Tewotenarau, and [xi] the house of Gur, son of Sys. To Tefhape he gives [iv] a half share of the ruined storehouse, var. my share of the stone house which came to me in the name of . . . my father, [x] the house of Pytêu, and [xi] the (waste lands of) the house of Gemmis and its grounds. All these properties have quite different neighbours. Probably those given to Tuot were much better than those which fell to Tefhape, so as to maintain the proportion of 2 to 1 in the division.

vii 23. For "we have 10 before us (?)" I read "we ourselves (ϩⲱⲱⲛ) have 10".

vii 24: "the land aforesaid"; the original has "the 20 arurae of land aforesaid".

viii 12. For "the house of G. and the waste lands in the neighbourhood of the village of *P.*", I read "the house of G. and the waste lands which are round it, which are in the village of *P.*", which seems more correct on grammatical grounds and from comparison with A 8.

viii 16, 18, 20, 21. "Myself" (ϩⲱⲱ) perhaps gives a better sense for *ḥʿ-y* than "also".

viii 20 (twice). 21: "*t st*(?)". The original has in all three cases *t-t-s* "give it", a pronominal form of the infinitive which retains the ending *t*, cf. Boh. ⲧⲏⲓⲧⲥ, Akh. ⲧⲉⲉⲧⲥ. The antecedent of the suffix *s* is the feminine *dn* "share"; omit therefore the comma after "oil" in the translation of viii 21.

ix 1. The plate shows *n* before *p t*.

ix 14. The translation of *n-ge* receives no light from the reference to Spiegelberg, *op. cit.*

ix 23. The text has "she (not "he") was not thrown in".

x 4. For ⟨*s n*⟩ read ⟨*n*⟩ only; *a-'r-w* is relative form.

x 8. The Editor points out in a letter that "and he give property belonging to another man" should read "and he give property belonging *to him* (*mte-f*) to another man".

x 13. I suggest tentatively ". . . everything and all property which is described on the apportionment deed of which a copy is written elsewhere and which (deed) exhibits through them (the things and property) his ⅓ share".

The *ḫp*, *ḫp-f* which in B and Vo so often introduce sentences in both the past and present tenses seem to have but little force, and to be over-translated by "moreover", "it is a fact that", "it happened (happens)". "Now" would perhaps be a more suitable translation.

A.

10. For *e-wn-mte* (twice) in the transliteration read *e-wn-nte*.

Vo.

i 20–1. *N-t-t ḫp-f e-bn e(-w ?) rḫ tm 'n* is translated, no doubt correctly, "when it happens that they (?) cannot produce" and Spiegelberg, *op. cit.*, is referred to for the double negative. But in Spiegelberg's examples two negatives are equivalent to an affirmation. What we have here seems to be a nonsensical fusion of the two negative constructions *ḫp-f e bn e(-w) rḫ 'n* and *ḫp-f e(-w) rḫ tm 'n*, with erroneous omission of the subject.

iii 7: "Socrates, who (not 'when he') was Strategus".

iii 16: "He writes (out) the 8th tablet of the law of Egypt". This seems an unlikely thing for the chief of police to do. The translation is surely, with the preceding sentence, "I have caused to be brought to their notice(?) the laws regarding them; it is (for "they are"; *e-f sḫ* should be *e-w sḫ*) written in the 8th tablet of the law of Egypt". The use of the singular is perhaps influenced by the not uncommon expression *e-f sḫ n p hp* "it is written in the law (that . . .)", *cf.* B i 17 = ii 20, x 7.

iv 1. The plate shows *n* before *p swyws*. P. 54, n. 1: Spiegelberg, *op. cit.*, § 510, should have been referred to for the *temporal* use of *n-t-t ḫp-f*.

iv 2. The plate shows *n* before *p strtyqws*.

iv 18: not "the written copy" but "what was written in the copy" as in line 17a. "She claiming against Tefhape together with what was written at her behest, saying . . ." is hardly possible, for *e* does not mean "together with"; I read "she claiming against T., what was written at her behest saying 'It belongs to Tuot . . .'".

v 4. "My eldest son" is vocative, and belongs to the speech of Petetum (*cf.* B vii 8); it should therefore not be separated from "I have given thee".

v 11. Not "his" but "its (the storehouse's) remaining ⅓ share".

10593

4. The translation has "If I abandon thee as a wife, (or) if thou shalt abandon me (?), I am to give them to thee on the day of (thy) asking them from me, which thou shalt do it on one day in 30 days, the day of asking the 110 silver pieces aforesaid from me which thou shalt do it". I translate: "If I abandon thee as wife, or if thou abandon me (*ḫ'-t* = ⲕⲁⲁⲧ), I shall give them to thee in the time of requiring them from me that thou hast fixed; within 30 days (lit., a day in 30 days) is the time of requiring the above 110 silver pieces from me that thou hast fixed. If I do not give them to thee in it (the time, namely) one day in 30 days. . . ."

10595

11: "12 (artabas) of wheat".

10599

7. Insert *a* (clear on the plate) before *'nk* in the transliteration and translate "I having cultivated . . .".

The Glossary is wholly autographed in the very neat and clear writing with which students of the *Demotic Magical Papyrus* are familiar. The writings are not, as in most modern demotic glossaries, facsimiled from the originals, but are given in a normalized style; this is no doubt all that is now necessary for ordinary Ptolemaic documents, and has indeed a positive value from the hand of a demotist of the Editor's great experience, for it shows the student the normal forms which underlie the variations of individual hands. It is, however, much to be regretted that, with a single exception, no references are given to the numerous and valuable discussions of words and phrases in the footnotes to the transliterations and translations.

38. The first demotic writing is incorrect.

56. Without *ḥry* in B vi 15.

63. *Yt-nṯr* (?), Vo iii 4, should have followed here.

86. "*wḥ* (?) . . . 'addition'". The reference, 593 12, seems to be incorrect. Is this word identical with the group in 597 12 transliterated *1 a 1½* (?) on p. 74 and rendered "hemiolia" on p. 76, and is the latter again what is referred to on p. 137 as *1½ (a) 1*, but with a different writing, and a reference to 597 10, where nothing like it seems to occur?

150. In B ix 17 *mte* is not conjunctive but "belonging to", and is written not for *nte* but for *m-dr*, see Spiegelberg, *op. cit.*, § 375.

157. "*N* occurs between words standing in apposition"; in the translations, however, it is in several places referred to here (B i 2. 7, ii 14, x 16) incorrectly rendered as a genitive, *cf.* note above to B i 1–2. For Vo iv 3 read iv 4.

172. There can be little doubt that the "special use of *nt*" is, as the Editor tentatively suggests, derived from the Late Egn. genitive *ntj*. A study of this word in Late Egn., demotic, and Coptic would assuredly prove fruitful.

182. The interesting meaning "by reason of" and the like (*e.g.* B i 16, ii 1. 10) is omitted.

343. Add 598 19.

385. Here insert 22nd day, B ii 12.

460. For *p sḥ mᶜ* read *p sḥ tme*.

522. The writing in 597 6. 16, 598 5, 599 5, 600 5, with the second consonant reduced to a mere horizontal stroke, was perhaps worth noting.

The Glossary of Personal Names would have been rendered more valuable as onomastic material by the inclusion of the 74 names of witnesses.

The thirty-one plates of the second volume are, on the whole, extremely clear and legible, the documents having been photographed without shadows. But, as is too often the case in such publications, the background is black, so that breaks and holes appear as dark as the ink, and may therefore interfere with the reading in some places. It cannot be too strongly urged that all papyri in which the written part is not quite free from such defects should be so photographed that the latter have white inside them—no difficult task. The scales may be calculated from the dimensions of documents given in Vol. I, with two exceptions.

In conclusion I would emphasize the very great service that Sir Herbert Thompson has rendered to Egyptology and the study of ancient law by this fine edition of the most important group of demotic papyri that has been published for many years.

BATTISCOMBE GUNN.

Die Datierung der Mumienporträts. Von DR. HEINRICH DRERUP. (Studien zur Geschichte und Kultur des Altertums, XIX, Heft 1.) Ferdinand Schöningh, Paderborn, 1933. Pp. 66, 20 plates.

Though quite a short book, this is the best and most comprehensive survey of the mummy portraits as yet attempted. Dr. Drerup traces their evolution from the early first century A.D. to the second half of the fourth, basing his dating partly on the evidence of the coiffures, which in many cases reflect the fashions of the Roman court, and partly on the evidence of artistic style. He ascribes certain groups to individual masters, which is reasonable enough, as there cannot have been many painters practising this branch of work at one time in a small place like Philadelphia or even in a metropolis like Arsinoe. It may be noted that one portrait in one of his groups comes from Hibeh, while the others were presumably found in the Fayum; but this is not a serious objection, for mummies were often made up in one district and transported to another for burial. It is surprising to find what a large number of panels, chiefly painted in tempera, Drerup has been able to assign to the fourth century, no less than a quarter of the 600 extant pieces.

No Ptolemaic specimen has yet been found, although many Ptolemaic cemeteries have been ransacked; and it is now generally admitted that all the portraits belong to the Roman period. Drerup goes even further: he is inclined to attribute the introduction of this form of mummy decoration to the settlement of Roman veterans in the Fayum. He finds in the portraits a certain affinity to the sculptured busts on Roman tombstones of the first century B.C., and the style of the earliest examples seems to him more Roman than Hellenistic. But after all we do not know to what extent and in what style portraiture, especially encaustic portraiture, was practised in pre-Roman Egypt. The painted tombstones from Alexandria cannot be called portraits, but there is an interesting reference in O.G.I.S. 51 to an εἰκόνα γραπτήν of a local official at Ptolemais in Upper Egypt. In Philadelphia itself, from whose neighbourhood come so many of the portraits, encaustic painters were employed as early as the middle of the third century B.C., not only for decorating the woodwork of houses but also for making separate πίνακες (see especially P.S.I. 407, P. Cairo Zen. 59767, 59782*a*); and I do not feel sure that the art of portraiture was not flourishing in the χώρα long before the painter became an ally of the funeral undertaker.

C. C. EDGAR.

Life and Letters in the Papyri. By JOHN GARRETT WINTER. (The Jerome Lectures.) Ann Arbor, University of Michigan Press, 1933. Pp. vii+308.

Mr. Winter's book consists of a series of lectures which were intended "to interest primarily those who are not specialists" in the field of Greek papyrology. The themes chosen for discussion are: Rome and the Romans in the papyri; the life of the people; evidences of Christianity in the private letters; additions to Greek poetry and prose. The author has evidently a thorough knowledge of his subject, and he presents the facts in a readable and interesting form. He not only utilizes both old and newly published material, but also quotes freely from unpublished papyri in Michigan, showing incidentally how rich the Michigan collection already is. The translations are careful and reliable. Perhaps one should add, as far as the material admits; for papyrology is still a young science and our understanding of the texts is being advanced day by day. For instance, I notice that in P. Oxy. 724 χωρὶς ἑορτικῶν is still translated as "feast days excepted"; but Krüger has lately shown from other documents that the probable meaning of the phrase is "without including gifts at festivals".

In a book intended for popular instruction one does not look for new theories or original research. But in fact Winter often takes occasion to discuss difficult passages, especially in private letters, and to propose interpretations of his own. Several of his criticisms are valuable and deserve to be taken note of. In other cases it is doubtful whether the new explanation is adequate. I cannot but think, for example, that to translate κακῶς ἐθεράπευσεν in P. Oxy. 40 as "treated without a licence" is to strain the natural sense of the words. And many passages in the private letters are so obscure that to attempt to reconstruct the circumstances is rather a waste of ingenuity.

C. C. EDGAR.

CORRESPONDENCE

We have received the following letter from Mrs. C. R. Williams:

"Your issue of June, 1934, contains a review by the late Professor T. Eric Peet of my book, *The Decoration of the Tomb of Per-nēb*, and I should like, if I may, to comment on his misgivings concerning my use of the volume *Medum*. If they are justifiable he did a real service to Egyptology in warning that 'the coloured plates of this volume were (merely) a laudable attempt to give us some idea of what Old Kingdom mastaba-work looked like' and in saying that he 'should be sorry to use them in a scientific research into Egyptian painting'. Further, many colour-puzzles are presented by the plates, and these will conveniently evaporate if they are nothing but copyist's mistakes.

"I shall not enter into a defence of my own position, though it was not taken carelessly, or cite the various Egyptologists who have thought well enough of the plates to use them in reference to Egyptian colours. But I wish to make a suggestion in reply to the only reason given by Professor Peet for his mistrust of the *Medum* coloured plates. He had compared the detail of Plate xxviii, 4, with its original, now in the Manchester Museum, and found the two in disagreement about the colouring of a 'bull-sinew whip' held by a 'neatherd'. The Plate shows a yellow handle and yellow terminal thin lash with white between, the original shows the object all white, or rather now a 'dull cream'. Therefore Professor Peet regarded the Plate as inaccurate. But is it not somewhat of a scientific risk to assume that a fragment of Egyptian wall-painting copied in 1892 or earlier would necessarily years later still be in just the condition it presented when copied? Egyptian earth and mineral pigments are not indeed wont to change colour, but they do drop off the wall. The top final surface, sometimes as thin as paper, will peel off, exposing a smooth white ground on which it had been laid. On a day in March 1927, I stood in a certain Old Kingdom tomb of the Gizeh necropolis, one protected by iron gratings but not by glass, and actually saw the action of wind in carrying down loose flakes of paint, and such flakes were then often to be observed elsewhere on floors below wall-scenes which were more or less denuded of their colours. So familiar to me has been this tendency of Old Kingdom tempera pigments to flake off that it had never once occurred to me to see in the whip of the *Medum* plate a white object with yellow tip and handle. Regarding white as a wholly improbable colour for an Old Kingdom colourist to paint a whip—whether one of sinews or perhaps of rope—I have always judged Plate xxviii, 4, to depict an all-yellow whip which had lost part of its top surface, and I now believe it quite possible that, since the copy for *Medum* was done, the original has lost the remainder of its one-time yellow colour, leaving a smooth whitish ground wholly exposed.

"Of course no one would assume that the *Medum* coloured Plates could be absolutely error-free; not even Sir Flinders Petrie, at the time the copies were made, did so. His own account of the copying (*Medum*, pp. 21–2) makes it clear that he aimed, not to give a general idea of the appearance of the walls, but to copy them with the utmost accuracy of detail and to produce results 'equivalent to the original sculptures'. I am loath to think that he failed so utterly with the coloured Plates that, in the absence of anything better to represent the period of the Meidûm paintings, we must exclude them from all scientific study. Let us hope, however, that work at Meidûm may yet reveal other early paintings, and that these may be published by one of the new methods of colour photography and reproduction.

C. R. Williams."

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