

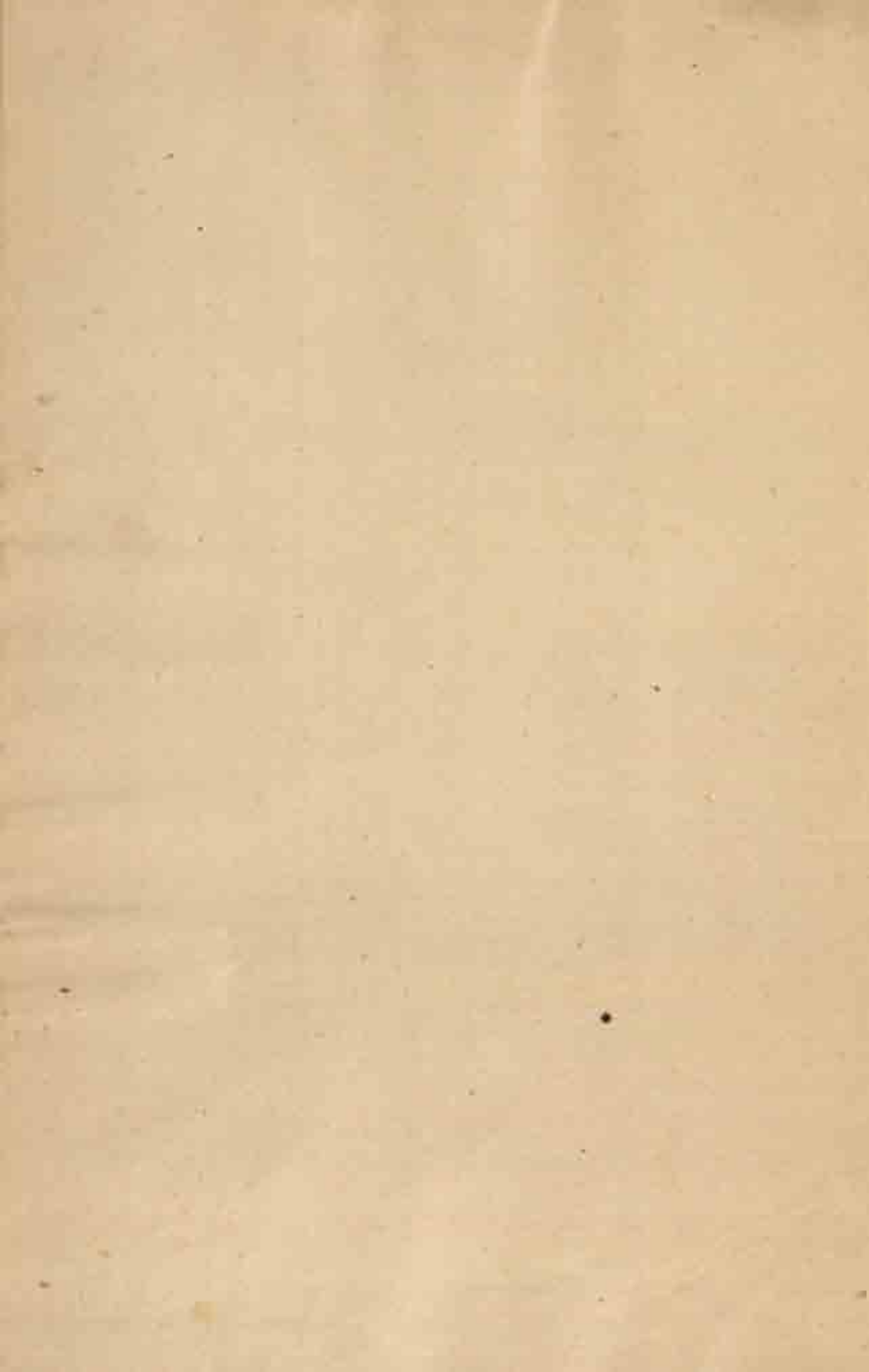
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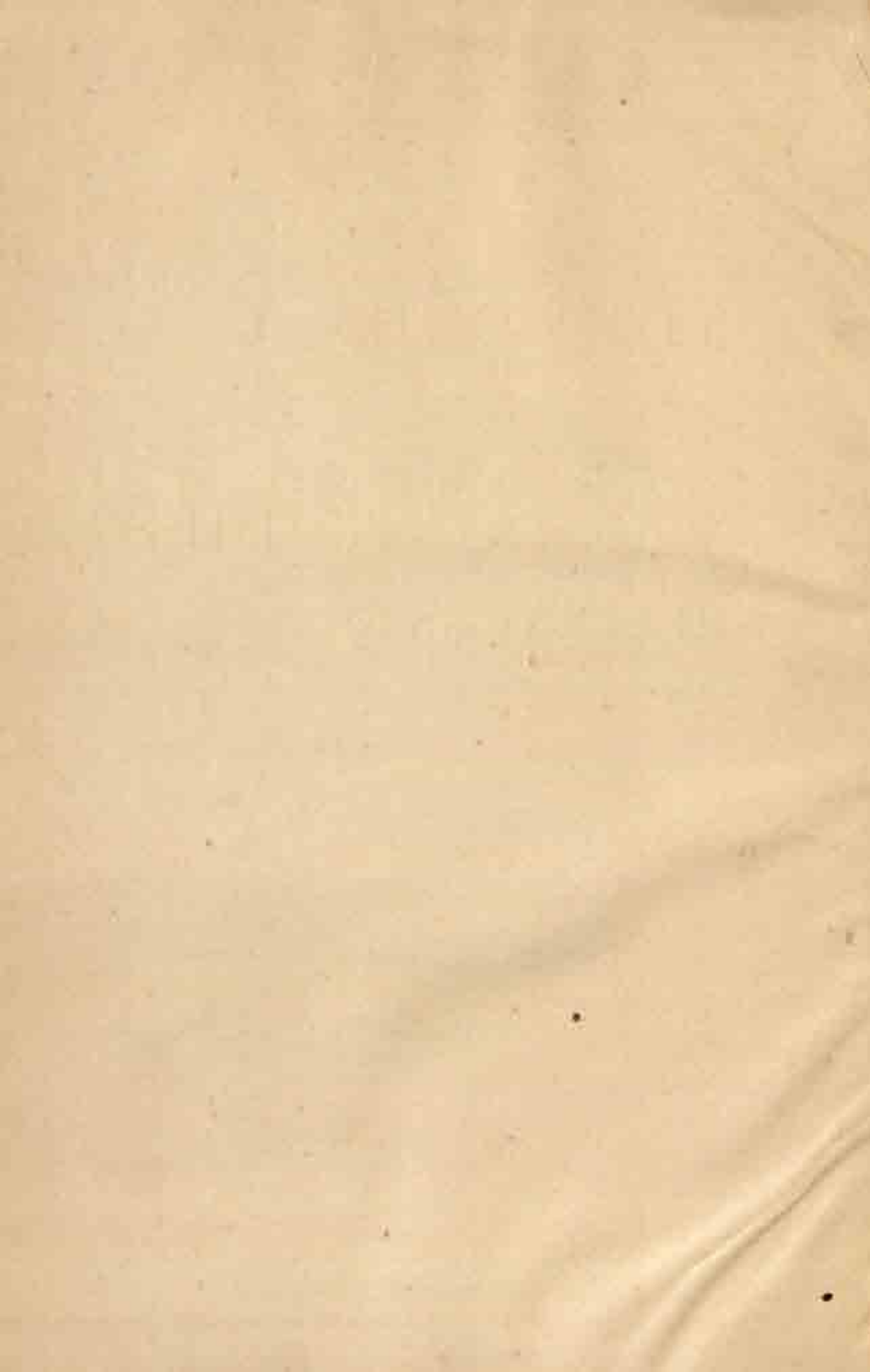




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MILITARY OPERATIONS ON THE NORTH FRONT OF MOUNT TAURUS

IV.—THE CAMPAIGNS OF 319 AND 320 B.C.

IN a footnote in *J.H.S.* 1918, p. 144, I stated the view that the battle (319 B.C.) in which Antigonos defeated Alketas and the associated generals took place in the *αὐλῶν* which leads from the N.E. corner of the Limnai towards Pisidian Antioch, carrying the southern or Pisidian road across Asia Minor eastward. This important route, regarded as a highway from the west coast to the Cilician Gates, is a recent discovery, though parts of it have been often described and traversed.¹ In *J.H.S.* 1920, p. 89 f., I have argued that it was the road by which Xerxes' great army marched from Kritalla to Kelaimai.

There are two authorities on whom we depend for details of the battle of 319 B.C., Polyænus *Strat.* 4, 6, 7 and Diodorus 18, 44; but both of these gather all their information from that excellent military writer Hieronymus of Cardia, the friend and historian of Eumenes. Polyænus tells the story with soldierly brevity, relating only the chief military features: Diodorus diffusely and at great length; but so that we can recognise Hieronymus behind and beneath, and restore the full account as given by that writer.

The Pisidic Aulon, a "tunnel" with open country at each end (not a gorge or glen leading up to a high mountain pass), rises gently E.N.E. from the plain at the N.E. corner of the Limnai: a streamlet flows through it to the lake: it is bounded S. by rock, steep but not very lofty, and N. by low hills sloping gently back to the steep Kara-Kush-Dagh N. (described in the *Geographical Journal*, 1923, p. 279 f.). It is the *αὐλῶν κατ' ὄρεον πρὸς Μισόλῳ* of an inscription from Apollonia (*J.H.S.* 1918, p. 140), and is one of the *αὐλῶνες* which Strabo (p. 569) had heard about, but not seen. The term *Πισιδικὴ (χώρα)* is characteristic of earlier writers, Polyb. and Diod. (Hieronymus): Xenophon uses only *Πισιδίαι*; there was not in the estimation of those writers a country Pisidia, but only Pisidike, a tribal territory. Strabo first speaks of Pisidia as a country;² but there seems generally to be a prejudice against the word until the Romans made Pisidia a political entity as a division of a province and later as a province.

¹ It has been confused with (1) the road to Iconium, with which it coincides for the whole stretch between Neapolis (Karnag-tale) and the west coast, (2) the Via Sebaste from Colonia Antiochia to Lastra Colonia. It was not till 1909 that we traversed the part between Kara Vinnu and Appa Seral

through the great cañon. Between Bey-Shohar and Kara Vinnu I have not traversed it, but Sterrett has seen it. The great cañon was not traversed even by so wife-ranging a traveller as Sterrett.

² Strabo quotes Artemidore's *Πισidia*.

Strabo had not seen Pisidia, but knew that there were πόλεις in it: now he is careful in his use of the term πόλεις to imply a municipal organisation Hellenic in type. A friend urges that Polyaeus means only 'an aulon in Pisidia'; but Polyaeus got the term from an early writer (viz. Hieronymus), who undoubtedly specified the precise locality. Moreover Polyaeus is generally careful to specify locality, and not to speak vaguely of 'an aulon in Pisidia.' The inscription suggests that Aulon was almost used as a proper name, hence the article was not needed.

The precise meaning of geographical and topographical words is not always observed by modern scholars, and is sometimes disregarded by the ancients themselves. The undulating foothills which intervene between the road through the Pisidic Aulon and Eagle mountain on the north (Kara-Kush-Dagh) were called by Hieronymus ἀκρολοφίαι, which I take to mean hill-ridges, a very good description: it does not necessarily imply that the ridges are rough or sharp or steep. Diodorus preserves this term in one place, but elsewhere he calls them ἀκρορεῖα, a word that involves exaggeration (ὕπερρεῖα would be more correctly substituted for it, and perhaps may have been the word used by Hieronymus and even by Diodorus).

Polyaeus's text is in one point wrong: it transforms 'the ground below the mountains, rough and difficult' into 'the (path) rough and difficult through the mountains,' but the intention of that writer in his otherwise admirable description of the fighting and marching can be easily restored by correcting τὴν διὰ τῶν ὄρων τραχείαν into γῆν ὑπὸ τῶν ὄρων τραχείαν, which may pass as a fair but not strikingly good representation of Hieronymus's account of the localities. But Polyaeus perhaps mistook the local features.

From Polyaeus and Diodorus it is easy to recover a complete picture of the battle: Antigonos hurrying on to surprise the sleeping camp of Alketas and the associated generals in the Pisidic Aulon, but betrayed by the trumpeting of his elephants; the hasty movement of Alketas and his light-armed troops to seize the foothills (ἀκρολοφίαι, ὕπερρεῖα) overlooking the road on the north, and to detain Antigonos, in order that the hoplites might have time to arm themselves and form in order of battle (phalanx): Antigonos holding back his right wing to check the troops of Alketas, while he rushed on with his centre and left wing (λοξώσας τὴν στρατίαν, in echelon) to destroy the main body of the enemy, still in disorder and half-armed; Alketas retreating on his main body but finding that Antigonos had already pushed in between and cut him off; the parley and the complete surrender at discretion of the whole army of the west, which, being composed mainly of forces like those of Antigonos and not much interested in the rival claimants, was quite ready to join the army of the victor. Then followed the flight of Alketas with a handful of followers to Termessos: Droysen estimates this as a distance of four days, which is not far from the truth, if the battle took place in the Pisidic Aulon.² Antigonos followed, and succeeded in capturing the generals, who were betrayed by the

² Droysen places the battle in the open ground between the Klimas and Payam-Agatch, an easy day from the neighbour-
hood of Termessos.

older men among the Pisidians of Termessos, whereas the younger men² were faithful to the duty of hospitality. Antigonus then returned by way of Cretopolis towards Phrygia, which was his own territory. As has been shown in *J.H.S.* 1920, p. 107, he went to Afion-Kara-Hissar (Leontos-Kephala), and on the top of that tremendous rock, the strongest fortress in all Phrygia, he imprisoned the captured generals under what he thought was sufficient guard. Thereafter he returned to Cappadocia.

In his account Diodorus differs in respect of the locality from Polyaeus. There can be no doubt which is preferable. The clear, brief, sharply outlined narrative of Polyaeus carries conviction. Diodorus says that Antigonus had advanced beyond Cretopolis, and thus he transfers the battle to the extreme south of Pisidia, near the descent to the Pamphylian lowlands. Formerly I was disposed to set small store by Diodorus, whose description of the operations in the wars of the Diadochi is long, verbose, and not very clear. Recently, however, I see that this judgment was wrong: Diodorus followed an excellent authority, and though he treated the author rather freely, and sometimes failed to understand the operation or to make it clear to his reader, it is often possible to work back to the excellent account given by Hieronymus. In the present case Diodorus made one serious error, which can readily be eliminated. He did not know what or where was the Pisidic Aulon, and he tried to state the scene of the battle more precisely. Inasmuch as Antigonus advanced from the battle to the neighbourhood of Termessos, and then came back by way of Cretopolis towards Phrygia, his own country, Diodorus assumed that the battle had been fought near Cretopolis. This error was not unnatural, but it rests on a false assumption. If it is cut out, the rest of his account is good (apart from the loose term *ἀκρωρία*, where *ἀκρολοφίαι* was in his authority and is actually used by Diodorus later). The rest of his narrative supplements and adds detail to that of Polyaeus.⁴

A different theory was advanced by Schönborn, the most pathetic figure in the history of Anatolian exploration, and has been accepted by all historians English and German. Schönborn was a schoolmaster of the old German type, patient, careful, full of fine ideals and ready to sacrifice himself for them. He was fired with the noble idea of exploring Asia Minor, and he was very scantily provided with money for the journey: in Germany they have long learned that this is a mistake, and the best provisioned expeditions in Asia Minor

² This is a very unusual division of opinion in ancient Anatolian society; a division of duties in Palestinian society between the older and the younger members is mentioned in *Act. Apost.* IV. (where the active work falls to the younger men in the Church at Jerusalem). Generally the authority and experience of the old guided the young.

³ If it were safe to take *εὐρυτέρως* to imply higher position on the right wing of Antigonus (as in Xenophon, *An.* 4, 8, 2), this would be an important detail; but, al-

though in the operations of a battle, and the example of Xenophon, some justification might be found for this sense, yet the regular usage refers only to higher position, and so in Diodorus himself. Recent editions of Xen. read *εὐρυτέρως*.

Polyaeus speaks of Pisidic Aulon as a well-known place, and Schönborn identified it with the famous Klimax. The Aulon was the scene of countless battles, of which only a few are known to us (*J.H.S.* 1918, p. 144; *Geographical Journal*, April 1923).

have been German, since G. Hirschfeld about 1870 inaugurated the new era. Schönborn prepared himself for the hardships which he would have to encounter by sleeping on the ground and so on for months beforehand, ignorant that the best way to be ready to endure hardships is to start in the best of strength and physical condition. He did some very useful geographical work, and died shortly afterwards, partly as the result of the hardships of Turkish travel, which reduced his vitality.

Schönborn had time to explore only a small part of Pisidia; and he tried to fit historical operations to the part which he knew. There is always a temptation for the traveller to do this (as I know from personal experience). He and subsequent historians have localised the battle of 319 B.C. in or over or under the Klimax, which is the steep ascent from the Pamphylian plain to the Pisidian mountain land. I traversed this route in 1882, and speak from experience: it is irreconcilable with the operations in the battle of 319 B.C., but many years and much exploration were needed to discover the truth. It was through careful examination, in repeated visits, of the incidents in the great battles of A.D. 1176 and 1190, that success and confidence were gained. Unfortunately it has been necessary to correct an error in the text of Polyæmus, and an error of understanding in Diodorus, as part of the process of historical comprehension; and this necessity of altering our authorities is never welcome, even in a small detail.

Schönborn was approximately right in the situation where he placed Cretopolis, and he naturally followed Diodorus in finding the scene of the battle beyond Cretopolis, past which he supposes Antigonus to have marched, i.e. at the upper end of the Ladder, on which he supposed that Alketas lay encamped to dispute the progress of Antigonus.

Antigonus had marched 2500 stadia (about 300 miles) in seven days and seven nights, a wonderful feat, to reach the scene of the battle, coming from Cappadocia. The distance was doubtless counted by a *bématistês*, and was correctly recorded by Hieronymus. This corresponds well with the distance from southern Cappadocia² along the Pisidian route to the Aulon; but it is absurdly insufficient to bring Antigonus to Cretopolis and the Klimax south of it. By no possibility could that distance have been traversed in the time: it is far more than 2500 stadia. This objection alone is conclusive and unanswerable.

Now the object of Antigonus's march was to crush Alketas. He therefore went where that general and his associates were. The Ladder could have been occupied by Alketas only for the purpose of defending the approach to the lowlands of Pamphylia; yet there was no object in this, for Alketas had never been in Pamphylia in the preceding marches and operations. The troops were of the west, not of the south coast, and we hear of them near the Hellespont, and of the attempts made by Alketas to form alliances with the Pisidians; but nothing could be worse calculated to strengthen his Pisidian connexion than to defend the Ladder, leaving all Pisidia open to Antigonus: the Ladder

² Strictly south-western Cappadocia.

is on the extreme southern limit of the Pisidian territory, with its foot in Pamphylia.

Moreover, Alketas and the associated generals were on their march against Antigonus; and Antigonus, leaving his subordinates to look after Eumenes in Nora, *ὁρμήσει ἐπὶ τοῖς ἐπιτορευομένοις ἡγεμόνας* . . . and by his rapid march surprised his opponents. The details of the battle are rightly given by Polyaeus: Diodorus misinterprets the operations and makes them unintelligible. Either we must accept Polyaeus and his localisation, or we must leave the battle and its scene unknown. But, accepting Polyaeus, we see how Diodorus's misapprehensions arose and how much excellent material exists in his account. The ground both above and below the Klimax is irreconcilable with the incidents of the battle: I speak from personal observation, but do not wish to lengthen the discussion: there is nothing that could be called *αὐλὸν* either at the top or at the foot. The battle was fought on one of the great east-and-west routes, which are only three.² Diodorus, reading that Antigonus effected a surprise, concluded that he occupied the higher ground, whereas Polyaeus grasped the operations as described by Hieronymus. Antigonus hurried along the road, and Alketas vainly tried to stop his march by seizing the higher ground on his right flank.

Droysen rightly infers from Diodorus that Termessos, to which Alketas fled, was about four days' march from the battle. It is the natural interpretation of Diodorus's narrative, that there was needed a considerable length of march to reach Termessos; but an easy day would carry a rapidly hastening army, making wonderful marches such as those Greek armies made, from the front of Cretopolis to Termessos or the neighbourhood.³

Alketas was encamped in the Aulon, through which he knew that Antigonus would come, and Antigonus was able to advance in battle array with a right and a left wing. The pass (Aulon) was therefore broad and open, not narrow and easily held by a small force against a large army. Yet the strength of the Aulon made it important in military history and the scene of many battles. Its strength lay in the foothills (*ἀερολοφίας*) on the north, which stretched back to the mountains further north, bare and gently undulating; these foothills could be occupied by defenders of the Aulon against an enemy, and they must be cleared of opponents before an army could advance through the Aulon: hence the strategy of Alketas, which, though unsuccessful, was excellent in itself and offered the only way of resisting Antigonus. The much superior force of Antigonus, however, enabled him to guard against this danger without interrupting his headlong rush down the Aulon on the half-awakened enemy. These operations are quite inconsistent with a battle in a narrow pass, where a considerable army of about 20,000 men could not have encamped, and where an enemy of 48,000 men could not have advanced in right and left wing and centre.

² In the *Geographical Journal*, April 1923, and in *J.H.S.* 1929 I have described the battle and the routes.

³ Antigonus never reached or entered

Termessos: probably not even Alketas did. The latter sought Termessan protection: Antigonus sought to impede this. To enter the city would defeat either purpose.

We are not informed by Diodorus from what exact point Antigonus started; but before entering Cappadocia he had been in Syria at Triparadeisos and in Cilicia. He therefore crossed by the Cilician Gates, the one great pass, and he was at once involved in war with Eumenes, who was in south-western Cappadocia, and the description given by Plutarch implies that the scene was not far from the northern end of the pass, in valleys bordered by hills or mountains. This description is not reconcilable with central Cappadocia, which is a level land of plateau, not of valleys amid mountains.

Eumenes was defeated and shut up in Nora, where his defence was memorable. Nora, a rock fortress with a surface two stadia in circuit and a splendid spring of water,* should be recognisable with certainty. Rock fortresses are numerous in Anatolia, but a perennial spring of water is very rare, and the features of Nora need only careful exploration to give perfect assurance of the situation. In any case Antigonus, after investing Nora, left the siege to his officers, and proceeded against his opponents in the west. This object dictated his movements. From Nora to the Aulon is nearly 2500 stadia, and to perform the march in seven days and nights was a wonderful feat: to reach Cretopolis was quite impossible. The origin of Diodorus's error has been explained above: in place of the unknown 'Pisidic Aulon' he substituted Cretopolis, misled by the occurrence of that place in the operations subsequent to the battle.

It is evident that at this period the way from southern Cappadocia to the west coastlands of Asia Minor followed the great southern or Pisidic route. The opponents of Antigonus could calculate that he must come this way; they occupied the pass called the Channel before his march had begun; and here they were surprised by his unexpected attack, which was only betrayed to them by the trumpeting of his elephants. They obviously felt assured he could not by any possibility take a different route and come in behind them, cutting them off from the western lands. Accordingly we must understand that the Central Route and the Northern or Royal Route were either not used for military operations or were out of account owing to the situation where Antigonus was known to be. Of course the Royal Road had been used from time immemorial, but it involved far too long a march round by the north side of the plateau. The Central Route was also considered to be impossible for Antigonus, partly from the deficient water-supply, but also from the fact that Antigonus was operating on the extreme south of Cappadocia, from whence an army would find special difficulty in getting on to that Central Route.

The authorities make it clear that—

(1) Antigonus advanced by a great route leading west from Cappadocia in order to destroy his enemies, the supporters of Perdicas.

* *Thap. Epitome* Plut. *Ann.* 11. *Dioc.* XVIII. 41, 3; depends on a statement of Hieron. (reproduced by Plut.); but he misread *ὄδωρ* as *ὄλας*: wood could not be used as food, and something to sustain life is needed. Hieronymus could never

have said that Nora had the necessities to stand a siege for many years without mentioning the water supply (especially as he mentions salt). Wood for fires would be useful, but hardly a necessary. Dung is used for cooking fires, and there were horses.

(2) His enemies on the west knew by what road he must advance, and awaited him at a pass offering facilities for defence.

(3) At this point they were able to encamp in the pass, and afterwards they could try to draw up their line of battle (phalanx) there.

(4) Antigonus advanced at the critical moment with a broad front fully deployed and ready for battle; he was evidently informed by his scouts where and how the enemy were posted.

(5) His danger lay in attack by an enemy holding the hills on the flank, i. e. his right. It was by holding those hills that the Turks defeated Manuel's far superior army in 1176. He guarded against this danger with skill and daring.

(6) After the battle Alketas fled a considerable distance through the land of the Pisidians until he reached the neighbourhood of Termessos, and besought assistance and hospitality. Antigonus followed him up, and by his threats terrified the Termessian elders, who abandoned Alketas. The distance from the battle-field to Termessos is estimated by Droysen as four days' march, and was evidently considerable; though Greek armies would in flight traverse it in three days. A map showing Termessos, Cretopolis and the Aulon is enough to prove that the battle took place at the latter, not beyond Cretopolis.

(7) The agreement amid differences between Polyænus and Diodorus is explicable only on the supposition that they depend on one original, viz. Hieronymus of Cardia. Diodorus's verbose account becomes clear and illuminative when it is treated as a completion of the brief military statement in Polyænus.

(8) The military importance of the Pisidian Aulon is proved by the fact that it was a *Kleisoura* in later Byzantine times.

In the operations of 319 B.C. the name, Aulon, of the broad open pass leading up from the lake (called in later times *Kleisoura Tzyhritzi*) is revealed. There is a series of passes, called Aulones, in the frontier land on the north of the Pisidian Taurus, which have much the same character. Strabo mentions that from the lake Trogitis the Aulones extended in several directions. The name, doubtless, was applied geographically to a pass not steep, and having an easy opening at both ends; and it is to be pointedly distinguished from a narrow pass running up into the mountains and leading across a ridge to a similar descending pass on the other side. This term is peculiarly appropriate to the region of southern Phrygia and Pisidia which we are describing.

The name Aulon perhaps lasted till the Turkish conquest, when the Turks imposed their language and even their names for localities.

Nora or Neroassos (Ptol.) has been sought in vain. Sterrett suggests the imposing fortress of Zengibar-Kale high over Develi-Kara-Hissar on the west. This identification, however, can hardly be maintained. (1) Zengibar is certainly the ancient Kizistra (as is shown by Chamich, II. p. 161),* and Kizistra

* Chamich's description of the appearance of Kizistra as one entered the plains of Erjish from the south (viz. from the direc-

tion of Kodandos by the direct road passing east of Bereketli-Maden) is conclusive as to this identification.

is an ancient name, which appeared on Agrippa's survey of the Empire before 12 B.C. and thence found its way into the Peutinger Table; (2) it has no water-supply, if we may judge from Hamilton's description, and the operation of circumvallating it with double walls and ditches and wonderfully strong palisades would not be possible; (3) it is too far from the scene of the war between Eumenes and Antigonos in 320 B.C., though we must concede that, if Eumenes's idea of a retreat into Armenia had ever been carried out, Zengibar-Kale would lie close to his line of march.¹⁸

To discover Nora it would be necessary to examine the numerous castles near Cybistra-Herakleia, Loulon-Faustinopolis, Paduandæ and Tyana, especially near the first two. I have seen most of them, and the place which I should immediately explore is the castle about six miles east of Eregli and four north of Ibriz, called the strong fortress of Hirakla by Ibn Khordadbeh. It is a very splendid-looking castle, on a strong rock rising out of the western point of a ridge stretching westwards from the front group of hills lying before Taurus. Through these hills passes the direct path from Eregli to Ulu-Kishla and the Gates,¹⁹ a horse-road only (though I would try to take a native waggon along it without hesitation), keeping south of the castle of Hirakla, whereas the waggon-road keeps to the north of the castle and reaches the village of Tehayan (nine hours from Eregli). On this site I suspect that there is a large spring of potable water: in 1891 my wife and I, going from Ibriz to Ulu-Kishla and the Gates, passed below the castle, high up on the hill, and came on a splendid stream of water flowing in a channel, apparently artificial, from the higher ground on our right. I fancied at the time that this might be water drawn off from the Ibriz stream and conducted high on the hills round a course of many miles to pass under the castle, and thence along the northern face of the ridge for several miles further to irrigate the plain to the north-east; but it now seems more probable that the water originated from a spring high up close to the castle, always accessible from it, and furnishing the defenders with an unfailing supply. If this suspicion be right, Nora is discovered exactly where it best suits the campaign of 320 and the march of Antigonos in 319.

The derivation of Nora or Neroassos is suggested by Professor Sayce convincingly. The great spring of water high on the side of a hill is a feature of divine origin. The castle was Nêroassos, the castle of Nêreus, or Nôra, the water. The variation in the vowel is characteristically Anatolian. The terms *Nηρηίδης* and *Nηρεὺς* are Homeric and Anatolian; *νερό* in modern Greek.

It is better to describe clearly the scene of operations in 320 B.C. Eumenes was defeated by Antigonos *ἐν Ὀπανίσις τῇς Καππαδοκίας*. This battle is

¹⁸ If, however, Eumenes ever got so far as Zengibar, one can hardly imagine why he should stop there, as further flight was easy, and his opponents far away. He stopped because his flight proved too difficult. The prospect of being shut up in

Nora offered no attraction and was the last refuge of despair.

¹⁹ In many parts Taurus's front ridge rises straight from the plain without any intervening foothills.

described by Plut. *Eum.* 9, and Diod. XVIII.40. Eumenes had much superior numbers, 20,000 cavalry, 5000 infantry, against 10,000 foot and 2000 horse led by Antigonus, with 30 elephants; but the latter had 5000 Macedonian infantry, splendid troops, while Eumenes's army was rotten with treachery,¹² and he was deserted during the battle by Apollonides and the commander of cavalry. The defeat of Eumenes was crushing, and he lost all his baggage. The scene is unknown; Orkynia or Orkyniot is not mentioned elsewhere; but Antigonus was coming from Syria through Cilicia, after the winter of 321-0, and Eumenes occupied the valleys at the north end of the long crossing of Taurus over the Cilician Gates. The valleys suited cavalry operations, to which Eumenes evidently trusted. Antigonus seized part of the outer belt of mountains (i.e. Taurus) overlying these valleys. The scene is clearly defined by the description. Distinct valleys, not one single great plain as in Central Cappadocia, belong to the neighbourhood of Taurus and the outer fringe of mountains which overhang the plains, e.g. the Vale of Loulon-Halala-Faustinopolis and others towards Kybistra west and Tyana north; but those two cities are in the open plain and are not to be considered. Orkynia was either in the Vale of Loulon below Ulu-Kishla, or in the circular valley lying above that village, probably the latter, which is high-lying (about 5000 ft.), extensive and level, with hills or mountains all around.¹³ Eumenes, after thinking of retreating into Armenia, saw that his troops were deserting to Antigonus, and hurried to occupy Nora (near the frontier of Cappadocia and Lycaonia, Plut.), turning west instead of north, because he knew the advantages of Nora, which could hold out for years, well supplied with wheat, salt and water, though devoid of all the comforts of life. Only his personal friends and devoted followers accompanied him, about 600 foot and horse: Plutarch says 500 horse and 200 foot, of whom some departed with mutual friendliness at the entrance to Nora.

As to the Klimax, Polybius V. 72 makes its situation clear, all the more so since an Italian expedition discovered Pednelissos in 1920 on a mountain peak overhanging the Kestros. The Klimax is situated on a route leading north and south.

Antigonus, evidently in the spring of 319 after the rains, advanced towards Psidike, in which it chanced that Alketas and his associates were lying.¹⁴ He must have had the luck of dry weather and firm roads. If rains had lasted,

¹² An incident that occurred before the battle deserves note. Perdikkas, one of his chief officers, deserted him with 3000 foot and 800 horse, and encompassed three days' journey away. Phoenix of Tenedos made one rapid day and night journey with 5000 men, traversing the whole distance, and fell on him at the second night-watch.

¹³ This high level valley looks circular as one travels across it, but I do not assert that this appearance is strictly true to facts. Here rises one branch of the Tchakut river, which flows through Taurus to the

Cilician Plain near Adana. Another branch comes down from N. past Loulon castle: a third comes from S.W. into the Vale of Loulon, while a fourth joins lower down at Takhia-Keupren, coming from N. or S.W.

¹⁴ *ὁ δὲ τῷ Πτολεμαῖῳ ἐναντίας τῆς Πσίδικης*: this also is a conclusive proof that they were not advancing north up the Klimax from the low coastland of Pamphylia, still less that they achieved the impossible operation of encamping in the Klimax, if it were the *σπίλας Περδίκας*.

his rapid march could not have been accomplished. Moreover, the rivers must have been full of water to supply his army, but not overflowing to detain it. The winter frost had therefore quite broken up, and April happened to be dry: this was a lucky chance, for April and May and even June may in some years happen to be very rainy. The circumstances were all favourable: this was a piece of luck, but Antigonus knew how to use the opportunity. The enemy were on their march also (*ἐπιπορευόμενος* Diod.), but they were spending time in Pisidike, as it was still early, and they could not count in early April on good weather. Operations in those regions in spring depend largely on weather. In 301 Antigonus found luck against him. Lying at Kelainai he delayed too long, and allowed Lyimachus and Seleucus to advance and join forces at Ipsos, so that when he reached Paroreios he had to meet the united armies. It is quite in accordance with frequent experience that in both years rain lasted later on the western part of the Taurus front, so that Antigonus in 319 and Seleucus in 301, coming from the Cilician side, had the luck of hard soil and dry weather, while their opponents were delayed in the west.

In conclusion, a speculation may be permitted about the unknown name Orkunia or Orkunioi. In compound personal names of which the first element is the god's name Tarku or Tarkun, it often takes the form Troko (Trokon, Trokom, where "n" or "m" represents nasalization), *e. g.* Trokoubigremis, Trokozarnas, Trokonda, etc., as well as Tarkuorios, etc.

Perhaps Orkunioi is an error for Torkunioi or Trokunioi, Etruscan Tarquinii. Analogies between Etruria and Anatolia are numerous and natural (Herod. I. 94): compare Tursenos, Tyrrhenus; also Tyrrha of Lydia: Turos Pisid. (Stephanus, *J.H.S.*, 1883, p. 34, *H.G.A.M.*, p. 414, *Τυρρᾶς* in Acarnania, Mayer, *Hermes*, 1892, p. 506).

WILLIAM MITCHELL RAMSAY.

THE PROGRESS OF GREEK EPIGRAPHY, 1921-1922.

Is the following Bibliography, which continues that of *J.H.S.* xli. 50 ff., I attempt to deal with the publications of 1921 and 1922, though a few books and articles are noticed which, though they appeared in previous years, only came under my notice in the period in question. It must be borne in mind that periodicals sometimes fall into arrears, and thus the actual year of publication may be later than the nominal year as indicated in the title. I have seriously modified the geographical order hitherto followed in my Bibliographies so as to bring it into strict accord, so far as the inscriptions of Europe are concerned, with that of the *Inscriptiones Graecae*; for those of Asia and Africa I follow the order adopted in the *C.I.G.*

The mass of the relevant material has rendered necessary the utmost compression, and, while I have aimed at introducing some reference to every contribution to Greek epigraphical studies, I have found it impossible to summarise or to indicate the value of each. No mention is normally made of reviews, but I have occasionally added references to them for special reasons, e.g. because of the value of their positive contribution to the study, or because they afford a ready means of surveying the contents of the books to which they relate.

I. GENERAL

Several important bibliographies have been issued during the period under review. An admirable 'Bulletin épigraphique' for the years 1917 to 1919 has been compiled by P. Roussel,¹ and one for 1920 by the same scholar with the assistance of A. Plassart.² E. Ziebarth has undertaken the difficult task of presenting a conspectus of the epigraphical literature of a quarter of a century (1894-1919): in a first article³ he begins by surveying the progress of the *Inscriptiones Graecae*, handbooks of Greek epigraphy, collections and selections of texts, and works relating to the history of Greek epigraphy and to questions of the Greek script, and then reviews successively the areas covered, or to be covered, by *I.G.* iv-vii., and in a second⁴ he deals with the fields of *I.G.* ix. and x. So valuable is the work accomplished that it is most desirable that the completion of this immense undertaking should not be long delayed. For Christian and Byzantine epigraphy, with which I cannot attempt to deal fully in this Bibliography, I may refer to the summaries published from

¹ *Rev. Et. Gr.* xxxiii. 403 ff.

² *Ibid.* xxxiv. 423 ff.

³ *Bursians Jahresberichte*, clxxxiv. 91 ff.

⁴ *Ibid.* clxxxix. 1 ff.

time to time in the *Byzantinische Zeitschrift*⁵ and the *Byzantinisch-Neugriechische Jahrbücher*. A singularly valuable review of recent work on Greek inscriptions, not rigidly restricted in time and making no pretension to completeness, is that by F. Hiller von Gaertringen,⁶ in which Attica and the Islands have received the fullest treatment as they have not yet been dealt with by Ziebarth. Epigraphical discoveries are frequently referred to in the full and detailed 'Chronique des fouilles et découvertes archéologiques dans l'orient hellénique' which has appeared in the last two volumes of the *Bulletin de Correspondance Hellénique*;⁷ since, however, the texts in question are not there 'published' in the usual sense of the term, I shall not refer to them in the following pages except occasionally and for special reasons.

No progress has been made with the issue of the *I.G.*, but a fresh fascicule⁸ of the *Inscriptiones Graecae ad res Romanas pertinentes* has been published, containing 275 texts,⁹ edited with a brief commentary by G. Lafaye and belonging for the most part to Smyrna, Sardis, Erythrae, Teos, Philadelphia and Tira. Of Dittenberger's *Sylloge Inscriptionum Graecarum* (3rd edition) the beginning of 1921 gave us the first half of the index-volume,¹⁰ as noted in my last Bibliography (*J.H.S.* xli, 51); the second half, which will conclude the whole work, has not yet appeared.¹¹ A new handbook of Christian epigraphy¹² by F. Grossi Gordi has followed, after an interval of only three years, that of C. M. Kaufmann;¹³ the author has, however, confined himself to the western provinces of the Roman world, and Greek inscriptions, while by no means excluded, naturally play a more subordinate part than in Kaufmann's work. The chapters deal with (1) Palaeography of the monuments, (2) Epitaphs, (3) Sacred inscriptions, divided into ten classes, (4) Inscriptions on small objects, (5) Chronological indications, (6) Style, language and metre, (7) Hermeneutic, and (8) Criticism, and the book is provided with an analytical table and full indexes. A. Mente has essayed the ambitious task of tracing the development of Greek and Roman writing from the earliest times to the discovery of printing in a little work¹⁴ which naturally depends largely upon epigraphical materials in its opening sections; although it has evoked some adverse criticism as well as some warm commendation,¹⁵ it will at least play a valuable part if it calls attention to some of the main problems which still demand study and solution.

A. Kappelmacher has written an interesting note¹⁶ on the significance of 'ABC-Denkmaeler,' with special reference to the theory that these always

⁵ The most recent is *Dgr. Zeits.* xxiii, 509 ff.

⁶ *Jahresberichte d. philol. Vereins zu Berlin*, 1921, 188 ff.

⁷ xlv, 367 ff., xlv, 457 ff.

⁸ iv, 6, Paris (Leroux), 1921.

⁹ No. 1499 = No. 1446.

¹⁰ iv, 1, Leipzig (Hirzel).

¹¹ i-xv, 1 are reviewed by A. Körte, *Neue Jahrb.* xlvii, 173 ff.; cf. *J.H.S.* xli, 164 f.

¹² *Trattato di epigrafia cristiana latina e*

greca del mondo romano occidentale, Roma, 1920. Cf. *Med. Fac. Or. Beyrouth*, xii, 421 f.

¹³ Reviewed *Hist. Zeits.* cxxii, 391 ff. (R. Herzog).

¹⁴ *Geschichte der griechisch-römischen Schrift*, Leipzig (Dietrich), 1920.

¹⁵ *Phil. Woch.* xli, 571 ff. (E. Hermann), *Byz. Neugr. Jahrb.* ii, 217 f. (V. Gurdthausen), *Boll. fl. class.* xxviii, 190 f. (L. Castiglioni).

¹⁶ *Wien. Stud.* xlii, 83 ff.

served magical purposes; the work¹⁷ of F. Dornseiff on mystical and magical uses of the alphabet I know only through a review¹⁸ by W. Roscher.

Among the accessions to Greek literature which form the subject of J. U. Powell and E. A. Barber's *New Chapters in the History of Greek Literature*¹⁹ are several which we owe to inscriptions: J. L. Stocks deals with the exposition of the Epicurean faith by Diogenes of Oenoanda (p. 31 ff.), J. U. Powell with the Delphian hymns, the paean of Isyllus of Epidaurus, the paean to Asclepius and the hymn to the Idaean Dactyls (41 ff.), and G. Murray with the hymn of the Curetes from the Dictaean temple in eastern Crete (50 ff.). D. Levi has subjected to a close scrutiny²⁰ the thirty-eight Cretan metrical inscriptions, of which he gives a list (p. 354), comparing them with those of other regions and with poetic literature, in order to test the validity of the rules laid down by Wilhelm Meyer²¹ for epigrams of the Alexandrian age; he draws attention to the very high percentage of infractions and emphasises the fact that Meyer's rules are not mentioned by any writer on metre or grammar or by any scholast. E. Flink's essay, 'De singulari quadam epigrammatum antiquorum forma,'²² has not yet become accessible to me.

In the realm of dialectology the most important publication of the past two years has been the first volume of F. Bechtel's work on the Greek dialects²³ which comprises those of Lesbos, Thessaly, Boeotia, Arcadia and Cyprus and bears on almost every page evidence of the extent to which Greek inscriptions have contributed to this study. Each section opens with a synopsis of the epigraphical and literary sources, save those on Thessaly and Cyprus, for which we rely wholly on inscriptions. The author has also published a third series²⁴ of brief notes on Arcadian, Cyprian, Elean, Theraean and Cretan words or constructions, many of which come from inscriptions, as well as comments²⁵ on Argive, Laconian and Coan word-forms. E. Schwyzler devotes two articles²⁶ to some of the minor problems raised by dialect-inscriptions from various parts of the Greek world, R. Thurneysen deals²⁷ with several Arcadian peculiarities, and E. Fraenkel investigates²⁸ two remarkable forms in the Milesian $\mu\alpha\lambda\lambda\alpha\iota$ -inscription and the phrases $\alpha\pi\epsilon\iota\ \phi\epsilon\tau\epsilon\sigma$ and $\epsilon\upsilon\ \tau\alpha\iota\varsigma\ \epsilon\upsilon\alpha\upsilon\tau\alpha\iota\varsigma$ which occur in the Delphian Labyadae-inscription (*S.I.G.*³ 438).

V. Müller discusses²⁹ an inscribed statuette, of unknown provenance, now at Vienna (*C.I.G.* 6835), and a cup bearing the legend $\epsilon\upsilon\alpha\iota\alpha\varsigma\ \epsilon\tau\epsilon\iota\alpha\gamma\epsilon\upsilon\mu\epsilon\tau\eta\varsigma$ (*sic*) $\delta\ \delta\epsilon\gamma\alpha\delta\alpha\omega\varsigma$ figures in one of Sotheby's sale-catalogues.³⁰ G. M. A. Richter's account³¹ of the classical collection in the New York Museum refers to

¹⁷ *Das Alphabet in Mythik u. Magie*, Leipzig (Teubner), 1922.

¹⁸ *Phil. Week.* xlii. 1209 ff.

¹⁹ Oxford (Univ. Press), 1921.

²⁰ *Rendiconti dei Lincei*, xxviii. 208 ff., 242 ff.

²¹ *Sitzb. München*, 1884, 976 ff.

²² *Ann. Acad. Sci. Fenn.* B xvi. 2.

²³ *Die griech. Dialekte*, i., Berlin (Weidmann), 1921.

²⁴ *Gon. Nachr.* 1920, 243 ff.

²⁵ *Zeits. vergl. Sprachf.* L. 99 ff.

²⁶ *Gloss.* xi. 75 ff., xii. 1 ff.

²⁷ *Ibid.* xii. 144 ff.

²⁸ *Indog. Forsch.* xi. 81 ff.

²⁹ *Röm. Mit.* xxxiv. 90.

³⁰ *Rev. Arch.* xv. (1922), 342.

³¹ *Handbook of the Classical Collection: Metropolitan Museum of Art, New York*, 1917, pp. 76 ff., 100 ff., 131, 140, 208, 221 f., 229.

various inscribed objects, and the first section of P. Graindor's 'Marbres et Textes Antiques d'Époque Impériale,'³² though it contains no unpublished texts, dates, interprets or defends the authenticity of five inscriptions in the Musée du Cinquantenaire at Brussels, belonging to Attica (No. 2), Ithaca (7), Asia Minor (4, 5) and Egypt (6).

In the field of religion and mythology we may notice first A. Salaž's article³³ on Zeus Kasios, in which the author reviews the evidence, much of it epigraphical, for this cult in Coreyra, Delos, Egypt, Syria, Epidaurus, etc., and publishes completely for the first time an Attic inscription of the third century of our era (p. 182 ff.); he concludes that the cult originated in Syria, where it is attested from the third century B.C., passed thence to Egypt, and spread later to the Greco-Roman world, probably by way of Delos. S. B. Luce deals³⁴ with the legend of the 'old man of the sea' and Heracles, and attempts, by the aid of numerous vase inscriptions, to show that 'Nereus' and 'Triton' are both representations of the ἄλιος γέρων. E. Peterson's dissertation³⁵ entitled *Εἰς θεός* contains much epigraphical material, but I cannot speak of it from personal knowledge. Attention should also be drawn to P. Stengel's article³⁶ on libations, on which Attic and Coan inscriptions throw valuable light, and to R. Ganszyniec's corrections³⁷ of several texts in Audollent's *Defixionum Tabellae*.

In a paper entitled 'Hellenistisches' A. Wilhelm discusses³⁸ some epigraphical and historical problems of the Hellenistic period, investigating the name and family of Nabis' wife, restoring an Epidaurian text referring to Philip V of Macedon and a letter to Magnesia from Orophernes of Cappadocia, and explaining the titles applied in two Delian inscriptions to a courtier of Ptolemy X. A. Segrè, in the course of a discussion³⁹ of the *καὶνὸν νόμισμα*, examines two passages from the Edict of Diocletian (A.D. 301).

Korpsia and cognate names are explained⁴⁰ by P. Pardizet as given to children who have been exposed as infants and rescued *ἐκ κορπίας*, while names compounded with *Θαρυ-* are collected and discussed⁴¹ by F. Hiller von Gaertringen.

R. Stübe's work⁴² on the origin and development of the alphabet deals mainly with (1) the genesis of the alphabet, (2) its development within the area of Semitic speech, (3) the derivatives from the Semitic script, and (4) the European development of writing in the Middle Ages. According to Stübe the oldest

³² *Recueil de travaux publiés par la Faculté de Philosophie et Lettres, Université de Gand, Ann.* 50, Gand, 1922.

³³ *B.C.H.* xlv, 160 ff.

³⁴ *Am. Journ. Arch.* xxvi, 174 ff.

³⁵ Göttingen, 1920. Reviewed by O. Weinreich, *Phil. Woch.* xli, 913 ff.

³⁶ *Hermes*, lvi, 525 ff.

³⁷ *Bes.-Neogr. Jahrb.* III, 164.

³⁸ *Anzeiger d. Akad. in Wien*, 13 July, 1921, No. 18.

³⁹ *Mem. d. Lincei*, xvi, 3, p. 100 ff.

⁴⁰ *Rec. Ét. Anc.* xxiii, 85 ff. Cf. P. Graindor, *Marbres et Textes Antiques*, p. 241.

⁴¹ *Zeits. vergl. Sprachf.* i, 12.

⁴² *Der Ursprung d. Alphabets u. seine Entwicklung*, Berlin (Heintze u. Blanckertz), 1921. Cf. *Theol. Liturg.* xlvii, 126 f. (M. Lidbarski), *Deutsche Liturg.* xxiv, 515 ff. (H. Jensen).

alphabet originated not long after 1400 B.C. in western Asia among a Semitic-speaking people: it was not the independent invention of some genius, but was due to suggestions derived from the Egyptian system, as is shown by the Sinaitic inscriptions, which prove that the Egyptians gave to the Semites the prototype of a script, especially of a phonetic script. The author touches only very briefly (pp. 12-14) on the origin of Greek writing, which he regards as directly borrowed from a Semitic source in the tenth or ninth century: no Greek inscription is represented in the twenty plates, though these illustrate the Phaestus disk (ii. 7), a Minoan linear text (iii. 8) and a Cyprian inscription (iii. 9), but two of the concluding tables (21, 22) give the pedigrees of writing in general and of the Greek scripts in particular. The Phaestus disk has not ceased to fascinate and to invite conjecture. F. W. Reid has come forward with a new interpretation⁴² of the text, which he considers a musical composition. I do not know A. Rowe's paper,⁴³ which assigns the disk to a Cypriote origin and dates it in the seventh century B.C. R. A. S. Macalister⁴⁴ arrives at 'a series of probabilities,' which point to the conclusion that the disk was imported into Crete from some fairly remote land, probably in Africa, and that it contained a letter, treaty, contract or other diplomatic communication rather than a religious, literary or musical composition.⁴⁵ C. Burrage starts a series of studies in the Minoan hieroglyphic inscriptions with an attempt⁴⁷ to interpret the signs on a stone whorl from Phaestus, maintaining that they represent letters rather than ideographs, that the underlying words are the ancient Cretan equivalents of the later names Talos and Telchinia, and that the language spoken by the primitive Cretans who wrote on the tablets discovered by Evans was Semitic and not Greek; he thinks it possible to read many of the Minoan hieroglyphic texts and hopes shortly to publish the results of his studies. A lively discussion continues to centre round the Sinaitic inscriptions discovered by Petrie and brought into prominence by A. H. Gardiner. W. von Bissing⁴⁸ assigns the inscriptions at the earliest to the close of the XVIIIth Dynasty, criticises and rejects the whole 'Phantasiegemälde' of R. Eisler (see *J.H.S.* xli. 54), and maintains that we have in these inscriptions texts written in a Semitic language and expressed by an alphabetic and not a syllabic writing (p. 19); this system he would attribute to a Semite who came from Egypt, though without having come into too close contact with Egyptian culture, but was unaffected by that of Mesopotamia. C. Bruston devotes two articles to this same script; in one of these⁴⁹ he attempts to read and translate several of the inscriptions, which he regards as clearly couched in a Semitic dialect closely akin to Hebrew, dating from about 1500 B.C., i. e.

⁴² *Pal. Expl. Fund Q. S.* 1921, 29 ff.

⁴³ *Trans. and Proc. Royal Soc. S. Australia*, xliii. (1919), 142 ff., summarised in *Am. Journ. Arch.* xxv. 170.

⁴⁴ *Pal. Expl. Fund Q. S.* 1921, 141 ff.

⁴⁵ See also *Notes and Queries*, March 19, 1921, p. 237, *Pal. Expl. Fund Q. S.* 1921, 112.

⁴⁷ *Harvard Studies in Class. Phil.* xxxii. 177 ff.

⁴⁸ *Sitzb. München*, 1920, No. 9, *Cl. Phil. Woch.* xli. 757 (Thomsen).

⁴⁹ *Bull. Soc. Nat. Ant.* 1920, 289 ff.

at least two centuries before Moses, while in the other ⁵⁰ he deals in detail with the alphabet and dialect of the Sinaitic texts, the origin of alphabetic writing, and the order of the letters, concluding that 'Greece received the alphabet not from the Phoenicians, as has been so often stated, but rather from the Aramaeans or Syrians by way of the Greek colonies in Asia Minor,' and that at a far earlier period than has been believed hitherto. In a review ⁵¹ of Eisler's work, A. H. Sayce maintains that, thanks mainly to the new Sinaitic evidence, which he prefers to assign to the period of the XVIIIth Dynasty, though admitting the possibility of its going back to the XIIIth, 'the problem of the Semitic alphabet, as it has been termed, is at last in large measure solved' (p. 302). W. M. Flinders Petrie has adduced ⁵² new evidence from Illahun and Kahun to support the thesis maintained in his *Formation of the Alphabet*, that as early as the XIIIth Dynasty an alphabet was in regular use in Egypt, out of the full complement of whose sixty letters the Phoenicians later made their selection of twenty-two. H. Schneider, on the other hand, calls in question ⁵³ the early date of the Sinaitic inscriptions, their Semitic language and their claim to represent the first stage of the evolution of the alphabet from the Egyptian hieroglyphs, assigning them to a date not earlier than the tenth century B.C., and regarding them as probably of Philistine origin. J. Helm's account ⁵⁴ of the origin of the alphabet and the Sinaitic texts I have been unable to consult, and know nothing of its contents save what the title suggests and a brief summary in *Phil. Woch.* xii. 665.

II. ATTICA

It will be best to deal with Attic inscriptions in three chronological groups, corresponding to the three Attic volumes of the *Inscriptiones Graecae*. The number of new inscriptions is small, but considerable progress has been made in the restoration and interpretation of important texts previously known.

[I.G. i.] *Down to 403 B.C.*—A. Brueckner has given us the eagerly awaited publication ⁵⁵ of the *ostraka* discovered in the course of his excavations in the Ceramici in 1910 and 1914. Together with the four already known ⁵⁶ these now number fifty, and bear the names of Megacles son of Hippocrates (Nos. 1, 2), Xanthippus son of Arrhiptron (3, 4), Themistocles (5, 6), Thucydides son of Melesias (7-17), Cleippides son of Deinias (18-41), Andocides son of Leogoras (42), Tisander son of Epilycus (43), Encharides son of Euchares (44), an uncertain name, probably that of either Thucydides or Cleippides (45-49), and Damon son of Damonides (50). Nos. 7-49 seem to have been used on a single occasion, in which the issue apparently lay between Thucydides and Cleippides: this is assigned by Beloch ⁵⁷ to the period immediately after

⁵⁰ *Rev. Arch.* xiv. (1921), 49 ff., xv. (1922), 336 f.

⁵¹ *Journ. R. Asiatic Soc.* 1920, 297 ff.

⁵² *Ancient Egypt*, 1921, 1 ff.

⁵³ *Gr. Litig.* xxv. 242 ff.

⁵⁴ *Die Entstehung des Alphabets, die neu entdeckten sinaitischen Inschriften u. d.*

Alte Testament in Theologie u. Glaube, xii. 85 ff.

⁵⁵ *Att. Mit.* xi. 1 ff.

⁵⁶ Hicks and Hill, *Gk. Hist. Ins.* 14, 81, 92, 26, 27, 39.

⁵⁷ *Griech. Gesch.* ii. 1. 313.

Pericles' death, but Brueckner advocates some year before 443 B.C., and in a valuable essay⁵⁴ on Pericles and the political parties at Athens A. Rosenberg has given weighty reasons for dating the ostracism in question between 447 and 441. Among the three archaic bases found in the Themistoclean (?) wall of Athens, and therefore earlier than the Persian War, is one bearing the signature of the sculptor Endaios—"Ενδοῖος ἀ[ν]τὶ τὰς ἐνὸς ἐνὸς"—accompanied by a text, probably metrical, purposely erased so that but a few letters are now legible.⁵⁵ J. J. E. Hondius publishes⁵⁶ three new Attic inscriptions,—a sixth-century votive, a fragment of a proxeny-decree and a fragment of a casualty list, which he conjecturally connects with Pericles' Pontic expedition. F. Hiller von Gaertringen has given us⁵⁷ a short text from the sanctuary of a phratry—*Ἡερον Διὸς Ἐνὶ Θυμαρίδου φρατρίας*—and, in conjunction with A. Pogorelski,⁵⁸ three fragments of a stele (one written on both sides) found on the Acropolis, belonging probably to 421 B.C. or some year soon afterwards, and relating to the temple of Athena Nike. W. B. Dinsmoor has rendered further valuable service to the study of the great constructions of fifth-century Athens: in one article⁵⁹ he deals with the extant fragments (*I.G.* i. 284-8; 545, 545 a, and one unpublished) of the accounts, extending over nine years (c. 405-407 B.C.), of a colossal statue, which he identifies with Phidias' Athena Promachos, while in a second⁶⁰ he adds a new fragment to the building-accounts of the Parthenon (p. 238 f.), shows what readjustments of his previous reconstitution are necessitated by subsequent discoveries, gives a revised historical summary of the document (242 ff.) and adds some notes on the accounts of the Erechtheum for 408/7 B.C. (245 ff.). F. Hiller von Gaertringen, who is at present devoting himself mainly to the early Attic inscriptions with a view to preparing a revised edition of *I.G.* i., has attempted a restoration⁶¹ of the Athenian law of about 445 B.C. relating to Hestiaia (*I.G.* i. 28, 29), and has put forward attractive conjectures⁶² in connexion with several other early Attic texts. To W. Bannier we owe two further instalments⁶³ of his interesting and fruitful studies of Attic inscriptions, mainly belonging to this period. M. A. Levi has commented⁶⁴ on various questions relating to the Athenian treasury in the fifth century, such as the date of the transference of the war-chest from Delos to Athens, the amount of the reserve at that time and later, the relation of League funds to those of Athens, and the date of the important decree of Callias (*I.G.* i. 32). Financial questions affecting the same period have been touched on by P. Perdrizet⁶⁵ and T. Reinach⁶⁶ and the much-discussed decree dealing with the Eleusinian

⁵⁴ *Neue Jahrb.* xxxv. 203 ff.

⁵⁵ A. Philadelphus, *J.H.S.* xiii. 106, *B.C.H.* xvi. 1 ff. Cf. C. Picard, *C.R. Acad. Inscr.* 1922, 117 f.; A. Della Seta, *Dobele*, iii. 297 ff., 400 ff.; *Am. Journ. Arch.* xxv. 355 ff.

⁵⁶ *Monumens*, xlix. 201 ff.

⁵⁷ *Sitzb. Berlin*, 1921, 441.

⁵⁸ *Ibid.* 1922, 187 ff.

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⁵⁹ *Am. Journ. Arch.* xxv. 118 ff.

⁶⁰ *Ibid.* 233 ff.

⁶¹ *Göt. Nachr.* 1921, 62 ff.

⁶² *Sitzb. Berlin*, 1921, 436 ff.; *Hermes*, lvi. 478, *Axy. Ep.* 1918, 196.

⁶³ *Phil. Week.* xi. 307 ff., xiii. 833 ff.

⁶⁴ *Atti d. R. Acc. Torino*, lvi. 113 ff.

⁶⁵ *B.C.H.* xvi. 43.

⁶⁶ *Rev. Et. Gr.* xxiv. 457 f.

firstfruits (*S.I.G.*² 83) has been briefly examined⁷¹ by B. Keulen in his essay 'De Pericle pacificatore.' S. Casson's excellent *Catalogue of the Acropolis Museum*⁷² uses the Erechtheum frieze-inscription (*I.G.* i. 324) for the interpretation of the extant remains of the frieze (pp. 27, 174 ff.), and publishes (pp. 284, 300) or republishes (pp. 231 ff., 278 ff., 303 ff.) the inscriptions, almost all dating from the sixth or fifth century, preserved in the Museum; these are discussed from the points of view of chronology and classification in the Introduction (p. 35 ff.). C. Anti's essay⁷³ on the sculptor Lycius deals with his signature on a well-known basis from the Acropolis, and L. Weber discusses exhaustively the monument set up to commemorate the Athenian victories of 506 B.C., known to us from passages of Herodotus and Pausanias and from extant fragments of the earlier and of the later epigram inscribed on the base.⁷⁴ In his book⁷⁵ on the Acropolis M. Schede includes a facsimile and an account of the decree granting citizenship to the Samians in 405 B.C. (*I.G.* ii.² 1).

W. Brandenstein⁷⁶ and E. Kalinka⁷⁷ have dealt with 'the earliest Attic inscription' on a terra-cotta vase from the Dipylon, which is usually read 'Ἦος τὴν ὀρχηστῶν πᾶντων ἀταλὰντα παίζει ταῦτα ἑκάε μιν. Both raise objections to this last phrase, but whereas Brandenstein would read *hekāe* in place of *hekāe* ('dieses Gefäß soll ihn erfreuen'), Kalinka proposes *ταῦτα ἑκάεμεν*, 'for him I burned with love.' J. M. Edmonds deals afresh⁷⁸ with a fifth-century vase depicting Sappho holding a roll on which appear the words *ἔπεα πτερόεντα, θεοὶ, ἡπίον ἐπέων ἀρχομαι ἀλλ' ὀνείστε*, and concludes that Sappho's poems were known at Athens in the latter half of the fifth century in an edition different from that which later became current. D. M. Robinson publishes⁷⁹ an Attic amphora with the signature of Nicosthenes, discovered near Cuere and now at Baltimore; J. D. Beazley examines⁸⁰ minutely an *askos* by Macon, of the period of the Persian Wars, inscribed *ho παῖς καλός*, and H. McClees⁸¹ discusses the significance of *καλός*-names on Attic vases, adding the legend *Ἡπταρχός καλός· ναὶ* on a recent acquisition of the New York Museum.

[*I.G.* ii.] *From 403 to 31 B.C.*—Among the works already mentioned those of S. Casson, W. Bannier and H. McClees deal in part with texts of this period. A. N. Skiias has published⁸² thirteen grave-inscriptions from Attica and Salamis, ranging from the early fourth to the late second century B.C., A. D. Keramopoulos⁸³ two fragmentary epitaphs from the deme Aexone, and the Archaeological Society⁸⁴ a boundary-stone from a *ἡρώιον* and a mutilated altar-inscription, both from the Peiræus. The decree (*I.G.* ii.² 10) honouring those who aided in restoring the democracy after the rule of the 'Thirty

⁷¹ *Monumens*, xlviii. 245 ff.

⁷² Vol. II, Cambridge (Univ. Press), 1921.

⁷³ *Bull. com. arch. com.* xlvii. 91.

⁷⁴ *Philobios*, lxxvii. 77 ff., esp. 105 ff.

⁷⁵ Hinks and Hill, *Gr. Hist. Inscri.* 12.

⁷⁶ *Die Burg von Athen*, 114 f. and Pl. 90.

⁷⁷ *Klio*, xvii. 262 ff.

⁷⁸ *Ibid.* 267 f.

⁷⁹ *Class. Quart.* xvi. 1 ff.

⁸⁰ *Am. Journ. Arch.* xxvi. 54 ff.

⁸¹ *Ibid.* xxv. 330.

⁸² *Bull. Metr. Mus. of Art*, xvi. 211 ff.

⁸³ *Arch. Ep.* 1919, 37 ff.

⁸⁴ *Πρακτικά*, 1919, 43 ff.

⁸⁵ *Ibid.* 1917, 20.

Tyrants' is discussed ⁸⁶ by W. Kolbe, who interprets it as granting (a) citizenship to those who had joined the democratic exiles at Phyle, and (b) *ἐγγύησις* and other rights to those who fought at Munychia, and emphasises its significance for the history of the orator Lysias. W. W. Tarn has re-examined ⁸⁷ in the light of an Orchomenian decree, the vexed question of the Athenian archons of 286/5 to 263/2 B.C., proving that a break occurred in the secretary-cycle after 285/4 B.C., and concluding that 'the main outlines of Ferguson's chronology from Menekles [283/2] onward still stand, fortified in essentials, modified and amplified in details, and with one important change, Peithidemoes' [267/6]. G. Glotz inquires ⁸⁸ into the date and cause of the supersession of the prytanes by the *πρόεδροι* as the executive committee of Council and Assembly, and decides in favour of the winter 378/7 B.C., pointing out the intimate relations in which the regime of the *πρόεδροι* stands to the federal constitution of the revived Athenian League. P. Cloché too depends to some extent on epigraphical evidence in his discussion ⁸⁹ of the powers of the *Βουλὴ* in the fifth and fourth centuries B.C., as well as in his article ⁹⁰ on the treaty of 357 between Athens and Thrace, the text of which survives in *I.G.* ii.² 126. J. J. E. Hondius examines ⁹¹ τὸ κοινὸν γραμματεῖον as found in literature and inscriptions and its relation to τὸ ληξιαρχικὸν γραμματεῖον, distinguishing the various meanings borne by the phrase. P. A. Phourikes discusses ⁹² a decree of the *θιάσις* of Bendis dated 274/3 B.C. (*Λογ. Ἐφ.* 1915, 1 ff.) and proves the correctness of Fourmont's attribution to Salamis of a similar decree (*I.G.* ii. 629), upon which he comments fully in a separate article.⁹³ I have been unable to consult D. Comparetti's essay referred to below in connexion with Pharsalus, E. K. Hatzbecker's dissertation ⁹⁴ on the Eleusinian accounts of 329/8 B.C., and V. Marstrand's work ⁹⁵ on the Peiraieus arsenal, in which the evidence afforded by the specifications for Philo's *σκευοθήκη* (*S.I.G.*² 969) plays an important part.

[*I.G.* iii.] *The Roman Imperial Period.*—In the Christian basilica on the bank of the Ilissus G. Soteriou discovered an inscription which he restores ⁹⁶ Ἰουλιανὸς] Σεβαστὸς; ἀγωνοθετήσας ἀνέθηκε. In an interesting yet not wholly convincing paper ⁹⁷ J. Sieveking interprets an Attic relief bearing a prominent Ψ as a votive of a Roman family resident at Athens in memory of its dead teacher of Greek, 'the γραμματιστής who, however, in the picture modestly retires behind the monument, which serves as a foil to him, of the famous organiser of uniform writing in Athens,' i.e. Archinas. Far more important is the contribution of P. Graindor, who in recent years has devoted himself with extraordinary energy and success to the cultivation of this field.

⁸⁶ *Klio*, xvii. 242 ff.

⁸⁷ *J.H.S.* xi. 145 ff.

⁸⁸ *Rev. Ét. Gr.* xxxiv. 1 ff.

⁸⁹ *Ibid.* 231 ff.

⁹⁰ *Rev. Phil.* xlv. 3 ff.

⁹¹ *Μουσικαία*, i. 87 ff.

⁹² *Αἰνὰ*, xxx. 378 ff.

⁹³ *Ibid.* 393 ff.

⁹⁴ *Die Eleusinische Rechnungsbücher von 329/8 v. Chr.*, Leipzig.

⁹⁵ *Armeniet i Piræus og Oldtidens Byggeskæbte*, Copenhagen, 1922.

⁹⁶ *Λογ. Ἐφ.* 1010, 29 f.

⁹⁷ *Sitzb. München*, 1920, No. 11.

In a large volume ⁹⁸ Graindor sets himself to the task of collecting and discussing the texts, mostly epigraphical, which help us to date the 208 eponymous archons known to us in this period, correcting and revising von Schoeffer's list: in this work, the value of which is greatly enhanced by the chronological table, alphabetical list of archons and index of inscriptions corrected or restored, the author touches upon or discusses in detail most of the chronological and historical problems raised by the study of Athens under the earlier Roman Empire. In a second valuable work ⁹⁹ on sculptures and inscriptions of this period, Graindor deals (p. 38 ff.) with seven texts from Athens and Eleusis which have hitherto been imperfectly published if published at all, including an epigram of a granddaughter of the historian Arrian, a text which relates to the family of the sophist Isaeus, and a rescript of Gallienus referring to Eleusis; a later section (p. 81 ff.), entitled 'Contributions to the history of Herodes Atticus and of his father,' deals with the fortune and the will of Herodes' father, the beginnings of his own career, his relations to Avidius Cassius, and two Eleusinian inscriptions erected by him. In a long and detailed article ¹⁰⁰ Graindor deals with the Attic *ephebia* under the Empire, examining separately each of the festivals, whether peculiar to the *ephebi* or open to a wider circle, which by their contests 'contributed in large measure to throw into relief the eminently sporting character taken by the *ephebia* at Athens under the Empire,' and passing on to inquire into the nature and organisation of the *Διονυσιαί* (p. 220 ff.). How far the author rests upon epigraphical materials in his discussion of 'Augustus and Athens' I cannot say, as this article ¹⁰¹ is inaccessible to me. ¹⁰²

III. THE PELOPONNESE

[*I.G.* iv.] A herm ¹⁰³ inscribed 'Ἡρώδης ἐνθάδε περικρατεῖ, discovered in 1919 in a torrent-bed at Corinth, gives us our first identified portrait of Herodes Atticus, and a b.-i. vase ¹⁰⁴ of the sixth century, found in Etruria but of Corinthian fabric, affords clear evidence for the Corinthian use of *ἐν* as equivalent to *ἐνθάδε*. At Sicyon an inscribed Roman lamp has come to light. ¹⁰⁵ Other recent discoveries include an archaic temple-boundary and a metrical epitaph from the environs of Argos. ¹⁰⁶ W. Vollgraff has published ¹⁰⁷ a fragmentary Argive votive inscription of the fourth century B.C. as well as an improved text ¹⁰⁸ of a well-known decree of the Dionysiac *τρυφῆται* discovered in 1861 (*I.G.* iv. 558), and some further notes ¹⁰⁹ on an Argive record unearthed by himself in 1902 and 1904 (*B.C.H.* xxxiii. 171 ff.), criticising two restorations

⁹⁸ *Chronologie des Archontes athéniens sous l'Empire*, Brussels, 1922.

⁹⁹ *Marbres et Textes antiques d'époque impériale*, Ghent, 1922, pp. 9 ff., 38 ff.

¹⁰⁰ *Musée Belge*, xxvi. 163 ff.

¹⁰¹ *Rev. Belge de Philologie et d'Histoire*, i. 429 ff.

¹⁰² For Attic inscriptions of this period see also the articles referred to above in footnotes 33 and 36.

¹⁰³ *B.C.H.* xlv. 170 ff.

¹⁰⁴ *Glotta*, xii. 152 (P. Krestschmar).

¹⁰⁵ *Arch. Ep.* 1919, 45 ff.

¹⁰⁶ *Epigraphica*, 1916, 77, 95 (Arvanitopoulos).

¹⁰⁷ *B.C.H.* xlv. 226.

¹⁰⁸ *Museonnapole*, xlix. 113 ff.

¹⁰⁹ *Ibid.* l. 223 f.

proposed¹¹⁰ by F. Bechtel, who also deals¹¹¹ with a passage in another document of the same provenance (*ibid.* 451). F. Hiller von Gaertringen has restored¹¹² a passage in a decree honouring a citizen of Aegae in Cilicia. A. Boethius' careful work¹¹³ on the Argive calendar comprises four chapters, dealing with (1) the time of the Nemean festival, (2) the Argive months, (3) the Horaea, and (4) a survey of the Argive year. A. Salač's discussion¹¹⁴ of texts from Argos and the Heraeum (*I.G.* iv. 620, 527) is inaccessible to me.

The discoveries made at the Asclepion near Epidaure by P. Kavvadias have excited keen interest and aroused much discussion. Among them is a complete new stela of the fourth century B.C. recording cures and other miracles wrought at the sanctuary; its 137 lines must have contained some twenty-five narratives; and though long usage of the stone as a threshold has made more than half of these illegible, those which can be read are of remarkable variety and interest. Two considerable fragments have also been added to one of the two previously known *εὐχαῖραι* of this type (*I.G.* iv. 952).¹¹⁵ These finds have been briefly summarised by S. Reinach¹¹⁶ and somewhat more fully by the present writer.¹¹⁷ Kavvadias also published¹¹⁸ in 1921 five inscriptions, discovered in 1918 and 1919, under the title 'The Achaean League according to inscriptions from the excavations of Epidaure.' The first is a decree of 112 B.C. granting honours and privileges to an Epidaurian, Archelochus, for his success in a diplomatic mission on which he secured for his native city friendship and alliance with Rome. The second (p. 124 ff.) has the heading *Θεοτ. Τέχαι Ἀγαθὰ. Νομογράφοι Ἀχαιῶν οἱ τοῦ νόμου τῆς Ὑπείρας* *θεῖτες*, followed by the names and cities of the *νομογράφοι*. The inscription can be dated in or soon after 227 B.C. and is palaeographically interesting as affording, according to Kavvadias, our latest example of *στοιχῆδος*-writing and a system of punctuation by means of blank spaces: its main value, however, consists in the light it throws on the institution of the *νομογράφοι* in the Achaean League, known to us otherwise only from a decree¹¹⁹ found at Magnesia on the Maeander, on the cities represented on the board of *νομογράφοι* and on the number appointed by each. The third text (p. 128 ff.) is the eagerly-awaited document referred to in my last Bibliography (*J.H.S.* xli. 57) and in a short article¹²⁰ by C. H. Weller on 'An Ancient League of Nations'; it is composed of eight fragments—the three longest discovered in 1918, the remaining five a quarter of a century earlier (*I.G.* iv. 924)—and, as interpreted by Kavvadias, contains a law of 223 B.C., regulating the new situation in the Achaean League caused by its alliance with Macedon and modifying its constitution with a view to safeguarding the interests of the new allies and giving the Macedonian kings the

¹¹⁰ *Zeits. vergl. Sprachf.* l. 69.

¹¹¹ *Phil.* 70. Cf. *Glotz*, xi. 79, xii. 1 f. (E. Schwyzer).

¹¹² *Hermes*, lxxi. 153 f.

¹¹³ *Der Argivische Kalender*, Upsala, 1922. Cf. *Phil. Week.* xlii. 997 f. (W. Roemer).

¹¹⁴ *Esty. filol.* xlii. 18 ff.

¹¹⁵ *Arch. Ep.* 1918, 155 ff. Cf. *Hesperia*, 1900, 17; *Mélanges Perrot*, 41 ff.

¹¹⁶ *Rev. Arch.* xiv. (1921), 407.

¹¹⁷ *Proc. R. Soc. of Medicine*, 1922, xv. (Section of the History of Medicine), 24 ff.

¹¹⁸ *Arch. Ep.* 1918, 115 ff., 191 f. Cf. *Hesperia*, 1918, 21 ff.

¹¹⁹ *Jaeger*, v. *Magnesia*, 39.

¹²⁰ *Class. Journ.* xvi. 360 ff.

right of intervention during the κοινὸς πόλεμος, i. e. the Cleomenic War, in the internal affairs of the League and especially in the activities of its συνέδριον. The writing surviving on the reverse side of one of the large fragments Kavvadias regards as belonging to the treaty of peace concluded at this time between the Eleans and the Achaeans. The fourth text, found in 1919 (p. 149 ff.), is possibly a fragment of the treaty admitting Epidaurus to the Achaean League in 243/2 B.C., but is surpassed in interest by the fifth (p. 151 ff.), which records on the obverse the verdict of an arbitral tribunal appointed about 242 B.C. to settle the frontier between Epidaurus and Arsinoe (Methana), and on the reverse the names of fourteen arbitrators representing the city of Thalpiusa. The above interpretation of the principal document of the group has been accepted, it would seem, by E. Ziebarth,¹²¹ but has been vigorously and successfully combated by H. Swoboda and U. Wilcken. The former,¹²² accepting the main conclusions of Kavvadias regarding the other four documents, though proposing¹²³ in No. 2 Πατριεύς (citizen of Patrae) in l. 18 and Ἀσχεύς or Ἀσχεύς (citizen of Aschium) in l. 28, shows that Kavvadias had overlooked the discussions of the earlier fragments (*I.G.* iv. 924) by Wilhelm¹²⁴ and by Wilcken,¹²⁵ as well as the most recent works on the Achaean League, opposes a number of objections to his interpretation of the text, and argues that it is in reality 'the foundation-charter of the Hellenic League founded by Antigonus Doson, or, more accurately, the decree or law of the Achaean League ratifying the arrangements relative to the formation of the League.' U. Wilcken,¹²⁶ on the other hand, regards the document, of which he gives a more accurate reading and a fuller restoration, as containing the συνθήκαι concluded at the Isthmus, probably in the spring of 302 B.C., between Antigonus Monophthalmus and the Hellenic Union founded by him (*Plut. Dem.* 25) for the purpose of maintaining peace among its members and the prosecution of a united war against Cassander. Thus he interprets the κοινὸς πόλεμος of the inscription, which Swoboda and Kavvadias identify with the Cleomenic War, while the βασιλεῖς repeatedly mentioned are Antigonus Monophthalmus and Demetrius Poliorcetes according to Wilcken's interpretation, Antigonus Doson and Philip V according to that of Swoboda. Of the remaining seven texts excavated in 1918-20 and published¹²⁷ by Kavvadias, a dedication to Ἡρᾷ Ἀργεῖᾳ Διὶ Νεμεῖνι πατρίοις θεοῖς (No. 11), an inscribed statue-base of Marcus Aurelius (No. 13), and a similar inscription on the same base, which was turned upside down and back to front to support a statue of Severus Alexander (No. 14), call for special attention. A. Wilhelm restores¹²⁸ an Epidaurian document of about 218 B.C. relating to Philip V of Macedon, and

¹²¹ *Ελλάς*, I. No. 4/5, p. 14, referred to in *Hermes*, lxxi. 518.

¹²² *Hermes*, lxxi. 518 ff., 627.

¹²³ Both corrections were made by A. Wilhelm in lectures delivered at Oxford in spring, 1922; the latter was suggested by B. Leonardos but not accepted by Kavvadias (*Αρχ.* 'Εφ. 1918, 192).

¹²⁴ *Sitzb. Wien.*, clxv. No. 6.

¹²⁵ *Sitzb. München*, 1917, No. 10, 37 ff.

¹²⁶ *Sitzb. Berlin*, 1922, 120, 122 ff.

¹²⁷ *Αρχ.* 'Εφ. 1918, 192 ff.

¹²⁸ *Anzeiger d. Akad. in Wien*, 1921, No. 18, p. 41.

W. Volgraf proposes¹²⁹ a new reading and interpretation of two lines in the paeon of Isyllus, of which J. U. Powell gives a general appreciation.¹³⁰

[*I.G.* v.] A. N. Skiias has published¹³¹ a group of eleven texts, ranging from the archaic period to Roman Imperial times, which were brought to light during E. R. Fiechter's excavation of the Amyclaeum in LACONIA; we may also notice P. Wolters' account¹³² of the visit paid by Cynac of Aeneia to Taenarum and F. Bechtel's discussion¹³³ of a peculiarity found in the speech of Geronthias. The word *χοιρεία*, which occurs in the mystery-inscription (*I.G.* v. 1. 1390) of Andania in MESSENIA, has been defended¹³⁴ by F. Hiller von Gaertringen against the scepticism of some modern scholars. No new inscriptions have come to light in ARCADIA, but T. Kalén has made valuable contributions¹³⁵ to the interpretation of the Tegean building-inscription (*I.G.* v. 2. 6), R. Thurneysen¹³⁶ and E. Fraenkel¹³⁷ have discussed various questions of the Arcadian dialect, particularly those raised by inscriptions of Tegea (*S.I.G.³* 306), Mantinea (*I.G.* v. 2. 262) and Orchomenus (*ibid.* 343),¹³⁸ and F. von Hiller has dealt¹³⁹ in detail with a well-known decree of Styriophalus (*ibid.* 351).

[*I.G.* vi.] In a discussion¹⁴⁰ on the topography of Elis A. N. Skiias inserts two new epitaphs from Lasion in the Elean highlands. Olympia is the reputed provenance of a golden bowl¹⁴¹ recently acquired by the Boston Museum, bearing on the outer rim in Corinthian letters of the seventh or early sixth century B.C. the legend *ὑπελειδαι ἀνέθεν ἐξ Ἡρακλείας*. Questions of Elean dialect are dealt with by F. Bechtel¹⁴² and E. Schwyzler.¹⁴³ A fragment of an inscribed epistyle¹⁴⁴ from Aegium is the sole contribution of ACHAEA.

IV. CENTRAL AND NORTHERN GREECE

[*I.G.* vii.] B. Leonardos continues to render invaluable service to the study of the inscriptions from the sanctuary of Amphiaraios at Onorts, publishing¹⁴⁵ twenty-five grants of *προξενία*, twenty-two of which are made by the Boeotian Confederation and recorded in the Boeotian dialect, while the rest (Nos. 100, 103, 117), emanating from the Oropians, are written in the *κοινή*; elsewhere¹⁴⁶ he reports on the excavations of 1919 and 1920, during which some minor epigraphical finds were made, including the signature of a sculptor Pheidias, perhaps a descendant of his famous namesake. E. Preuner subjects to a close scrutiny¹⁴⁷ the list of victors in the Great Amphiarquia

¹²⁹ *Memorogno*, I. 241 f.

¹³⁰ J. U. Powell and E. A. Buxton, *New Chapters*, 46 f.

¹³¹ *Apex*, Ep. 1919, 32 ff.

¹³² *Ath. Mitt.* xl. 91 ff.

¹³³ *Zeits. vergl. Sprachf.* I. 71.

¹³⁴ *Ibid.* 295.

¹³⁵ *Strena Philol. Upsiensis*, 1922, 187 ff.

¹³⁶ *Glotta*, xii. 144 ff.

¹³⁷ *Indog. Forsch.* xl. 84 ff. *Cl. Glotta*, xi. 77 f. (E. Schwyzler).

¹³⁸ *Cl. J.H.S.* xl. 144 f.

¹³⁹ *Ath. Mitt.* xl. 84 ff.

¹⁴⁰ *Apex*, Ep. 1919, 42 ff.

¹⁴¹ *Mus. of Fine Arts Bulletin*, cx. 63 ff. *Cl. Am. Journ. Arch.* xxvii. 108.

¹⁴² *Gött. Nachr.* 1920, 247 ff.

¹⁴³ *Glotta*, xii. 2 ff.

¹⁴⁴ *Apex*, Ep. 1919, 32.

¹⁴⁵ *Apex*, Ep. 1919, 34 ff.; cf. 1918, 195.

¹⁴⁶ *Ibid.* 1919, 90 ff.

¹⁴⁷ *Herms*, lvii. 80 ff.

(*I.G.* vii. 414), which he attributes to the year 335 B.C., and discusses the relation between the programme of this festival and that of the Panathenaea. K. Brugmann has called attention¹⁴⁴ to the Boeotian word *πρεῖω*, which occurs in a Thespian decree, and E. Schwyzler has commented¹⁴⁵ on a dedication from Thebes (*I.G.* vii. 3682). The epigraphical discoveries made, mostly in 1903, at the sanctuary of the Ptoion in BOEOTIA have been published¹⁴⁶ by L. Bizard. A votive inscription, dated by the editor between 554 and 539 B.C. and consisting of five iambic lines in the Attic dialect though with some Dorisms, was set up by Alcmeonides, son of Alcmeon, to celebrate a victory won in the chariot-race at the Panathenaea, and a second, of which a preliminary publication¹⁴⁷ appeared in 1892, records a dedication of Hippiarchus, son of the Athenian tyrant Peisistratus: ¹⁴⁸ of the ten remaining texts the most interesting are that on the base of a sculptured group by Tisistrates of Sicyon representing Heracles and the boar (No. 5), part of the replies of Thebes and another city to the *θεοποι* sent from Aegaeia to invite their participation in the Ptoia (No. 9), and the well-preserved *ἀπολογία* of an *agonothetes* of the Ptoia in the first century B.C., comprising a list of victors, the names of the states which shared in the sacrifice, and a summary of accounts (No. 10).

[*I.G.* viii.] Several valuable texts from DELPHI have been published for the first time and marked progress has been made in the restoration of others already imperfectly known. To M. Holleaux we owe a careful edition¹⁴⁹ of a decree of Chaeronea in honour of Amatokos, the Thracian commander of an auxiliary force in the army which enabled Sulla to conquer Mithridates' generals in Greece; it reveals several new facts relative to the first Mithridatic War, the attitude of the Thracian king Sadalas, and the strategy of Sulla in 87 and 86 B.C. A. Plassart has published,¹⁵⁰ with an exhaustive commentary on the chronological, geographical and religious questions involved and indexes of geographical and personal names, the eleven extant fragments of the lengthy list of Delphian *θεοποδοῖαι*, dating from the second century B.C., of which only a small portion was previously published. Replat's reconstruction¹⁵¹ of the Chian altar owes much to the 'lettres d'assemblage' inscribed upon its stones. E. Bourguet discusses¹⁵² two fifth-century Argive dedications, of which fragments survive, and attempts to reconstruct the bases on which they were engraved; he also deals with¹⁵³ the base of Aristaeus as an illustration of the methods and defects of H. Pomtow, a number of whose errors are corrected in a valuable paper¹⁵⁴ by A. Wilhelm, containing restorations of or notes on twelve Delphian texts. P. Fournier reopens¹⁵⁵ the discussion of

¹⁴⁴ *Indog. Forsch.* xxxix. 149 ff. Cf. *B.G.H.* xlv. 522 f.

¹⁴⁵ *Ullstein*, xl. 78. Cf. *B.G.H.* xlv. 515 f.

¹⁴⁶ *B.G.H.* xlv. 227 ff. Cf. *Hermes*, lvi. 477 f.

¹⁴⁷ *C. R. Acad. Inscr.* 1892, 91 f.

¹⁴⁸ See J. J. E. Hondius, *Hermes*, lvii. 475 ff.

¹⁴⁹ *Rev. Et. Gr.* xxxii. 325 ff.

¹⁵⁰ *B.G.H.* xlv. 1 ff.; cf. *Ann. Journ. Arch.* xxxi. 358.

¹⁵¹ *B.G.H.* xlv. 328 ff.

¹⁵² *Rev. Et. Gr.* xxxii. 41 ff.

¹⁵³ *Ibid.* xxxiv. p. lv. f.

¹⁵⁴ *Anzeiger d. Akad. in Wien*, 1922, vii.

¹⁵⁵ *Rev. Et. Anc.* xxiv. 1 ff.

the inscription from the stadium, which he dates about 440 B.C. and reads τὸ(ν) νέμερον μὲν εἰσέραι ἐς τὸν ἵππῳ, 'défense de faire sortir du Stade le vin nouveau,' and T. Homolle deals¹⁰⁰ afresh with the fascinating problem of the inscription on the base of the Delphian charioteer, reviewing the various theories and restorations propounded and maintaining that the attribution of the earlier dedication to Gelo and of the later to his brother Polyzeus must be regarded as demonstrably correct. H. Pomtow studies in detail¹⁰¹ the votive offering set up by the Pharsalians in 346-4 B.C., representing Achilles mounted and Patroclus on foot: to this he assigns a base bearing a dedicatory inscription and the signature of two sculptors from Atrax, over which was later engraved a dedication of a statue of the Emperor Claudius (*S.I.G.² 80* A). He has also published¹⁰² a fifth and concluding series of 'Delphische Neu-funde' with addenda and corrigenda. In the first section he draws up a chronological list of the extant bases of statues of Romans erected at Delphi, from that of M. Acilius Glabrio in 190 B.C. to that of Nero in A.D. 54, and discusses twenty texts (Nos. 138-154) engraved on some of these. Next come ten other texts relating to Romans (155-162a), the most interesting of which is the latter part, sixty-three lines in length, of a previously unpublished law of 100 B.C. dealing with paracy (156). The third section comprises eighteen of the thirty-five documents engraved at a later period on the monument erected in honour of Aemilius Paulus (163-170): most record grants of προξενία and other honours, but there are also two manumissions (171-2) and a fragment of an arbitral decision referring to the Daulian schools (170). Twenty-three further miscellaneous texts are added (179a, 180-200a), and the article closes with a number of important corrections in the readings or restorations of previously known inscriptions. Among the recent accessions to Greek literature surveyed¹⁰³ by J. U. Powell are the hymns discovered at Delphi, and K. Praechter takes three Delphian texts (*S.I.G.² 868*) of the second century after Christ in honour of Taurus, Barchina, Nicestratus and others as the starting-point of a detailed discussion¹⁰⁴ of middle Platonism with special reference to Nicestratus. Inscriptions also play a large part in P. Cloché's examination¹⁰⁵ of the names and numbers of the *πατριῶται* in session from 346 to 327 B.C. and the effect produced in the several states by the creation of the *πατρίαι* in 339; the same is true of F. Stählin's discussion¹⁰⁶ of Phthiotis and the peace between Philip V and the Aetolians, and, presumably, of M. A. Levi's essay¹⁰⁷ on the chronology of the Aetolian generals from 221 to 168 B.C., which I have been unable to consult. Two difficult phrases in the Labyadae-inscription (*S.I.G.² 438*)—ἐντὶ Φέρεος (l. 45) and ἐν τοῖς ἐνναυτοῖς (l. 161)—are interpreted by E. Fraenkel¹⁰⁸.

¹⁰⁰ *Acad. Royale de Belgique: Bull. de la Classe des Lettres*, 1921, 333 ff.

¹⁰¹ *Philologus*, lxxvii, 194 ff.

¹⁰² *Klio*, xvii, 153 ff.

¹⁰³ J. U. Powell and E. A. Barber, *New Chapters*, 42 ff.

¹⁰⁴ *Hermes*, lvi, 481 ff.

¹⁰⁵ *B.U.H.* liv, 312 ff.

¹⁰⁶ *Philologus*, lxxvii, 199 ff.

¹⁰⁷ *Atti d. R. Acc. Torino*, lvi, 179 ff.

¹⁰⁸ *Indog. Forsch.* xl, 66 ff.

[I.G. ix.] E. Schwyzer comments¹⁶⁹ on the inscription recording the *συμπολιτεία* between Stiris and Medeon in Phocis (I.G. ix. 1. 32). R. MacKenzie discusses¹⁷⁰ the form *ἡρέσται* (= *ἡρέθαι*) which occurs in the charter of the colony at Naupactus found at Oeanthea in Ozolian Locris (*ibid.* 334), and E. Kalinka appends to an article¹⁷¹ on the Trojan royal house an excursus on the *Laerian* penance, in which use is made of the famous inscription from Tolophon relating to the maidens annually sent to servitude in Troy.

THESSALY has proved less prolific than in most recent years. N. I. Giannopoulos has published¹⁷² a batch of eighteen inscriptions of the early Christian period found at Phthiotic Thebes. F. Bechtel has explained¹⁷³ two river-names which occur in the record of a frontier dispute found at Melitea (I.G. ix. 2. 205). In the rocky slopes to the west of Pharsalus is a cave, from the mouth of which come two inscriptions published¹⁷⁴ by N. I. Giannopoulos, a short fifth-century votive, already known,¹⁷⁵ the last part of which is unintelligible, and a long epigram of twenty hexameter lines, beginning with a welcome to the visitor and proceeding to enumerate the divine beings to whom the place is sacred and the good gifts they have severally bestowed upon Pantalces, who had planted and adorned the spot. I regret that D. Comparetti's discussion¹⁷⁶ of these inscriptions is out of my reach. C. D. Buck has proposed¹⁷⁷ to read *τοὶ ἀγνῶται* (nom.) in place of *τοῖς Ἀγνῶταις* (dat.) in another Pharsalian text (I.G. ix. 2. 241). A stele from Gomphi published¹⁷⁸ by Comparetti contains the reply of an Egyptian oracle to the priestess of a women's *θίασος*, and is interesting if not unique inasmuch as the ends of the lines and the whole of one line are left unengraved, probably because the sacred manuscript which contained the divine words was partly damaged and the copy on stone reproduced it as closely as possible. A decree of Gonni incorporating an Attic decree of the second century relative to the Eleusinia and the Mysteries has been fully discussed by¹⁷⁹ P. Foucart, whose comments on the *theopía* and on the festivals is of great value for Attic hortology. An insignificant fragment from Iolcus appears,¹⁸⁰ together with several Byzantine inscriptions, in an article by Giannopoulos on the Byzantine buildings of the district of Demetrias.

V. EPIRUS, MACEDONIA, THRACE, SCYTHIA

[I.G. x.] A fourth mosaic inscription relating to the building of the Christian *basilica* at Nicopolis in EPIRUS has been uncovered in its outer narthex by A. Philadelphens,¹⁸¹ and a group of texts, most of them very late, from Janina, Apollonia and elsewhere has been published¹⁸² by B. Pace. G. Kazarow

¹⁶⁹ *Glotta*, xi. 77.

¹⁷⁰ *Class. Qu.* xv. 187.

¹⁷¹ *Arch. Rel.* xxi. 18 ff.

¹⁷² *Bz. u. Neogr. Jahrb.* ii. 386 ff. Cf. *B.C.H.* xlv. 324.

¹⁷³ *Hermes*, lvi. 325.

¹⁷⁴ *Byz. Ep.* 1919, 48 ff.

¹⁷⁵ *B.C.H.* xxxvi. 668 f.

¹⁷⁶ *La iscrizioni testi scoperti dell'antro*

di Farsalos (Teasaglia) e le iscrizioni dell'antro dell'Homotto (Attica), Florence (Ariani), 1921.

¹⁷⁷ *Class. Phil.* xvii. 86.

¹⁷⁸ *Atene e Roma*, ii. 167 ff.

¹⁷⁹ *Rev. Et. Gr.* xxxii. 190 ff.

¹⁸⁰ *B.C.H.* xlv. 200.

¹⁸¹ *Pravosl.* 1916, 67 ff.

¹⁸² *Annuario*, iii. 286 ff.

has given us¹⁸⁸ a relief of Mithra *ταυροκτόνος* with an inscription, almost entirely illegible, discovered N.W. of Pélée in MACEDONIA. Under the title 'Amphipolitan Studies' P. Perdtizet discusses¹⁸⁹ several questions relative to the history and epigraphy of Amphipolis and assigns to that town the sale-catalogue (*S.I.G.* 832) copied at Lakovikia. C. Picard publishes¹⁹⁰ a fresh text, dating probably from the early fifth century, of the correspondence between Abgar V of Edessa in Osroene and Jesus Christ, which 'became a kind of talismanic writing, to which was increasingly attributed in the Christian world a magical protective virtue not only for individuals but also for cities' (p. 43). The present copy, engraved on the gateway of Philippi by which the Via Egnatia entered the city from the east, is composed of nine fragments of Abgar's letter and three of Christ's reply, written in larger and more widely spaced characters; five other epigraphical copies, more or less mutilated, survive, but the Philippian version is the first from a city-gate and contains some points of special interest, which are fully dealt with by the editor, who also discusses in detail the source and significance of the document. G. Senne republishes¹⁹¹ the two inscribed cups of Alexandrovo in THRACE, and the inscriptions recording the Thracian cult of Zbeburdos are collected and examined¹⁹² by C. F. Lehmann-Haupt. Of the unpublished inscriptions copied by Sestini¹⁹³ towards the close of the eighteenth century in Constantinople and the Prince's Islands, three are of the tenth century or later and the other two are not of special interest; similarly the thirteen unpublished or little known documents from Constantinople discussed¹⁹⁴ by J. Ebersolt are of value for Byzantine rather than for Hellenic studies, and the same is true of all save one of those dealt with by K. Lehmann-Hartleben.¹⁹⁵ I have not yet seen the third volume of G. Mendel's catalogue¹⁹⁶ of the sculptures in the Constantinople Museum. Mention must also be made of A. von Domaszewski's re-examination¹⁹⁷ of the inscription of the 'Serpent Column' erected at Delphi after the Persian War and now standing in the Hippodrome at Constantinople. From SCYTHIA there is still little to report, as archaeological investigation is apparently suspended for the present owing to political and economic conditions. A belated reference must, however, be made to a work¹⁹⁸ of the utmost importance which appeared at Petrograd in 1916 but is hardly yet obtainable in this country, the second and greatly enlarged edition of the first volume of B. Latyshev's collection of the Greek and Latin inscriptions of South Russia. It contains those of Tyras, Olbia, Chersonesus and other settlements from the Danube to the Bosphoran kingdom. Of the 751 texts

¹⁸⁸ *Arch. Rel.* xi. 230. Cf. *B.C.H.* xlv. 540.

¹⁸⁹ *B.C.H.* xlv. 36 ff.

¹⁹⁰ *Ibid.* xlv. 41 ff. Cf. *Journ. d. Sav.* 1920, 142 f.

¹⁹¹ *Rev. Arch.* xv. (1922), 60 ff.

¹⁹² *Klio*, xvii. 283 ff.

¹⁹³ *Annuario*, iii. 249 ff. Cf. *B.C.H.* xlv. 545 f.

¹⁹⁴ *Musées archéol. de Constantinople*,

Paris (Leroux), 1921, pp. 31, 41, 45 ff. Cf. *Rev. Arch.* xiv. (1921), 438; *B.C.H.* xlv. 490.

¹⁹⁵ *Bgr.-Neogr. Jahrb.* iii. 103 ff.

¹⁹⁶ *Musées Imp. Ottomans: Cat. d. Sculptures*, III, Constantinople, 1914. Reviewed *Rev. Et. Anc.* xxiv. 70 f.

¹⁹⁷ *Sitzb. Heidelberg*, 1920, 5.

¹⁹⁸ *Inscr. ant. oras septentrionalis Ponti Euxini*, i.²

69 are in Latin and five bilingual; the remaining 677 are in Greek and belong mostly to Olbia (Nos. 20-324) and Chersonesus (349-667). Latyshev has incorporated in this new edition the results of all the discoveries and discussions of the thirty-one years which had elapsed since the first issue of the volume, adding 302 texts, of which sixty-seven are here published for the first time. M. Rostovtzeff has utilised epigraphical materials in his masterly history¹⁹⁴ of South Russia as well as in his short survey¹⁹⁵ of archaeological work in that field from 1913 to 1917. M. Ebert's account¹⁹⁶ of South Russia from the earliest times down to the invasion of the Huns is accompanied by a 'Quellenangabe' (pp. 378-415) in which references to inscriptions play a considerable part.

VI. THE ISLANDS OF THE AEGEAN

[I.G. xi.] Although additions to the inscriptions of Delos have been few in number, French scholars have devoted themselves with good results to the task of exploiting the epigraphical riches of the island for architectural, topographical and historical purposes. F. Durrbach has published¹⁹⁷ the first instalment of a selection of Delian texts, containing seventy-five historical inscriptions ranging from the seventh century to 166 B.C., in chronological order and accompanied by a translation and an ample commentary. The same scholar has given us¹⁹⁸ the full extant text of the *ἐπεὶ συνγραφὴ* of Delos, dating from about 300 B.C., which laid down regulations for the lease of sacred domains; all the more important parts had previously been published, and those which appear here for the first time are unhappily very seriously mutilated and add little to our knowledge. A bilingual text, partially published by Roussel¹⁹⁹ but imperfectly explained hitherto, has been identified by E. Cug²⁰⁰ as a consular *lex* Gabina Calpurnia of 58 B.C., bestowing on Delos liberty and exemption from imposts and directing the restoration of the sanctuaries plundered by the pirates in 69 B.C. C. Picard has made use of epigraphical materials both in his article²⁰¹ on the history and organisation of the Society of Merchants from Berytus united for the cult of Poseidon—*τὸ κοινὸν τῶν ἐν Δῶδεῖ Βηρυτίων Ποσειδωνιαστῶν ἐμπόρων καὶ ναυκλήρων καὶ ἐγδοχέων*, to give it its full official title—and in his splendid monograph²⁰² on the Society's buildings at Delos. G. Glotz has restored²⁰³ a passage (I.G. xi. 203 B, ll. 10-16) relating to the transport of marble for the Delian theatre in 369 B.C., valuable alike for its economic and for its architectural interest, and has discussed²⁰⁴ the chronology of the Delian archons of 314-302 B.C., reaching results

¹⁹⁴ *Franks and Greeks in South Russia*, Oxford (Univ. Press), 1922.

¹⁹⁵ *Journ. d. Sav.* 1920, 109 ff.

¹⁹⁶ *Südrußland im Altertum*, Bonn & Leipzig (Schöndner), 1921. Reviewed *Phil. Week.* xlii. 828 ff. (Ziebarth).

¹⁹⁷ *Choix d'inscriptions de Délos*, Paris (Leroux), 1921. Cf. *Rev. Arch.* xiv. (1921), 426.

¹⁹⁸ *Rev. Ét. Gr.* xxii. 167 ff.

¹⁹⁹ *Delos: Col. Alb.* 334, tables 3, 4.

²⁰⁰ *B.C.H.* xlv. 198 ff.

²⁰¹ *Ibid.* xlv. 223 ff., esp. 255 f., 295, 307 ff.

²⁰² *Exploration archéol. de Délos*, VI, Paris (Doinard), 1921, esp. p. 24, VII, VIII.

²⁰³ *Rev. Ét. Gr.* xxxii. 240 ff.

²⁰⁴ *B.C.H.* xlv. 382 ff.

differing slightly from those of Durrbach.²⁰³ Two stamped tiles and a boundary-stone of the precinct of Leto are published²⁰⁴ by R. Demangel, while F. Courby's important article²⁰⁵ on the three temples in the centre of the sanctuary, the *temenos* of Artemis, and the *oikos* and colonnade of the Naxians makes constant reference to the evidence of published inscriptions. J. Hatzfeld examines and restores²⁰⁶ the dedications 'Απόλλωνι καὶ Ἰταλικαῖς engraved on the Doric architraves and the Ionic entablatures of the porticoes of the *dywpa* of the Italians. R. Vallois seeks to determine²⁰⁷ the nature of the *ἀγάλμα* carried annually in procession at the Dionysia and quotes all the texts, published and unpublished, which refer to it. T. Homolle traces,²⁰⁸ by the aid of a decree²⁰⁹ of 159 B.C., the career of Eubulus of Marathon, one of the Athenian cleruchs settled on Delos, who in 186 B.C. became envoy and ἀρχιθεσπός, and in the next few years held successively the priesthoods of Asclepius, Dionysus and the Great Gods. At the close of his article on Ptolemaeus Epigonius M. Holleaux collects and discusses²¹⁰ all the passages in Delian documents which refer to a Ptolemy son of Lyaimachus. Finally, A. Wilhelm throws light²¹¹ on a decree (I.G. xi. 716) relating to Nabis of Sparta and on a dedication²¹² in honour of an Athenian courtier of Ptolemy X Soter.²¹³

[I.G. xii.] No new inscriptions of Rhodes have been published, but M. Holleaux maintains²¹⁴ against P. Girard the possibility of a proposed restoration in the Lindian Chronicle, and B. Leonardos makes²¹⁵ a number of minor corrections in Rhodian inscriptions published in *Annuario*, ii. 151 ff. F. Hiller von Gaertringen, who has an unrivalled knowledge of the inscriptions of Thera, supports²¹⁶ his attribution of a letter of 'King Ptolemy' (I.G. xii. 3. 327) to Philometor and examines the use of the forms Α and Α and of the Macedonian and Egyptian calendars in Theraean documents of the Ptolemaic period. F. Bechtel discusses²¹⁷ the long *e*-sounds in the archaic inscriptions of the island and calls attention²¹⁸ to the occurrence of the form Παμφυλαί in Coe as a variant of the common Dorian tribe-name Παμφύλαι. E. Fraenkel examines²¹⁹ the meaning of the phrase *ἀπὸ πυκνῶς* in a Coan sacrificial calendar (S.I.G.² 1025), and P. Stengel uses²²⁰ the same text to throw light upon Greek libations. Except Delos the CYCLADES have not proved very productive. G. Gerola publishes²²¹ a group of late Christian inscriptions of Seriphos, and P. Grainger continues his fruitful studies of Cycladic antiquities in an article²²² which contains three unpublished texts from Tenos, a decree of Ios, several short inscriptions on stone, lead or pottery from Coe, and a

²⁰³ B.C.H. xl. 298 ff.

²⁰⁴ *Ibid.* xlv. 97, 93.

²⁰⁵ *Ibid.* xlv. 174 ff.

²⁰⁶ *Ibid.* xlv. 471 ff., 570.

²⁰⁷ *Ibid.* xlv. 94 ff.

²⁰⁸ C.R. Acad. Inscr. 1922, 131 ff.

²⁰⁹ C.I.G. 2276 = Durrbach, *Choix*, 79.

²¹⁰ J.H.S. xii. 194 ff.

²¹¹ *Anzeiger d. Akad.* in Wien, 1921, No.

18.

²¹² B.C.H. xxxii. 430, No. 43.

²¹³ For Delos see also B.C.H. xlv. 533.

²¹⁴ *Rev. Ét. Gr.* xxxiv. p. xlvi. f.

²¹⁵ *Arch. Ep.* 1918, 195.

²¹⁶ *Klio*, xvii. 94 ff.

²¹⁷ *Göt. Nachr.* 1920, 240 ff.

²¹⁸ *Zeits. vergl. Sprachf.* l. 70 f.

²¹⁹ *Indog. Forsch.* xl. 86 ff.

²²⁰ *Hermes*, lvii. 549 f.

²²¹ *Annuario*, iii. 232 ff.

²²² *Musee Belge*, xxx. 68 ff.

number of valuable comments on or corrections of Cean texts. In an appendix to her long account of the fortress of Cnos, A. K. Sarou prints²²⁵ thirteen Greek inscriptions found within it, only four of which had been previously published. C. Picard's report on the excavations at THASOS in 1914 and 1920 includes²²⁶ a revised text of the sale-list of the confiscated property of the Thasians and Neopolitans who took the Athenian side in 412-408 B.C. (*I.G.* xii. 8. 263), two fragments of a fourth-century enactment regarding mercantile relations at sea, a fourth-century munimission by sale to Apollo, six mutilated decrees and fifteen dedications; a summary of the thirty-one epitaphs found in the course of the excavation is added, but the texts are not given in full. J. U. Powell gives an account²²⁷ of the hymn to the Idaean Dactyls from Eretria in EUROEA (*I.G.* xii. 9. 259) and B. Leonardos a revised reading²²⁸ of a sixth-century epigram of the same city (*ibid.* 285). An interesting discovery made at Carystus is announced but not yet published.²²⁹

[*I.G.* xiii.] The only new inscriptions of CRETE published during the period under review are two from Gortyn edited by D. Comparetti,²³⁰ one a *boustrophedon* text, unhappily very mutilated, referring to land-mortgage, the other a curious decree of the late fifth or early fourth century B.C., written *boustrophedon* and *stoichedon* in Ionic letters, by which a doctor from Tralles is appointed to cope with an epidemic at Gortyn, receiving from the state his drugs and instruments. J. Loewenthal comments²³¹ on the Gortynian form *ἰατρία*. G. N. Hatzidakis²³² upon the name *Κεραμειτῆς* found in a Cretan dedication (*B.C.H.* xxvii. 292 ff.), and W. Vollgraf²³³ upon two geographical names which occur in a text formerly assigned to Coryra (*I.G.* ix. 1. 693) but now recognised as being of Cretan origin.²³⁴ Contributions to the study of Cretan inscriptions occur in several works already mentioned,—Murray's appreciation of the hymn of the Curetes,²³⁵ the dialectological articles²³⁶ of E. Schwyzler and F. Bechtel, and Levi's discussion of Cretan epigrams.²³⁷ I need not here recur to the subject of the pre-Hellenic Cretan script upon which I touched above.²³⁸

VII. WESTERN EUROPE

[*I.G.* xiv.] Apart from two archaic inscriptions discovered²³⁹ at Motya in Sicily and a curious dedication,²⁴⁰ *Ἀπολλωνι καὶ Παῖδοις καὶ Ἀνρῳ*, from the cave of S. Nicolo at Buscemi, the finds made in the island—at Syracuse,²⁴¹

²²⁵ *Ἀρχαιολ.* xxxvii. 137 ff.

²²⁶ *B.C.H.* xlv. 144 ff., 569 f.; cf. 553.

²²⁷ J. U. Powell and E. A. Barber, *New Chapters*, 49 f.

²²⁸ *Ἀρχ.* Ep. 1910, 88.

²²⁹ *B.C.H.* xlv. 529.

²³⁰ *Annuario*, iii. 103 ff. Cf. *Am. Journ. Arch.* xxvi. 358 f.

²³¹ *Zeits. vergl. Sprachf.* l. 40. Cf. *Gott. Nachr.* 1920, 253 f.

²³² *Glossa*, xii. 149 f.

²³³ *Monum. Ant.* 302, 428.

²³⁴ *S.I.G.* 940, *S.G.D.I.* 3198.

²³⁵ J. U. Powell and E. A. Barber, *New Chapters*, 50 ff.

²³⁶ *Glossa*, xi. 78 f., xii. 7, *Gott. Nachr.* 1920, 251 ff.

²³⁷ See footnote 20.

²³⁸ *Ibid.* 42-47.

²³⁹ J. I. S. Whitaker, *Motya*, London (Bell), 1921, p. 286 ff.

²⁴⁰ *Notiss.* 1920, 327 f.

²⁴¹ *Ibid.* 318 f., 325 ff.

Menae,²⁴² Agrigento²⁴³ and Palermo²⁴⁴—are neither numerous nor of especial value. ITALY has made a somewhat larger and more important contribution. At Rhegium (Reggio) a base²⁴⁵ was found in 1921 which had borne a bronze statue of Gaius Norbannus, set up by the Rhegine *dēmos*, probably before the fall of the Roman Republic; a new reading of an archaic fragment from Medma (Rosarno) is suggested²⁴⁶ by F. von Duhn; at Hippo (Monteleone Calabro) excavation has unearthed a stamped tile and an epitaph,²⁴⁷ at Briatico a fragment of a tomb-inscription.²⁴⁸ F. Ribezzo has reopened²⁴⁹ the discussion of a puzzling dialect-inscription from the territory of the Peucetii in Apulia published in 1912 (*Glotta*, iv. 200 ff.), and G. Calza's account of recent work at Ostia contains²⁵⁰ two inscriptions painted on walls. The interesting Greco-Jewish inscriptions²⁵¹ from the catacomb of Monteverde in Rome continue to excite interest and comment,²⁵² and S. Reinach has made a Greek metrical epitaph from Rome the starting-point of a full and valuable discussion²⁵³ of Valentine and Valentinism. No less interesting is a marble cippus²⁵⁴ adorned with reliefs relating to the worship of the Magna Mater and bearing a metrical inscription in elegiac verse, the difficulties of which have not been wholly solved by D. Comparetti. Among the inscriptions examined by A. Galieti in his long article on 'The age of the moon employed as a chronological element in Roman epigraphy'²⁵⁵ is a Latin inscription of A.D. 269 engraved in Greek characters.²⁵⁶ In a detailed survey of the remains of Domitian's Villa on the Alban Hills G. Lugli republishes²⁵⁷ four inscriptions found there, while a seal has been discovered²⁵⁸ at Mentana inscribed *εὐεργ.* A curious metrical text from Puteoli, consisting of thirteen lines and attributable to the second century of our era, has been restored and explained²⁵⁹ by A. Olivieri, who sees in it a hymn to Apis composed by a certain Apion, and regards it as an important document for the history of Egyptian religion in the Greco-Roman world. H. Diels, however, offers²⁶⁰ an alternative restoration and translation, and concludes that the poem commemorates the writer's father and shows 'no religious motives save for the fact that he attributes to the gods the long and blessed life of his father, and regards with awe the number-play as something wonderful bestowed on men by the gods. The level of this science corresponds to that of his versification and of his whole

²⁴² *Notizie*, 1920, 337.

²⁴³ *Ibid.* 338.

²⁴⁴ *Herm. Ant.* xxvii. 197 ff.

²⁴⁵ *Notizie*, 1922, 181.

²⁴⁶ *Arch. Ant.* xxxvi. 163 f.

²⁴⁷ *Notizie*, 1921, 494 f.

²⁴⁸ *Ibid.* 489.

²⁴⁹ *Rev. indo-grec-lat.* iv. 237 ff.

²⁵⁰ *Mon. Ant.* xxvi. 368.

²⁵¹ See *J.H.S.* xli. 94 f.

²⁵² See corrections by W. Mors, *Hermes* lvi. 438 f., and reviews by E. Loewinson, *Bull. con. arch. con.* xlvii. 206 ff., and F. Porbion, *Or. Lat.* xxv. 57 ff.

²⁵³ *Rev. Arch.* xiv. (1921), 140 ff.

²⁵⁴ *Notizie*, 1922, 81 ff.

²⁵⁵ *Bull. con. arch. con.* xlviii. 73 ff., esp. 100 ff.

²⁵⁶ De Rossi, *Inscr. Christ. urbis Romae*, 11.

²⁵⁷ *Bull. con. arch. con.* xlviii. 35, 37, 63.

²⁵⁸ *Notizie*, 1921, 62.

²⁵⁹ *Ant. Accad. Napoli*, n.s. viii. (1921), 45 ff. Cf. *Rev. indo-grec-lat.* v. 103 (F. Ribezzo), *Bull. fil. class.* xxviii. 73 ff. (F. Kießow).

²⁶⁰ *Rev. indo-grec-lat.* v. 179 f. Cf. Ribezzo's reply, *ibid.* 180 note.

point of view.' I do not know A. Monti's publication²⁶¹ of a Greek Christian inscription of Pisaurum (Pesaro) in Umbria. D. M. Robinson describes²⁶² a sixth-century Attic amphora, now at Baltimore, found near Caere and bearing the signature of Nicosthenes. But the most remarkable find is that from an Etruscan tomb at Banditella, near Marsiliana in the Albegna valley, excavated by A. Minto.²⁶³ Among a number of ivory objects was a writing-tablet with a Greek alphabet written retrograde along one edge: the discoverer assigns it to the Chalcidian group, dates it from the close of the eighth or, at latest, the beginning of the seventh century B.C., and claims that 'in view of its high antiquity and the perfect preservation and clearness of the letters, it may be regarded as the *princeps* of the model alphabets hitherto discovered on Etruscan soil.'²⁶⁴ Britain too is represented, for C. R. Peers comments²⁶⁵ on the gnostic talisman found at Carnarvon in 1827 and now preserved in the Public Library there.

VIII. ASIA MINOR

B. Pace's account²⁶⁶ of the travels of Domenico Sestini in Asia Minor (1779-92) deals especially with the inscriptions which he copied: twenty-five of these appear under his name in the *C.I.G.* and five others from the copies made by other travellers; the remaining twelve, published by Pace, include a fragment of an epitaph (?) from Scutari, four texts from Cyzicus, and fragments from Bessikian (between Cyzicus and Prusa) and Amasia (Paphlagonia). F. Cumont's tribute²⁶⁷ to the work of P. Fourcade, another early explorer of Asia Minor, gives the text of a Pontic inscription (*C.I.G.* 4179) and refers to an unpublished document in his papers. W. L. Westermann's 'tentative reconstruction, in general outline, of the system of the land-registers of the royal domain of the Seleucids,'²⁶⁸ rests primarily upon an examination of inscriptions of Didyma (*O.G.I.* 225), Iium (*ibid.* 221) and Sardis (*Am. Journ. Arch.* xvi. 11 ff.). From CARIA we may note three epitaphs of Caunus,²⁶⁹ an Ionic epigram on a statue-base at Halicarnassus published²⁷⁰ by U. von Wilamowitz, who calls attention to its curious dialogue form and the beauty of its writing, and A. Wilhelm's restoration²⁷¹ of the word $\psi\chi\rho\delta\alpha\iota\omega\nu\iota\sigma$ (*Jeigularium*) in a text of Lagina (*B.C.H.* slii. 89 f.). The section of the great work on Miletus which deals with the Nymphaeum contains two inscriptions²⁷² edited by H. Dessau, a Latin text on the lower architrave and a Greek on the upper recording the adornment of the building $\epsilon\kappa\ \tau\omicron\upsilon\tau\omicron\upsilon\ \theta\epsilon\iota\omicron\upsilon\varsigma\ \delta\alpha\upsilon\epsilon\tau\omicron\upsilon\varsigma$ in A.D. 241-4. The section on the northern market and the port on Lion Bay closes with a

²⁶¹ *De (incr. quadam Pisaurum)*, Turin (Lattes), 1921.

²⁶² *Am. Journ. Arch.* xxvi. 54 ff.

²⁶³ *Marsiliana d'Albegna*, Florence (Alinari), 122, 227 ff., and Pl. XX.

²⁶⁴ See, however, A. Grenier's review, *Rev. Arch.* xv. (1922), 308 ff.; *Rev. Et. Anc.* xiv. 273 ff.

²⁶⁵ *Proc. Soc. Ant.* xxxi. (2nd series), 127 ff.

²⁶⁶ *Annuario*, iii. 240 ff.

²⁶⁷ *C. R. Acad. Inscr.* 1922, 308 ff.

²⁶⁸ *Class. Phil.* xvi. 12 ff., 291 f.

²⁶⁹ *Annuario*, iii. 267 f.

²⁷⁰ *Arch. Mus.* slii. 157 ff.

²⁷¹ *Phil. Week.* slii. 23 f.

²⁷² *Milet.* i. 6. Berlin and Leipzig (de Gruyter), 1919, 33 f.

chapter ²⁷² by A. Rehm comprising one Latin and five Greek inscriptions. One of these, the decree of about 650 B.C. imposing penalties on political transgressors (*S.I.G.³ 58*), has already attracted much attention; the others are an epigram inscribed on a marble lion (25-31 B.C.), the base of a statue of Domitian, an altar of Poseidon and a group of six *graffiti*. The famous *μολυβδ*-inscription (*S.I.G.³ 57*) continues to evoke comment and correction, ²⁷⁴ as does also ²⁷⁵ a third-century text now in the Louvre (*S.I.G.³ 666*). A late Hellenistic epigram leads B. Haussoullier into an interesting discussion ²⁷⁶ of the sanctuary and cult of Dionysus at Miletus and of the epigraphical texts relating thereto. Apart from Vollgraff's comments ²⁷⁷ on a metrical epitaph and Westermann's examination, already referred to, of the deed of sale of the village of Pannus (*O.G.L.* 225), only B. Haussoullier has dealt with the inscriptions of Didyma. In one article ²⁷⁸ he scrutinises, by the aid of five published texts, the constructional work carried on in and round the temple from 176/5 to 172/1 B.C., and in an appendix discusses the manner in which the oracle was consulted; in a second, ²⁷⁹ in which four texts are published for the first time, he shows that some adjustment is needed in the accepted dating of the list of eponymous *stephanephori* for the early part of the first century B.C., completes and corrects a dedication of 54/3 and examines the effect of the Piratic War on Didyma; and in a third ²⁸⁰ he summarises our knowledge of the Sacred Way from Miletus to Didyma and deals with two new and valuable documents of the second century B.C., in which the reconstruction and maintenance of the Sacred Way play a large part. In this connexion he has some valuable remarks on ancient road-building and the relevant inscriptions (p. 93 f.). A Wilhelm discusses ²⁸¹ the text, purport and historical significance of the letter addressed to the city of Amyzon by a king Antiochus, whom he identifies with Antiochus III, and offers ²⁸² a new reading and interpretation of a letter from Orophernes of Cappadocia to Priene. From LYDIA there is little of note to record save the above-mentioned fascicule of the *Inscriptiones Graecae ad res Romanas pertinentes* and C. Picard's monumental work ²⁸³ on Ephesus and Claros, which makes full use of the epigraphical materials. The same indefatigable scholar reports ²⁸⁴ provisionally on his researches in the district of Teos, E. Schwyzer suggests ²⁸⁵ a new interpretation of a phrase in the best-known inscription from that town (*S.I.G.³ 38*), A. J. Evans ²⁸⁶ illustrates a Greco-Roman relief of the *ταρπακαβάφια*, found at Smyrna and now in Oxford, and T. Reinach proposes ²⁸⁷ a new reading in an epigram of Sardis (*I.G. Rom.* iv.

²⁷² *Milet*, l. B. *ibid.* 1922, 100 ff.

²⁷³ W. Vollgraff, *Memnoyene*, xlix. 310;

E. Fraenkel, *Indog. Forsch.* xl. 81 ff.

²⁷⁴ *Rev. Phil.* xlv. 289 ff.

²⁷⁵ *Rev. Ét. Gr.* xxxi. 256 ff.

²⁷⁶ *Memnoyene*, l. 255 f.

²⁷⁷ *Rev. Phil.* xlv. 248 ff.

²⁷⁸ *Ibid.* xlv. 45 ff.

²⁷⁹ *Cinquantième de l'École Française des Hautes Études*, Paris (Champion), 1921, 85 ff.

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²⁸⁰ *Antiquar. A. Acad.* in Wien, 7 July, 1920.

²⁸¹ *Ibid.* 1921, No. 18, p. 5 ff.

²⁸² *Ephèse et Claros*, Paris (Boccard), 1922.

²⁸³ *C. R. Acad. Inscr.* 1922, 229.

²⁸⁴ *Ibid.* xl. 76 f.

²⁸⁵ *J.H.S.* xli. 237 f.

²⁸⁶ *Rev. Ét. Gr.* xxxiv. 318 f.

1910): A. Cuny²⁸⁸ and A. E. Cowley²⁸⁹ have contributed to the study of the Lydo-Archaic bilingual text from Sardis.²⁹⁰ Turning to MYRIA we must note O. Corradini's article²⁹¹ on the functions of the Pergamene ἀστυνόμος, C. Picard's restoration and explanation²⁹² of an inscription of Pergamum (C.I.G. 3538) recording an oracle of Clarian Apollo, C. Michel's discussion,²⁹³ with one important conjectural alteration, of the decree of Scepsis (O.G.J. 6) evoked by Antigonus' letter (*ibid.* 5), a note²⁹⁴ by E. Nachmanson on a text of Cyzicus (S.I.G.³ 798), and W. Vollgraff's re-examination²⁹⁵ of the earliest Cyzicene decree (*ibid.* 4). BITHYNIA is represented by T. Homolle's provisional publication²⁹⁶ of an important decree of Prusa honouring a Macedonian, τεταγμένος στρατηγός τῶν κατ' Ἑλλησποντον τόπων, for political, religious and economic services to the city, probably c. 189 B.C. Nor has PHRYGIA proved much more prolific. Of N. A. Bees' two contributions to Christian epigraphy one²⁹⁷ falls outside the scope of this review, the other²⁹⁸ presents a new reading of a text of Iconium previously published²⁹⁹ by J. R. S. Sterrett and by H. S. Cronin. In a valuable essay³⁰⁰ W. M. Calder restores, translates and discusses the epitaph of Julius Eugenius, bishop of Laodicea Combusta, adds a metrical epitaph of Severus and Eugenius, and argues that the latter was the successor of the former in the episcopate and that both monuments were simultaneously dedicated about A.D. 340. GALATIA is represented by several contributions to the text and history of the Monumentum Ancyranum. Foremost among these is E. Kornemann's book³⁰¹ on the Mausoleum of Augustus, the history of the *Res gestae* and the literary character of the inscription, concluding that 'the *Res gestae*, however slight they naturally were at the start, were from the very outset an integral part of the monumental building on the Campus Martius' (p. iii.); we must also note H. Malcovati's edition³⁰² in the *Corpus Scriptorum Latinorum Paeninsulae*, and the brief critical surveys of recent work on the Monumentum by F. Koepp³⁰³ and A. von Premerstein.³⁰⁴ To A. Salač we owe the first illustrated publication³⁰⁵ of three Sinopean epitaphs now at Constantinople, two of them metrical and the third bilingual: to two of these D. M. Robinson has added³⁰⁶ useful comments and corrections. T. Reinach discusses³⁰⁷ the epigram on the funeral-stele of Chelidon of Zela in

²⁸⁸ *Rev. Ét. Anc.* xiii. 1 ff.

²⁸⁹ *C. R. Acad. Inscr.* 1921, 7 ff.

²⁹⁰ For Lydia cf. *Am. Journ. Arch.* xxvi. 81, *B.C.H.* xlv. 565, 566.

²⁹¹ *Bull. Et. class.* xxviii. 112 ff.

²⁹² *B.C.H.* xlv. 190 ff.

²⁹³ *Rev. Ét. Gr.* xxxii. 388 ff.

²⁹⁴ *Revue*, xvi. 183 f.

²⁹⁵ *Museon*, l. 37 ff.

²⁹⁶ *C. R. Acad. Inscr.* 1921, 261, 269 ff.

²⁹⁷ *Die Inschriftenaufzeichnung des Kodex Sinaiticus* 508 (976), Berlin, 1922.

²⁹⁸ *Byz. Neogr. Jahrb.* iii. 119.

²⁹⁹ *Epigr. Journ.*, 200; *J.H.S.* xxii. 342.

³⁰⁰ *J.R.S.* x. 42 ff.

³⁰¹ *Mausoleum u. Totenbericht d. Augustus*, Leipzig (Teubner), 1921: reviewed *Phil. Week.* xli. 293 ff.

³⁰² *Imp. Caes. Augusti operum fragmenta*, Turin, 1921: see *Bull. com. arch. com.* xlviii. 171 ff. (J. Colin). R. Wirtz, *Das Mon. Anc. Trior*, contains only the Latin text.

³⁰³ *Jahresh. d. philol. Vereins zu Berlin*, viii. (1920), 298 ff.

³⁰⁴ *Phil. Week.* xlii. 135 ff.

³⁰⁵ *B.C.H.* xlv. 354 ff.

³⁰⁶ *Am. Journ. Phil.* xiii. 71 ff.; *Am. Journ. Arch.* xxxi. 80 f.

³⁰⁷ *Rev. Arch.* xii. (1920), 185 ff.

PONTUS; and G. de Jerphanion, assisted by W. M. Ramsay and H. Grégoire, makes additions and corrections³⁰⁸ to published texts from Pontus and CAPPA-DOCIA. An event of outstanding importance is the publication of a second part of the *Tituli Asiae Minoris*,³⁰⁹ edited by E. Kalinka, containing the Greek inscriptions of western LYCIA: this affords a welcome proof that, despite the obstacles opposed by the present economic crisis, the Vienna Academy has not abandoned the task for which preparations have so long been in progress and of which the fulfilment began with the issue, in 1901, of the Lycian texts in the native script. The present section comprises 395 Greek inscriptions, of which no fewer than 148 appear here for the first time. To J. L. Stocks' essay on the Epicurean text from Oenoanda I have already referred. B. Pace publishes³¹⁰ four Lycian inscriptions now in the Adalia Museum, as well as some twenty-five dedications and epitaphs³¹¹ copied in Lycia, and M. Holleaux supports,³¹² in opposition to E. von Stern, his view that *Προλεψαίος ὁ Αὐσιμαχίου*, also called *Εὐρύτορος*, prince of Tebessus (*O.G.L.* 55), is the son of Lysimachus and Arsinoë daughter of Ptolemy I Soter. A. S. Diamandaris gives³¹³ a revised text of an epitaph from Megiste (*C.I.G.* 4301 d.). B. Pace also publishes³¹⁴ seven texts of PAMPHYLIA, now at Adalia, one of which is a decree honouring Caecilia Tertulla *ἱεραρχίῃ τοῦ [Ἰλίου] Σεβαστῆς καὶ Θε[ᾶς] ἀρχηγέτιδος Πόπ[ης]*, thirty-nine inscriptions (including seven Latin and one modern) from the coast between Attalea and Side,³¹⁵ and several Byzantine bullae,³¹⁶ as well as twenty-five Greek inscriptions,³¹⁷ mostly honorary or votive, from Pednelissus in PISTIA: D. Comparetti has dealt³¹⁸ separately with the longest and most interesting document from that site, conferring honours and distinctions on a priestess. R. Monterde publishes³¹⁹ twenty-four inscriptions from Tarsus, Adana, Mopsuestia and other sites in CILICIA, now collected in the Museum at Adana: fourteen of them are new and several (Nos. 4-6, 10) possess considerable value. Further notes on some of these texts have been added by Monterde and E. Michon.³²⁰

IX. FURTHER ASIA

U. Mago's work³²¹ dealing with the text inscribed on the monument of Antiochus of Commagene on the summit of the Nemrud Dagh is still out of my reach. Among the objects described in N. Giron's epigraphical notes³²² are a ring of uncertain provenance inscribed *εὐρύχα ὁ φορέων*, a Greek silver amulet of the fourth or fifth century with magical signs and invocation, an

³⁰⁸ *Mé. Fac. Or. Beyrouth*, vii. 295 f. Cf. *Egy.-Nouvel. Jahrb.* iii. 80 (P. Mous); *O. R. Acad. Inscr.* 1922, 214.

³⁰⁹ Vol. ii. fasc. 4, Vienna (Hölder), 1920: cf. *Phil. Week*, xlii. 751 ff.

³¹⁰ *Anuario*, iii. 17 ff.

³¹¹ *Ibid.* 61 ff.

³¹² *J.H.S.* xli. 183 ff.

³¹³ *AcX. Ep.* 1919, 96.

³¹⁴ *Anuario*, iii. 11 ff.

³¹⁵ *Ibid.* 29 ff.

³¹⁶ *Ibid.* 181 ff.

³¹⁷ *Ibid.* 149 ff.

³¹⁸ *Ibid.* 143 ff.

³¹⁹ *Syria*, ii. 267 ff., 280 ff.

³²⁰ *Ibid.* iii. 170 f., For Augustus see *Herms*, lvi. 153 f.

³²¹ *La série des stèles sur le monument de Nemrud-dagh*, *Pinacolo*, 1921. For Commagene see also *Syria*, i. 183 ff.

³²² *Journ. Asiatique*, xix. (1922), 66 ff.

inscribed Byzantine cross from Aleppo, and four texts from Scythopolis and the environs of Damascus. R. Monterde publishes³²² eighteen inscriptions, one of them in Latin, including a group of epitaphs of the first century of our era from Arethusa, Emesa (Homs) and other places in Emesene, an epitaph from Isryē, N. of Palmyra, two texts from Jibrin (E. of Aleppo), a sixth-century building-record from Berytus, and a *graffito* and a building-inscription from the northern Lebanon; he also suggests a new reading of an important text from Antilebanon. J. B. Chabot edits³²³ a selection of inscriptions, Greek and Palmyrene, from Palmyra: the texts are not printed, though a number of the original stones are reproduced in the plates, but translations into French, accompanied by the necessary comments, are woven into a narrative of Palmyrene history. E. Cuq discusses³²⁴ Julius Priscus, the colleague of Timesitheus as prefect of the Praetorian Guard under Gordian, mentioned in inscriptions of Palmyra (*I.G. Rom.* iii. 1033) and of Philippopolis in the Hauran (*ibid.* 1202), and distinguishes him from a namesake who, according to a text of Philippopolis (*Rev. Arch.* xii. (1908), 474), held the same office under the Philips. The contribution³²⁵ of Heliopolis (Baalbek) is almost negligible, but the work³²⁷ on Damascus by C. Watzinger and K. Wulzinger published by the Germano-Turkish 'Denkmalschutz-Kommando' includes a careful examination of the building-inscriptions of the temple of Juppiter Damascenus and nine unpublished texts from various spots in the city.³²⁸ F. H. Weissbach has given a full account³²⁹ of the Greek inscriptions at the mouth of the Lycus (Nahr-el-Kelb). The archaeological collection of the University of St. Joseph, now incorporated in the Beyrout Museum, contained fourteen inscriptions on stone as well as three small inscribed objects.³³⁰ A dedication Τέχνη Ἀδριανῶς Πι[τρ]ῶν from Berytus, a Sidonian epitaph, a votive inscription to Baal Marcond and Poseidon from Deir el-Qal'a, and a dedication to Zeus from Byblos are edited³³¹ by R. Monterde and R. de Mesnil. The French archaeological missions to Sidon and to Tyre have discovered and published a number of grave-cippi,³³² two amphora-handles and various other texts.³³³ The completion of the publication of the Greek and Latin inscriptions collected in Syria by the Princeton University Archaeological Expeditions is an achievement which must cause legitimate pride to that University and to the members of those expeditions, as it assuredly confers a boon on all epigraphists. W. K. Prentice

³²² *Mélanges de l'Univ. St. Joseph, Beyrout*, viii. 84 ff.

³²³ *Choix d'Inscriptions de Palmyre*, Paris, 1922. Cf. *Syria*, iii. 266 f.

³²⁴ *C. R. Acad. Inscr.* 1922, 184 ff.

³²⁵ *Annuaire*, iii. 251 f.; T. Wiegand, *Beibl. z. J. Berlin* (de Gruyter), 1921, pp. 26, 29, 39 ff., 43.

³²⁶ *Damascus*, Berlin (de Gruyter), 1921, pp. 28 ff., 103, 107 ff.

³²⁷ For Damascus add *C. R. Acad. Inscr.* 1922, 40 ff.

³²⁸ *Die Denkmäler u. Inschriften an der Mündung des Nahr-el-Kelb*, Berlin (de Gruyter), 1922, 28 ff. Cf. P. Thomsen, *Phil. Week.* xlii. 950 f.

³²⁹ *Syria*, iii. 171 ff. Cf. *C. R. Acad. Inscr.* 1922, 81.

³³⁰ *Mé. Mus. Or. Beyrout*, vii. 282 ff. Cf. C. Clermont-Ganneau, *C. R. Acad. Inscr.* 1921, 233.

³³¹ *Syria*, i. 237 ff.

³³² *Ibid.* iii. 8, 21, 115 ff.

has brought to a close the section dealing with North Syria by publishing³³⁴ the sixty-three Greek inscriptions of the Djabel Sim'an, of which only six were previously known, while E. Littmann and D. Magie have completed that on South Syria³³⁵ by giving us the 130 Greek and two Latin texts of the Ledja, mostly building-records and epitaphs, of which 103 appear here for the first time. Each volume is provided with the ample indexes essential to its usefulness. From Palestine also there is much to report. The excavations of N. Slousch at Tiberias (El-Hammâm) have brought to light two inscribed sarcophagi,³³⁶ and D. G. Hogarth has published³³⁷ three texts, of which two are honorary inscriptions of the first century A.D., discovered at Ascalon. In a paper³³⁸ which is inaccessible to me, W. J. Moulton corrects and comments on a text of Caesarea; E. Nachmanson proposes³³⁹ a restoration of an inscription from Joppa relating to Antoninus Pius. P. Thomsen, who in the past has rendered valuable service to Palestinian studies, has compiled a Corpus³⁴⁰ of the Greek and Latin inscriptions of Jerusalem, prefaced by a useful introduction tracing the history of archaeological investigation in Jerusalem, classifying the inscriptions and indicating their value; the actual texts, republished with bibliography and commentary, number 123, of which rather more than half are Latin and most of the Greek date from the fifth or later centuries. To these we must add an inscription discovered³⁴¹ on Mount Ophel at Jerusalem in 1914 but not published³⁴² until 1920: it tells how Theodotus, son of Vettienus, priest and chief of the synagogue, built the synagogue for the reading of the law and for the teaching of the commandments, and the hostel and the chambers and the water-installation, as a lodging for strangers who required it. The text has been discussed by its discoverer, R. Weill³⁴³ by T. Reinach³⁴⁴ by C. Clermont-Ganneau³⁴⁵ by A. Marmorstein³⁴⁶ with special reference to the old Rabbinic writings, and, in great detail, by L. H. Vincent³⁴⁷; G. M. FitzGerald has provided a convenient survey³⁴⁸ of the arguments and conclusions of these scholars regarding the date and significance of the text and the relation of this synagogue to that of the *libertini* mentioned in *Acts*, vi. 9.

A mosaic floor has been unearthed at Eleutheropolis, in which the figures of spring, summer and earth are indicated by Greek titles.³⁴⁹ The 'Wissen-

³³⁴ *Princeton Univ. Arch. Exped. to Syria*, Div. III. Sect. B, Part 6, Leyden (Brill), 1922.

³³⁵ *Ibid.* Sect. A, Part 7, 1921.

³³⁶ *Rev. Bibl.* xxx. 442, xxxi. 121 f.; cf. *Pal. Expl. Fund Q. S.* 1921, 183 ff.

³³⁷ *Pal. Expl. Fund Q. S.* 1922, 22 f.

³³⁸ *Ann. Amer. School Oriental Research in Jerusalem*, i. 66 ff. Cf. *Rev. Arch.* xiii. (1921), 130.

³³⁹ *Erasm.* xvi. 181 f.

³⁴⁰ *Zett.* D. Pal. Verrina, xliii. 128 ff., xlii. 1 ff. Cf. *Rev. Bibl.* xxxi. 477, note 1. See the postscript to this article.

³⁴¹ *C. R. Acad. Inscr.* 1914, 333 f., quoted *Rev. Bibl.* xii. 280.

³⁴² *Rev. Et. Juives*, lxx., Annuaire, Pl. XXVa.

³⁴³ *Ibid.* lxxi. 30 ff.

³⁴⁴ *Ibid.* 46 ff.

³⁴⁵ *Revue Bleue*, Aug. 21, 1920, *C. R. Acad. Inscr.* 1920, 187 f.; *Syria*, i. 190 ff. Cf. S.A. Cook, *Pal. Expl. Fund Q. S.* 1921, 22 f.

³⁴⁶ *Pal. Expl. Fund Q. S.* 1921, 23 ff.

³⁴⁷ *Rev. Bibl.* xxx. 247 ff.

³⁴⁸ *Pal. Expl. Fund Q. S.* 1921, 175 ff. Cf. *Zett.* D. Pal. Verrina, xlii. 143 f. (and bibliography), xiv. 29 f.

³⁴⁹ *Rev. Bibl.* xxxi. 262, Pl. VIII. X.

schaftliche Veröffentlichungen des deutsch-türkischen Denkmalschutz-Kommandos²⁹⁰ include an account of Sinai by the general editor, T. Wiegand, in which are published three late epitaphs and a fragment from Hafir el-'Amlja,²⁹¹ and a valuable Corpus of the Greek inscriptions of Palaestina Tertia by A. Alt,²⁹² who has also summarised the archaeological and epigraphical work carried on in Palestine by Germans during the War.²⁹³ C. Clermont-Ganneau's article²⁹⁴ on the procurators of the province of Arabia makes use of Greek inscriptions from Batanea and Sik-en-Namala, near Petra, and C. Diehl's paper²⁹⁵ on an inscription of Ezerouk in Armenia corrects the reading given by Strzygowski.

X. AFRICA

I omit the Greek inscriptions of Egypt, on which I report periodically in the *Journal of Egyptian Archaeology*. The remarkable discoveries in the Cyrenaica published by E. Ghislanzoni and G. Oliverio in the *Notiziario Archeologico* issued by the Italian Colonial Ministry were alluded to in my last Bibliography (*J.H.S.* xli. 65 f.), but call for a somewhat fuller mention. They comprise²⁹⁶ some signs cut on the top of a milestone of Hadrian on the Cyrene-Apollonia road, a bilingual milestone of Claudius, two copies of a *cippus* with a bilingual inscription of A.D. 71 commemorating the restoration to the Roman people of some *ager publicus* which had been left to Rome by Ptolemy Apion, and a group of twelve unpublished texts of Cyrene and Berenice,²⁹⁷ including the record of the refounding of Claudopolis by Claudius Gothicus and an honorary inscription erected to Hadrian and Antoninus Pius in the closing months of Hadrian's reign.²⁹⁸ Eleven texts, mostly votive or sepulchral, from Cyrene, Apollonia, Ptolemais, Teuchira and Berenice were published by Ghislanzoni in a preliminary survey²⁹⁹ of the work accomplished in this region. The inscriptions from Thapsus,³⁰⁰ Leptis minor (Lemta),³⁰¹ Carthage,³⁰² Tunis,³⁰³ Thuburnica,³⁰⁴ Thugga³⁰⁵ and Caesarea (Cherchell)³⁰⁶ are all brief, and most of them occur on amphora-handles, gems, *bullae* or other small objects. Of greater interest is the inscription on a sarcophagus found at the ancient Lambiridi, on which J. Carcopino bases a long discussion of African

²⁹⁰ Berlin (de Gruyter). See *Syria* ii. 260 f. (R. Dussaud); *Phil. Week.* xli. 903 ff. (P. Thomsen).

²⁹¹ *Sinai*, pp. 106, 108.

²⁹² *Die griech. Inschriften der Pal. Terr. südlich der 'Araba*. Cf. *Phil. Week.* xlii. 590 f.

²⁹³ *Zeits. D. Pal.-Verains*, xlii. 93 ff., esp. 104 ff.

²⁹⁴ *Cinqsième année de l'École Pratique des Hautes Études*, Paris (Champion), 1921, 161 ff.

²⁹⁵ *C. R. Acad. Inscr.* 1920, 215 ff.

²⁹⁶ *Not. Archaeol.* ii. 159 f., 165 ff.

²⁹⁷ *Ibid.* 181 ff., 195 ff.

²⁹⁸ Cf. *J.H.S.* xli. 238; *Ann. Jour. Arch.* xxvi. 370 f.

²⁹⁹ *Notiziario archeol. sulla Cirenaica*, Roma, 1913.

³⁰⁰ *Bull. Arch.* 1920, cxix.

³⁰¹ *Ibid.* 1919, 216 ff.

³⁰² *Ibid.* 1919, cxliii, clxxiv. f., 218 ff., 1920, lxxii.; *Bull. Soc. Nat. Ant.* 1919, 138, 1920, 288, 1921, 168 f., 161 f.; *C. R. Acad. Inscr.* 1920, 198.

³⁰³ *Bull. Arch.* 1920, cxx. f. Cf. *Rev. Arch.* xvi. (1922), 77 ff.

³⁰⁴ *Bull. Arch.* 1919, cliz.

³⁰⁵ *Ibid.* 3 ff.

³⁰⁶ *Bull. Soc. Nat. Ant.* 1921, 179.

Hermeton.³⁶⁷ The magnificent volume³⁶⁸ which inaugurates the complete collection of Latin inscriptions from Algeria and thus practically forms a revised edition of the corresponding sections of the *C.I.L.* contains over 4000 texts, among which two are bilingual and ten—from Hippo Regius, Thibursicu, Madauros and elsewhere—Greek (see Index, p. 447).

POSTSCRIPT.—Since the foregoing article was in print, the concluding section³⁶⁹ of Thomsen's *corpus* of the Greek and Latin inscriptions of Jerusalem has come into my hands. It contains 149 texts classified as epitaphs, ossuary-inscriptions, inscriptions on small objects of metal, stone or clay, *addenda*, and doubtful or spurious texts, together with full indexes and tables of concordance. I have not yet had access to S. Klein's *corpus*³⁷⁰ of Jewish inscriptions from Palestine, which, according to Thomsen,³⁷¹ is a useful, yet by no means flawless, collection of 183 epitaphs and 18 synagogue-inscriptions, arranged geographically and accompanied by brief comments.

MARCUS N. TOD.

³⁶⁷ *Rev. Arch.* xv. (1922), 211 ff.

³⁶⁸ *Inscriptions Latines de l'Algérie. I. Inscriptions de la Proconsulaire*, par S. Gsell, Paris (Champion), 1922.

³⁶⁹ *Zeits. D. Pal.-Vereins*, xlv. 90 ff.

³⁷⁰ *Jüdisch-Palästinisches Corpus Inscriptionum (Ossuar-, Grab- und Synagogenschriften)*, Berlin, 1920.

³⁷¹ *Zeits. D. Pal.-Vereins*, xiv. 84; cf. xlv. 143.

MORE RELICS OF GRAECO-EGYPTIAN SCHOOLS

SOME further light has been thrown on one of the educational problems suggested by the ostraka published in this Journal in 1908 (Vol. XXVIII, p. 121) from another ostrakon acquired at Luxor by Dr. Alan Gardiner shortly after that date and given by him to me. This, if we may judge by the peculiar staining of the surface, is another relic from the same scholastic rubbish heap as most of the ostraka previously described; and it bears a second copy of one of the exercises found on them. A comparison of the two copies is interesting.

In the first place, the new ostrakon shows that Nos. XV. and VIII. of the old series belong together. The shard appears to have been broken in two anciently, as the edges of the break are rubbed and dirty, and the two pieces are stained differently, as if they had lain in separate parts of the rubbish heap; but, though these circumstances helped to prevent their relationship being noticed previously, there can be no doubt that the two belong together. Their union makes a revision of the transcript, especially along the fracture, possible, and also explains some obscure points in the arrangement.

Copies of the two texts are given: A is the combination of XV. and VIII., B the new ostrakon. A is now practically complete, except for a chip off the lower left hand-corner; B has lost a considerable piece on the left, and a small one on the right, side at the top of the text.

The rhythmic movement of the whole text points clearly to an attempt, though not a very successful one, at iambic trimeters. This was noticed by P. Beudel (*Qui ratione Graeci liberos docuerint* . . . , Münster, 1911, p. 57) in regard to the part of A contained in XV., and the completion of the document makes it still more evident. But there are curious similarities in error, and at the same time variants, in the two versions, which render the explanation of their relationship difficult.

The ostraka do not look as if both had been written by the same hand, even if allowance is made for the wide margin of variation in a schoolboy's uncial: the letters in B are better formed, compact and with firm strokes; in A the writing is large and straggling, badly aligned, and deteriorating as it goes on, though part way through his exercise the writer seems to have tried a new pen, without improving his results. We may assume as most probable that the two copies were made by different scholars.

They can, however, hardly be independent reproductions of an original given to the boys: if a passage had been dictated or recited, which the scholars were expected to write out from memory, it would presumably have been

continuous in sense and correct in metre, and two boys working independently would not have broken off at exactly the same points in the clauses or fallen into the same errors of scansion. On the other hand, neither is a slavish copy of the other, as may be seen from a detailed comparison.



The combination of the two copies produces a text which may be shown thus:

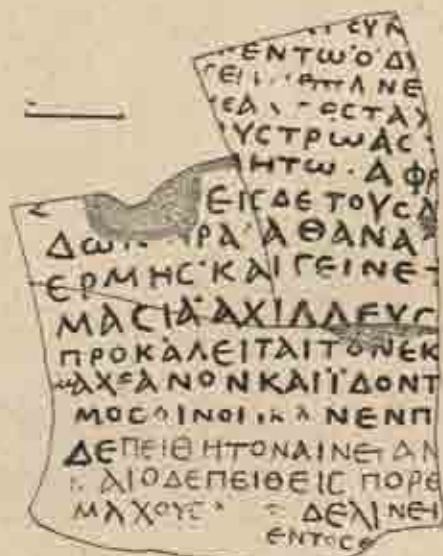
Πλάσσω ὁ Προμηθεὺς τᾶλλα θηρίων γένη
 οὐδὲν γυναικῶν
 μή τὸν Δία τὸν μέγιστον, εὐ γὰρ Εὐρεπίδης
 εἶρηκεν τὴν γυναικείαν φύσιν
 πάντων μεγίστην τὴν ἐν ἀνθρώποις κακῶν
 ἂν μὲν γὰρ ἐπιτύχη τις εὐτυχεῖν βίῃ
 μόχθων καὶ πόνων ταύτην ἔχων
 ἂν δ' εἰς κακὴν τε καὶ πονηράν ἐμπίσῃ
 χεῖμαίεται ἅπαντα διὰ τέλους τε τὸν βίον

A (i. e. the writer of text A) corrected his copy at several points: in l. 4 he struck out the superfluous ϵ in Εὐρεπίδης, but subsequently replaced it;

in l. 7 he had missed three words, ἐν ἀνθρώποις κακῶν, which he wrote, upside down, at the bottom of the sherd (a second hand made a correction of the same passage just above the last, but supplied ἀνθρώποις κακῶν ἐν instead of ἐν ἀνθρώποις κακῶν); in l. 8 the two letters ΧΕ, left out of εἶτον, are added above the line. There are still some mistakes of spelling left: in l. 4 the final letter of Εἰρεπιδος is omitted; in l. 7 the final letter of μεγίστη; in l. 9 πᾶλλον (or πόρῶν) is written for πόρῶν, and in l. 12 ΚΕΙ for ΧΕΙ. There are no corrections in B, whose writer might be supposed to have profited by the corrections of A: his version—ΤΩΝΕΔΝΘΡΩΠΟΙΣ—looks as if he had been following A's—ΤΩΝΕΔΝΜΕΝ—but had realised the omission in A in time to escape any error beyond ε for ΕΝ: and ΕΥΤΥΧΕ suggests a misunderstanding of the correction in A: he has avoided the uncorrected mistakes in A's lines 4 and 12, and shares that in line 7; but he has some of his own, πόρῶν for πόρῶν and παμπλᾶν for παμπλᾶν.

A solution which seems to account adequately for most of these phenomena has been suggested to me by Mr. Christopher Cookson. He thinks that the boys may have been working together, doing exercises in scansion, somewhat after the plan which he remembers to have been followed in his school-days for introducing boys to iambs, possibly with the equivalent of blackboard demonstrations by the master: thus the ending at γυναικῶν might be an exercise in the penthemimeral caesura, and διὰ τέλους an example of how to fit in a pyrrhic word.

The publication of these corrections has been delayed by the necessity of comparing the writing of A with that of B, and this had to await the return from loan of A, together with most of the other ostraka described in 1908. Two of the latter, Nos. XII. and XIII., have been fitted together with the assistance of a third fragment not previously identified; and the resultant text is



Evidently here we have a reference to the argument of *Iliad* XX.; and the middle part can be reconstructed sufficiently to give a measure of the original length of the lines. The catalogue of deities presumably ran

ΕΙC ΜΕΝ ΤΟ]ΥCΤΡΩΛCΑ [ΡΗC' ΑΠΟΛΛΩΝ'
 ΑΡΤΕΜΙC']ΛΗΤΩ' ΑΦΡ[ΟΔΙΤΗ' ΞΑΝΘΟC
 ΙCΤΑΝΤΑΙ]ΕΙC ΔΕ ΤΟΥCΑ[ΧΑΙΟΥC ΠΟCΕΙ
 ΔΩΝ' ΗΡΑ' ΑΘΑΝΑ']ΗΦΑΙCΤΟC'
 ΕΡΜΗC'

It may be noted here that while sorting some fragments from Oxyrhynchus I found another bit of III., which has been added to the main portion in the British Museum. It is from the top right-hand corner, and contains the letters

ΒΥΒΩ

ΓΩ

ΔΩ

The final resting-places of the ostraka published in 1908 should be recorded, as Ziebarth, who reprinted the texts of I., II., III., IV., and VII. in *Aus der antiken Schule* (Lietzmann's Kleine Texte series, Bonn, 1910), appears to think they are all in the British Museum, which is true only of III. Nos. I., IV., VI., X., XII., XIII. and XVI. have gone to the Royal Ontario Museum, Toronto; Nos. II., V., VII., VIII., IX., XI., XIV., XV. and XVII., together with the new ostrakon B, to the Bodleian.

J. G. MILNE.

THE EARLY GEOGRAPHY OF SOUTH-EASTERN ASIA MINOR

THANKS to the cuneiform tablets discovered at Boghaz-Keni, the capital of the Hittite empire, the thick darkness which hung over the geography of eastern Asia Minor in the pre-classical age is at last being dispelled. And therewith several questions relating to the culture and history of prehistoric Greece are likely to be cleared up.

At Kara Eyuk, also called Kul Tepè, 'the Burnt Mound,' eighteen kilometres N.E. of Kaisariyeh and near the village of Manjé-su, many hundreds of tablets have been found written in a West-Semitic dialect, differing but little from the vernacular of Assyria as distinct from Babylonia, and belonging to the age of the Babylonian Third Dynasty of Ur (2400-2200 B.C.). The name of the city was Kanis or Ganiš, and it was a Babylonian colony, defended by the Assyrian soldiers of the Babylonian empire, but chiefly occupied by Babylonian and more especially Assyrian merchants, who worked the mines of silver, copper and lead in the Taurus and exported the metal to the civilised world. The great Babylonian firms had their 'agents' there; good roads had been made throughout the whole region, in connexion with the trade-route from Babylonia past Nineveh to Cappadocia, and traversed by postmen whose letters were in the form of clay tablets. I may remark incidentally that one of the places from which the copper came was Khalki, perhaps meaning 'Wheat'-city (Contenau: *Trente Tablettes cappado-ciennes*, xvi. 12, 131), which probably gives us the origin of the Greek Χαλκός. One of the Hittite deities mentioned in the Boghaz Keni texts bore the same name. The Babylonian colony in Kanis and the mining localities introduced the cuneiform script and Babylonian civilisation into Asia Minor; Greek tradition recognised the fact with its legends of Semiramis and the Herodotean statement that Belus and Ninus were ancestors of the Heraclid dynasty of Lydia. The civilisation was very advanced, and there was even a sort of ladies' college in the neighbourhood of Kanis.

In the flourishing days of the Assyro-Babylonian colony the leading native state was Kursaura, a name contracted in later days into Kussar. Kursaura is evidently the Garsaura of classical geography. The language spoken in it was mainly prefixal, and as its inhabitants are called 'Hittites' in the texts, it has been agreed to term it Proto-Hittite. In the sixteenth century B.C. its kings established the Hittite empire and transferred their capital from Kursaura to Boghaz Keni, which was entitled *Khattu-sas*, 'The Hittite city.' Since the word *Khattu* signified 'silver' in Proto-Hittite, we may infer that the Hittites originally derived their name from the silver which they worked

and exported. As most of the silver used in Egypt came from Asia Minor, it is probable that the Egyptian *ḥet* 'silver' was an Asianic loan-word.

About 2750 B.C. Pamiba, king of Kursaura, combined with Kanis in resisting an invasion of the country by the famous Babylonian conqueror Sargon of Akkad. According to Sargon himself the object of his campaign was to protect the 'agents' (*dankari*) of the Babylonian firms at Pirsakhandia, from whence he brought back to Babylonia various northern plants, vines, fig-trees, rose-trees and the like. Dr. Weidner has pointed out that Pirsakhandia is the Pirsakhati of the Kara Eyuk or Cappadocian tablets, while I have shown that it is the Parsukhanta of the Boghaz Keri texts. Between Kanis and Pirsakhati constant intercourse took place, letters and a species of cheque passing backwards and forwards between the two cities. Sargon tells us that Pirsakhandia was on the summit of a mountain, and in the Boghaz Keri texts Parsukhanta is called 'Parsukhanta of the Mountain,' and is further stated to have been in the neighbourhood of Tyana. The name means 'the place of horses,' or 'Horse-repository,' from the Hittite *paras*, 'horse' (from which the Semitic *faras* was borrowed), and I therefore propose to identify it with the modern Farash, where there are old iron-mines on the road from Kaisariyeh and Fraktin, with its Hittite hieroglyphic monument, to Sis on the one side and Adana on the other. Sir William Ramsay has shown that in Asia Minor the modern topographical names repeatedly represent those of the pre-Hellenic epoch, which were officially disused in the classical period. Parsukhanta, however, must have lost all importance before the Assyrian age; its mines had doubtless been worked out.

About 1800 B.C. a king of the Hittites of Kursaura conquered the later Tyanitis and divided it among his sons. We are told that they were set to govern the following 'great fortresses': Khubis-na, Tuwanuwa, Nenassa, Landa, Zallara, Parsukhanta and Lu[khu]na (*Keilschrifttexte aus Boghazköi*, III. No. 1). From the Assyrian inscriptions we learn that Khubis-na was the Kybis-tra of the classical writers, *tra* (probably for *-teira*, *-taura*, *-tera*, in Assyrian transcriptions, *-tira* and *-dara*,¹ and meaning 'city') taking the place of the suffix *-na*, 'land of.' Tuwanuwa, also written Tuwanuwa, is Tyana. Nemessa would correspond with a Greek Nanessos, and it is therefore possible that it was the Nanessos, 'the city of Nana' or 'Nina' of Ptolemy. Mursilis, the grandson of the king who thus made himself master of the route to the Gulf of Antioch, invaded Babylonia in the reign of the last king of the Amorite dynasty of Khammurabi, and claimed to have captured Babylon. Telibinus, who reigned shortly after him, couples 'Parsukhandas of the Mountain' with Parminiya, and associates it with the cities of Iyatumas and Wasuwattas and the river Khulayas.

The Khulayas must have been the Pyramus. This is indicated in a treaty between the Hittite king Dudkhaliyas and Ulmi-Tarkhus, the king of Tarkhuntas, a country which lay to the north and north-west of the Gulf of Antioch.

¹ As in *Khata-tira* and *Khobum-dara*.

Here the boundaries of Tarkhuntas are defined as follows (*Keilschrifttexte aus Boghazköi*, IV, No. 10):—

'From the frontier of the military post in the city of Biassas (modern Piyas, classical Baine) to the city of Arimmattas is the frontier, Arimmattas belonging¹ to Biassas; from Mount Khuduwardas the Aleppian territory is the frontier, the Aleppian territory belonging to the river Khulayas; the district of Sawansas behind and above the stone monument (= cairn) of Ursu (Arsus, classical Rhossus) is the frontier; from the city of Ussas (Issus) the city of Zarâtas is the frontier, the city of Zarâtas belonging to the land of the river Khulayas; from the city of Wanzataruwas the city of Kharazuwas is the frontier, the city of Kharazuwas belonging to the city of Ussas. From the stone monuments (= cairns) on Mount Kuwalyattas to the stelae in the city of Suttas, was the frontier. But now I, the great king, have built the city of Santimmas,² and the city of Santimmas belongs to the river Khulayas; and from the cities of Wanzataruwas and Ku . . . senas, Mount Arlanda and the city of Alanas is the frontier. Now Alanas belongs to the country of the river Khulayas. The water of Mount Arlanda belongs to both the Hittite territory and the land of the river Khulayas together. From the city of Sininuwantu Mount Lûlas is the frontier. The city Nina-intas belongs to the land of the river Khulayas. The arms of the gold-stick (a Hittite official) which are behind (it) belong to the Sungod (the Hittite king). From the suburbs (?) of the city of Zarnusas is the frontier. The suburbs (?) belong to the river Khulayas. From the city of Zar(m)usas Mount Sariammis with military post and water for a mill is the frontier. The mill of the city of Saliyas is the frontier. Now the city of Saliyas belongs to the Hittites. And the numerous towns of the city of Walwaras which appertain to Walwaras on the road to Bit-Khatti (the Hittite territory), the cities, namely, of Matâs, Sankhadas, Larimmas, Saranduwas, Daddassis, from the frontier of the city of Saranduwas to this place where the arms are stationed,—all these belong to the land of the river Khulayas. From the districts of Walmammas and Waltan, the cities of Osawalas, Allubntas,³ (and) Khukhkhuras are the frontier. These cities belong to the land of the river Khulayas.'

Khula signifies 'greenish-yellow' and gave a name to another river, the Khula-na, which is identified by Ferrer and Hrozny with the classical Iris, now the Yeshil-Irmak or 'Green River,' the Halys being the 'Red River,' the modern Kyzyl-Irmak.

In the upper reaches of the Saros was Kizzuwadna, which Hommel some years ago suggested was the original of the Old Persian Katapatuka, the Cappadocia of classical writers. The capital of Kizzuwadna was Qumani, the classical Komana, as we learn from a text of the prophetess Mastigga, who describes herself as being of the country of Kizzuwadna and the city of Qumani

¹ The Hittite word signifies literally 'is the property.' Here it must refer to territorial possession.

² Santimmas is a derivative from the

name of the Cilician god Santa or Sandas.

³ The classical Olymbros, Illudri in the Assyrian inscriptions.

(*Keilschrifttexte aus Boghazköi*, II. No. 30). According to Strabo the goddess Ma of Komana was served by armed priestesses.

Gilicia west of the Kydnos was the kingdom of Arzawa, the name of which lingered into the classical age, since two settlers in Kastabala (*Budrun*) bear the name of 'Αρζαβας, 'the Arzawan' in an inscription discovered by Bent (*J.H.S.* xi. 2 (1890), p. 250). It was situated on the sea-coast and its position is defined in an inscription of Khattusilis III. (*Keilschrifttexte aus Boghazköi*, VI. No. 28). Here we read that 'the Arzawan enemy from the Lower (= Maritime) Country came, and he seized the Hittite territories, making the cities of Tyana (Tāwanuas) and Hydā (Udāa) the frontier.' At this time the Hittite capital was in Garsaura. To the east were the Gasgas or Kaskians, who left their name in Kiskias; their original seat had been in the neighbourhood of Sivas, but they descended southward conquering Hittite territory and making Neiasasi, east of Tyana, the frontier between themselves and the Hittite kingdom.

Westward the limits of Arzawa extended to the river Kalykadnos, called the Astarpa in the Hittite texts—a name which indicates the presence of an Indo-European people in the neighbourhood. Mursilis II. describes a campaign he made against the Arzawan king, whose stronghold Apāsas he captured as well as Walma on the Astarpa. The king of Arzawa fled 'across the sea,' apparently to Cyprus, while the Hittite invader proceeded to besiege the Arzawan army in the city of Pūrandā. After its submission Mursilis marched to the country of Mirā, which adjoined the rivers Astarpa and Sākha. The latter would have been the river flowing from the west into the Kalykadnos, the classical name of which is unknown.

From another text, which is unfortunately much mutilated (*Keilschrifttexte aus Boghazköi*, IV. No. 3), we learn that the countries of Mirā and Kuwaliya adjoined one another and were placed by Mursilis under the same ruler. He thus defines their boundaries: 'On this side the city of Maddūnas, a fortress of Dudkhaliyas, is the frontier, and on your side the military post of Oinoanda (Wiyana-wanda) is the frontier; accordingly you must not lay claim to jurisdiction (1) in the city of Aura (= Olba); on your side the river Astarpa and the land of Kuwaliya are the frontier; they shall be your territory; you must defend them; and from the river Astarpa and the river Siyanta no city whatsoever shall you occupy; if you occupy any city you will break your agreement with me, and I will come as an enemy and destroy everything.'

Wiyana-wanda, 'the vineyard,' was a not uncommon name for a city. We hear of one in the neighbourhood of the Gulf of Antioch (where it corresponds with the classical Oiniandos), and another in the Hittite kingdom. As for Aura, Sir W. M. Ramsay has long ago pointed out that the native name of Olba was Ura, Urwa, and it is interesting to have the cuneiform verification of this. The Siyanta may have been the river which flowed into Lake Trogitis.

* Or perhaps 'you must not block the exit from the city.' The noun may be read either *khatrian* 'writing' or *parian*

'ambit,' and the significance of the verb is doubtful.

North of Mirā and Kuwaliya was Khaballa, a name which must be preserved in the classical Kabalis and Kaballa. Mirā is found in the personal name *Mipa-sīṭas* in an inscription discovered by Heberdey and Wilhelm on the site of Korakesion; for the second part of the compound cp. *Ὀρσαλα-σίῃτα*.⁹ Another personal name found at Korakesion (as well as elsewhere) is *Κουάλις*, 'the Kuwalian.' *Kuwalis* or *Kualis* is a variant of *Kuanis*, 'the consecrated one,' with the interchange of *l* and *n* which is a characteristic of the Asianic languages and has caused me to divide them into the *l*- and the *n*-languages. The Hittite hieroglyphic inscriptions have shown that the native name of Ikonion, written *Kaonila* in an inscription discovered by Ramsay at Konia, signifies simply Hierapolis, 'the Holy City,' and I think we may therefore conclude that the Hierapolis from which the Kuwaliya of the Hittite texts was derived was Ikonion. Consequently while Arzawa lay on the east side of the Kalykadnos and included Olba, Mirā, Kuwaliya and Khaballa lay to the west of it, Mirā being the coastal region and Kuwaliya stretching northward to Konia.

The high-road of trade and war ran across the central plateau of Asia Minor from Garsaura to Antioch of Pisidia and Prynnessos. Mr. T. W. Allen (in his *Homeric Catalogue of Ships*) has made it clear that the maritime route along the north coast of Asia Minor did not exist in the Homeric period, the lines relating to it (*Iliad* II. 853-5) being a later interpolation, and the cuneiform texts make it equally clear that the northern portion of the Anatolian peninsula was but little known in Hittite times, and was the home of barbarous tribes. The two routes from east to west were the central one across the plateau and the sea-route of the Mediterranean.

The Hittite language of Boghaz Keui was that of Arzawa and Kizzuwadna, called Luian in the texts, largely mixed with elements borrowed from Assyrian and Indo-European. The original Hittite spoken in Garsaura, now termed Proto-Hittite, was mainly a prefixal language and very complicated. It is called 'Hittite' in the texts, and the Garsaura royal family after the foundation of the Hittite empire still continued to use Proto-Hittite names.

The Hittites themselves were originally a body of military adventurers, like the Normans in Europe, who owed feudal service to their superiors and were rewarded with lands in the conquered territories. This is shown by one of the Hittite laws where we read (*Keilschrifttexte aus Boghazköi*, VI. Nos. 3 and 6):—

'Formerly the soldiers of the Manda (Umman Manda), the soldiers of the Sāla, the soldiers of the land of Tabaḫ-lū (= Tibareni), the soldiers of the city of Khatrā, the soldiers of the city Zalpa,⁷ the soldiers of the city of Tas-kheniya, the soldiers of the city of Klummuwa, the archers, the Amazons, (literally, MEN + WOMEN), the ordinary men (and) the aborigines (literally

⁹ Cp. the name of Urballa of Tukhan in the time of Tiglath-pileser III. The termination *-sīṭas* may be merely the double suffix *-as-as* of the Hittite language, *Mira-sīṭas* being 'the Mirian.'

⁷ Repeatedly mentioned in the Cappadocian tablets of Kara Eyuk, and therefore probably in the neighbourhood of Mount Argæus.

early-occupants), paid taxes; they did not form part of the community; they held no property.

'When the Hittite feudal retainers (*amili illi*) came, they owed feudal service to the royal father, but no one received pay, and it was said to them: "Feudal retainers are you; the assembly of the royal father in the morning you constitute; then you leave it."

'To garrison the royal road they marched; the vineyard they planted; none of the nobles who were lauded proprietors paid taxes; they formed the community.'

The capital of Garsaura before the chief seat of Hittite power was moved to Boghaz Keui was Arinna, a name which signifies the City of 'Wells.' This is evidently the *Φρίατα* of Ptolemy, which he gives as the leading city of Garsauria.

The name of Tarsus does not appear in either the Tel-el-Amarna or the Boghaz Keui tablets. It is met with for the first time in the inscriptions of the Assyrian king Shalmaneser III in the ninth century B.C., where it is written *Tarzi*. Was Arzawa the earlier name of Tarsus? It is mentioned next to Adania (Adana) in one of the Boghaz Keui texts, and it bears some resemblance to the name Orsa-nes. Genesis (p. 67) reports a legend relating to the foundation of Tarsus which has a bearing upon the subject. The city, he says, ὑπὸ Ἐριχθονίου κτίσεται ἐκτεύχεται κατεσχέθη δὲ παρὰ Ὀρσάνου, ἐπὶ τῶν Τετάνων, καὶ ἐπικτίσεται εὐλήχει. It would seem that the name Tarsus must have originated after the overthrow of the Hittite empire in the twelfth century B.C., and the conquest of Arzawa and Cilicia by the Kaskians, Moschians and other tribes of the north-east who founded the Cilician empire of Solinus.

A. H. SAYCE.

A FEMALE HEAD OF THE BOLOGNA TYPE

[PLATE I]

This head was purchased for the Ashmolean Museum in 1920. It had belonged to the late Lord Downe, who bought it, probably at Rome, about 1800. It remained in his possession at Cowick Hall in Yorkshire until his death, when his widow removed it to her house in London. Since that, it has been in the hands of members of the family.¹

Only the nose is restored, but the face has been somewhat worked over, as is evident from its smoothness in comparison with the hair. Just in front



FIG. 1.—THE BOLOGNA HEAD.

of the left ear there is a trace of a curl in relief, which has been almost obliterated; and as there is a curl in the corresponding place on the Bologna head, to be presently cited, this would seem to show some rubbing down. The eyes also seem to have had some of their expression eliminated by over-working. On the other hand, there are several places on the face and ears where the surface has been only slightly abraded, and the grain of the marble shows clearly. It appears to be Pentelic, with small crystals showing here and there.

Any archaeologist, seeing this head, will at once notice its close likeness to the very beautiful and much-discussed head of Athena at Bologna (Fig. 1).

¹ I owe these particulars to a kind communication from Mrs. Brooke Hunt, the last owner. The purchase was made possible

by a generous contribution of Sir Arthur Evans.

which was regarded by Furtwängler as a copy of the Athena Lemnia of Pheidias. The hair in particular bears a close likeness to that of the head at Bologna, an almost unique treatment. The wavy locks come down on both sides from the parting to the broad band by which they are confined, and pass along the line of the forehead. At the back the hair is done up in a roll, as in the Bologna head. The features of the face in general are like those of the Bologna face; their measurements are almost the same, and the shape of the face is identical. The mouth also is closely similar, and very beautiful.

In the *Meisterwerke* (p. 30) Furtwängler gives the following measurements of the Bologna head:

Taenia to bottom of nose	124 mm.
Inner end of eye to chin	124 mm.
Length of nose, bottom to eyebrows	70 mm.
Bottom of nose to chin	70 mm.

These measurements are omitted in the English translation. I have compared our head, and find its measurements identical. Even the depth from forehead to back is the same. The details of hair are alike in the two heads. Yet the attitude, and the expression, which largely depends on the attitude, differ markedly. The Bologna head, turned towards the right shoulder, has a haughty and slightly peevish expression. The Ashmolean head, on the other hand, is somewhat wanting in expression, and it is turned full to the front. But the greatest contrast between the two heads is to be found in the treatment of eyes and neck. The eyebrows and eyelids of the Bologna head are sharply cut, as in a bronze figure, the eyes filled in with paste. The region of the eyes in the Downe head is softer and less emphatic. The neck of the Bologna head is simply treated, of severe fifth-century type: the neck of the Downe head is treated in the manner of the fourth century or later; it is fleshy, with the 'collier de Vénus' strongly marked. In a word, although point by point the two heads are alike they differ entirely in character. In the Downe head it is noteworthy that the eyes are not actually on a level, the right eye being a little lower.

It is not easy to account for the divergence of the two heads. But clearly the Downe head did not belong to a figure like the Athena of Dresden, the 'Lemnia.' If it was part of a statue, that statue must have been placidly looking forward; nor need it have been an Athena. It is possible that the head may have stood on a herm; though in that case the detailed working of the neck is surprising.

Such divergence, in the case of late copies of early statues, is by no means unusual. Some of the Diadumenes heads, regarded as Polykleitan, are of a far softer type than others. The heads of Praxiteles' Cnidian Aphrodite type are widely divergent in character. Indeed it is needless to cite instances, for the rule is general.

It is never safe, in the case of a copy of Roman times, to assume that it represents the original in any particular detail. When we have several copies of a noted work, there is a certain probability that where they agree they

represent that original; but when we have only one copy, it cannot, save in very exceptional cases, be trusted. This very simple principle of logic rules out a considerable part of the *Meisterwerke* of Furtwängler.

It is evident that the same head served, in the Roman Age, as a prototype or model to the sculptors both of the Bologna and the Downe head. That prototype was no doubt in bronze, as is shown by the line of the eyebrows and the eyes filled in with paste of the Bologna head, whose maker seems to have worked from the bronze original itself: the Downe artist may have worked from a copy of it. He keeps the measurements exactly; but evidently he regarded the head as an 'elegant extract,' like the Chiaramonti Niobid, and many other statues, made to fill a niche or adorn a portico in a wealthy Roman house.

The school whence the original came is, in my opinion, not easy to decide. Furtwängler was certain that it was the Pheidian. Amelung, on the contrary,² is convinced that the school is rather Polycleitan than Pheidian, and both these eminent judges have found supporters. My own opinion inclines rather to Furtwängler, but it would be a long and difficult business to cite the arguments and the parallels on both sides. I think it fairly certain that the original was of the fifth century; but it was so exceptional a work that it is hard to give it to any of the known workshops. The most distinctive point is the rendering of the hair. Here, although it is impossible to find an exact parallel,³ such works as the Laborde head and the head of Apollo in the Parthenon frieze prove that such a treatment as our head shows was not impossible at Athens in the fifth century.

P. GARDNER.

² *Jahreshefte* xi. 200-208.

³ The nearest seems to be the Ephesus head at Ny Carlsberg, *Jahreshefte* xi. 202.

A STATUE FROM A TOMB

[PLATE II]

THE Ashmolean has acquired in 1922 a very pleasing draped portrait of a woman. As the circumstances of its acquisition were somewhat unusual, and as they have been stated not very accurately in the *Times* and other papers, I will briefly mention them. The figure belonged to the collection of Mr. Vincent Robinson, F.S.A., of Beaminster, Dorset. At his death in 1909 his collection was dispersed. The present figure found no admirers, and was bought for almost nothing by Mr. Albert Hann. It was set up in a yard and soon lapsed into a deplorable condition. It was rescued by an architect, Mr. Arnold Mitchell, F.R.I.B.A., who set it up in his garden at Lyme Regis; but was good enough to cede it to me on very moderate terms. I engaged Mr. A. Rost the sculptor to take it to pieces, to remove the iron clamps with which it was fastened together, and to substitute brass. He added in plaster the upper part of the head and the nose. It was carefully cleaned, after which it presented quite another aspect; and I had much pleasure in presenting it to the Ashmolean, where it has found many admirers. It has already been figured, from the same photographs, in *The Times* of September 13th, 1922, and in the *Architectural Review*.

The height, including the base, is 3 feet 11 inches (m. 1.19). The restorations are, in Italian marble, the right hand wrapped in the mantle, and the lower part of the figure, all that is below the right knee and the left thigh; also part of the fold of the cloak on the right hip and at the left wrist. The top of the head is restored in plaster; (the top had originally been a separate piece); also the nose and some ends of drapery. The upper lip is somewhat injured. The right hand seems to be wrongly restored; in nearly all such figures it comes out of the mantle: the Italian restorer no doubt wanted to show his technical skill in representing a hand beneath the mantle. But in the Trentham figure, *J.H.S.* xxviii, Pl. XXVIII., it is covered.

The material of both head and body is large-grained, perhaps island, marble: the head is of finer stuff than the body, but is not necessarily from a different quarry. That head and body belonged together can hardly be doubted; there is no line of fracture, as the parts were separately made, but the likeness in scale and style, and the decided suitability of the head, make it almost certain. The back of the figure is unfinished, or, rather, left quite rough, showing that it was not meant to be seen.

Two plaits of hair are wound round the head. They start above the forehead, go to right and left respectively, and are tied at the back of the head. Some detached curls, which are undercut, fall down. In the plaits on each side are two small round holes, evidently meant for fixing some metal adornment, no doubt a coronet or stephane.

The lady is clad in a chiton, over which is a mantle. The mantle is brought round the right side, covering the hand; the end is supported by the left arm and wrist, which are pressed against the side. The fold round the wrist might at first be taken for a bracelet: there are similar folds on the wrist in some of the ladies of the Tomb of the Mourning Women from Sidon.

Female figures of this kind are not rare in Greek art. The type is adopted for Muses: but it is most usual for sepulchral statues, although these are most commonly veiled, like the Trentham statue above mentioned. It is one of the many poses due to the art of Praxiteles, and adopted on the Mantinea Basis, the Tomb of the Mourning Women, and elsewhere. Our statue, however, can hardly be so early as Praxiteles; probably it dates from the third century. The attitude though ordinary is pleasing; the head still more so. The long narrow eyes have a pathetic expression which is very attractive; and the hair is arranged in a remarkable way, a broad plait running round the head, but not confining the separate curls which fall down the neck. I cannot cite an exact parallel.

Whence the statue may have come can only be judged by the style and the marble; I cannot get any record. The marble is certainly not Attic. If the head was completed, as seems probable, in plaster, that is a technique which belongs especially to the school of Alexandria. I fear we must leave the matter in uncertainty. There are in the Ashmolean several Hellenistic *atellai* from Smyrna, on which the deceased lady is sculptured almost in the round, and stands under a canopy supported by pilasters. These figures are similar to the new acquisition in type; but they are veiled, and very inferior in style.

P. GARDNER.

A NEW SEAL IN THE ASHMOLEAN MUSEUM

Among a number of cuneiform tablets recently presented to the Ashmolean Museum by Mr. H. Weld-Blundell is an interesting seal (Fig. 1).¹ It is an egg-shaped lump of bitumen with a slit through the centre, in which can be seen carbonised remains of the tag; stamped on it are the impressions of two different seals: a small stamp showing a winged sphinx confronted by a star, repeated eleven times; and a very finely drawn head, facing to the right, laureate, which Prof. P. Gardner states to be the head of Apollo. He compares with it the head of Apollo on the coins of Magnesia, Myrina, etc., after 190 B.C. (see B. V. Head, *British Museum Catalogue of the Greek Coins of Ionia*, Pl. XIX. No. 3).² A similar seal is shown by L. Spelcers (No. 205 on Pl. IV. of his *Notice sur les Inscriptions de l'Asie Antérieure des Musées Royaux du Cinquantenaire à Bruxelles*, Wetteren), who wrongly calls the figure there depicted Hermes; it is, according to Prof. Gardner, Apollo, holding in his right hand an arrow and leaning his elbow on a sacred tripod, precisely similar to that depicted on the reverse of certain coins of Seleucus II. Callinicus (246-226 B.C.); (see P. Gardner, *B.M. Catalogue of Greek Coins: Seleucid Kings of Syria*, Pl. VI. No. 1.)



FIG. 1.—BITUMEN SEAL-IMPRESSION.

More important, however, than the figures are the legends, for they provide new words for the Greek lexicon. The *bullæ* in the Ashmolean reads ΧΡΕΟΦΥΛΑΚΙΚΟΣ ΕΝ ΟΡΧΟΙΣ, and that of Spelcers ΧΡΕΟΦΥΛΑΚΙΚΟΣ ΟΡΧΩΝ. In the latter case *χρεοφύλακκος* (for *χρεοφύλακος*) is merely the gen. sing. of *χρεοφύλαξ*, 'registrar of public debts,' a word already known from several inscriptions, and possibly representing here the Bab. *mākišu*, 'tax

¹ I owe the photograph to the kindness of Mr. E. T. Leeds, of the Ashmolean Museum.

² Mr. E. J. Forsdyke of the British Museum, and Dr. Hogarth, keeper of the

Ashmolean Museum, incline to the view that the type is a conflation of the heads of Apollo and Seleucus II. Callinicus as they appear on contemporary coins.

collector'; but the adj. *χροοφυλακικός*, found on the specimen in the Ashmolean Museum, is new. The proper name *Ὀρχοί* or *Ὀρχαί* for Uruk (Hebr. *Erekh*, mod. Arab. *Warkā*) is also new; until now only the adj. *Ὀρχηνός* has occurred (Strabo, *Geograph.* XVI. i. 6, p. 739), for in Gen. x. 10 the LXX merely transliterate the name *Erekh* (*Erech*) into Greek letters as *Ορεχ*. Both these forms combine to disprove the *e* of the Massoretic punctuation.

G. R. DRIVER.

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THE SOPHOCLES STATUES

IN the last volume of this *Journal* (pp. 50-69) Monsieur Théodore Reinach tried to prove that the Lateran statue, named Sophocles by nearly all competent writers ever since its discovery, in reality represents Solon, being most probably a copy of the lawgiver's Salaminian statue as described by Aeschines (pp. 59, 62). But of all the arguments brought forward the only one that might decide the question turns out to be a worthless relic from the dead stock of E. Q. Visconti's *Greek Iconography*. It is a replica of the head of the Lateran statue in the Uffizi put upon the herm-shaft with the inscription Σόλων ὁ νομοθέτης. Both are genuine, indeed, but do not belong together, as has been shown by Dütschke in his catalogue of 1878, and plainly confirmed by Th. Reinach (p. 65), whose illustration I repeat as Fig. 2. Every archaeologist trained in the criticism of ancient marbles will fail to understand why the latter writer 'really sees no other explanation of the present combination' than somebody's knowledge, drawn 'from other sources, that this was really the traditional head of Solon.' How often in the long period of careless restorations '*pepererunt desideria non traditos collus*,' just by means of such arbitrary combination! A grave error of this kind, into which the world was talked for more than half a century by the same Visconti, was his Aristotle portrait: the seated Spada statue inscribed (most probably) Ἀρίστιππος and restored with the head of a beardless Roman (Helbig, *Führer*² II., No. 1819). Of herms so enriched let me mention the four inscribed shafts of Aristophanes, Heraclitus, Isocrates and Carneades, found headless near Tivoli, but published in 1569 by Achilles Statius with antique heads, which a year later Fulvius Ursinus, evidently with good reason, declared not to belong, the Carneades head, e.g., having since been proved to represent Antisthenes (Cb. Hülssen, 'Hermeninschriften,' in *Röm. Mit.*, xvi. (1901), p. 157 sq., Nos. 7, 13, 19, 20). The Aristophanes shaft is still preserved, in the Uffizi, and now bears a different head, no more belonging to it than the other. There exists no doubt about the same kind of restoration in the fragment of a herm with the name Ἀλκιβιάδης in the Vatican, Sala delle Muse, crowned with a poor head of later imperial age, but given, nevertheless, by Visconti as a likeness of the famous Athenian (Helbig, *Führer*², No. 273). The Uffizi 'Solon' is worth no more than these. It was only E. Braun and Welcker (v. i.)—still not Visconti—who noticed in the 'Solon' head what the latter had already remarked in some Roman replicas, especially in that of the Museo Capitolino bearing the modern inscription Πινδαρος (Sala dei Filosofi, 33, our Fig. 5): namely, its harmony with the half-size herm-bust in the Sala delle Muse, discovered in 1778 and inscribed, on the plinth, Σοφοκλῆς, or rather Σοφοκλῆς

(*Museo Pio-Clement.*, vi. p. 144). So, when our statue became known, in 1839, nothing more was required for giving it its right name than to recognise its head as another copy of the same Sophocles type. This was the merit of the Marchese Melchiorri's lecture delivered at the Winckelmann Meeting of the Roman Archaeological Institute (*Bull. d. I.*, 1839, p. 174). Welcker, in his warm appreciation of the statue, published in the *Ann. d. I.*, 1846, p. 129 sq.,

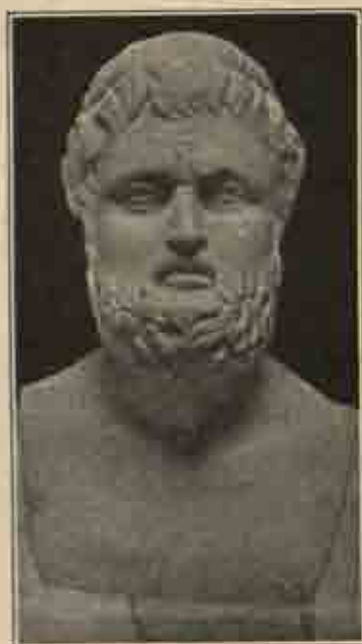


FIG. 1.—SOPHOCLES. SMALL VATICAN BUST WITH ANCIENT INSCRIPTION.



FIG. 2.—'SOLON.' HEAD IN THE UFFIZI, FLORENCE.

to accompany the drawing *Monumenti*, iv. 23 (both reprinted in the author's *Alte Denkmäler*, i. p. 456 sq., Pl. 5), did not do more than accept Melchiorri's plain statement, as did most of the scholars who had to give their opinion after him. Only Clarac in the text (v. 80) to the reproduction in Pl. 840 C of his *Musée* confessed not to know for what reason it was called Sophocles; i.e. not to have read Melchiorri or Welcker, proposing himself rather the name of Aeschylus (which the context clearly requires instead of the writer's or printer's error 'Eschine'), and S. Reinach in his *Clarac de poche*, p. lix, goes so far as to declare that Fig. 3 on p. 510 'n'est pas Sophocle.' But such

rare contradictions, unfounded as they were, did not prevent, so far as my knowledge goes, any other author from acquiescing in the name found for the head and the statue.¹ From this short account of the history of the problem everybody can gather what wrong is done to the memory of the late J. J. Bernoulli of Basel when, because of his well-considered adhesion to the two Italians' statements, which have been generally accepted by students of all nations, he is censured by Th. Reinach for 'an undue respect for German infallibility' (p. 55)—a notion quite strange to my mind after forty-five years of work as a pupil, a teacher, and a writer in German scholarship—and even for lack of 'courage and independence from his German masters' (p. 57), viz. August Boeckh, Eduard Gerhard and others, who were dead enough when their Swiss pupil in his own seventieth year published the first volume of his *Griechische Ikonographie* (1901).

In reality it was nothing else than the cogent likeness, in all essential features, of the head of the statue and the other good copies of this Sophocles type to the inscribed bust, that led Bernoulli the same way as all other archaeologists who looked at these monuments with sufficient knowledge of the proper analogies. Whoever has compared a long series of heads going back to the same Greek portrait, say of Euripides or Menander (p. 63), is perfectly aware how astonishing their differences can be, even if they have kept the original size. Still less uniform with good full-size replicas are considerably reduced marble copies like the inscribed Sophocles in question, most of them being of rather inferior workmanship. I had to deal with this class when publishing old drawings of Fulvio Orsini's inscribed Aristotle bust, one of the most important pieces of his iconographic collection, which unfortunately is lost for us, in my pamphlet *Das Bildnis des Aristoteles*, published as a *Program* to the list of the Doctors of Philosophy created in Leipzig University in 1907-8 (pp. 15, 20, 30 sq.; Pl. 2, Nos. 2 and 5). Even these two drawings, however, enabled us to prove a set of life-size heads, very different in value and expression, to be reproductions of the same portrait. The best of them show us at once that Orsini's small bust was no more than an abstract of the original, partly simplifying, partly exaggerating its forms. This kind of cheap craftsman's work is represented in another good specimen, on Pl. I of the *Aristoteles* essay just mentioned. This gives three photographic views of the half-size double herm at Dresden combining Euripides with Sophocles, and, with these, the front views of good full-size copies of the same portraits, viz. the Euripides herm in Naples and that of the other Sophocles type, representing the poet as an old man, in the British Museum (cf. Bernoulli, I, p. 129 sq.; Th. Reinach, p. 55 sq.). There can be no doubt that the miserable double herm is intended to reproduce the same prototypes, in spite of the

¹ See the references given in Friederichs and Wolters, *Gipsabgüsse*, No. 1307, and in Heibig and Amelung, *Führer* II, No. 1180 and p. 480. To the non-German writers quoted there we can add A. H. Smith, *Catal. of Sculpt.*, III, No. 1831; Leclat,

Collect. des moulages (Univ. de Lyon), 2, cat. of 1911, No. 851; Francis Beckett, *Afslutningssamling* (Copenhagen, 1904), No. 649, and, last but not least, Stuart Jones, *Museo Capitol.*, p. 232, 33, upon the 'Pindaros' above mentioned.

considerable alteration of nearly all details and even of the main features in the reduction. Compare, *e.g.*, in the two specimens of the more characteristic Euripides head the fringe of hair falling down into the forehead, the form and height of this expressive part, the length of the mouth and the nose, and the slight crooking of the latter in the profile of the double herm, so different from the well-preserved nose of the Mantua herm and even of that in the Sala delle Muse (Bernoulli, I, Pl. 17; p. 155, note 1).

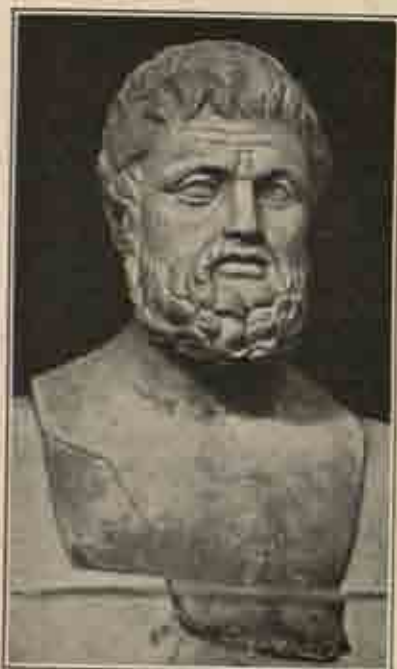


FIG. 3.—SOPHOCLES. SMALL VATICAN BUST WITH ANCIENT INSCRIPTION.

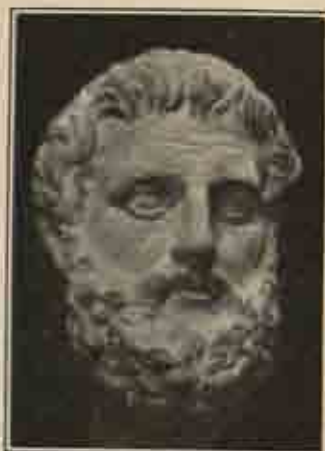


FIG. 4.—SOPHOCLES. HEAD OF THE LATERAN STATUE, FROM A CAST.

Scarcely less exact is the reduction of the Lateran Sophocles type in the small Vatican bust. Only, to compare both, we must not, as Th. Reinach does, put the head of the statue nearly in right profile at the side of the front view of the bust. We prefer the clearer photograph reproduced as Fig. 8 in Delbrück, *Ant. Porträts*, p. xxxiii. At the side of this, our Fig. 1, we put, as Fig. 2, Th. Reinach's front view of the Uffizi 'Solon,' of which the nose alone is restored. Moreover, we give, in Fig. 3, a three-quarter view of the inscribed bust reproducing its best published illustration known to me, from Sieveking's appendix of portraits to W. Christ, *Gesch. gr. Literatur*¹, Fig. 12, and beside it a photo of the cast of the Lateran head (Fig. 4), taken as nearly as possible in the same pose and light, and another, at least not very different, of the Capitol 'Pindaros' already mentioned (Fig. 5), kindly lent to the author by the Archaeological Seminary of Berlin (Anderson, 1628). This head will prove useful for our purpose as a replica of more superficial execution. In

both these full-size copies the nose again is restored, in the latter not much more, and Tenerani's other restorations (and retouchings) of the head of the statue, as described for the last time in Helbig's *Führer* II., No. 1180, are only superficial. This is proved by a cast taken before the restoration and preserved in Villa Medici, of which Amelung was good enough to send me three photographic views.

With these illustrations under his eyes the reader will not require many

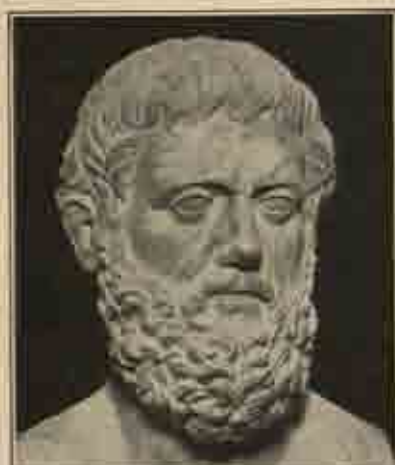


FIG. 5.—SOPHOCLES. CAPITOLINE HEAD WITH MODERN INSCRIPTION 'ΠΙΣΑΡΙΟΣ.'

words to convince him that the small bust is again such a coarse extract, partly exaggerated, partly simplified, of the same original as the big heads, in general proportions as well as in all characteristic details. Thus the bare parts of the cheeks are enlarged, in connexion with the general flattening of the curls of the beard, which, of course, in the small head goes much farther than in the 'Pindaros,' where, however, the middle division of the beard, very deep in the statue and the 'Solon,' is even more filled up than in the inscribed bust. This and the Capitol head are connected also by the upper eye-lid being more drawn up. Notwithstanding its reduction the bust has preserved even better than, e.g., the life-size Ludovisi Aristotle (*l.c.*, Pl. 3, 6) the main portion

of the front hair hanging down under the string-like fillet, a very rare attribute in Greek portraits (see below, p. 66). And the forehead itself has kept even so rare a detail as the lowest and shortest of its three transverse wrinkles, preserved, of course in finer drawing, also in the statue (Fig. 4). In the bust it cuts obliquely the top of the two furrows rising from the root of the nose. These very common lines are obliterated in the statue only by the restoration of the eyebrows,—the origin of a good deal of its 'serenity,' emphasised by Th. Reinach,—being present in the two other big heads. In the 'Solon,' according to the large photograph in my hands, there seems to be preserved also a trace of the transverse furrow which, so strongly marked, separates root of nose and forehead in the Vatican bust, no doubt another important contribution to its 'sulky expression.' In this bust alone the upper part of the nose is antique; its bridge is rather flat, perhaps from rubbing off the worn surface, but we have seen the same in the Euripides of the double herm (p. 60). To the latter and other such reduced portraits one could apply Th. Reinach's exaggerated description of the differences between our inscribed Sophocles and the full-size replicas with but little change.

To sum up: notwithstanding the ideal character of this portrait, even the Vatican reduction has preserved a sufficient amount of features, which are by no means 'quite faint and insignificant,' as Th. Reinach calls them. One may

wait calmly for the 'dozen of heads belonging to the same type' that he thinks 'easy to find in the Attic funeral stelae of those times' (p. 54). At least the two examples quoted in footnote 9, Prokles and Prokleides in the life-size *naiskos* relief at Athens, look quite different from our Sophocles and even from each other (Collignon, *Statues funér.*, Figs. 85-86). This is shown best by the detailed views of the two heads repeated in Fig. 6, with the author's and the publisher's kind permission, from Winter, *Kunstgesch. in Bildern*², p. 314, 2 and 3.

So Visconti's and Melchiorri's observations (p. 57 sq.) still hold good and give indisputably the name of the great poet to the elegant citizen represented in the good marble copy from Terracina. In counterproof all the other *ratiocinationunculae* adduced against this fact are easy to refute. It



FIG. 6.—HEADS OF PROKLES AND PROKLEIDES. FROM AN ATTIC GRAVE RELIEF.

is true, there exists a second, considerably different, portrait of Sophocles, representing him as an old man, which has been already mentioned (p. 59). Its identity is based on two inscribed marbles, the Vatican herm (Th. Reinach, Fig. 5) and the very small medallion bust Orsini-Farnese, unfortunately lost, but preserved by Th. Galle's engraving in Orsini's second *Imagines* (Th. Reinach, Fig. 4) and in his original pencil-drawing (cf. No. 40 in Hülsen's paper, quoted above, p. 57, and my *Aristoteles*, p. 4). Bernoulli, when preparing his *Greek Iconography*, tried very hard, in *Jahrb.* xi. (1896), p. 173 sq., to get rid of this evidence, doubting its unquestionable authenticity, even that of the extant herm. But in his book (i. p. 124 sq.) he complied with the facts and acknowledged the existence of two different Sophocles portraits. Th. Reinach, however, prefers to call this 'a desperate hypothesis' (p. 56), admitting as genuine likenesses of the poet only those of his old age. But he fails to tell us clearly how to get rid of the inscribed Vatican bust, the type of which (Figs. 1, 3) is so utterly different, in spite of his artificial attempt to reconcile both, in footnote 13. Only Visconti's light-hearted readiness to correct

unwelcome evidence found it admissible to conjure away so great a difference, giving a 'new' drawing of the Orsini medallion simply with the head of the new bust. This and other such tricks of Ennio Quirino's are demonstrated in my *Menander* paper, Ilberg's *Neue Jahrbücher*, xxi. (1918), p. 10 sq.

It was a generally erroneous opinion that Bernoulli expressed in his *Jahrbuch* article (p. 176) when he declared two so different portrait types to be downright incomprehensible in the case of a man whose true portraiture was most probably handed down to posterity from his own time. First, we know from innumerable monuments, funeral and votive, how slowly in the actual representation of distinct persons the predilection of Greek arts for typical rendering of nature yielded to the claims of individual likeness. No wonder that this art found no harm in altering a traditional portrait when there was a new monument to be erected for the same person. So for Herodotus imperial coins of Halicarnassus bear witness of a quite different type from that known to us in the two inscribed herms at Naples; but these portraits may both have been of later invention (Bernoulli, i. p. 158 sq., and Kekulé quoted there). No such doubt, however, is possible about the earliest likeness of Socrates, of which we have at least one thorough transformation from a much later period (see Georg Löschke in *Jahrb.*, xxix. (1914), *Anzeiger*, p. 515 sq., based partly on a newspaper article by Bulle). Still more important for us are the two portrait heads of Euripides, of which, it is true, only the well-known noble and thoughtful head (mentioned above in p. 59) is based on a replica inscribed with the name. The other, rarely copied, quite different in proportions and in the gloomy, excited expression, was not more than cautiously guessed at, in 1831, by G. Krueger in the well-preserved specimen of the British Museum (No. 1833 and Pl. II of A. H. Smith's *Catalogue*, our Fig. 7). But his conjecture has been confirmed by another of the four replicas² now known to us, the herm from Rieti in the Ny Carlsberg Glyptothek, No. 414b, best illustrated in Hekler, *Bildniskunst*, p. 89. For on its shaft there are incised three trimeters from the poet's *Alexandros*, concerning arrogant slaves, just as the Socrates herm at Naples gives us a dictum of his, taken from Plato's *Crito* (Bernoulli, i. p. 187, II, Pl. 24). My own first opinion that this Euripides type was the earlier one, has been refuted by Lippold, *Gr. Portratstatuen*, p. 50.

Lippold is right also in seeing a generally exact reproduction of the older



FIG. 7.—EURIPIDES. HEAD OF THE LATER TYPE IN THE BRITISH MUSEUM.

² A fifth replica of this type, recently found at Mentana, is now in Museo delle Terme (Not. d. Scen., 1921, p. 36 ff.; *A.J.A.*

xxvii. (1923), p. 91—in both publications unrecognized).

Euripides statue, with the much-copied head, in the sitting figure of the inscribed relief at Constantinople (best photograph in Marg. Bieber, *Denkmäler zum Theaterwesen*, Pl. 46). But I think we have got also at least a shadow of the statuary type belonging to the latter, the *σκυθρωπός* and *μισόγυνος* head (as Lippold, *l.c.*, ably styles it). It is the engraving reproduced here as Fig. 8 from F. Ursinus, *Imagines* of 1570, p. 27, representing one of the three statuettes found with the small Sophocles medallion already mentioned (p. 62), and its counterpart, Menander, in a tomb outside the Porta Aurelia (Hülsem. No. 10, as referred to above, p. 57). The best counterpart of this



FIG. 8.—EURIPIDES. LOST STATUETTE, ONCE IN F. ORSINI'S COLLECTION.

Euripides in the same find, unfortunately also headless, was a *Πινδαρος* (Hülsem. No. 36), one more example of a poet standing, whom another statue gives us sitting: that from the dromos of the Memphis Serapeum, now republished, after Mariette, by Wilcken in *Jahrb.* xxvii. (1917), p. 164. But to acknowledge a poet in a standing figure Th. Reinach, p. 58, too peremptorily requires him to have some characteristic attribute in his hands, such as a musical instrument (held also by the two Pindari just mentioned), or Corinna's book (Bernoulli, i. p. 89). To be sure, Orsini's lost Euripides, Fig. 8, may have held originally a mask, as does the colossal statue in the Braccio Nuovo, wrongly restored with an antique Euripides head—perhaps Aeschylus, as I suggested many years ago (Ameing, *Skulpt. im Vatican*, i. p. 72 and 913, Pl. 9, and Lippold, *l.c.*, p. 64. Is this Th. Reinach's 'Euripides of Naples'? p. 58). But the defect that the Lateran Sophocles has no such sign of his profession, cannot possibly discredit the clear evidence of his face, once more proved here. The lack of an attribute is easily to be understood when the *communis*

opinio is again right in supposing our marble statue to be copied from the Lyeurgan bronze in the Dionysos theatre. Sophocles having been represented there with the two other masters of tragedy, the artist might have wished at least in one of the three to do without a mask. And it is just this poet who, here too differing from the 'philosopher' Euripides, had lived the life of a normal Attic gentleman up to the high office of a *strategos*, that we can very well understand portrayed in the same general type as Solon (Th. Reinach, p. 62 sq.). It is a picture of the well-bred citizen correctly wrapped in his himation, that, so far as I remember, first appears in the vase-painting of the Clisthenean age, and is represented during the development of this art by men of very different ages, down to the nice schoolboys in the Berlin cup of Duris, who reminded Fr. Häuser precisely of Sophocles, being

at that time of about the same age (Furtwängler and Reichhold, *Gr. Vasenmalerei*, iii. p. 90). In the agitated life of the Parthenon frieze only a few of the men leading cows remain so well wrapped up. This happens very rarely also in the domestic scenes of the funeral reliefs and even in the votive offerings, the adorants of which usually show bare shoulders of their elevated arms. One of the rare exceptions I remember is in the funeral banquet, once called the death of Socrates, at Athens (National Museum, No. 1501, Svoronos, Pl. 83; P. Gardner, *Tombs of Hellas*, Pl. 3). That the old pose and attire always survived in solemn use is proved by the pedestal of a group on the Acropolis, dedicated by Atarbios and representing the cyclical chorus of 323 more probably than that of 366 (Beulé, *L'Acropole*, ii. Pl. 1; Friederichs and Wolters, *Gipsabgüsse*, No. 1330). That still in the same period a statesman and orator could also be portrayed in the same old type is known to everybody from the Aeschines statue, repeated in Th. Reinach's Fig. 9. But in the earlier history of the motive there is not to be found any reason for the theory so emphatically urged by that writer: that the Lateran statue is proved by this motive alone to represent a man of such a profession. And where is there any trace in the whole demeanour of our man to show us that he is 'facing an audience'? (Th. Reinach, p. 58).

It was still the Solon theory, combined with a highly contestable 'discovery' of W. Klein, that induced Th. Reinach to attribute the original of the Lateran statue to the elder Cophisodotus (p. 66 sq.). For this purpose he was obliged to put aside the very good stylistic reasons for which other scholars had connected our Sophocles with the Lycurgos bronze. In spite of a certain classicism, quite natural when a representative man of the Periclean age was to be portrayed again, the proportions of the figure as well as some details of the drapery, e.g. the triangular *apodygma* of the upper hem of the cloak (just as in the Aeschines), are not to be found earlier (P. Arndt, not Bullé, in his text to Brunn's and his own *Denkmäler*, No. 519, the statue from Eretria, and Caltrera in *Memorie dell' Accad. dei Lincei*, xiv. (1910), p. 276). It is simply a mistake to tell us (p. 57) that Winter supposed a work of Silanion as the 'ancestor' of the Lateran type. He did so (in *Jahrb.* v. (1890), p. 162) for the third portrait head then thought by some to represent Sophocles, but duly rejected by A. H. Smith and by Bernoulli, i. p. 142 sq. I imagine, it might be rather Xenophon, but cannot give here my reasons—slight, of course—for this suggestion.

We have already seen how much the later Euripides portrait, Fig. 7, this too depending most probably on the Lycurgan statue (p. 63 sq.), has changed the poet's contemporary likeness. No wonder to find the Lateran Sophocles just as different from the other, which represents him as advanced in years, but is earlier in style. Only the tendency of the transformation is opposite in both the examples, in conformity with the popular notions of the two characters: rather realistic and pathetic in Euripides, more rejuvenating and idealising in Sophocles. Of the more portrait-like features of the old man only the general outlines are preserved in the statue.

To the common stock of forms in both the heads belongs the attribute

of the fillet, foreign to everyday life in those times (cf. Th. Reinach, p. 53), and therefore very rare at least in grown-up men in the reliefs. It is no *taenia* or flat ribbon, but a plain ring made of a cord or string, still thinner in the head of the statue. For such a band, being twisted, we have, first in the *Odyssey*, the word *στρόφος*, and later, for thin strings, the diminutives. As an example of old Ionian *τροφή* Magnes of Smyrna, the eromenos of Gyges, is described as wearing the hair bound into a *κόρυμβος* with a golden *στρόφος*, in the story given us from Xanthus by Nicolaus of Damascus (*Fr. Hist. Gr.*, iii. 395, 63), and much later still the great painter Parrhasios of Ephesus, who called himself a *ἀστροδιάκτος ἀνὴρ*, used to have a white *στρόφιον* round his head (Athen. 12, 543 F). In other men of classical times the same is known only as a traditional sign of some dignity. Just the Sophocles attribute we find in the Herculaneum helm of a Spartan king Archidamus, whom I think to be rather the third than the second (Bernoulli, i. p. 121, Pl. 12). But also for republican functionaries the *στρόφιον* was preserved: so at Athens for the *κομοβύλακες* (Pollux 8, 94). Quite generally it is known as the head-gear of priests (Suidas, s.v.). Plutarch, *Aristid.* 5, tells us that Callias ὁ λακεόπλουτος at Marathon was saluted by a barbarian as a king because of the *strophion* he wore, being *Daduchos*. That this was a rather thick round string is shown by the representations of the Hierophant in the monuments, so in the sarcophagus of Torre Nova published in *Röm. Mitt.*, xxv. (1910), Pl. 5, where on p. 156 Rizzo has collected other evidence. Later on the plain cord must have given way at least sometimes to a broader ribbon, as was the *στρόφιον μεσοπρόφυρον* of the priest of Aratus mentioned in Plutarch's biography of Aratus (53), and well illustrated by polychrome hydrias from Alexandria (cf. my *Symposium Ptolemaios II.*, p. 52). But when at about the same time the priest's attribute in *Inschriften von Priene*, No. 201, 13 and 202, 13, is called a golden *στροφίσκος*, we can scarcely understand anything else than the old string.—That it was not worn always by all Athenian priests is proved by a well-preserved representation of one, in the long ungirt chiton, on the tombstone of the Berlin Museum, No. 1768 (*Kurze Beschreibung ant. Skulpt.* (1920), Pl. 30). However, in the middle figure of the east frieze of the Parthenon it might be not impossible to restore a *strophion*, at least so far as I can judge of it by the cast. Compare also the statues in Cozza, *Grabreliefs*, Nos. 920-922.

Now everybody knows from the *βίος Σοφοκλέους* that he was the priest of the hero Ἄλκιον, a name generally thought to be corrupt, but lately defended by Ernst Schmidt (a promising young scholar fallen in the war) in *Athen. Mitt.* xxxviii. (1913), p. 73 ff. This dignity and its characteristic attribute could not be ignored, when the poet shortly after his death got his sanctuary as hero Dexion, in which, at this period, a cult-statue was inevitable. And of such a statue the biography actually speaks in the passage just alluded to, where, after a gap, we read: *ἰδρυθεὶς ἐπ' ἱερῶντος τοῦ υἱοῦ μετὰ τῇ τελευτῇ*. Whoever wishes, with Th. Reinach in his first footnote, to understand this *ἱερῶντος* of another hero or god, is obliged to insert, before or after *τελευτῇ*, *αὐτοῦ* or *τοῦ πατρὸς* or some other word to the purpose. But

as the words run they are quite unobjectionable and they tell us, what all other scholars—Wieseler, Lippold (*l.c.* above, p. 63) and Th. Reinach alone excepted—have understood: of the poet's statue being set up, soon after his death, by his son. So this Iophon statue proves to be no 'myth,' as Th. Reinach says, and we know from literary sources actually of two Sophocles statues, which can and must be taken for the originals of the two portrait types preserved and, happily enough, both known to us by inscribed copies. To defend facts so rare and precious against a charge more spirited and self-confident than well-considered seemed to me worth while.³

FRANZ STUDNICKA.

Leipzig, March 1923.

³ That I could venture to do so in this *Journal*, notwithstanding my poor knowledge of English, I am indebted to the editors and to my Leipzig colleague in

English philology, Professor Max Förster, who were good enough to correct my manuscript.

NOTICES OF BOOKS

The Greek Commonwealth. Politics and Economics in Fifth-century Athens. By A. E. ZIMMERN. Third Edition, revised. Pp. 461, 3 maps. Oxford: Clarendon Press, 1922. 16s.

The third edition of Mr. Zimmern's *Greek Commonwealth* needs but little introduction. Upon its very first appearance in 1911, the book was speedily recognised as one of the most vivid and stimulating surveys yet done in English, of Periclean Athens and of the long process of development which lay behind and led up to that brief but brilliant epoch. A second edition in 1915 enabled some corrections to be made, more illustrative matter to be added, and a valuable map of Attica to be included. Both these issues were reviewed in due course in this *Journal*. In the present edition a clearer and corrected map replaces the former one: the footnotes are still further enriched by illustrations culled from more recent literature and events; but the main text itself remains practically unaltered.

A lengthy review is therefore not called for. The merits of the earlier editions repeat themselves here. Not least among them is the use Mr. Zimmern gently yet insistently constrains his readers to make of the pictorial imagination. His own mind ranges freely and freshly and with admirable scholarship over the widest variety of relevant facts; but he knows that a homekeeping Northern student can rightly apprehend these facts only by 'a deliberate effort of the imagination.' So throughout the book Mr. Zimmern is seeking to detach, out of the store of 'ideas' (as Locke might have said) already painted on his readers' minds by their general experience, that imagery which will most enable them vividly and accurately to picture to themselves the conditions of a life very different from their own. There is no better method of exposition, but because of the danger of falling into false analogies, its use demands a rare caution and discriminatory skill. Mr. Zimmern reveals both qualities in full measure, and in his book misleading associations are few and far between. Occasionally, one ventures to think, he is so led astray, as when he compares Greek warfare to a 'fine sport, the great and only game' in the eyes of virile young Greece (p. 345); though, one should add, of the rightness of this particular analogy Mr. Zimmern himself is evidently convinced, since he retains it in spite of earlier criticism.

Neither does Mr. Zimmern in this new edition tone down at all his rather roseate view of the motives animating Athens before the Plague. Until that devastating stroke, he says, 'honour and public duty were more to most men in Athens than gold or silver' (p. 365): 'The Plague was the "first" step in Athens' irresistible decline (p. 298). Before that, 'all the high things in human life' seemed to lie along the road she was travelling: 'Freedom, Law, and Progress; Truth and Beauty; Knowledge and Virtue; Humanity and Religion' (p. 432). One cannot help suspecting that in all this there is present the fallacy of a subtly false emphasis; and it is just this over-emphasis of Athenian idealism that one feels most inclined to criticise in an excellent book. The analysis of others' motives is never an easy task; and every revealing act or word is precious evidence to him who would probe a people's soul; but the question occurs: is Pericles' Funeral Speech an altogether safe guide to Athenian motives? It shows us Athens as Pericles at his best would have her to be; but the rank and file of the people may have fallen as far beneath him in character as in another sphere their skill fell below the cunning of the master-hand of Pheidias. Then again, Pericles was speaking amid the first tumults of war, when crowding and vengeful enemies were already summoning Athens to Judgment; and at such crises both statesmen and peoples willingly forget the things wherein they have offended, and remember only the ideals, the measure of their past service of which is the measure of their strength. Our own experience has provided us with examples enough of statesmen whose war speeches read

strangely in the light of their previous and subsequent practice and utterance. This is not, of course, to deny the idealism of Pericles and of the city which he led, nor to fail to recognise its unusual strength. But in the soul of Athens there were other forces at work as well. Her irresistible decline did not *begin* with the Plague—with a cruel stroke *ab extra*. To take but one example. The narrow exclusiveness of the citizenship law of 451, which not only brought disastrous degradation upon Outlander women, but shut out resident aliens from a just and reasonable reward for their services, and made it certain that there could never be a real fusion and comradeship between Athens and her allies, but only subjection and servitude for the one and a tyranny for the other—this illiberal law cannot be glossed over as merely an 'odd freak of blindness' in a 'great people' (p. 336). Athens saw clearly enough on other occasions, as e.g. when it was a question of gaining a foothold in Boeotia by granting citizenship to Plataei; she saw clearly enough later in 405 when—too late—she extended her citizenship to Samos. Or take the Megarian decree: is it not a rather hopeless whitewashing of Pericles to represent that deadly stroke against a neighbour (whose parts Athens coveted) as really a move for peace, a last desperate attempt to stave off war by a display of Athenian power (p. 426)? Mr. Zimmern has made us all his debtors by throwing into relief the lofty idealism of Athens in her best aspects; there still remains for someone the less grateful task of exposing the unlovely impulses of her spirit which struggled with that idealism, and ultimately laid it in the dust.

The book contains a few unfortunate misprints. On p. 40, l. 15, the word 'no' should be deleted; on p. 299, l. 27, 'with' should be 'without'; and on p. 334, l. 3, for 'more girls than boys' the reading 'more boys than girls' should be restored from the second edition.

P. A. S.

Hellenic History. By G. W. Botsford. Pp. xi + 520; 87 illustrations. New York: Macmillan, 1922. 18s.

In this posthumous work Prof. Botsford has bequeathed a new plan for writers of Greek history. Disarding the conventional limitation by which historians, *mores Aeschyleos*, may only present two actors on the stage, a soldier and a politician, and must relegate all the other characters to the chorus, he has introduced craftsmen and housewives, artists and men of letters, as active participants in the play; and has devoted a full half of his 'copy' to them.

In endeavouring thus to embrace Greek life in all its complexity Prof. Botsford has set himself a far harder task than if he had simplified (and devitalised) his Greeks into mere cannon-fodder and administration-objects. How far has he succeeded in it?—We need not dwell here on a number of small inaccuracies which have crept into his text, nor yet on his tendency to represent as an ascertained fact what can at best be no more than a probable conjecture (e.g. in his reconstruction of Minoan society). We would rather draw attention to some of the things which the author has left unmentioned: the influence of Egypt upon early Crete; the siege of Troy; the discoveries of Pytheas and Eudoxus; the favoured position of the new Greek cities in the Hellenistic monarchies; the cosmopolitanism of the Stoics. Hardly enough stress is laid upon colonial expansion as a stimulus to the material and mental development of the Greeks, nor yet upon certain unlovely aspects of Greek life such as the savagery which long persisted in the remoter regions, the wasting of good human material in foreign mercenary service, the parasitism engendered by slavery; and so many essential facts are omitted in the story of Philip of Macedon as to create a somewhat unfair impression against him. But against these criticisms of detail we must set certain outstanding merits. Prof. Botsford has struck a most judicious balance between the political and non-political parts of his work, and, while he has not concealed his own predilections in matters of politics and culture, he has always endeavoured to do justice to the other side of the case. His readers will be led by him into regions which have usually been closed to historical students, and they will generally find him a safe and steady guide.

Ἱστορία τῆς Χίου. Τόμος Α'. Ἱστορικὴ Γεωγραφία καὶ Γενεαλογία. By G. I. ZOLOTOS. Pp. xxix + 653. Athens: Sakellarios, 1921. Dr. 30.

This is the first volume of an exhaustive treatise on the history of Chios, the materials for which were collected by the lifelong labour of a local schoolteacher and antiquarian. The author unfortunately did not live to give the final shape to his book, but his daughter, Miss A. Sáros, has earned our gratitude by preparing it for publication. The unfinished character of the work is apparent in a disconcerting number of misprints, and may be noticed in the chapter on prehistoric Chios, in which the evidence is presented in a somewhat undigested mass. This chapter makes a good point in emphasising the strong connexion between Chios and Minoan Crete in Greek tradition; but it uses the term 'Pelagian' too freely and commits a palpable mistake in calling Apollo Patroüs a Pelagian deity (p. 37; cf. p. 339, where Athena figures as a specifically Ionian goddess). But the present volume must be judged by its geographical and topographical section, which constitutes by far the largest part of it. This is a sterling piece of patient and successful research. From inscriptions, from modern place-names, and from a large array of mediæval and modern travel-books it collects a vast mass of evidence, and it discusses these materials with the discretion of a true scholar. The author's main conclusion, that ancient Chios was exceptionally well populated, fits in well with the statements of ancient authors and may now be regarded as definitely established.

It is pleasing to note that Ionia, the home of Corais and the cradle of Greek culture ancient and modern, is still capable of producing research work of solid merit.

Ἱστορία τῆς Ἑλληνικῆς Γεωργίας. Τόμος πρῶτος (1821-1833). By Dr. L. ΖΟΓΓΑΝΗΣ. Athens, 1921.

The author claims that this is the first Greek work on the important subject of which he treats, and we can well believe it, for agriculture has less attraction for the Greeks than politics or economics. The present volume begins with a review (mostly from secondary authorities) of agriculture in Greece from the Frankish conquest down to 1821, especially with regard to the current crops, about which there is much valuable information not otherwise easily accessible. There follows a detailed summary of the rare treatise upon Greek trade by the French vice-consul, Beaujour, who published in 1798 the result of his experiences between 1787 and 1797. These preliminaries together with extracts from Pouqueville fill nearly half of this volume. The rest is occupied with the damage done to the trees by Ibrahim Pasha, the burning of three-quarters of the Athenian olive-grove in 1830, and the agricultural policy of Capo d'Istria, one of whose first acts was to import potatoes (unknown in Greece before 1828, and introduced into the Ionian Islands only in 1811). The Corfiote statesman also showed great energy in planting trees—still one of the great wants of Greece—and founded the agricultural school at Tryna in 1829, of which G. Palaiologos was the first director. There is a considerable account of him and of the first professional agriculturist who worked in Greece, an Irishman, named Stevenson. But the author laments that the place-hunters and the *λογιστάραι* despised agriculture and its professors. The volume abounds with curious information, often to be found (as in the case of Grote's *History*) in the disproportionate footnotes. Few are, for instance, aware that tomatoes were introduced into Athens only in 1815, and were first grown in the famous Capuchin Convent, in which Byron, four years earlier, had written 'The Curse of Minerva.' The author has evidently studied his subject widely, and proposes in three or four more volumes to bring it down to 1921. The loss of Eastern Thrace will, however, deprive Greece of one of her chief agricultural provinces.

WILLIAM MILLER.

Πολιτική Ἱστορία τῆς Νεωτέρας Ἑλλάδος. 1821-1921. Τόμος Α'. 1821-1865.
By GEORGIOS E. ANASTAS. Athens, 1922.

The first volume of this interesting work, based in several places upon unpublished materials, is rather a series of historical essays than a detailed historical narrative. The author gives proof of moderation in his judgments; thus he takes the unusual view, that the British policy of the maintenance of the Ottoman Empire in the middle of the last century was really for the benefit of Greece, because the collapse of Turkey at that time would not have benefited a weak Greece but a strong Russia. He condemns the men who dethroned Otto, but praises the political sense of George I., whom he considers (p. 281) to have been the wisest statesman in the Greece of his time. He is severe upon the party system, which has made politics a bitter contest between rival gangs of men following some prominent personality rather than some guiding principle. For the leaders the result has been, as he says, *disastres*; for he asks whether 'the greatest political chiefs in Greece' have not received 'biterness and cursing or forgetfulness and contempt at the hands of their contemporaries.' Trikoupi and M. Voulas are examples. He omits, however, to mention another characteristic of South-Eastern Europe, that of expecting miracles from its diplomatic representatives abroad. For their success usually depends less upon their own diligence and ability than upon the real power and resources of the country which they represent, nor are Western Governments, as is believed in the Near East, constantly occupied in considering the affairs of the Levant. The volume is agreeably written and illustrated with a number of portraits and autographs. A few slips may be detected, such as the substitution of Nicholas instead of Alexander II. as Tsar (p. 276), and 'Redoliffa' for 'Redoliffa' (p. 281). It is amusing to learn that Kallergas, the author of the revolution of 1843, actually proposed to Otto the suspension of the Constitution, which was its object and result! Of the leading politicians of that period, Kolottis meets with the author's criticism, although he admires his courage.

The paper and type do great credit to the printers, and the author is to be congratulated upon having produced a singularly fair and impartial work. It will be in the second volume that his greatest difficulties will arise; for few Greeks of to-day would incur Solon's penalty for not taking sides in a political crisis.

WILLIAM MILLER.

Grammaire descriptive du Roméique littéraire. By LOUIS ROUSSEL. Pp. xiv + 357. Bibliothèque des écoles françaises d'Athènes et de Rome, Fascicule CXX. Paris, N.D. E. de Boccard.

The *roméique littéraire* which M. Roussel describes in this book is the language, Greek he will not call it, used systematically by Psichari and his followers ever since 1888; 'le début de la Renaissance,' when *τὸ καθαῖον μὲν* was published. This he treats as a fixed form of speech, refusing to consider its history, or even its relations with other forms of modern Greek. The result he hopes will be useful to the foreigner who is anxious for instruction, and even to Greeks, 'if they are ever taught their own language' (p. xi). This assumption that the Greek of the modern *καθαίον*, whatever its merits, is the only form of Greek that can now be called alive is not likely to be acceptable to many of the most learned of the contemporary scholars of Athens; still less his description of the purist form of the language, which to them is one of the links which bind Greece to its long past, as a 'mélange à dose variable d'anachronismes, gallicismes et barbarismes' (p. xiii). Indeed in other ways the author follows the less commendable exaggerations of some of the demoticists, and tries in every way to cut off the life of modern Greek from its historical sources, not in doing this is he by any means averse from wounding the feelings of those to whom all Greek is essentially one language with a vitality so great as to flow into numerous forms. Thus he finds it necessary to reject in much of his work the use of the Greek alphabet, quite disregarding the fact that this makes the reading of his book very tedious for all but the very small number of persons who know no Greek, but wish to learn to read this particular branch of modern Greek literature. Nor does he stop here: he introduces new grammatical terms,

calling the aorist subjunctive the '*subjonctif parfait*' (p. 105), and even giving to the genitive case the name of dative, because of its use to express the indirect object. This originality gives him so much satisfaction that he passes over as of no moment the usages in which the genitive, preserving its original signification, deserves its old name even from the most exclusively modern point of view. This tendency, which it is hard to regard otherwise than as a form of hostility to everything in modern Greek outside the books of Psichari and his followers, appears again when he calls it (p. 261) 'an oriental language' :—could any epithet be more absurd for the language of the people whose rôle it has always been to stand between Europe and the barbarous East?—and takes even a wider sweep when he complacently consoles himself with the prophecy that some day the northern dialects, with their frequent loss of the cases of the plural and their generally poorer character, will affect the language of the islands, and so the contemporary literary Romain may be no more than a brilliant *langue d'île* destined to no long life. '*Même s'il doit être autrement*,' even if Greek as a fully inflected language is not destined to break down entirely, we may still console ourselves: the language certainly 'subira l'influence des parlers du Nord, et nul ne peut savoir jusqu'à quel point' (p. xiv). Again, Greeks are particularly, and naturally, sensitive on the subject of the influence of Turkish and Slav: he cannot avoid saying, therefore, that the Turkish words ejected by the purists and by a part of the nation were legitimately introduced (p. 27), and that to Slav—he points his malice by saying to Bulgarian—influence are probably due several features of the language. For some of these proof either way would be difficult, though the *onus probandi* lies upon the author, but when he mentions here the precision of Modern Greek in noting the aspects of the verb, it is hard to see how the modern language differs from the ancient, except by way of natural development.

But apart from the general spirit of the book, when the reader has overcome the difficulties of the wantonly non-historical arrangement of the facts of a language, which after all is the one which perhaps beyond all others deserves and demands an historical treatment, he will find much that will interest him in the highest degree. The collection of examples from the pages of contemporary writers, who it must be remembered are the most notable literary artists in modern Greece, shows the character and idiom of the modern spoken language as it is to be found nowhere else; for this alone the author deserves many thanks and much credit. It is tempting to say that with his equipment he ought to have produced the book which every one wants, an historical account of the modern written Romain, describing it in its relations with the earlier forms of written demotic and with the modern local dialects; with some sympathy with the general Greek point of view and with a more historical attitude towards linguistic science he could well have performed us this service. But to look at his work in this way comes too close to blaming him for writing his own book and not another. The work taken as it stands is an important contribution to the study of what is certainly the most interesting of the contemporary phases of the whole, which we may be pardoned for calling the Greek language.

R. M. DAWKINS.

Geometry of Greek Vases. Attic Vases in the Museum of Fine Arts analysed according to the principles of Proportion discovered by Jay Hambidge. By L. D. CASEY, Curator of Classical Antiquities. Pp. xi + 235, with numerous diagrams in the text. Boston, 1922.

The title of this book exactly describes its contents: in it Mr. Casey has given us drawings in elevation of 182 Attic vases, and finds that of the whole number only 'nine (and possibly a few more)' do not exhibit in their main, and even in their detailed measurements, proportions to be accounted for by Mr. Jay Hambidge's theory of Dynamic Symmetry. For an account of the theory of Dynamic Symmetry we must refer to a review of earlier books on the subject which appeared in *J.H.S.* xli. p. 204, and to an answer to Mr. Hambidge's critics which Miss Richter contributed to the *A.J.A.* xxi. p. 59. In this book Mr. Casey has tested it on a large scale in the only possible way; that is, by trying whether the theory works in so many instances that chance is practically excluded, and we are driven to believe either that the proportions of the vases were consciously arranged according to the theory,

or that the potters worked on these lines by some aesthetic instinct. Mr. Caskey puts his own position perfectly clearly on p. viii of the Preface: 'The coincidences are in many cases so accurate, simple, and logical, that I find it less difficult to believe them due, in part at least, to conscious design, than to instinctive obedience to a mysterious aesthetic law, or to mere accident.' His aim is 'to present in as complete and accurate and intelligible a form as possible the evidence furnished by the whole collection of Attic pottery in the Museum of Fine Arts' (p. 28). The subject, the possible relations between beautiful form and mathematical proportions, is a very difficult one, and it is not made easier by the ignorance of mathematics displayed by many aesthetic critics, and by the not uncommon, but very un-Greek, idea that mathematicians are unlikely to have a sense of beauty. To come to Mr. Caskey's book: we think that something more than a series of instances in which proportions work out according to the theory is needed to prove its conscious use; some external evidence is required, and of that we have as yet had none. If it were not for the mathematical criticisms of Professor Rhys Carpenter (*A.J.A.* xxv, pp. 18-36) we should incline towards the idea, suggested but rejected by Mr. Caskey, of 'instinctive obedience to a mysterious aesthetic law,' and this we feel is the utmost that any collection of examples apart from external evidence could demonstrate. That the system was consciously used by Greek designers is a theory which may be compared in one way to astrology: even if we could grant that it would be proved if it were found to fit the facts, the theory will seem to many people so antecedently improbable that they are not likely to give themselves the trouble of mastering the evidence.

There is no space here to do more than to refer readers to the previous work of Mr. Hanibridge and his critics, with the assurance that in this book they will find abundant materials to help them to form their own judgment on the question. One great service, however, the book performs for students of these vases: it contains a large number of carefully drawn elevations of vases, which cannot fail to be of use, and provide material for the study of the forms of vases which it would be difficult to find elsewhere.

R. M. DAWKINS.

Seneca the Philosopher and his Modern Message. By RICHARD MOTT GUMMERE. Pp. xvi + 150. Boston, Mass.: Marshall Jones, 1922.

'The volume before us is the first in a series entitled 'Our Debt to Greece and Rome,' which is to be a comprehensive attempt to expound in a number of short studies the classical inheritance of the modern world. Prefaced to the book is a list of contributors, mostly of Philadelphia, but also from other cities of America, 'whose generosity has made possible this Library.' Authors and titles of the first fifty-two volumes are also given. The great writers have for the most part volumes to themselves; but there are also a large number of interesting subjects of another type, e.g. Language and Philology, Greek Politics, Biology and Medicine. The list of authors includes many from this side of the Atlantic, not only from England but also from Italy (Ferrero and Lanciani) and from Belgium (Cumont). It is an interesting and appetizing programme, and every reader of this *Journal* will join in wishing the venture a great success.

Dr. Gummere's essay on Seneca puts together in light and readable sequence a considerable collection of references to the philosopher from Minimus Felix to Maeterlinck, and by this method attempts (in the general editor's words) 'to explain the nature and extent of the influence of the philosophy of Seneca.' His quotations are very interesting, and show the reader how great Seneca's reputation has been. They do not, however, show that Seneca's philosophy has been of great account. For the citations are mostly commonplaces and drawn from books and authors not philosophical. Still less do they substantiate the editor's claim 'that Seneca still lives.' We venture to think that Dr. Gummere's treatment is too indirect. We should be sorry to miss any of his quotations; but some serious effort to state Seneca's contribution to thought is required in a book on 'Seneca the Philosopher.' Unfortunately this effort is not made; and we are left to infer the 'Modern Message' from the things which persons who were mostly not philosophers said about him. But at that distance all philosophies look very much alike.

La Légende socratique et les Sources de Platon. By EUGÈNE DUPRÉL. Pp. 450. Bruxelles: Les Éditions Robert Sand (London: H. Milford), 1922. 15s. net.

Prof. Dupréel has two main theses: first, that Plato derived his material mainly from the sophists of the fifth century, and secondly, that Socrates-the-Father-of-Philosophy is a myth. But as he wrote (no conjecture) the habit of paradox grew upon him. He determined to make the most of his opportunity, and deny within his chosen field everything upon which there is any approach to agreement among the historians of philosophy. He does, it is true, occasionally make a slip and adopt an orthodox position. He devotes, for instance, a whole chapter to proving that Aristotle is no authority on Socrates. But this seems to be due partly to the influence of Prof. Taylor's *Varia Socratica* and partly to an incomplete acquaintance with the recent literature of the subject. In general, however, he sticks to his chosen part of heresimachy; and the further he goes, the bolder his heresims become. That there is much sophistic material in the earlier Platonic Dialogues is very probable, and some of Prof. Dupréel's clever combinations in the first section of the book deserve attention. That all the writers of Socratic dialogues borrowed from the same sources, and those the sophists, is much less probable. That the externals of the traditional Socrates are derived from the comedians is improbable. That there were no Socratic schools of philosophy is hardly credible. That Aristotle was never a pupil of Plato is absurd. We could continue to enumerate provocative theses; but these instances will perhaps suffice.

Prof. Dupréel would have us amend fundamentally our notions of Greek Philosophy. Its golden age was the fifth century, and Hippias was its supreme genius. So Hippias, who boasted at Olympia that he had made all his things himself, turns out to have made Greek Philosophy as well! Frankly, we do not believe it. If Prof. Dupréel wishes to convince, he ought to reconsider fundamentally his notions of evidence.

J. L. S.

Essai sur la politique pythagoricienne. By A. DELATTE. Pp. xii + 296. Bibliothèque de la Faculté de Philosophie et Lettres de l'Université de Liège, Fascicule XXIX. Paris: E. Champion, 1922. Fr. 25.

This dissertation, published under the auspices of the University of Liège, reviews the history of the Pythagorean order in its political aspects and submits to detailed examination the chief Pythagorean political texts. Pythagoras himself, an apostle of holy living, undoubtedly objected to any intermeddling in politics, and when his followers formed at Croton an active political party he warned them of coming errors and retired to Metapontum, apparently as a protest. In the succeeding struggle with the adherents of Cylon the order held its own, Delatte thinks that later, in the middle of the fifth century, the aristocrats, who had seen in the Pythagoreans merely a menace, began to realise that Pythagorean was better than democratic domination, and made the society a rallying-point in their struggle against the rising power of democracy. This view of the latter period of strife seems new and by no means improbable. Our best authorities, Aristoxenus and Timæus (in Iamblichus) and Diocarchus (in Porphyry) give most conflicting accounts of these matters, nor are we helped by later writers, who either garble the earlier evidence or else compose mere hagiography. Delatte draws up a genealogical tree showing the relations of our various sources from the fourth century B.C. down to Teetetus.

To pass to the political texts, Delatte concludes that the fragments of Archytas' *Hepi eikon kai deusemoneon* contain nothing that need be later than the fourth century and are in fact genuine; there is no Platonism in the fragments; the ways in which political rights are distributed are indeed called *idea*, but these do not resemble the Platonic *idea*. Delatte, it may be noted, cordially agrees with the view of Burnet and Taylor that the Socratic and Platonic doctrine of forms is essentially Pythagorean. He ingeniously restores sense to the first fragment of Archytas by taking *adikos* as 'hyper-doric' for *hētikos* (= Attic *hētikos*). The *Hepi politeion* attributed to Hippodamus, who cannot be the Hippodamus mentioned as a political theorist by Aristotle, Delatte thinks

is a late archaizing work. The 'Preambles of Zaleucus and Charondas' were probably composed by Locrian and Rhegian legislators as a code of public morals to serve as an introduction to their laws, and in course of time came naturally to be attributed to the semi-mythical personages who were reputed to have originally given laws to Rhegium and Locri. They may have been written in the fifth century, when much is heard of the distinction between law imposed by force and customary morality sanctioned by public opinion.

The Pythagorean habit of treating politics as a branch of applied mathematics is illustrated at considerable length by Delatte and with perhaps more tolerance than it deserves. In *Isidore's* Life of Pythagoras, §§ 130-131, we read that the most perfect constitution is symbolised by a right-angled triangle with sides of 3, 4 and 5 respectively. With the help of Plutarch's *de Isid.* 36, Delatte shows that 3 = ἀρχή = magistrates, 4 = ἰσοδοξία = citizens, 5 = ἀνταρκαρία = law, and that the right angle is thus an image of social justice founded on law. Archytas, a distinguished mathematician who in a well-known fragment defines the three chief mathematical means, we find proving that aristocracy is a realisation of harmonic proportion and is therefore the best constitution. This kind of argumentation may afford amusement to modern readers with a taste for arithmetic, but will hardly inspire them with the emotions which a Pythagorean would feel appropriate to mysteries so august.

Delatte's work is acute and scholarly, and though from the vagueness and uncertainty of the evidence one sometimes has the impression of participating in an intellectual exercise rather than in the discovery of truth, that is not his fault. He has rummaged Xenophon, Isocrates, Plato and Aristotle for political doctrines which bear upon his theme, and a full index of passages cited is a useful feature of his book. Sometimes, particularly in the historical portion, he seems a little diffuse, and it would have been well if he had found space for the full Greek text of the fragments which he translates and discusses.

J. H. S.

Imp. Caesaris Flavii Claudii Iuliani Epistulae Leges Poemata Fragmenta Varia: collegimus recensuimus I. Bidez et F. Cumont. Nouvelle Collection de Textes et Documents publiée sous le patronage de l'Association Guillaume Bude. Paris: Société d'Édition 'Les Belles Lettres.' London: H. Milford, Oxford University Press, 1922. 12s. 6d.

The foundation for this long-expected edition of Julian's Laws and Letters was laid in 1898 when in the *Mémoires* of the Académie royale de Belgique Bidez and Cumont published their *Recherches sur la Tradition manuscrite des Lettres de l'empereur Julien*. Now after a quarter of a century the work stands complete. We thus possess at last a reliable text, and more than that, for throughout the book parallel passages alike from pagan and Christian sources are cited and references given to modern manuscriptal literature; these will prove of the highest value to historical students. The volume contains the 'epistles' of Julian in the ordinary sense of that word: it does not therefore include Julian's letter to the Athenians, nor that to Theodorus; the latter, it is interesting to note, is dated by Bidez immediately after the death of Constantine (cf. Bidez: *L'Évolution de la politique de l'empereur Julien en matière religieuse*: Brussels, 1914, p. 6, n. 4; and contrast Rostagni: *Giuliano l'Apostata*: Turin, 1920, Appendix II.). There are few surprises in the division adopted by the editors between the genuine and spurious or doubtful letters. Of the letters confidently rejected by Schweur only No. 72 (Hertlein) is accepted as genuine; of those rejected by Gelfken (*Kaiser Julianus*: Leipzig, 1914, p. 145) only that to Theodorus (= 7*), Ep. 25 (Hertlein), not included among the spurious letters by Gelfken and defended by Jaster (*Les Juifs sous l'empire romain*, I. p. 159), is rejected: 'etenim Iuliani scribae ab epistula sermonem LXX interpretum non astantant' (p. 280), while the attempt of R. Armin (*Philologus*, XX., 1913, pp. 115 sq.) to defend Ep. 33 (Hertlein) is regarded as unsuccessful. The annus coronarius edict is attributed to Julian; Wilcken's recent article was published too late for any discussion by Bidez (cf. *Zeitschrift der D.M.G.-Stiftung*, XLII., 1921, pp. 150 sqq.) who adds, 'de quo alibi disputandum erit.' It may be noted that Wilhelm Esslin has maintained the ascription to Julian in *Klön*, xviii., 1922, pp. 131-2.

This edition is so mature a work that little is left for a reviewer save an expression of gratitude. The suggestion of Asmus that Ep. 62 (Hertlein) is probably addressed to Aphobius might have been recorded (cf. Asmus: *Julians Brief über Pegasus*, *Zeitschrift für Kirchengeschichte*, xxiii, 1902, pp. 479-495), and in the citation of the Vita S. Eusebii (p. 59) a reference might have been given to the study by Latuisev, *O Zhitiye sv. velikomučenika Eusebiya* (*Zhurnal Ministerstva narodnogo Prosvyashcheniya*, N.S. LV, 1915. *Otdel Klassicheskoi Filologii*, pp. 65-91), where a new text is published from Cod. Vatican. 1671 (v. x.).

N. H. B.

Carchemish. Report on the Excavations at Jerablus on behalf of the British Museum. Part II: The Town Defences. By C. LEONARD WOOLLEY, M.A. 4to. Pp. xii+156; 61 text illustrations and 32 plates. Oxford: University Press, 1921.

The introductory volume of the official publication of the excavations at Carchemish, written by D. G. Hogarth and published in 1914, has now been followed, after an inevitable interval of seven years of war and its consequences, by a second volume written by C. L. Woolley, who, after R. C. Thompson, succeeded Mr. Hogarth in the directorship of the expedition in 1912 and conducted the excavating campaigns of 1912, 1913, 1914, and 1920. Since the last date the Franco-Turkish treaty has placed Carchemish on the Turkish side of the Syrian boundary, and work has perforce been suspended until new arrangements are made. Much remains to be published that can only be elucidated by further excavation, but meanwhile Part II of the work is issued, dealing with the Hittite fortifications and methods of building, as well as house-sites. Mr. Woolley is a connoisseur of brick walls and foundations: he is a specialist in them. And the present part of *Carchemish* gives him ample scope to show his interest and his skill in reconstituting the town-walls, forts, gates, and mounds of the ancient city, and in making suggestions as to their dates. On this point he is definite in assigning the ring-wall to the Early Hittite period, before 2000 B.C., the inner town wall to the Middle Hittite period. Personally we have doubts whether the term 'Hittite' can justifiably be used of the earlier period at all, since we have as yet no proof that there were any Hittites at Carchemish in those days. We do not know that the Anatolian invasion of Syria did not take place until after 2000 B.C. It might seriously be suggested that the term 'Hittite' should be dropped altogether so far as the most ancient Carchemish is concerned, and some less question-begging term such as 'North Syrian' or 'Syro-Euphratean' be adopted in its stead, at any rate as regards the early period. Of Hittites in later days, as far back as 1200 B.C., there is of course no question, and there were no doubt Hittites there as early as the Hyksos period in Egypt, six centuries earlier; but before that we have no definite information. May not the 'champagne' cups be as much North-Syrian as Anatolian in origin and pedigree?

Mr. Woolley finds traces of the great convulsion of 1196 B.C., when Carchemish, like other cities of Kheta and Amor, fell before the invading Philistines and their allies of Mushki, in destruction and remodelling of the walls; and he also confirms the valuable observation, which he has already made elsewhere, that the invasion is immediately followed by the introduction of iron and of cremation. Also Hittite warriors in future wear a panoply, with crested helm (Pl. B 26) resembling the Greek, which, like the latter, was obviously derived from the invaders from West Asia Minor, from Lycia and Caria, 'Urphiliatia,' the home of the crest and the cuirass. One almost suspects that after 1200 Hittite Carchemish was ruled by Mushki princes.

The new defences of the city Mr. Woolley compares with those of Sinjirli, finding in both a similar method of defence by means of two parallel walls running 'so far as might be' in straight lines, and only a few metres apart, and dispensing with mound, moat, and earthwork. The excavators of Sinjirli thought that these two walls were of different dates, the inner replacing the outer after it had fallen to ruin. Mr. Woolley's explanation, however, has most probability in its favour.

Among the houses excavated was one which Mr. Woolley with good reason thinks was burnt in the taking of Carchemish by Nebuchadnezzar in 604 B.C. The facts that the

house was destroyed before and 'that it had remained undisturbed ever since, made it an ideal site for excavation, for whatever was in it at the time of its destruction, and did not perish in the fire, was waiting to be brought to light. . . . The house had been destroyed by an enemy and the burnt ruins were littered with evidence of a desperate struggle. Everywhere, and especially in the doorways, were arrowheads, literally in hundreds, arrowheads in bronze and in iron and of many types, some of them Hittite, some clearly not. Occasionally a mass would be found all fused or rusted together, the contents of a quiver: sometimes the single points would be bent or broken as if by striking on the stones or metal-work of the doors. Javelin-heads were fairly numerous, a sword was found and a remarkable bronze shield; and in rooms 3 and 4 there were human bones on the floor.' The shield is important: it is of thin bronze, circular, and bears an archaic Gorgoneion in its centre: 'round this in narrow concentric zones are rows of running animals, dogs, hares, gazelles, and horses' (Pl. 24). There can be no doubt that it is Ionian; the shield of a Greek or Carian mercenary. In the house also were found Egyptian bronze figures of gods and fragments of alabaster vases and the pale-blue faience or composition 'New Year flasks' with their inscriptions, 'May Anen open the new year well for its owner!' and so forth, which are so characteristic of the seventh and sixth centuries. Then too were found clay seal-impressions with the name of Pharaoh Necho, and a bronze ring with cartouche-bezel inscribed with the name of Psammetichus I. The burnt white steatite human mask, also found in this house, we would not, says Mr. Woolley, claim as Egyptian.

The general deduction from these remains is obvious: we have here the house of a Hittite noble or official closely connected with Egypt, or possibly that of an Egyptian officer, destroyed in the siege of 604 B.C. after the defeat of Necho by Nebuchadnezzar. 'Everything in the house is to be dated to 604 B.C. and to the years immediately preceding it,' and Mr. Woolley suggests that the destruction of the city was the punishment of long intrigues with Egypt against Babylon. This we now know to be very probable, since Mr. C. J. Gadd's recent discovery of a contemporary Babylonian record of the Fall of Nineveh in 612 (not in 606) B.C. shows us that Assyrian power had for some years before the catastrophe been bolstered up by Egyptian armies sent by Psammetichus I, perhaps (as suggested by Mr. Gadd) in common fear of the Scythians, perhaps (as seems to me equally probable) in agreement with the attitude of subject-alliance with Assyria which Psammetichos had observed faithfully in former days, and which it is possible he had always preserved. After all, he had once been an Assyrian prince, and bore the name Nabu-shezib-ammi. His armies appeared constantly on the Euphrates at this time in support of his old suzerain against the ambition of Nabopolassar, and Necho, his successor, kept up the anti-Babylonian tradition after his death, until the final catastrophe at Carchemish and the bankruptcy of the new Egyptian hegemony in Syria. Mr. R. C. Thompson has translated for the volume a coneiform tablet (Pl. 26) found in the same house which records a concession of rights over oaks and other trees useful for leather-tanning, granted to certain Syrians of Harran by the Assyrian government in the reign of Sennacherib, a century earlier.

The photographic plates of late-Hittite hieroglyphic inscriptions will be most useful to students of this elusive script. Among those of the sculpture is specially noticeable the great stone seated figure of a god in Assyrianizing style on a base supported by lions held by a gryphon-headed running figure: a cast of this base is in the British Museum. The photographs of tomb groups and miscellaneous antiquities are interesting, especially the unique arrow mould (Pl. 23), the bronze greave on Pl. 25, and the beads and pottery from 'Middle Hittite' tombs (Pl. 27).

We notice that in this volume the modern name of Carchemish is given in the form of 'Jerablus,' whereas in Dr. Hogarth's volume it is called 'Djerabis,' which we were under the impression was really the correct form, 'Jerablus' being due to a confusion with Hierapolis, which is really Membij (see *Carchemish*, I, p. 24). The original uncorrupted form having been used on the title-page of the first volume, we think it would have been better to have retained it (especially since it is probably a corrupted descendant of the original *Gorgoneia*), in spite of the fact that 'Jerablus' is the name under which it is more generally known nowadays.

It is to be hoped that in a not distant future Mr. Woolley will be able again to take up

the work at Carchemish for the Trustees of the British Museum, now that peace is concluded with Turkey. It is an enormous site, and only the fringe of it has been touched as yet; we have still much to learn from Carchemish. We can only regret that the anonymous donor who made the work possible should not have lived to see further results.

H. R. H.

Tylissos à l'époque minoenne. By JOSEPH HAZZIDAKIS. Traduit du grec par l'auteur avec la collaboration de L. Franchet; introduction et annotations par L. Franchet. Pp. 91; 48 text illustrations; 10 plates. Paris: Geuthner, 1921. Fr. 25.

This book consists of the articles of M. Hazzidakis on his excavations at Tylissos, Τέλοςος μινωική, which were published in the *Ἀρχαιολογικὴ Ἐφημερίς* in 1912, reissued by the author in a French form, with the addition of a translation of an article on some Bronze Age Cretan tombs published in the *Athenische Mitteilungen* in 1913. It is very convenient to have M. Hazzidakis's description of his successful excavation in a separate form, with all the illustrations as it originally appeared, although it is not so necessary for British, American, and German archaeological readers as for the French, since the learned public in the first three countries seems to be commonly more familiar with Greek than is the case in France. But quite frankly we regret that M. Hazzidakis should have taken M. Franchet as his Gallic guide, philosopher, and friend on this occasion. M. Franchet's inability to do justice to the work of the British excavators at Knossos, or even to understand it, is so well known that it discounts much of what he says in his introduction to its detriment, and even of what he says in praise of that of M. Hazzidakis at Tylissos. M. Hazzidakis has no need of M. Franchet's eulogies: we all know his excellent work, and it cannot be palatable to the distinguished Cretan archaeologist that his work should be praised in express contrast to that of Sir Arthur Evans and all other archaeologists, British, American and Italian, in Crete. To describe the excavations at Tylissos as 'les plus importantes qui ont été faites jusqu'ici en Crète, non pas au point de vue de la valeur intrinsèque des objets trouvés, mais à celui de leur valeur documentaire et de la méthode rigoureuse qui a permis à l'auteur d'établir péremptoirement des divisions chronologiques s'appuyant sur les faits, à l'exclusion de toute hypothèse' (p. 4), is frankly absurd. Leaving Knossos, Phaistos, and Hagia Triada out of account, are Palaikastro, Gourniá, Vasiliki, Psira, and Mochlos to be regarded as excavations not so scientifically conducted as Tylissos, and the conclusions of their excavators not based on rigorous method and on facts? Such comparisons are odious, and we are glad to see that M. Franchet confesses that M. Hazzidakis was not aware of what he was going to say in his introduction: 'Je ne me hasarde pas à lui soumettre ces lignes.'

To his introduction M. Franchet adds a new classification of the periods of Cretan archaeology of his own to take the place of that of Evans, in which he suggests the use of the term '1^{re} Age du Fer' instead of 'époque géométrique,' which he seems to think is an Evansian term. But what else was the Geometric period ever supposed to be? And Sir Arthur would probably consider E.M. I. and II. to be as 'énéolithique' as M. Franchet does.

Turning to M. Hazzidakis's own work, and disregarding M. Franchet's occasional footnotes, which contribute nothing to its value, we find that the author has not added anything new to his text. Tylissos was an interesting site, carefully excavated, and has yielded important antiquities, such as wall-paintings and the great bronze cauldrons and the beautiful little vase of obsidian which are so well known. Its stratification may not always agree absolutely with that of Knossos, just as the eastern sites may also yield evidence slightly differing from the Knossian, as in the case of L.M. I. and II.; but this in no way invalidates Sir Arthur Evans's general scheme, as M. Franchet seems to think.

Alteuropa in seiner Kultur und Stilentwicklung. By CARL SCHUCHHARDT.
Pp. xii + 350, with 35 plates and 101 figures in text. Berlin: Trübner, 1919.

The Director of the Berlin Museum für Völkerkunde here attempts to present in a popular form a survey of the cultural history of our continent from the Diluvium to the Great Migration. He bases his analysis of European cultures on principles derived from cultural anthropology. Pottery is his chief guide from the neolithic period onwards, and we welcome the restatement here in handy form with illustrations of his classification of ceramic forms according to their derivation from gourd, leather, or basket prototypes (pp. 44-8). The influence of wood in vessels richly illustrated in the lake dwellings and recently pointed out by Evans in early Cretan types is, however, under-estimated. Moreover, the independence of stone and metallic shapes is denied altogether, and this leads to fantastic derivations for vases of the Bronze Age civilisations (e.g. the 'situla' from a leather cup, p. 53). Next to pottery comes architecture. The long rectangular house is classed as Nordic on the ground that it is the natural type for structures in wood. Its Nordic origin is, however, left a mere postulate and unsupported by any early evidence except the West European *Schlosserried*, so that Boehlke's recent refutation (*B.S.A.* xxiv.) holds good. Contracted or extended interment is a further criterion. Both represent the customary position of the sleeper; the former in warm southern climates where men lay on the bare ground; the latter in the north where some sort of bed must have been used to keep out the cold.

About a fourth of the book is devoted to the Aegean. Two ideas dominate Schuchhardt's discussion of the Aegean cultures—the 'fertilising influence' of the West in Crete and the Cyclades, and the Nordic (i.e. Indo-Germanic) inspiration of the Mycenaean civilisation on the Mainland. To support the former view the well-known connections between the Eastern Mediterranean and Spain, Malta, etc., are explained in a manner the inverse of that generally adopted since Montelius. New Grange becomes the prototype of the Greek *tholos*, Stonehenge of the 'lion circle' of Mycenae (p. 80). This inversion is justified by the contention that a continuous development from palaeolithic cave-burials to interment in artificial grottoes and built tombs can be traced in the west (pp. 148 and 67). Similarly, Evans' typology of the figurines (*Palace of Minos*, p. 48) to which the well-known schist and marble plaque-idols of the Iberian Copper Age may be appended as a last degeneration, is reversed (p. 166) in order that the *Menhir*—originally a throne for the ghost and then transformed into an actual image of the ghost itself—may be made the starting-point of the series. In view of the immense preponderance of female idols we are tempted to inquire whether males were immortal in those days. Silver is found native in Spain. Hence the silver daggers of Knossos are adduced as evidence of a Spanish origin for the form. In fact the Minoan silver came via Troy, *τηλαίβης ἄρ' Ἀλκίβη*, whence no doubt the Kuban and Galich silver was also derived. Even the Remedello pin is a South Russian (*Jakovice*) not a Spanish type. Schuchhardt's contempt for stone enables him to derive the varnished bowl (and through it also the silver cup of Minyan shape from Mycenae!) via Malta from leather types of the West without even mentioning the Egyptian IVth Dynasty prototypes. The Kamars style is said to have originated in Malta (p. 175), as evidenced by the Hal Saflieni roof decorations and the 'lion motive' on the pottery, the explanation of which is given by Evans (*op. cit.*, pp. 261 ff.). Yet Schuchhardt is frankly puzzled by the isolated appearance of the spiral in the island (p. 225). In all this our author seems to have abandoned the method of explaining the known from the known which is the keynote of the best German work and has led to many valuable results. Incidentally he treats as his own discovery the explanation of the downward tapering column and its illustration from the Balearic Isles which was given by Evans in 1901 (*in Mycenae Free and Pillar-Collie*).

The thesis of Nordic intervention is more familiar. Schuchhardt does not, like Schmidt, bring his Nordics to Knossos, and fully recognises Minoan elements in the Shaft Graves. He relies mainly on the megaron and the pottery. The former troubles him somewhat in Troy, where the Anatolian elements are admitted. He thinks it arrived in Troy I. and was preserved by the mixed masters of Troy II. The megaron, as has been remarked, is not Nordic, and Schuchhardt's treatment of the pottery is far fetched. The

intrusive Dimini ware, it is said, shows the influence of Slavonian ware, and this derives its technique (*Tiefstich*) and its metopie decoration of lozenges, rosettes, and triangles from the North-west German megalithic pottery. This Nordic influence is continued in Lissakladi III. and reappears in Mycenaean motives. The demonstration of the latter thesis involves some extraordinary inversions of the real development.

In conclusion it may not be out of place to suggest one general criticism of the German attempts to find early evidence of Nordic influence in Greece of which Schuchhardt's is by no means the most weighty. This is the simple question of chronology. Can Dimini or Troy II. have been influenced by an expansion of the people who made the North-west German megalithic pottery? Now, as is well known, the keystone for the chronology of the northern Stone Age worked out by Montelius and others consists in the synchronisms established between the bell-beakers in Spain and the North on the one hand, and in Sicily at Villafraati on the other, and between Simdan I. and Troy II. Schuchhardt correctly dates Troy II. to E.M. III-M.M. Ib, on the strength of button-seals on the one hand and Kamares sherds on the other, though his assignment of the Early Helladic glaze-ware (*SAH. Samml.*, nos. 1989 and 2050), now first published, to strata III-V, is incompatible with this. But he follows Schmidt in regarding Villafraati as approximating rather to Stentinello and the Knossian neolithic than to Simdan I. and Troy II., so that the bell beakers and then the Megalithic pottery in the North can be pushed back half a century further than the older chronology allowed—say to E.M. I. Can we check this? In addition to the arguments of Sophus Müller and Tallgren, I venture to suggest the following. The graves of Jordansmühl in Silesia on the German thesis belong at latest to the period when the Nordic expansion—Kossinna's first wave—was beginning. Now Jordansmühl is derived from, but a little later than, the culture represented by the graves of Lengyel in Hungary (Senger, *Schlesisches Vorzeit*, N.F. vii, pp. 82 ff.). The latter station can be connected through Vinča with Thessaly III. by the red-crusted ware (*J.H.S.*, xiii, p. 275) and so with E.M. III. Incidentally Slavonian ware and the bell beaker are both later in the Danube area than the Lengyel graves. Hence Nordic influence in the Aegean before the latest years of E.M. III. is a chronological impossibility. At the same time Schmidt's dating of the Copper Age in Spain becomes virtually untenable.

For the rest, however, despite its faults, *Altengropa* with its many illustrations offers the handiest introduction that is available to the Hellenic student who wishes to become acquainted with the neighbouring cultures of Central Europe.

V. G. C.

The Bronze Age and the Celtic World. By HAROLD PEAKE. Pp. 201, 14 plates and 26 figures and maps in the text. London: Benn Bros., 1922. 42s.

Mr. Peake's survey of Europe from palaeolithic times is, in view of the special interest of his book, naturally more summary than Dr. Schuchhardt's, and it is based on skulls rather than on pots. The main arguments too are much less closely reasoned than in *Altengropa*. Indeed so many steps are omitted that many of Peake's conclusions might be taken for guesses by the uninitiated. For instance, our author is very probably right in finding, with Schrader, the original home of the Indo-Europeans (here called 'Wiros' and equated with the Nordic race) in South Russia, and in identifying them with the red skeleton folk of the *Ezerova*. But the material published by Spitsyn, Tallgren and others, on which this theory must be based, is not sufficiently well known here or in Germany to be assumed without a reference. Nor can the German view of the north-west European origin of the Wiros, handled in such a masterly fashion from the archaeological side by Kossinna, be simply ignored, especially when Giles is criticised at such length.

The one whole chapter devoted to the Aegean is largely concerned with the Nordics there, and in fact merely restates the case for the Achaeans on the lines laid down by Chadwick and Mackenzie without using new evidence such as Miss Hall's work at Vrokastro. The argument that, as the Thracian Thyrasites was conspicuously Alpine (*φορὸς κεφαλῆς* = broad-headed), the Ionian Achaeans must have been Nordic long-headed, is rather too ingenious. The dynasts whom the Achaeans supplanted, were not Mediterranean Minoms,

but a hypothetical people called Prospectors, introduced in Chapter IV, to explain the megalithic monuments, and there described as bands of Sumerian merchants. Peake sees Prospectors in the broad-headed strain who appear already in Early Minoan Crete. They organised the trade of the island and later became the rulers of the Minoan settlements on the mainland. They are depicted as an avaricious *bourgeoisie*—the forerunners of Ure's tyrants—from whose sway the strong and honest Nordics rescued the proletariat. The establishment of barbarian dynasties can be satisfactorily accounted for, without this contrast, on the lines suggested by Chadwick. The whole theory of Prospectors is admittedly speculative, and essential links in its deduction seem to be racial types observed by its author in a café in Athens, and a distribution of ores which cites Cilicia as the source of Minoan silver.

The most original and valuable part of the book is the typology of the leaf-shaped swords based on the hilt. Peake abandons Nais's derivation of this type from the Minoan rapier and traces it directly to the Italian dagger. The type from Mycenae and Muliana which was brought by his Achaeans is the fourth in a series of which Hallettatt yields the seventh. To the same type belongs the sword inscribed with name of Seti II, attributed to the 'Elkesh' of the raid of 1220 B.C. This dates the series. The iron sword was brought by the Dorians, but no instances are cited. We should be glad to have Peake's opinion on the weapons from Halos and Vrokaastro. This typology is still admittedly tentative, but it looks as if it may prove a most valuable weapon to the archaeologist.

The cross division of the Centum Viros into P and Q peoples on Rhys' theory presents insuperable difficulties. In particular it is hard to argue, as the theory requires, that the last group to reach Greece, the Dorians, spoke peculiarly a P dialect and 'may well have been the first people to introduce such a tongue' there, when labialisation is most complete in the oldest dialect, Cypro-Arcadian, and in Aeolic (πῆρε for πῆρε). Rhys has misled Peake into choosing πῆρε (πῆ from ky) as an example to show how Greek falls on the P side of a division which must, in view of the P-Italic *skias*, be based on the treatment of the velars.

V. G. C.

A History of Greek Mathematics. By SIR THOMAS HEATH. 2 Vols., pp. xv + 446, xi + 586. Oxford: The Clarendon Press, 1921. £2 10s.

It is a criticism commonly brought against the scholarship of our day that, while the research of specialists produces an endless series of monographs upon the minutiae of every branch of learning, the results of that research are seldom collected into general treatises taking a wide view of the whole subject. Sir Thomas Heath at least has removed this reproach from his own peculiar domain; for having, by his successive studies of Euclid, Diophantus, Apollonius and others, established his right to be regarded as our highest authority on Greek Mathematics, he has now given us a synthesis of his life's work which it is safe to say will not be superseded for many years to come.

The book covers a very wide range, for Sir Thomas does not limit himself to Pure Mathematics, but follows Apollonius of Perga into the realms of Astronomy (where he pays a needed tribute to the great neglected name of Aristarchus of Samos, the originator of the heliocentric system eighteen centuries before Copernicus); he surveys mechanics through the eyes of Archimedes and touches from time to time upon the mathematics of musical harmony; and Zeno's famous paradoxes lead him to those abstruse problems, relating to the fundamental assumptions of mathematics, which lie really within the metaphysician's field. But the major portion of the work is very rightly devoted to the two branches of the subject which were most highly developed by Greek mathematicians: Geometry, including much of the content of our Algebra, and ἀριθμητική (as opposed to λογιστική, the mere science of calculation), which corresponds to our Theory of Numbers and Indeterminate Analysis.

Naturally we miss the results of modern analytical methods, for the Greeks never attained to an algebraic notation, and notation dominates mathematics as language dominates other branches of thought. But we are shown how much of our trigonometry

was known, with but slight differences of terminology, to Hipparchus and Menelaus; and at every turn we are reminded of algebraic theorems which are implicit in statements of arithmetic or geometric form. Indeed we sometimes feel that Sir Thomas presses the Greek claim unduly far; for after all if the knowledge of a fact includes a knowledge of all its implications, we shall have to say that he who knows the axioms knows the whole of mathematics. But this is not the place for a commentary on the *Meno*.

Covering as it does so much ground, it is not surprising that the book shows signs of ruthless compression. Though the arrangement is very largely by authors, more biography has been cut down to the narrowest limits, and we miss the fascinating digressions of some of the author's earlier works. But this restraint allows him to set forth all that is really relevant to the subject with the lucidity, the orderliness, and the logical power that both the classical scholar and the mathematician are trained to admire.

Every tree is clearly outlined, but we cannot fail to see the wood. We realise how essential to the Greek mind was that austere Doric strain in it which sought after the severe beauty of mathematical truth and which wrote over the door of Plato's Academy *δυσκολόγητος νόμος εἰσires*. For Mathematics is an art as well as a science, especially that very Greek and very esoteric branch of it, the Theory of Numbers, which still fascinates mathematicians to a degree quite out of proportion to its intrinsic importance, and which is so closely connected with that strange numerical mysticism which does not begin with Pythagoras and does not end with the "*numero Deus impari gaudet*" of Leibnitz.

From the whole work we gain a clear picture of the Greek mind seeking in the truths of number the harmony which is to resolve the discords of the world. It is a quest which is not yet ended nor abandoned. For what is the latest effort to explain the observed phenomena of physics by the laws of pure geometry but a reversion to the Greek idea of *κόσμος*? Is not Einstein the latest of the Pythagoreans?

Egypt and the Old Testament. By T. ERIC PEET. Pp. 227, 2 maps. Liverpool University Press. London: Hodder and Stoughton, 1922. 5s. net.

Greek studies impinge so much nowadays upon ancient Egyptian and Semitic lore (the Bronze Age culture of Greece, for instance, cannot be properly understood without constant reference to Egypt) that Prof. Peet's interesting little book on the relations of Egypt and early Palestine as shown us in the Old Testament deserves at least a short notice in these pages. Except for the last chapter, on 'The Episode of Onias,' Greek interest is nowhere directly involved, though the penultimate chapter on 'The Jewish Colonies in Egypt,' the settlement of the Diaspora at Syene, will be of interest to all students of Egypt of the Ptolemaic and Persian periods, when Greeks were as intimately concerned with Egypt as Jews. But the whole book deserves attentive reading as an eminently sane treatment of the subject, disfigured neither by the extravagances (now happily almost buried in oblivion) of the more extreme 'Higher Critics' nor by the ignorant obscurantism of their more extreme opponents. Some may think that the outlook is almost too cautious and conservative. Certainly, if he errs at all, it is on the side of caution; but we can at least be assured that when Prof. Peet confesses that a thing no longer admits of doubt, the probability is that the matter is settled.

H. R. H.

The Western Question in Greece and Turkey. A Study in the Contact of Civilisations. By ARNOLD J. TOYNBEE. Pp. xi + 429, 3 maps. London: Constable & Co., 1922. 18s.

Professor Toynbee is a doubly bold man. Although holder of a chair of Byzantine and modern Greek history, in which the Greeks are specially interested, he has not hesitated to write a book which cannot have been pleasant reading to his clients, and has been quoted with skill by the Turks; although without previous journalistic experience, he went out

as correspondent of a great newspaper to a region where appearances are specially deceitful and where people are past-masters in the art of arranging the scenery for the benefit of the writers in the stalls.

His book really consists of two parts—the former the development of his theory of the influence, not always beneficent, of the West upon the East; the latter a narrative of what he saw during his visit to Asia Minor. As his book was written before the Turkish victory and the consequent Mudania Convention and Lausanne Conference, his description of the military situation as a 'stalemate,' and his judgment that 'the Anatolian campaign would not be terminated by a military decision' (p. 238), have not been confirmed by facts. Military critics are the most fallible of journalists. But we agree with him that 'Conferences and agreements are likely to have no more than a partial effect'; for, although he apparently thinks that the tide of Lepanto and Navarino has turned definitely in favour of the Turks, the whole trend of Balkan history points to the probability that one day the Turks will leave our continent, in which they were never more than a garrison, whereas Asia is their true home. Professor Toynebee, who in 1915 collected a mass of evidence to prove that the Turks massacred the Armenians, in 1922 came round to the strange view that 'atrocities are committed in similar exceptional circumstances by people of every nation and civilisation,' and that 'the revolutionary process of Western civilisation was one of the causes of massacres' (p. 266). But there is this difference: the Turkish policy of massacre was an organised system, as anyone who was in Constantinople during the Armenian massacres can testify, whereas the massacres by Christians have been usually sporadic incidents. If, again, the Turk be as capable of progress as Professor Toynebee seems to believe, how is it that he has hid his light under a bushel for so long? How is it, for example, that Albania, most backward of all Balkan regions under Turkish rule, has made considerable advance during its few years of independence?

The author truly points out that the confidence of the Greeks in the British Government's resolve to 'see them through' (p. 99) increased their warlike feeling, and he exposes the absurd fallacy of the Near Eastern peoples that the West is constantly thinking of their affairs. But it is not clear why he considers (p. 65) Greek neutrality 'more dignified than the purchase of territory by intervention.' Was not the latter exactly what Italy did by the Treaty of London, which was the reward of her entry into the war? As for the causes of M. Venizelos' defeat, that statesman told the present reviewer that in his opinion the real reason was the prolonged mobilisation. But every Philhellene will share Professor Toynebee's judgment, that 'Greece cannot begin to rebuild her shattered political life so long as it remains dominated by personal rancours' (p. 68).

The most interesting passages in the book are the description of M. Stergiades, the Greek High Commissioner—a remarkable man—and that about the Moslem Cretan refugees, who found, after all, in Asia Minor that they had more in common with the Greeks, to whom they belonged by race, than with the Turks, to whom they were joined by religion. Exile usually makes patriots of us all.

Greece and the Allies, 1914-1922. By G. F. ABBOTT. Pp. xi + 242. London: Methuen & Co., 1923. 7s. 6d.

Mr. Abbott, who is well known as a writer on subjects connected with the Near East, has in the present volume entered upon a highly controversial field. Although ex-King Constantine is now dead, party passion still burns furiously around the events about which the author writes, and it is scarcely yet possible to approach them with that judicial view proper to the impartial historian. Mr. Abbott's sympathies are strongly with the late King, and he scarcely does justice to the much greater statesman, whose defeat and exile are one of the causes of his country's present temporary set-back. As a careful summary of the case for Constantine, the book may be consulted, but it is a clever party pamphlet rather than a history. Had George I. not been assassinated at Salonika, the history not only of Greece but of the European war would have been different; for that shrewd

sovereign, who in his political testament foresaw his son's character, and its dangers, would have collaborated with his great Minister, and, as a Dane, had no liking for the Prussia which had robbed Denmark of Schleswig-Holstein in 1864.

Rodi. By ARSENZO MARZET. Pp. 170, 64 plates. Il Piccolo Cicerone Moderno Nr. 21. Rome, Milan, Florence, Naples; Alfieri and Lacroix, 1922. L. 15.

This admirable guide-book to the island of Rhodes has particular value as a record of the work done there by the Archaeological Mission, the School of Archaeology at Athens, and the military and civil authorities of the island since the beginning of the Italian occupation in 1912. Their greatest achievement is the clearance and restoration of the Hospital of the Knights, lately used as barracks by the Turks, and the establishment in that most suitable place of an archaeological museum for the southern Sporades. A general historical sketch, which like the rest of the text is equipped with the necessary bibliographical references, introduces a short account of the topography of the ancient city of Rhodes, and a longer description of the city of the Knights and of the later Turkish buildings; the fortifications are described at length in a separate section. For the rest of the island there is a rapid excursion to Ialyssos and Lindos. At Lindos it is noted that the Danish excavations under Blinkenberg (*loc.*) and Kinch so disturbed the soil of the acropolis that the walls of the castle have since had to be strengthened by the Italian Government. There is no mention, however, of the finds which that unfortunate expedition left to the care of the Italian Government in the castle. The greater part of the book is naturally devoted to the Knights, but the description of the Hospital itself is conveniently combined with an inventory of its present rich contents. These have a wide range from neolithic pottery to island embroideries. Most important is the material from more than forty tombs in the Mycenaean cemetery of Ialyssos, the excavation of which, in 1914, has completed and, let us hope, corrected the work of Sir Alfred Billotti, who dug the other part of this site for the British Museum in 1868-71, partly at the expense of John Ruskin. The text is illustrated with sixty-four half-tone plates well printed on special paper, besides topographical plans and heraldic diagrams. The book is small enough to go into the pocket, but large enough for library use; the type is clear, the form is elegant, and the price is modest.

Iranians and Greeks in South Russia. By M. I. ROSTOVITSEFF. 4to, pp. 290, 33 plates, 23 figures in text and map. Oxford; Clarendon Press, 1922. £4 4s.

Anyone who has long pored over a jigsaw puzzle, arranging the bits according to resemblances of colour or other such hints without much luck in real fitting, and then has had somebody who had done the thing before come and put group after group of pieces together into their true places and make the whole into a connected picture, will exactly enter into my feelings as I read the proofs of this book: again and again groups of facts with which I was quite familiar, but had not been able to combine, fell into place and explained each other: only occasionally it was one or two fresh pieces of information that gave the key to what was already known.

The first such combination, correlating the copper age in N. Caucasus with predynastic Egypt and the early times of Sumer is to me the least convincing, perhaps because I am unfamiliar with the things compared and unable to distinguish specific resemblance from the general primitive lack of style visible in all three regions.

The treatment of the wars and raids of Cimmericians and Scythians in the eighth and seventh centuries B.C. is not only masterly in itself, but for the first time explains things in later history. Taking the Cimmericians as mainly Thracian, our author uses them to account for the strong Thracian element always to be found on the Cimmeric Bosporus (I do not know why the form Bosporiæ is used throughout the book) and the succession there of two dynasties of kings with Thracian names; while he sees the origin of the hitherto

mysterious Iranian element which played such a part in the history of Pontus, Armenia and the parts about them, in remains of Iranian Scythians. He does, however, allow that Chimerian proper names have an Iranian cast, and that the Scythians in some representations (e.g. the Solokha gorytus) recall Mongolian types.

In treating the history of the Scythians, Rostovtzeff really returns to a more literal belief in the Greek accounts of them: by carefully examining the authorities he shows that though the term 'Scythian' was no doubt used loosely, it primarily denoted a definite nationality, and that this specific nationality lasted in the Crimea and the Dobruzha at least till the coming of the Goths: we have all been too much inclined to believe that all exact use of the name had ceased by about the Christian era. Again, by taking literally what we are told of the agricultural tribes in Scythia, he makes clear the economics of the Scythian kingdom and their corollary the prosperity of Olbia and the Bosporus. An interesting point brought out is the shift in the commercial spheres of influence of these two centres corresponding to the shift of the native population, and attested by the different character of the wares supplied by each. Scythian prosperity was narrowed and then extinguished by the advance of the Sarmatae: rather unwillingly I have come to agree that our author's distinction between the matriarchal Thracian or Caucasian Sauromatae and the patriarchal Iranian Sarmatae brings order into this part of history, but I do not quite know what to make of one point in the Amazon myth of the Sauromatae, their speaking essentially the same language as the Scythia.

New finds of tombs in the Government of Orenburg (Prokhorovka) may be recognised as Sarmatian by the fundamental differences between Sarmatian and Scythian equipment; this enables us to trace how the former came down from the Ural Steppes to the Don, a great gain to knowledge. I think an Englishman sympathises with the archer Scythia in their losing struggle against the Sarmatian men-at-arms.

Very interesting is the demonstration that as the Scythia yielded to the invaders their borders on the east, including the Kuban basin, so Scythia in its finds though not assigned by Herodotus to the Scythia, they reorganised their power in the west and intensified their hold in the Kiev region, so that their culture really penetrated their western subjects, hitherto almost unaffected by it.

The art-history fits into the political changes: given a general art of the nomadic Iranians in the sixth century B.C., not an abstraction after the Streykowski Altai-Iran manner, but a vigorous beast-style with its own tendency to polychromy, yet subject to external influences from Assyria, Asia Minor and Ionic Greece, we are shown how the S. Russian Scythians, in closer touch with Greece, rejected their polychromy and developed their beasts, whereas the more Asiatic Sarmatians developed the colour side and rather let their beasts become stiff and conventional. So by the interaction of Bosporan Greek skill and Sarmatian taste arose a style with conventional designs and brilliant lines such as suited the Barbaric world and ran parallel with the colouristic reaction against classic line which over swept the Roman Empire (surely on p. 171, l. 25 *his* should be *line*). Rostovtzeff shows by dated tombs at Kerch that this bright-coloured style was fully formed before the Goths had reached S. Russia, so that it is not due to them but to the folk they found there. Meanwhile the north of Europe had less opportunity for colouristic display, and the beasts there flourished without the jewels and are the main element in the Perimian style and in that northern style which attained special developments in Scandinavia and Ireland and was an important constituent of medieval art. The other day I was much struck by the Scythian look of the griffins on Avebury font, collateral descendants of those in the Oxus treasure.

So at the other end of the Nomadic world the early Chinese beast-style of the Chou (why is it here written *Chou*?) dynasty (e.g. *Times*, July 18th, 1923) has much in common with the early nomadic beast style, while the Han dynasty is subject in both art and life to Greek and still more to Iranian influences. To such a correlation of barbaric arts we have long been feeling our way, it is hard to say to whom each point is due, but we have here the most intelligible survey of the whole evolution.

Another group of facts that Rostovtzeff discusses, concerns the Bosporan kingdom both before and after the critical times from Mithridates to Augustus; something of this he has already given in this Journal, but here we have the whole story. The last chapter

suggests that survivals of the ancient world-wide trade connexions of the N. Euxine made possible the commercial Varangian state which became Great Russia.

The 33 plates and 23 figures give us nearly three hundred objects, a most carefully selected minimum to make the text intelligible; as far as possible the author has avoided things photographically published in accessible works: most welcome are the many Kalerme things so long awaited, some Solokha things, the Voronezh cup, the vital find at Prokhorovka, the Scythic objects from Cappadocia and the new views of the Maykop cups and the Chertomlyk vase.

References to literature are mostly omitted in the text, but further information or discussion of any given object can generally be followed up in the full and well-classified Bibliography. The Map at the end is clear and serviceable and the Index adequate. Mr. Beazley's Englishing of the text cost him much obscure labour, but the result leaves nothing to be desired. The Russian words are transliterated after the system of the British Academy, all save the Author's name, which he would not submit to rule.

The book is not so much full of facts, as of ideas: the result of a lifelong study of the immediate facts and a wide familiarity with the remoter fields of knowledge from which anything may be gleaned to help with its special region. Former writers, for all their interest in the natives of the country, have not had the wit to draw them in lines firm enough to make them stand out as clear as the familiar figures of their Greek neighbours: but now Scythians and Sarmatians can take their place with Persians and Parthians, with Thracians, Celts and Germans as people with an art and a civilisation of their own, outside the charmed circle of the Mediterranean basin, but not outside the general process of world history.

ELIAS H. MINKS.

Vvedenie v Arkheologiyu: Istoriya arkheologicheskogo Znaniya. [Introduction to Archaeology: History of Archaeological Knowledge.] By A. A. ZHEBUL'EV. Pp. 199. Petrograd: 1923.

The growth year by year of international interest in the material remains of the past has so widened the circle of archaeological knowledge that by now there is felt an insistent demand for guidance through this extensive historical material. Meanwhile there has not hitherto existed a general survey of archaeology embracing its whole content and furnishing information about the literature which has so much increased in the last few decades. This makes Professor Zhebul'ev's work not merely one of the first attempts to fill a real gap, but a valuable contribution to the history of the study of archaeology in general and Russian archaeology in particular.

The book falls into two parts, Western and Russian. For the purpose of readers of this Journal we may neglect the full and carefully written survey of Western archaeology with its detailed bibliography and confine our attention to the Russian part.

The results of Russian archaeology from the middle of the nineteenth century attracted the serious attention of the West, which saw that many essential questions could not be answered without its help. Russia owing to various ethnographical and geographical conditions offers a very favourable field for archaeological investigations. The Greek and Roman colonies of South Russia yield most valuable material belonging not only to the colonists, but to the Scythians, Sarmatians and other barbarous tribes that once inhabited the Black Sea steppes. Investigation into the life and art of the nomadic peoples who are vaguely put down to the 'Migration Period' establishes an undoubted connexion between them and the art of the Far East and is leading the way to a new synthesis embracing the most ancient civilizations and opening new avenues of historical research. No need to refer to Koniakoff, Tolstoy, Reinach, Mura or Rostovtzeff. Besides the barbarous things the Crimea and Caucasus have given us an inexhaustible wealth of Christian remains mostly to be referred to the Byzantine or oriental culture of the Middle Ages, but some to Western Europe. We find notices of these as early as E. D. Clarke's *Travels*, final edition just a hundred years ago. Further, from the time that the Russian state was constituted we have an infinite series of antiquities, past all counting, and containing not only the things

labelled in a wholesale way "Russian antiquities," but another division not less miscellaneous called "Oriental." Such an abundance of objects has made it possible to assemble very rich collections. The first Museum we may see in the Moscow *Orezhiyaya Palata* (the Armoury) mentioned already in the sixteenth century and made in the nineteenth into a general storehouse of the cimelia of Russia.

In the eighteenth century Peter the Great's worthy successor Catherine II. founded the Hermitage, the first Museum in the European sense of the word devoted to art, archaeology and history. The rise of national feeling in the early part of the nineteenth century was reflected in a special interest in antiquities, and people recognised that the efforts of investigators ought to be correlated. This movement was encouraged by the Tsar and the statesmen round him, such as Count Rumyantsev, whose collections of books and objects are the nucleus of the Rumyantsev Museum at Moscow.

Under Nicholas I. special attention was given both to "Russian antiquities" and to the finds in the South of Russia, Kerch, Phanagoria, Chersonesus, etc. To preserve antiquities locally museums were founded at Odessa, Theodosia and Kerch. Side by side with the Government private initiative did its part and archaeological societies came into being at Odessa (1839), at Petersburg (1846), and at Moscow (1864). The moving spirit of the latter was Count A. S. Uvárov, who started the Archaeological Congresses which have done much to spread archaeological knowledge. In 1859 was founded the "Archaeological Commission," which had supreme control over archaeological investigations and issued voluminous publications. It has now been converted into an "Academy of the History of Material Culture." The numerous Ecclesiastical Societies have produced a rich literature on the religious antiquities, and their museums contain, some of them, valuable collections such as that of Bishop Porphyri Uspenski at Kiev. Professor N. P. Kondakov was the main spirit in founding in 1906 the 'Committee for Safeguarding Russian Icon painting': this not only strives to improve this branch of national art, but studies its most ancient and perfect examples.

The chief examples of ancient Russian painting are in the church frescoes and the icons: these have recently become the objects of the most attentive study. In this province we have the works of Sakharov, Budaev, Zabélin, Rovinski, Likhachév, Pokrovski, Filimonov, and, above all, N. P. Kondakov. A summary of the subject by the latter is being translated, and will be issued by the Clarendon Press. Numismatics were looked after by the Moscow Numismatist Society, and this branch came into its own earlier than others; witness the works of Burzhikov, Oléin, Koelme, Chaudoir, Iversen, Ct. I. I. Tolstoy, Oréshnikov, Ipin, the Grand Duke George Mikhailovich and others.

The popularisation of archaeological knowledge was furthered by the Archaeological Institutes in Moscow and Petersburg, but they have now been closed.

On the model of similar establishments supported by foreign governments a Russian Archaeological Institute was opened in Constantinople in 1895: its principal purpose was the study of Byzantine antiquities under the leadership of the Academician, Th. I. Uspenski. Books like N. P. Kondakov's *Histoire de l'Art Byzantin*, D. F. Belyáev's *Byzantine*, and various works by Th. I. Uspenski, Th. I. Schmidt and others have long passed into the common stock of knowledge. In no region is the saying *Europa non legitur* less regarded by European scholars who continually use and refer to Russian works on East Christian Archaeology. N. P. Kondakov's *Iconography of the R.F.M.*, Th. I. Budaev's *Hist. of E. Art*, N. V. Pokrovski's *Last Judgement*, A. I. Kirpichnikov's *Iconography of the Ascension*, N. P. Likhachév's *Historical Importance of the Italo-Cretan School*, and works by E. K. Rádin, D. V. Aynálov, etc., throw light and sometimes quite a fresh light upon the monuments of the Christian East.

A closer acquaintance with and investigation of the monuments of ancient art, life and civilisation in Turkestan, Central Asia, and Mongolia right to the borders of China have confirmed the idea of their first-rate importance for the understanding and historical interpretation of whole periods in the life of peoples who long ago brought their culture from the depths of Asia not merely into Russia proper but to Byzance, the Balkans and thence into Mid Europe.

Eastern Archaeology found its representatives in Potánnin, V. V. Radloff, N. I. Vyslovski, V. R. Rosen, V. A. Tissenhausen, V. A. Zhukovski, Y. I. Smirnov, V. V. Stásov,

V. V. Barthold, S. Th. Oldenbourg, I. A. Orbell, N. Y. Marr, in whose works is discussed one question after another concerning the remains of art and life in the East and about the Caucasus.

As long as there was no special chair of Archaeology in the Russian Universities the subject was treated by the Professors of Classics and History. Under the new scheme of 1863 a chair of Art History was founded and Archaeology, specially classical, came more or less under this head. The first professor of this subject was K. K. Görtz († 1883): among his pupils was the great authority on Russian and Byzantine Antiquities, N. P. Kondakov, Fellow of the Academy of Sciences, who in the words of Zhebelév "created a Kondakov School of Archaeology in Russia."

The dawn of Russian archaeological literature opens out in the 'seventies, looking back one can but wonder at the amount which has been done in a province so lately desert. In the last half century Russian archaeology has occupied so firm and independent a position that it has been able to mark out its aims and develop its individual features and character. With these it will go on to face the colossal problems which are confronting modern Archaeological Science.

SÉRGEI NIKOLÁEVICH KONDAKOV.

Korakou. A Prehistoric Settlement near Corinth. By CARL W. BLEGEN, Ph.D. Pp. xv + 139, 8 plates (5 in colour), 133 text illustrations. Boston and New York: The American School of Classical Studies at Athens, 1921.

At Korakou, on the shore of the Bay of Corinth about three-quarters of a mile east of Lechaion, there is an oval mound, which was proved, by the exploration reported in this book, to be the site of a prehistoric settlement continuously occupied during the whole Bronze Age. Its archaeological value lies in the fact that, having been the abode of modest folk, it contains an undisturbed deposit. At Tiryns and Mycenae the princely palace-builders largely destroyed the evidence of earlier habitation. But the excavation of Korakou was not exhaustive. It took two weeks in 1915 and six weeks in 1916, and consisted in digging a number of test-pits (eight through all the strata to rock-level, three more through upper and middle strata, and one through the upper strata only), and in a more general excavation of the surface of the whole central area. The finds were mostly potsherds; there were few of the usual miscellaneous objects of clay, stone and metal, and many architectural remains ranging from fragmentary wall-foundations in the bottoms of the test-pits to a very complex ground-plan on the top level. Little that is new was found, but never before had all these things been found together—'Korakou explains Tiryns and Mycenae.' Excavators of various nationalities have produced from various localities of the Greek mainland various kinds of prehistoric pottery which reflect in their names the diversity of their discovery—*Urfrnis*, Hagia Marina, Kamáres, *Mattmalerei* and Minyan wares. The sequence and connexion of these fabrics have been confirmed or indicated at Korakou, and further, a complete series of Mycenaean pottery, parallel to the Late Minoan ware of Crete, has been assembled for the first time. Dr. Blegen, by picking up the clue, has assumed the double obligation of guiding us through this new labyrinth and of straightening out the tangles made by his less fortunate predecessors. He has conducted his own excavation with meticulous care, and has presented his discoveries fully and promptly; his classification of the pottery and his illustrations of this and the rest of his material leave nothing to be desired.

The pottery is the important instrument. Three main strata are distinguishable in the deposit. The lowest contains the hand-made pottery called *Urfrnis* (here translated 'glazed ware'). The second stratum, which is apparently separated from the first by a layer of ashes, marking a sudden destruction, has for its characteristic pottery Minyan ware and *Mattmalerei* ('mattpainted ware'). The third stratum contains the complete series of Mycenaean pottery, but it shows no definite beginning, for there is no 'catastrophe' or other external mark separating it from the second. Three different periods are, however, plainly represented, and these approximately correspond

to the three Minoan periods which Sir Arthur Evans defined for Crete, and the three Cycladic periods into which the less obviously tripartite material from Phylakopi has been divided. The further triple division of the Minoan periods made a fixed scheme in which the whole Aegean Bronze Age might ultimately be reduced to order in relation to the chronology of Crete. The new Helladic periods then, if they are 'naturally based on the Minoan system,' must run parallel to the Minoan and Cycladic. Or, if Korakou plainly shows a different chronology, the Korakou periods will make an independent scheme. But Dr. Blegen gives us a most confusing compromise. He makes eight Helladic periods, not nine (M.H. iii. is missing); his Early Helladic divisions do not correspond to the Early Minoan, and his E.H. iii. overlaps M.M. i. This is a subtlety which none besides its author is likely to appreciate. Since any arrangement by the present evidence must be conjectural, it would surely have been better to start in the direction of simplicity.

The name Helladic is happily chosen. It is properly applied to the periods of the mainland civilisation, and will very usefully distinguish the native products of those periods, but it cannot equally well be given to fabrics of foreign origin. Mycenaean pottery, for instance, already has a universally accepted name; it also has some claim to be called Late Minoan, but as 'Late Helladic ware' it is unrecognisable. Minyan and 'matt-painted' wares are also Late Helladic in period, and the latter may prove to be the real Helladic pottery by origin. It seems, however, that Dr. Blegen is a new prophet of Greek independence: for him Mycenaean pottery has no true Cretan origin, but was 'evolved through a gradual and regular development of Yellow Minyan ware under constantly growing Minoan influence.' That influence was attracted by a process of peaceful absorption on the part of the mainland culture, which 'gradually draws nearer to Minoan standards until finally it merges with and dominates the latest stage of that civilisation.'

This argument involves a strange perversion of the facts. We need not discuss the question of a Cretan occupation of Greece, but simply the relation of Mycenaean to Minoan art. It was pointed out nine years ago in this *Journal* (1914, p. 135) that Mycenaean pottery contains a Minyan element. The 'Yellow Minyan' and the 'Ephyraean' goblets from Korakou may represent two steps in the process of incorporation, but even so much as this is doubtful. Their connexion with the grey ware, the true Minyan, is in the 'fatty' clay and perhaps the solid stems and some types of handle. The nature of the clay could not in any case be changed. The curved body is a Cretan form: it is the same as the 'deep two-handled bowl with rounded sides and wide splaying rim' which Dr. Blegen cites as the other Minyan parent of Mycenaean ware. This began in the typical cups of M.M. ii., and was extremely common in East Crete in L.M. i., when it tended to grow deeper and to taper towards its base: in a few examples it is definitely a goblet with a foot (*Gourvix*, Pl. VIII., 26; *Palakastro*, Pl. XVII., b), and this is almost identical with the 'stemmed goblet' from the Vaphio tomb (Ed. *Apx.* 1889, Pl. 7, 19), which Dr. Blegen quotes in one place (p. 48) as having Cretan decoration, and in another as 'clearly representing the mainland or northern tradition' (p. 110). It is, in fact, entirely Cretan. The remarkable feature of the new Mycenaean fabrics is that they agree so closely in their earlier stages with the Cretan; their history seems to be a gradual divergence from Minoan standards, not a gradual approach to them. We would rather believe that Dr. Blegen is not well acquainted with the Cretan material, than that he has been led by his mainland theory to ignore it; and in this belief we are encouraged by his impossible attribution of the important Minoan (or Cycladic) jug from Drachmani in Phocis to M.M. ii. It might indeed be E.M. ii., but is more probably an imitation of the M.M. La type which preserves the Early Minoan tradition. It follows that the account of Mycenaean origins in this book has not much value. In the description of the pottery there is sometimes a lack of precise terminology which might also be remedied by closer study of what has been done for Crete—it is a pity to have introduced 'saucer-boats' and 'tea-cups' into a scientific vocabulary, and not to have excluded 'cups of the Vaphio or Kafilis shape' and 'hole-mouthed jars.' The book is otherwise a worthy record of a most important excavation. We are grateful to Dr. Blegen for the complete and careful statement of his evidence, though we must take exception to his interpretation of a part of it.

E. J. F.

Our Hellenic Heritage. By H. R. JAMES. Vol. II, part III. Athens—Her Splendour and her Fall. Pp. 288. London: Macmillan, 1922. 4s. 6d.

It will be difficult to judge Mr. James' second volume until both the divisions into which it falls are issued. The present instalment is confined to the single theme of the Athenian empire, and taken by itself gives an inadequate idea of Greek achievement in the fifth century. But regarded simply as 'the tragedy of Athens,' it is a manifest success. Mr. James has brought out clearly the dramatic unity of his story, and his praise of Athens is as judicious as his criticism is temperate. As in Vol. I. the author assimilated the quaint joyfulness of Herodotus, so in the present book he reproduces the well-poultured pride of Thucydides.

Comment in detail may be restricted to a few minor points. The tradition that Aristides was a conservative in home politics (p. 12) is a late one; Aristotle makes him a democrat; quite possibly he was neither. The division of dicasteries into ten panels (p. 90) probably was an afterthought of the fourth century. The statement that Athenian society was free from *gawcherie* because it was purely masculine (p. 102-3) may pass in Europe, but would be challenged in America or Australia. The map to illustrate the Delian Confederacy (p. 14) is poor, and the chapter on Athenian art, though excellent in itself, cries out for a reference to the Hellenic Society's illustrative material. But, provided that it is supplemented with a lantern lecture or two, the present volume should make an ideal introduction for boys and girls to the world of Pericles and Alcibiades.

A History of Ancient Greek Literature. By HAROLD N. FOWLER, Ph.D., Professor in the College for Women of Western Reserve University. New and Revised Edition. Pp. vii + 502. New York: Macmillan, 1923.

This work will need much revision yet before it can justly claim to be even a tolerable text-book. Intended apparently for students who know little or no Greek, it tries to include a short account of everything from Homer to Justinian. The result is a number of notices of writers of little importance, not a word of whose works any ordinary student will ever read, and absurd compression of the space allotted to great names; thus the Hippocratic corpus gets half a page, Aeschylus about ten pages, including outlines of his surviving works; Kallimachos has a page and a half, of which the *Asia* occupies some four lines, not a word being said about its influence on later writers. The chapter on Homer blandly ignores everything that has been done this century, though J. A. Scott is named in the bibliography. Only the old dithyramb-theory of the origin of Tragedy is mentioned. Just enough of metre is said to mislead a student; the difficulties connected with the personality of Sokrates are not touched upon; the important historical notice, Bdt. IV., II, is introduced with a sneer at its author's 'childlike faith.' Worst of all, the student is told practically nothing of the history of literary movements or the changing fashions in form or dialect (as to the latter, Prof. Fowler seems to imagine, p. 365, that the *koine* was a learned international language, like mediaeval Latin), or of the interplay of Greek and Roman literature. If he desires to make his text-book anything but an ingenious means of causing his pupils to hate the very name of Greek, let him omit three-quarters of the details and devote the space thus gained to an intelligent commentary on the main events.

Religione Dionisiaca. By CAROLINA LANZANI. Pp. xi + 251. Torino: Fratelli Bocca, 1922.

It appears that Warburton and Creuzer, being dead, yet speak. The theory on which this curious work rests is that Dionysos is a Semitic solar deity, borrowed in pre-Hellenic times and developed on highly transcendental lines in Greece. The well-worn antithesis between Apolline and Dionysiak religion is brought forward once again, and we are assured that Apollo represents 'il sole immutabile, eterno, indifferenziabile, considerato come principio attivo, come causa prima e quindi il sole nel cielo,' whereas 'il sole in terra, ossia il sole in quanto trova la sua esplicazione nella vita terrestre universale, è Dioniso.'

(p. 15). Naturally there is connected with this much eloquence about mystic doctrine, 'antica scienza transcendente' (p. 89), and the like. Logos and Demiurgeos occur frequently, starting at p. 2 (a human mother is characteristic of deity in general, 'omnis Logos, omnis Demiurgeos'), and being perhaps most prominent on pp. 97-100. This farrago we are invited to accept as a true account of 'una delle più importanti manifestazioni dello spirito ellenico' (p. vii), 'gli organi più vitali della religione ellenica' (p. viii).

How well qualified the authoress is to judge of anything Greek may be learned from her handling of simple texts. Hdt. IV. 87. 4 is interpreted to mean that there was at Byzantium a temple of Dionysos 'covered with Assyrian inscriptions.' The words of the historian are: αἶρος δὲ (a stone of an inscription put up by Darius) ἐκτέλεισθαι παρὰ τοῦ Διονύσου τὸν ἐπὶ . . . γυμνάσιον Ἀσσυρίων ἔλεος. After that, one is not surprised to find the *Dionysiaca* of Nonnos characterised as the work of 'un poeta cristiano dei primi tempi della Chiesa' (p. 117 n. 1), or to hear (p. 181) that Plutarch (*de E apud Delph.*, 1) when he says that the letter E was ἐν προδρόμῳ παρὰ τῷ θεῷ means that it was carved on the façade of the temple. Also, the confusion between Lucilius and Lucian on p. 96 looks less like a misprint than it otherwise would.

Théophraste Caractères. Texte établi par OCTAVE NAVARRE. (Collection Budé). Pp. 75. Paris: 1920. Fr. 5. [Introduction and text with critical footnotes.]

— Translation par O.N. [same series, place, date, and price, with the same introduction and with explanatory footnotes].

Teofrasto I Caratteri. A cura di GIORGIO PASQUALE. (Biblioteca di Classici Greci diretta da Nicola Festa). Pp. xii + 73. Firenze: 1919. L. 2.50. [Introduction, text, and translation with explanatory footnotes.]

The text of Chanabon's *sarcophagi libellus* continues to exercise the wits of scholars, and, despite the labours of many, the end is not yet in sight. Coet's view, 'religiosus libellus'—other than A, B, and V—*ad unum omnes foci non facientes*, ably championed by Diels in his *Theophrastea* of 1885 and his Oxford Text of 1909, will not find many upholders to-day.¹ The Herculanean text of the fifth Character (cited in full by Philodemos, *z. xaxois*, Bessi, *Hec. Vol. Coll. Text.* p. 13), mutilated as it is, will satisfy most inquirers that the family known as C bears traces of an independent tradition, and corroborate the view that the Munich Epitome cannot be dismissed as a derivative of B and V.² Diels showed the inconsistency of a great mind by printing the Epitome along with the fuller text. His follower, Dr. Navarre, accepts his arguments *sine phrase*, and constitutes this text exclusively according to A B V, naively excepting from his ban the very MS.—the Herculanean Fragment—which in the eyes of most critics must condemn it as *ultra vires*. His apparatus, in which, like Diels, he clumps the families C D E as *recentiores*, unfortunately perpetuates three errors of Diels which have been pointed out long ago.³ Where he takes a more independent line, in emendation, the text is sometimes improved: at 26.10 ἀδελφίδου for ἀδελφῆ is excellent, and so is ἀδρῆς for ἀδρόδ before ἑβριζομένης at 26.3. At 2.10, where he transposes παραπομπῶν in the form παραπομπῶν (so the despised 'rec.') from before εἰς and reads ἀπὸ τῶν παραπομπῶν ἀπὸ τῆς παραπομπῆς, he removes a meaningless word at the expense of a neat but not necessary idiom. At 15.5 οὐκ ἔν γένεσιν <πρὸς> διδόντων is a good idea; but surely word-order, grammar, and palaeographical probability call for οὐκ ἔν γένεσιν <πρὸς> γένεσιν <τι> διδόντων. At 8.2 τίς <οὐ> ἔχει παρὰ τοῖς εἰς τὴν xaxis would require the addition of τί; the remedy is probably simpler: for καὶ λέγει τι καὶ τὸς ἔχει κ.τ.λ. read καὶ τὸς λέγει; καὶ τὸς ἔχει παρὰ τοῖς εἰς.

¹ F. W. Hall, *A Companion to Classical Texts*, Oxford, 1913, p. 279, dates the *Characteres* in their present shape at 'probably 6th cent. A.D.' This is doubtless roughly true of the addition of the Proem and epilogues, but cannot apply to the main part of each Character (including the definition). The Herculanean text of Char. V., published in part by Crümmel in *Wessely's Stud. zur Palaeogr.* vi. in 1900 and wholly by Bessi in *Rev. di Filol.* in 1909, is practically identical with that of our MSS.

² I may be allowed to refer the reader to *C.Q.* 1910, pp. 128 ff.; see also Groeneboom *Minerva*, 1917, pp. 127 ff.

³ *C.Q.* i. c.

καὶ τοῖς; the corruption seems to have begun with the transposition of καὶ τοῖς and καὶ τῷ and continued with the loss of τῷ and its restoration in the wrong place.

In more than one place Dr. Navarre claims for editors or later editors, including the latest readings of the 'inferiores' or suggestions of Casaubon: at 1, 4 1 τοῖς and at 13, 4 ποῖος occur in 'reco.'; at 4.11 χόρτος, at 11.5 ποῖος and at 25.5 εἰρεῖς, are Casaubon's. Those, like the misprint σφαιροτόμος at 21.9, are doubtless slips. But the reader wonders why at 20.6 and 23.5 the 'oblique' optative is altered to the indicative, and why, at 23.3, ὡς αὐτῷ εἶχε, 'how he behaved to him,' is marked down as suspect. Compare Xen. Mem. 1.38 ὡς εἶχε πρὸς ἀλλήλους. At 11.7 I note as unsatisfactory the change of ποτακαλεῖν ἐπὶ ταῦτα, 'invite them to dinner to eat them with him,' to = ἐπὶ δεῖπναι; for outside poetry and Ionic prose δεῖν will hardly be found save in two half-poetical passages of Plato, and the usual δεῖναι occurs at 5.5, 17.2, and 21.2. At 8.8, where A B have πῶς οἰσθαι πιθανῶς and 'rec.' more correctly πῶς οἰσθαι πιθανός, 'you can't think how plausibly' (cf. Ar. Ran. 54, τῇ καρδίᾳ ἐπύραξε πῶς οἶσι σφόδρα), and the indicative had to remain in the midst of the uniform οἰσ- and infinitive construction beloved by the maker of the Later Recension,¹ the conjecture ὡς οἶον τε πιθανός is surely a blemish.

Dr. Navarre's translation is generally accurate and, so far as a foreigner can judge, readable. At 6.6 'il laisse mourir de faim sa vieille mère' is a little hard on the ἀπονενομίαις. It is merely τῇ μητρὶ μὴ τρέφειν (cf. Dem. Phoen. 27). At 8.9 'il court' does not represent the tense of προσδιδίμαρται. At 24.8 to carry his head 'relevée en arrière' would give the Proud Man a stiff neck literally as well as metaphorically (πάλλω is simply due to the contrast with κατὰ above). At 7.5 'jadis' would translate ποτὶ but the text has τότε. The notes are mostly apt and concise. At 5.5, however, the reader would welcome a reference to Koujeas' explanation of the axe-and-winskin game (*Hermes* 1906); and at 8.9 the effect of the apostrophe, doubtless intended, is spoilt by the note 'le texte grec paraît truqué'; while the note which opines that Char. XV. has lost its end, deprives Theophrastus of one of his most effective conclusions—'He (the αἰθιδῶς) is apt also not to pray to the Gods.'

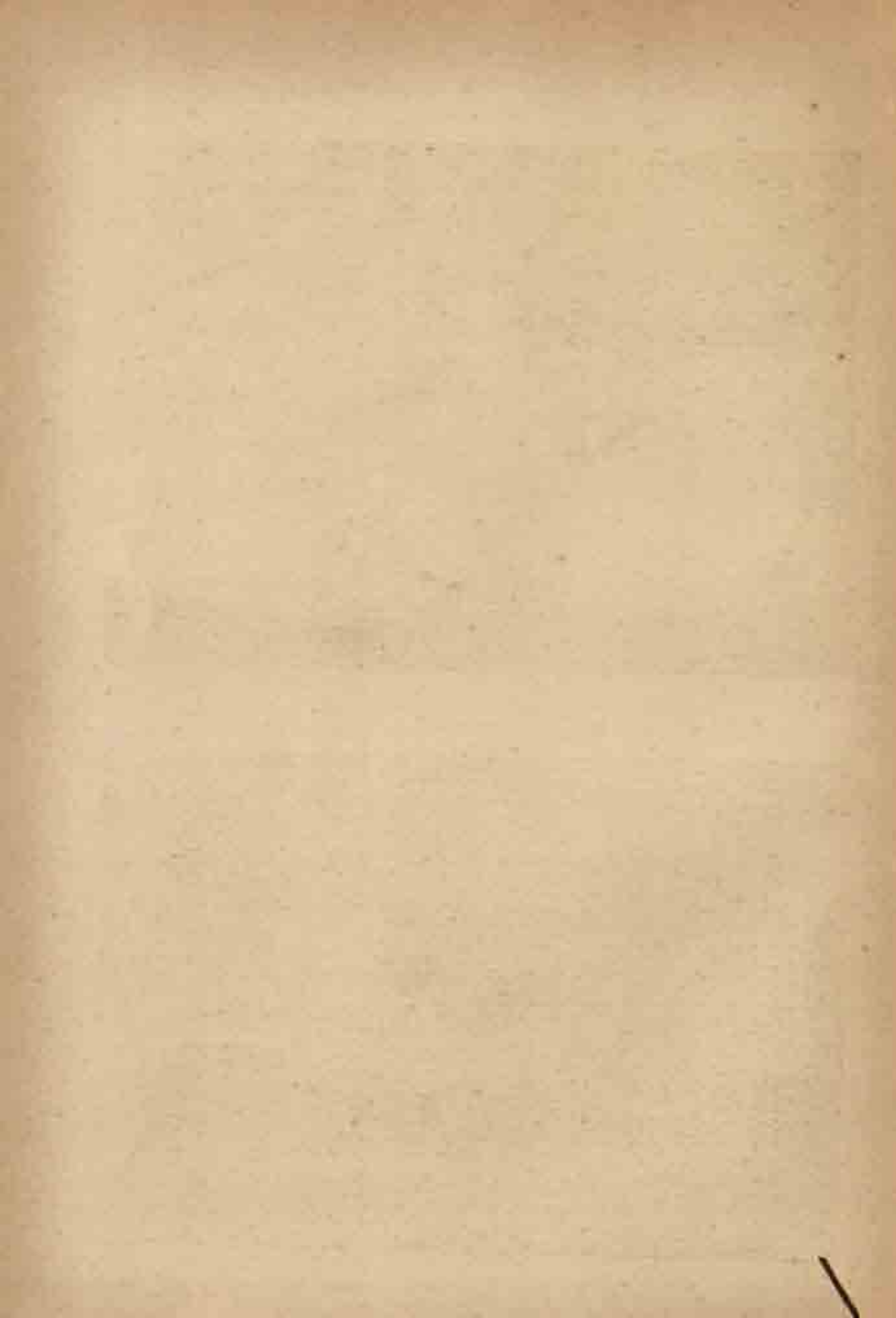
Dr. Pasquali's edition, though it does not aim so high, seems to me on the whole a better book. There is no *apparatus*, but the text, as readers of his articles in *Rivista Italiana*, 1918-19, would expect, shows sound judgment and scholarly taste. He has no delusions about the respectability of the C family, and where he gives the stigma of brackets it is generally deserved. He very properly rejects Wachsmuth's galoshes at 2.8, and accepts Ribbeck's *καὶ* at 7.10, Bailham's *δυσκρίστες* at 19.5, and Schneider's *ἀγροῦσθαι* at 21.4. His own conjectures are very few and mostly good. At 15.9 οἷοι *δυσκρίσαι* πολλοὺς χρόνους οἰδέειν, and at 20.9 εἰ *παύσει* γὰρ αὐτοῖς (the Unpleasant Man's friends at his table) οἱ *δυσκρίσαι* *δυσκρίσαι*, deserve a permanent place in the text. Less satisfactory is πάντα *δειξῶν* πῶς οἰσθαι πιθανῶς *σχετλιάζων* at 8.9 (see above); and the reading of αὐτοῦ for αὐτοῖ at 19.5 and 20.9 and 10 violates the rule 'ὁ παρὰ αὐτοῦ, but ὁ *δυσκρίσαι* *παύσει*'. It is a pity, too, that the necessary and certain transpositions at 3.5 and 4.12-14, though accepted in the notes, are not made in the text. In one place Dr. Pasquali's respect for C fails him. At 1.7 *προσδιγγήσθαι* δὲ καὶ τῶν ἐκ' Ἀποροφῶντος τότε (so A B; C *παρὲ* αὐ τοῖς) *γενομένη* τῶν *μητορῶν* *μαχρῶ* cannot be right. The introduction is a charming piece of work. The tone of the notes, which are brief and remarkably well chosen, is that of the man who is trying to make it out with the reader's help, not telling him *ex cathedra* what it means. English scholars will look forward with pleasure to the critical edition of which this little book is a foretaste.

J. M. EDMONDS.

¹ Previous to the text used by Philodemus, see my *stemma C.Q.* I. c.

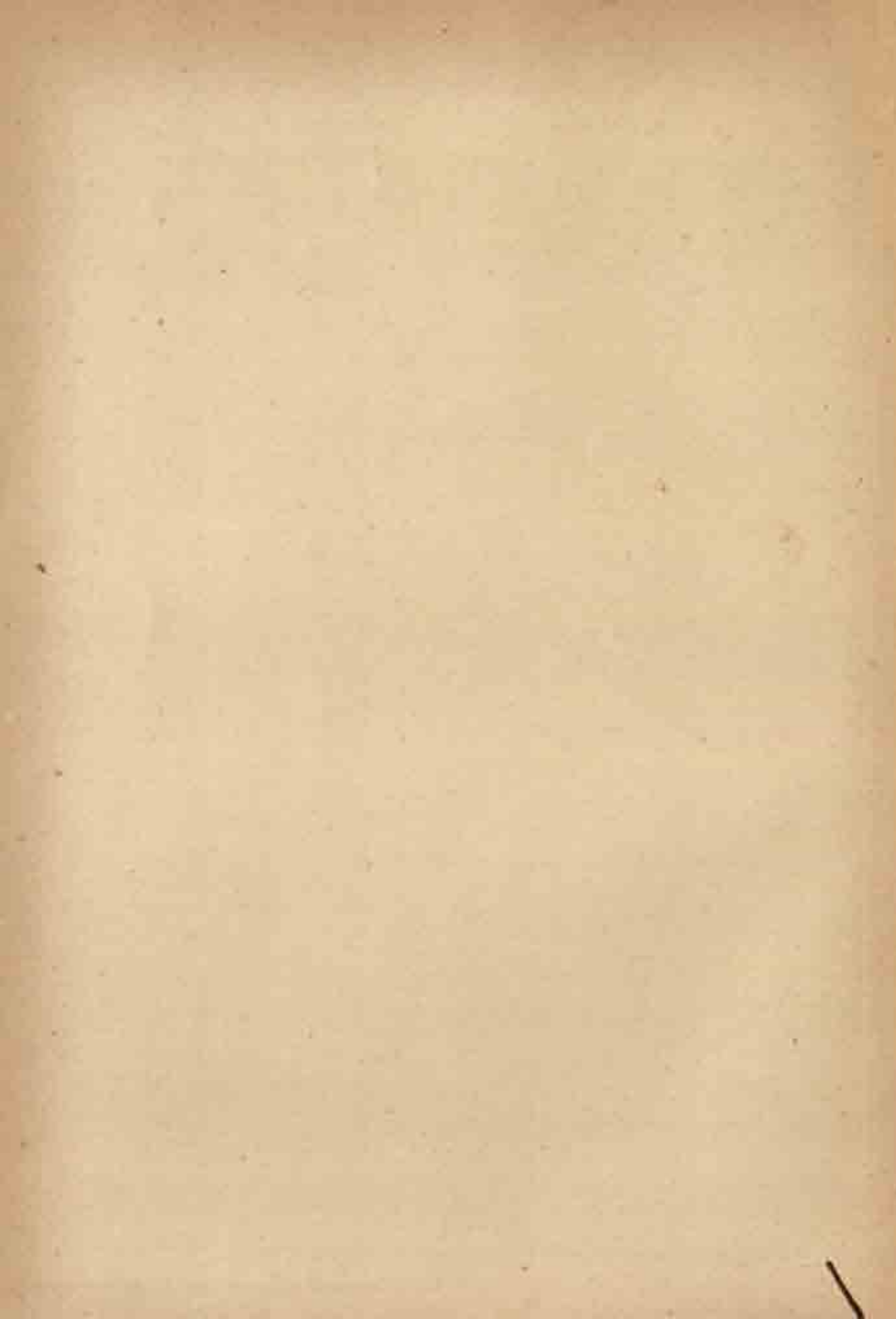


MARBLE HEAD





MARBLE STATUE OF A WOMAN



ALEXANDER AND THE GANGES¹

WHEN Alexander turned back at the Hyphasis (Beas), how much did he know about what lay before him? And why, in the vulgate tradition, does he know of the distant Ganges and the distant kingdom of Magadha, but not of the next great river to the Beas, the Sutlej (a question often asked), or of anything else between the Beas and the Ganges? The answer is not difficult, once the elements of our tradition are sorted out chronologically; *that*, as in so many questions, is the real problem.

We possess one contemporary document bearing on the matter which has escaped notice, a satrapy-list or gazetteer of 'Asia,' i. e. Alexander's empire,² dating from the last year of his life; very possibly Hieronymus used it by way of introduction to his history of the Successors, and it now forms the basis of Diodorus 18, 5 and 6.³ We can date this document with certainty. It includes the Indian provinces, and so is later than Alexander's return from India. The 'Hyrcanian sea' (not Caspian) is still a lake, so it is earlier than Patrocles. Chandragupta is unknown, so it is certainly earlier than Megasthenes and probably earlier than *circa* 302. Poms is still alive, so it is earlier than 317. Susiana 'happens to be' part of Persis,⁴ i. e. it was under the same satrap, which can only have happened at one point in the story: the satrap is Pancestas,⁵ and the date must therefore be before the partition of Triparadeisos

¹ This paper is the conclusion of a study dealing with Diod. 18, chs. 1-6, of which the first part, relating to chs. 1-4, was published *J.H.S.* 1921, 1. These six chapters are important, as they professedly lie round about that point in the tradition where Ptolemy ends and Hieronymus begins.

² 'Asia' or 'all Asia' means, in the later part of the fourth century, the Persian Empire which Alexander claimed to rule; so used both by Alexander himself (Arr. 2, 14, 8, in 333; *Lindian Chron.* c. 103, in 330; and Strabo ap. Arr. *Ind.* 35, 8, in 325) and in common parlance (e. g. *Syll.* 326, in 307/6).

³ I called attention briefly to this document in *J.H.S.* 1921, p. 8, n. 36a. As to Hieronymus, see Rouss' acute suggestion, *RA. Mus.* 37, 1902, p. 586, n. 1. If so, Diodorus got it from Hieronymus.

⁴ 18, 6, 3; Persis *ἐν τῇ* τῇ *Περσίᾳ* . . . *ἐκείνης ἐκείνης*.

⁵ Dexippus fr. 1 (on the partition of Babylon), with von Outschand's emendation of *Περσίᾳ* for *Σαρδηνίᾳ*; Sogdiana has already been mentioned, so the corruption is certain, and the emendation is certain also on geographical grounds, the order being Carmania, Persis (*Περσίᾳ*), Babylonia, Mesopotamia. What Dexippus says is this:—as to the Susians, after death overtook 'Oropios' (name admittedly corrupt) for rebellion, 'then he had the authority over them jointly with' something, *ἐν τῇ αὐτῇ αὐτῇ τῇ* *Δακτύλῳ* *ἐν τῇ*. The subject of *ἐν τῇ*, whether *Δακτύλῳ* has fallen out before *αὐτῇ* or not, is the person last mentioned before 'Oropios,' i. e. Pancestas, satrap of Persis; and *αὐτῇ* means 'as well as over Persis.' The fact that, at the time of the partition of Babylon, Susiana was reckoned part of Persis explains the omission of Susiana from all our lists (except Justin's) of the satrapies dealt with at that partition, the lists being otherwise complete.

in 321, when Susiana was given to Antigenes. The Hyrcanian sea 'happens to be embraced by' Parthia;⁶ that is, Parthia and Hyrcania are still one satrapy, as they were under Phrataphernes, an arrangement which terminated in 321, when Philippos received Parthia alone. Media is still undivided; so the document is earlier than the partition of Babylon in 323, when Media was divided between Peithon and Atropates. Lastly, Armenia still appears as a satrapy of the empire, whereas the fiction of an Armenian satrapy was abandoned at the partition of Babylon;⁷ and this is decisive. The gazetteer then dates between spring 324 and June-July 323. It may or may not be official.

This document divides the empire into north and south of the Taurus-'Caucasian' line.⁸ After dealing with the northern provinces, it begins in 18, 6, 1 on the southern provinces, working from east to west: India therefore comes first. What it says about India, in Diodorus' version, is this. India lies along (*παρά*) the Caucasus, and is a large kingdom of several peoples, the greatest of them being the Tyndaridae (or Gandaridae), whom Alexander did not attack because of their elephants. A river, the greatest in that district (*ὁ μέγιστος δὲ περὶ τοὺς τόπους*), 30 stades broad, divides (*διρίζει*) this country (*χώραν*)—I think this means the India already described, but it might mean the Tyndaridae—from the India that comes next, i.e. further westward (*τὴν ἑξῆς Ἰνδικήν*). Bordering on this country (*ἐχόμενη ταύτης*)—i.e. either on the India already described or on the Tyndaridae—is the rest of India which Alexander conquered (*ἡ λοιπὴ τῆς Ἰνδικῆς ἣν κατεπολέμησεν ὁ Ἀλέξανδρος*—*τὴν ἑξῆς Ἰνδικήν* above), through the middle of which runs the Indus. That is to say, Alexander's conquests are divided from the rest of India by an unnamed river; independent India beyond this river is a single kingdom, associated with a name. Note especially that the gazetteer, like the sources used by Arrian in his narrative, does not mention the two names which play such a part in the vulgate tradition, the Ganges and the Prasi; and, looking at what the gazetteer does say about India, this shows conclusively that neither was known to its author, that is, to those about Alexander in 324/3. Alexander then can have known nothing of the Ganges or of Magadha; but it remains to see how the vulgate tradition arose.

The first Greek to visit and describe the Ganges and the Prasi was Megasthenes, who left India for the last time not later than Chandragupta's

(see the table of lists in Beloch 3, 2, 240). Justin 12, 4, 14 does give gens Susiana Coseno, but 'Coseno' is merely a corruption of *cosus*, and not vice versa, as Beloch 3, 2, 242 curiously suggested (repeated by Lehmann-Haupt, art. *Satrap* in Pauly-Wissowa); Cosmus was dead (Arr. 8, 2, 1), and no one else of the name is known, and one cannot suppose that Cosmus left a younger son of the same name who became a satrap and is never otherwise heard of, seeing that his heir Ptolemaeus (Syll.² 332), i.e. his eldest or only son, never held any office. Justin's version of the list contains

other blunders, and Droysen (*KL. Sch.* 2, 291) saw long ago that Coseno must be corrupt, though he did not see the solution.

⁶ 18, 6, 4. Παρθον, 4^ο ἢ ἐνδοχὴν ἐνδοχὴν τῆς Τρανίας ἐπὶ τῆς. Fischer's addition of *ἐπὶ τῆς Τρανίας* in his text is as indefensible as his insertion of *ἐνδοχὴν* Droysen in 18, 6, 2.

⁷ Details collected in Beloch 3, 2, 242.

⁸ Eratosthenes took his similar division from this document, and not vice versa; apart from the date, which is certain, it contains no trace of the real characteristic of his geographical scheme, the *οὔρεσες*.

death, *circa* 297, and must have written at latest soon after that date, while he may have written earlier. The Prasii are his name for Magadha, as is shown by Pataliputra being their capital.⁹ Magadha in actual fact lay on this side of (i. e. south and west of) the Ganges, and its empire (before Chandragupta) lay further west still, occupying part of the vast district of Northern India known as the Middle Country.¹⁰

Now Cleitarchus, who fixed the vulgate tradition about Alexander, did not accompany Alexander to Asia and was not with him in India; he was not one of the contemporary historians of the expedition, and is not a primary source, but was a literary compiler belonging to a later generation. It is certain now that he cannot have written *earlier* than the decade 280-270; and there are grounds, though not conclusive grounds, for putting his book even later, after 260.¹¹ But in any case, and this is what matters here, he wrote much later than Megasthenes.

Now in the vulgate, Alexander, when he reaches the Beas, hears of the Ganges and the Prasii, whom he desires to conquer; the story is given by both Diodorus and Curtius, and is our only professed account of what he knew when he turned back, though the good tradition, as we shall see, has a very different account of what the army believed. The sections of Diodorus (17, 23, 1-3 inclusive) and Curtius (9, 1, 36-2, 7 inclusive) which are material here agree so very closely that their derivation from a common original is certain; and as it is equally certain that Diodorus, Book 17, primarily represents Cleitarchus, that common original can only be Cleitarchus; no one, I think, now doubts this. But Diodorus and Curtius agree here, among other things, in one most extraordinary perversion, which therefore goes back to Cleitarchus also, and which is the key of the whole matter; the Prasii are *beyond* the

⁹ Strabo, 15, 702; Arr. Ind. 10, 5; both explicitly from Megasthenes.

¹⁰ See Cambridge History of India, Vol. I. (1922), Map no. 5.

¹¹ F. Reuss, *IK. Mus.* 57 (1902), 581 and 63 (1909) 58; P. Schnabel, *Berosos und Kleitarchos*, 1912. Cf. Th. Lenschau, *Bericht über griech. Geschichte*, 1907-1914, p. 191; in Bornan's *Jahresbericht*, 1919; R. v. Pöhlmann, *Griech. Gesch.* 1914, p. 287, (in Müller's *Handbuch*); C. F. Lehmann-Haupt, *Klio*, 15, 1918, 255, n. 3. I do not agree with Reuss and Schnabel on all their points; but I regard their main position, that Cleitarchus was not a primary source, as conclusively established. (The latest exposition of the traditional view that Cleitarchus was a contemporary and companion of Alexander is F. Jacoby's article *Kleitarchos* in Pauly-Wissowa, 1921 (very full); a careful perusal will show that there is no single one among the suppositions urged in support of the traditional view that is a valid or compelling argument.) The points

proven are, that Cleitarchus used Berosos, Patrocles, and Timaeus, and had never himself seen Babylon; add perhaps that he used the name Galatai, unknown before 278. Make every deduction you please; say that he might have used Timaeus' chronology before Timaeus had finished his history (though we do not know that it was published in sections), that *Γεωργία* in Diod. 17, 113, 2 may be a later addition (which I myself find incredible), and that the argument from the first official use of the name Soler in Egypt (on which and on Timaeus Niese's date of 'after 260' depends) is uncertain: there still remain three things that cannot be explained away; two of these are Berosos and Babylon; and the third is that a named fragment of Cleitarchus (Pliny, *N.H.* 6, 38) quotes a named fragment of Patrocles (Strabo 11, 508), and that on a matter (the size of the Caspian) as to which no writer before Patrocles could even have attempted a guess.

Ganges.¹² This strange mistake also occurs in Plut. *Alex.* 62 (see post), where the Prasii hold the further bank.

What led Cleitarchus to displace Megasthenes' Prasii in this way, and put them *beyond* the Ganges? There can only be one explanation. Cleitarchus must have had before him, among the other documents which we know he used, the two we have here noticed, the gazetteer of 324/3, and Megasthenes. (He need not necessarily have used the gazetteer directly.) In the first he found an unnamed river, called the greatest in the district, and a named kingdom *beyond* it. In the second he found the greatest river in India, the Ganges, and a kingdom whose capital stood on its bank, though in fact the kingdom stretched out westward. Like Fischer in his edition of Diodorus, he identified the two rivers and called the unnamed river the Ganges (see post on Diod. 2, 37, 1); and the kingdom of the Tyndaridae or Gandaridae, *beyond* the unnamed river, he then naturally identified with that of the Prasii, which he then necessarily placed *beyond* the Ganges; hence in the Cleitarchean vulgate this kingdom regularly appears as 'the Gandaridae (or Gangaridae) and Prasii.'¹³ Starting from this identification, he then wrote up Alexander in his usual fashion, not knowing that he had left out most of Northern India. Whether the mistake was an honest muddle, or a deliberate attempt at panegyric, is immaterial; probably the former, for he was a very bad geographer in any case, and the man who could confuse two such well-known rivers as the Hydaspes and the Acesines would have had no difficulty in confusing the unnamed river and the Ganges.¹⁴

Fortunately he left untouched an easy means of checking his mistake: the breadths of the rivers. (I refer, of course, to the conventional breadths.) The unnamed river of the gazetteer is 30 stades broad. Megasthenes' Ganges is not less than 100 stades broad.¹⁵ But the 'Ganges' in Diodorus is 30 stades broad (2, 37, 2) or 32 stades (17, 93, 2); 32 also in Plut. *Alex.* 62, from the same source ultimately as Diod. 17, 93. That 32 is merely an (old) error for 30 is certain; partly because it is 30 in Diod. 2, 37, 2; partly because Strabo 15, 702, after giving Megasthenes' figure, adds that some called it 30, and we know of nothing to which this can refer except Diodorus' source (Cleitarchus);¹⁶ partly because these big rivers were naturally always given in round figures.¹⁷ (I have only found one other case of a river in India 30 stades broad: Arr. *Ind.* 3, 10 suggests that the Acesines (Chenab), after

¹² *ἐπέκεινται τῇ ἐκείνῃ* (Diod.); *ulteriorem ripam colere* (Curt.).

¹³ Diod. 17, 93, 2; Curt. 9, 2, 3; Just. 12, 8, 9; Plut. *Alex.* 62.

¹⁴ On the confusion of Hydaspes and Acesines cf. Diod. 17, 89, 4 with 93, 2 (see Arr. 6, 1, 1). On Cleitarchus as a geographer see Jacoby *op. cit.*, who gives instances.

¹⁵ Arr. *Ind.* 4, 7; Strabo, 15, 702, *ὅρα ἡμέτερον*. (Both Megasthenes.)

¹⁶ The other figures we have all give a very different breadth from 30 stades. Mela 2, 68, 10, ten Roman miles (= 100 stades);

Pliny, *N.H.* 6, 65, on a moderate estimate 100 stades, on the lowest 7 miles (= 70 stades); Solinus 52, 7, minimum 80 stades, maximum 200; Aelian, *ἑρμ. ζῴων* 12, 41, minimum 80, maximum 400. Mela and Pliny of course reproduce the 100 of Megasthenes; I do not know what the other figures represent.

¹⁷ E.g. the Indus: Oves *ap.* Arr. 5, 4, 2, 100 stades to 40; Strabo, 15, 700, either 100 or 50; Arr. 6, 14, 5, perhaps 100 at Patala; Pliny, *N.H.* 6, 71, fifty. For the Ganges see n. 16.

receiving the other rivers, is 30 stades broad when it joins the Indus: but obviously the Chenab is not the unnamed river of the gazetteer.) The breadth alone then is sufficient proof that the 'Ganges' of Cleitarchus-Diodorus is only the unnamed river of the gazetteer.

And in fact we can probably trace the actual process of identifying this river with the Ganges. In 2, 37, 2 Diodorus gives by anticipation¹⁸ a bit of his own version of the gazetteer which he was to give in its place in 18, 6, 1:—a river 30 stades broad, with the Gandaridae (*not* Prasii) to the east of it; but in 2, 37, 1 he calls this 30-stade river the Ganges, just as Cleitarchus does in 17, 93, 2; this shows that 2, 37, 1 is from Cleitarchus also, and it seems that here we have reproduced the actual identification by Cleitarchus.¹⁹ As 2, 37, 2 represents the gazetteer, it is interesting to note that it gives one detail not given in 18, 6, 1: the river in question, the unnamed river, runs from north to south. It was well enough known since Megasthenes that all the middle Ganges, above Pataliputra, ran roughly west and east;²⁰ the remark should therefore be older than Megasthenes, and probably belongs to the original gazetteer.

Before leaving Cleitarchus, one other point may be noticed. His story about the Ganges and the Prasii is told to Alexander by a rajah on the Beas named Phageus, who begins by saying that across the river is a desert of eleven (Curtius) or twelve (Diodorus) days' journey. No Indian living on the upper Beas could have said this. If Phageus, who is unknown to the good tradition, ever existed, he lived much further south, near the Rajputana desert; but he may be as mythical as some other characters in the vulgate.²¹ That Cleitarchus put his Ganges story in the mouth of a man who begins by placing the great desert on the east bank of the upper Beas is itself a good test of what that story is worth.

To return to the gazetteer. The unnamed river, 30 stades broad, running north and south, and separating Alexander's India from what lay beyond, cannot be the well-known Beas (which, incidentally, Diodorus, 17, 93, 1, calls 7 stades broad), and must therefore be the Sutlej, which very likely did not then join the Beas at all, but flowed down the Hakra channel and was one constituent of the 'lost river.' Now was the kingdom of the Tyndaridae or

¹⁸ Such anticipations are common enough in Diodorus: e.g. 17, 23, 2 (Agathocles), 17, 27, 2 (the Argynaspids); 18, 4, 1 compared with 18, 12, 1; 18, 4, 8 compared with 18, 7, 1 seq.

¹⁹ This identification is clearly seen again in the late rhetorical composition which figured as Alexander's speech at the Beas: Arr. 5, 26, 1, *ὅτι πολλὰ ἐστὶν ἡμῶν ἡ λαοὶ ἔστιν ἔτι τοῖς ποταμοῖς καὶ τῶν καὶ ἐν ἡμέτεροις, ὅτι πολλὰ ἐστὶν ἡμῶν ἡ λαοὶ ἔστιν ἔτι τοῖς ποταμοῖς καὶ τῶν καὶ ἐν ἡμέτεροις*, so markedly inconsistent with what follows in 5, 26, 3,—between the Beas and the eastern sea are many warlike nations. On the other hand, Diod. 17, 108, 3—the Macedonians refuse to cross the Ganges—has nothing directly to do with

this identification; it is a *reference*, not part of the narrative, and is therefore not Cleitarchus; it belongs to a later legend, see post.—That Diodorus did use Cleitarchus in Book 2 is shown by the reference to him in 2, 7, 3.

²⁰ Strabo 15, 690 and 719. It is to be remembered that, for a long period subsequent to Megasthenes, the Ganges to Greeks meant *provisionally* the Ganges at Pataliputra (Patna).

²¹ For example, the emuch Bagons, who was merely part of the revenge which the Peripatetics took on Alexander for Callisthenes' death; see Diogenes Laërtius, fr. 19 = Athen. 13, 693 b.

Gandaridae, which lay across (east of) the Sutlej and 'along the Caucasus,' an old tradition! In the gazetteer, Diod. 18, 6, 1, the MSS. have Γονδαρίδων; in the parallel passage, Diod. 2, 37, 2, it is Γανδαρίδων, with MS. variants Γαδαρίδων and Γανγαρίων. In the Cleitarchus passage, Diod. 17, 93, 2, we have Γανδασιδών, and, in the parallel passages, Gangaridas in Curt. 9, 2, 3 (so in Just. 12, 8, 9), and Γανδαρίων (an obvious confusion with Gandhara) in Plot. Alex. 62. Now Gangaridas and Γανγαρίων are from Megasthenes' Gangaridae in lower Bengal, is the name Gandaridae then merely a mistake of Diodorus, and is the whole thing taken from Megasthenes? I think not. In Diod. 17, 91, 1 the bad Porus flies εἰς το Γανδαρίων ἔθνος; while Strabo 15, 699 has a version that Gandaris was his country. Now Porus really did fly eastward before Alexander across the Ravi (Arr. 5, 21, 4), and as Alexander never caught him he must have gone further east than Alexander ever went, i. e. across the Beas, or further; and whatever the confusion in Strabo, I think these passages make it difficult to say that Diodorus' version of the gazetteer is wrong, and that there was not across the Sutlej a real people called Gandaridae or Tyndaridae, or however their name got transcribed.²² Whether they were part of a confederacy, or whether the mention of a confederacy got written into the gazetteer later, must remain uncertain; but the part of the gazetteer given in Diod. 18, 6, 1 seems to be given with substantial accuracy, subject, of course, to this, that the statement that Alexander turned back from fear of the elephants is a late legend inserted by Diodorus himself; I shall return to this.

Strictly construed, the gazetteer imports that Alexander claimed India up to the Sutlej; and it is possible enough that he did. Across the Beas, says Arr. 5, 25, 1, was a people aristocratically governed (i. e. an Aratta people) with many elephants.²³ This can hardly go back to the *Journal*, from its form; probably it is Aristobulus repeating camp gossip, for the Aratta known to us had no elephants. But there may really have been an Aratta people there, and a great one, the Oxydracae, whom the late V. A. Smith did for other reasons place along the Beas.²⁴ (The maps in the *Cambridge History of India* put them east of the lower Ravi; but Arrian shows that this was Malli country.) It is probably impossible to ascertain for certain where the Oxydracae really lived, though Arrian 6, 11, 3 implies that their centre was some distance away from that of the Malli; but if they *did* stretch north between Sutlej and Beas we can understand Arr. 5, 25, 1, and also justify the gazetteer's claim (if it be one) of the country up to the Sutlej, for the Oxydracae submitted and were (nominally) placed under a satrap. It leads also to a most interesting hypothesis. Strabo 15, 687 (|| from Megasthenes), says that the Persians got mercenaries from the Τόρασι. If this, as I suppose, means

²² Kießling, s.v. *Gandaridae* in Pauly-Wissowa, makes the people of Gandhara, the Gandaridae, and the Gangaridae, three sections of one tribe, which had moved across India leaving parts of itself behind.

²³ Amplified in Strabo, 15, 702: a ruling

oligarchy of 5000, each of whom gave an elephant to the State!

²⁴ *J.R.A.S.* 1903, 685.—Arr. 5, 22, 1, *δοξα*, may mean that it was the Oxydracae who adjoined the Cathaenus.

the Oxydracae (Kshudraka),²⁵ why did any Achaemenid go to so distant a people for mercenaries? Clearly because the nearer peoples were his subjects; i.e. we get some support for the suggestion²⁶ that the rule of Darius I. had ended at the Beas, where Alexander's men refused to go on.

This finishes the deductions to be drawn from the gazetteer; but it remains to notice two possible objections to the conclusion that Alexander never knew of the Ganges. One is the suggestion²⁷ that Aristotle (and therefore presumably Alexander) knew of it, because it is the 'fluvius alter' of the *Liber de inundacione Nili*.²⁸ A perusal of the *Liber* disposes of this idea at once. Aristotle is considering whether the Erythrean sea be a lake or part of the circumfluent ocean. Artaxerxes Ochus, he says, thought that it was a lake [that India joined Ethiopia], and that the Indus was the upper Nile; some Indians, however, told him that the Indus flowed into the Erythrean sea, but that there was a second river, fluvius alter, rising in the same mountain as the Indus, and flowing into (or through) the same parts of India, ad illas partes Indie fluens, which *did* flow round the Erythrean lake, circumfluere exterius rubrum mare (as Ochus had supposed the Indus to do). It is clear, therefore, that the 'fluvius alter' was in the same part of India as the Indus, quite apart from the fact that 'India' meant to Aristotle only the country of the Indus and the Punjab; and if this river has any real meaning,—and one must bear in mind the darkness in which, for Western men, 'India' had become enshrouded during the fourth century,—it is one of the Punjab rivers, possibly enough the river of the gazetteer, the Sutlej-Hakra: for the Sutlej alone of the Punjab rivers rises, like the Indus, beyond the Himalaya and bursts through. However, I am only concerned here with what the 'fluvius alter' was *not*.

The other objection is an *a priori* argument: traders and students from the east came to Taxila, and therefore Alexander must have heard of the Ganges and its kingdoms. It is not much good setting up an *a priori* argument against the evidence of a contemporary (and perhaps official) document like the gazetteer of 324/3: but, apart from that, one may well ask what sort of information Alexander would *really* have got from a trader, after it had trickled through two different interpreters, via Persian. The way to answer that question is to look (say) at the sort of information the early Spanish voyagers got in America, and the queer manner in which it sometimes fitted in with their preconceived notions. If the Staff did question some trader, or even Taxiles, we may be sure that the answer did not fit in badly with Alexander's Aristotelian geography, because the same thing had actually happened elsewhere; Pharasmanes of Khiva knew the Aral well enough, but what he tried to tell Alexander merely confirmed Aristotle. It is, too, possible that we do possess an earlier piece of trade information of the sort here suggested, the

²⁵ See Müller in *F.H.G.* II, p. 415, where the numerous variants of the name are collected.

²⁶ By A. V. Williams-Jackson in *Camb. Hist. Indus*, I, 241.

²⁷ Kießling, *Ganges in Pauly-Wissowa*.

²⁸ Rose, *l.c.* 248; a Latin summary of

Aristotle's lost text *ἐξ ἧς τῆς Νείλου ἀναδύεται*. For its genuineness, see Partsch, *Abhandlungen d. k. sächsischen Ges. d. Wiss.*, Ph. & Kl., 27, 1909, p. 551; it dates from before Alexander's expedition, Belcher, *Neue Jahrb.* 27, 1911, 150.

river Hypobaros in Ctesias (Plin. *N.H.* 37, 39). What river the name 'bringer of good things' suggests no man can say; the Ganges is periodically suggested,²⁹ in spite of Ctesias' statement that the river was 'not large,' and one can only say what Lassen said seventy years ago,—it may be, but it is extremely doubtful. Essentially, the river is the Greek fairy river, the Eridanos, transferred to the east.³⁰ But what Ctesias has to say about the gum suggests that so much of the story as he did not invent is a trade story, i. e. came to Persia with the gum; and what one *can* say for certain about it is, that if Ctesias really got hold of a Persian translation of an epithet, unknown in Sanskrit, which belonged to the Ganges, he did not with the epithet get the faintest notion of where the Ganges was or what it was like. That Alexander also heard some 'travellers' tales' is possible enough; but that has nothing to do with any real information about the real Ganges.

The conclusion then is that Alexander, when he turned back, knew of the Sutej, and vaguely of some kingdom beyond it, with which the name Gandaridae or Tyndaridae was connected. He never knew of the Ganges or of Magadha, any more than he ever knew of the vast Middle Country between the Sutej and the Ganges. What he did know was not of a nature to shake his conviction, based primarily on the Aristotelian geography, that Ocean lay at quite a short distance in front of him, as is proved by his desire still to advance in spite of the great reduction in his small striking force by troops left on communications.³¹ The story that he knew of the Ganges and Magadha, which is unknown to the good tradition, has been written into the vulgate from Megasthenes through a mistake which I have traced; and by means of this story the vulgate has attributed to Alexander a scheme of conquest³² which has no basis in fact, because he knew nothing of the existence of the place whose conquest was the object of the scheme. The legend of the plan to conquer Magadha, however, matured much faster than the parallel legend of the plan to conquer Carthage and the Mediterranean, whose growth I have previously traced;³³ for while the latter was not actually accomplished till the Romance, Alexander conquered Magadha long before that. The first step was that some one forged a letter from Craterus to his mother (Strabo 15, 702) in which Alexander reaches the Ganges. Then follow two stories; in the one, preserved by Diodorus, 2, 37, 3, Alexander reaches the Ganges but dare not attack the Gandaridae (*sic*) because of their 4000 elephants; in the other, given in Plut. *Alex.* 62 and alluded to in Diodorus 17, 108, 3, he reaches the Ganges and desires to cross, but the army refuses. (As in Plutarch the 'Gandaritae and Prasii' hold the *further* bank, which represents the blunder made by Cleitarchus which this paper has been tracing, we have here an

²⁹ Most recently by Kiessling, *s.v.* *Ganges* and *Hypobaros* in Pauly-Wissowa.

³⁰ Kiessling, *Hypobaros*, above.

³¹ We have not the context of Nearchus' obscure statement (Strabo 15, 689) that the *δύας ἡ δία τοὺς ποταμούς* took four months; but it cannot have anything to do with the real size of India, and must relate in some way to

Alexander's march.

³² The vulgate's idea that Alexander meant to cross the Ganges, involving a conflict with Magadha, would almost arise naturally from its substitution of the Ganges for the Sutej.

³³ *J.H.S.* 1921, 1.

excellent instance of later legend springing from the Cleitarchean vulgate; it is illuminating for Plutarch's indiscriminate use of material.) Finally, in Justin 12, 8, 9, Alexander does conquer Magadha: Praesios, Gangaridas, caesis eorum exercitibus expugnat. The statement in Diodorus' version of the gazetteer, 18, 6, 1, that Alexander did not attack the Gandaridae because of their elephants, is then a mere remark of Diodorus' own,²⁴ quoted from his own version of the legend in 2, 37, 3. Like many legends, it possesses a minute substratum of fact; the report about the elephants across the Beas, Arr. 5, 25, 1, was one of the causes which decided Alexander's army to go no further.

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²⁴ Diodorus' habit of occasionally interpolating remarks or quotations of his own is now well established, anyhow for the later books; for instance — Jacoby,

Hieronymus in Pauly-Wissowa; Schubert, *Die Quellen zur Geschichte der Diadochenzeit*, *passim*.

DE MENSIIUM NOMINIBUS

A.

IN the huge mediæval storehouse of miscellaneous fragments, compiled not later than the eighth century and now known by the title *Liber Glossarum*, there are not a few items dealing with the names of the months in various parts of the ancient world. Some of them (such as *Hebël* in *Muccharabarum libro Augustus, qui apud nos mensis sextus, vocatur*) come from the second book of the *Instructiones* of Eucherius (p. 153, ed. Wotke); some (such as *Februarius nuncupatur a Februa, id est Plutone, cui eo mense sacrificabatur*) are excerpts from Isidore's *Etymologiae* (v. 33); while a few (such as *Aprilis vero, nullo deorum suorum nomine, sed de re propria, quasi Aperilem nominaverunt eo quod tunc plurimum germinis aperitur in florem*) can be traced to Isidore's *De Natura Rerum* (cap. 4). Among the remainder, however, which cannot be found in any of the definitely recognisable sources of the *Liber Glossarum*, there are 116 forming by themselves a distinct group. In these items a curt formula gives us the names by which the months were known in eleven different parts of the world, e. g. :—

- Adarzio : Hebraeorum lingua Martius mensis dicitur.
- Boaba channin : Hebraeorum lingua October mensis dicitur.
- Ab : Syrorum lingua Augustus mensis dicitur.
- Cinaath : Syrorum lingua Iulius mensis dicitur.
- Artana : Cappadocum lingua Aprilis mensis dicitur.
- Amarthath : Cappadocum lingua Augustus mensis dicitur.
- Archoithoth : Aegyptiorum lingua Augustus mensis dicitur.
- Clach : Aegyptiorum lingua November mensis dicitur.
- Ampiles : Tuscorum lingua Maius mensis dicitur.
- Cabreas : Tuscorum lingua Aprilis mensis dicitur.
- Antesterion : Atheniensium lingua Iulius mensis dicitur.
- Targelion : Atheniensium lingua October mensis dicitur.
- Adineos : Macedonum lingua Ianuarius mensis dicitur.
- Distros : Macedonum lingua Martius mensis dicitur.
- Areos : Bithyniensium lingua Iulius mensis dicitur.
- Metreos : Bithyniensium lingua December mensis dicitur.
- Antesterion : Perinthiorum lingua September mensis dicitur.
- Sébasios : Perinthiorum lingua Augustus mensis dicitur.
- Artemasios : Bizantinorum lingua Aprilis mensis dicitur.
- Lices : Bizantinorum lingua Maius mensis dicitur.
- Agripeos : Hellenorum lingua Februarius mensis dicitur.
- Druseos : Hellenorum lingua Iulius mensis dicitur.

Some, but not all, of these items have been printed by Goetz in his *Excerpta ex Libro Glossarum* (Corp. Gloss. Lat., v. 161-255) and are included in a very brief form (and without full indications of the Roman months to which the various names refer) in the *Thesaurus Glossarum Emendatarum* (C. G. Lat., vi., s.v. *Mensis*). The forthcoming edition of the *Liber Glossarum* will unfortunately be compelled for various reasons to treat these items in the same manner as the items excerpted from Isidore are treated. The lemma-words will all be printed, but the interpretations will be suppressed. In the case of Isidore the insertion of a detailed reference to existing editions of his works will put the reader in the way of obtaining all the information he is likely to require. The first part of this article is designed to play the same rôle to the month-name items as an edition of Isidore will do to the Isidore items. The lemma-words alone will be printed in the *Liber Glossarum* and a reference (= *Mens.*) will indicate that the item is dealt with here.

The first feature of these 116 items which attracts attention is the stereotyped formula in which they are presented; and the obvious inference is that they are all derived from a single source. They have not the appearance, however, of having come from a continuous piece of prose like the pages of Eucherius and Isidore which deal with month-names. Nor is it possible to hold that the compiler of the *Liber Glossarum* found them in the precise form which they now have. It would seem that the persistence of *thenerum lingua* in place of *Atheniensium lingua* (or *Athenacorum lingua*) and the frequency of *tucorum* or *tuquorum* for *Tuscorum* (in the MSS. which have not suffered from emendation) give us a clue to the original form of these items. So absurd an error as *thenerum lingua* repeated ten times over is best explained on the hypothesis that these items were remodelled by the compiler of the *Liber Glossarum* from month-lists of the *Hermeneumata* type, similar to those preserved in Corp. Gloss. Lat., iii. 72 and 210. At the head of each list there would appear some such phrase as *Menses Hebraeorum* or *Menses secundum Hebraeos*. Such lists as these would need modification before they could be disintegrated for use in an alphabetical glossary, and the compiler of the *Liber Glossarum* evolved a simple formula to suit his purpose. It was, however, an inevitable consequence that an error in the title of a list should be repeated with every single item contained in that list. Again, the versions which we find of the Egyptian months *Choiak* and *Tybi* may also be regarded as indications that these month-name items were indeed originally arranged in lists. *Choiak* was wrongly written as *Ciach* in the compiler's list and corrected to *Cofach* thus:—

November	Ciach	
December	Tibi	cofach

This correction was misunderstood and the *Liber Glossarum* gives two items, one on *Ciach* (= November), the other on *Tibicofach* (= December), which is apparently a ghost-word. It may even be that the not infrequent ascriptions of a month-name to a people among whom it was not current are due to confusions in transcribing from the various lists.

These items will, therefore, be presented here as lists and the formula

will be omitted, since it appears not to have been original. Any reader who likes may reintroduce the formula (except for the minor mis-spellings of the MSS.) with perfect accuracy by following the full examples of it which were given above, bearing in mind that the non-Roman name always stands at the head of the item. Since only the month-names and gentile-names are of any importance or likely to cause any difficulty, MS. readings will in general be cited for them alone. I rely on the two oldest and best MSS. of the *Liber Glossarum*, i.e. the Paris MS. (11529-30, *P*, representing one main family) and the Vatican MS. (Vat. Pal. Lat. 1773, formerly at Lorsch, *L*, representing the other). Frequently the readings of the Tours MS. (*T*) and the Vendôme MS. (*V*) have been quoted, but since they represent an emended version of the archetype they must not be thought to have the same authority as *LP* combined. The references prefixed in brackets are to the enumeration which has been adopted for the edition of the *Liber Glossarum*. To secure some uniformity in these lists it has seemed best to commence in each case with the month of January, the *caput anni* of the Julian calendar.

Yet before drawing up these lists, some mention should be made of the *Elementarium* of Papias, a glossary compiled about the middle of the eleventh century and not reprinted since the fourth edition of 1496. Papias had used a MS. of the *Liber Glossarum* as one of his quarries and took from it more than half of these 116 month-name items as well as some of those derived from Eucherius. Quite a number he retained as they stood, others he shortened and paraphrased. Thus the *Liber Glossarum* item *Ossamanar Cappadocem lingua Februarius mensis dicitur* becomes in Papias *Ossamania february mensis*; and *Mesoro Aegyptiorum lingua Iulius mensis dicitur* becomes *Mesores aegyptiace Iulius mensis*. In 1847 Bröcker and Hermann printed and discussed the items of Papias in two shrewd articles.¹ But it was not until 1853 that Hildebrand demonstrated the reliance of Papias on the *Liber Glossarum*, and we can now place the Papias items in a truer perspective and group them better than was possible for Bröcker. The readings of Papias are not of great importance, for at the best they only represent one MS. of the *Liber Glossarum*. Yet many of these month-names are still, in spite of Goetz' work, known only as they appear in Papias, and it is desirable to co-ordinate our sources of information by indicating in this article which of the items are found in Papias. When necessary, references will be given to the sections and sub-sections into which Bröcker divided the Papias items.²

I. HEBREW MONTH-NAMES.³ Formula: . . . *Hebraeorum lingua* . . . *mensis dicitur*. Cf. Papias, XIX b, d, e.

- | | | |
|----------|------------|--|
| (CA 453) | Ianuarinus | Canon (<i>LP</i> ; <i>om. Pap.</i>). |
| (KA 60) | Ianuarius | Canon (<i>LPV</i> ; <i>Kanon T</i> ; <i>Kanonus Pap.</i>). |
| (TE 13) | Ianuarinus | Thebet (<i>LP</i> ; <i>Thebeth TV Pap.</i>). |

¹ L. O. Bröcker: *Beiträge zur antiken Monatskunde* (Philologia, ii. pp. 246-261).
 K. Fr. Hermann: *Bemerkungen zu den monologischen Glossen des Papias* (ib. pp. 262-272).
 Eucherius: IX *Castra* (= *Euch.* 153, 13); XV *Is Nisan* (= *ib.* 10); XVIa *Adar* (= *ib.* 16); XVIb *Thebeth* (= *ib.* 14); XVIIb (= *ib.* 10); XVII (= *ib.* 14); XVIII (= *ib.* 11).

² The following Papias items are from

(SO 2)	Februarius	Sobath (<i>LP Pap.</i>).
(AD 22)	Martius	Adarzio (<i>LP; Adarrios Pap.</i>).
(NI 141)	Aprilis	Nisan baath (<i>P; bahat L; Nisanbaath TV; Nisabath Pap.</i>).
	Maius	—
(YE 1)	Iunius	Yer (<i>PV; lacuna LT</i>).
(YE 2)	Iunius	Yerana (<i>PV; lacuna LT</i>).
(TA 145)	Iulius	Thamax (<i>P; Taniaz L; Thamaz TV; Thamar Pap.; lege Tammuz</i>).
	Augustus	—
(IL 54)	September	Ilul et anim (<i>P; om. T; Iluletanum LV; Iludetanum Pap.</i>).
(BO 5)	October	Boaba channin (<i>PTV; Boabacchanin L; Boachabani Pap.</i>).
(AC 264)	November	Acpadi (<i>LPTV Pap.</i>).
	December	—

In this list there are many points which call for comment. (1) The normal form *Thebet* appears side by side with *Kanun*, the Syrian name for January. (2) *Sobath* is an alternative form of *Shebath* found at Heliopolis as the equivalent of March-April.⁴ (3) The month of March is normally called *Adar* and the obscure termination *-rios* seems to be without parallel. (4) The second element of *Nisan baath* may perhaps contain the Hebrew for *rest*; but it is not easy to see how such a word could find its way into a list of month-names unless the ultimate origin of the item is a misunderstood annotation of some phrase of Sacred Scripture. (5) *Iyyar*, the equivalent for May, has been transferred in garbled form to June and has ousted *Sivan*. *Yer* and *Yerana* (the latter a difficult form to explain) appear twice in Papias: (α) *Yer et erana hebraice Iunius mensis*; (β) *Jer et erana hebraice Iunius mensis*. (6) *Ilul et anim* is the juxtaposition of a genuine Hebrew month-name (*Elul*) and the old Canaanite name of the seventh Hebrew month (*Etanim*; cf. 1 Kings, viii. 2).⁵ In the original list *Etanim* was possibly written correctly as the equivalent of October, displacing *Tishri*. (7) *Boaba channin* is unparalleled. In the original it may have been equated with November, but it can scarcely be a corruption of *Marchesvan*. The second element (*Channin*) perhaps is connected with the month-name *Chann*, which at Heliopolis was the equivalent of March. (8) *Acpadi* (another strange form, here displacing *Marchesvan*) bears resemblance to *Aq*, the month-name for November-December at Heliopolis, and it may have stood opposite December in the original list in place of *Kislev*. In an attempt to explain some of the curious features of this list Bröcker suggested that the source was a tripartite list containing Hebrew, Syromacedonian and Heliopolitan month-names, and that Papias by a misapprehension treated them as synonyms, putting down as Hebrew a number of names which had no real claim. Of course

⁴ For advice in this section I am indebted to Prof. A. R. S. Kennedy of Edinburgh.

⁵ Cf. Babel, *Handbuch der math. und*

technischen Chronologie, I. 440; Ginzler, *Handbuch der math. und tech. Chron.*, iii. 33.

⁶ Cf. Babel, I. 495; Ginzler, ii. 12.

the confusions and mistakes are not due to Papias, and I am inclined to think they already existed in the list used by the compiler of the *Liber Glossarum*. The full solution of these puzzles, however, must be left to Hebrew scholars, who will remember that ghost-words and nonsense are not unknown in glossaries.⁶

II. SYRIAN MONTH-NAMES. Formula: . . . *Syrorum lingua* . . . *mensis dicitur*. Cf. Papias, XV a.

(CA 454)	Ianuarius	Canon (LP; om. Pap.).
(SA 13)	Februarius	Sabae (LPV Pap.; om. T.).
(AD 30)	Martius	Adar (LP Pap.).
(NI 143)	Aprilis	Nisan (LP; om. Pap.).
(YA 7)	Maius	Yar (P; om. L Pap.; Yar sirorum (om. cett.) TV).
(OZ 3)	Iunius	Ozirat (LPTV; Ozirot Pap.).
(CI 166)	Iulius	Cinath (L; Cinuath P; Cynabat Pap.; om. TV; sirorum L).
(AB 10a)	Augustus	Ab (LP; Abi Pap.).
(IL 53)	September	Hua (LP Pap.; lege Elul).
(TI 212)	October	Thysri (LP; Thisri Pap.).
	November	—
	December	—

This list contains fewer puzzles than the Hebrew one. (1) *Sabae* is presumably an error of transcription for *Shebeth*, for it does not appear elsewhere as an alternative form. The marginal label *De Glossis*, which is found opposite this item in LPV, is misplaced and cannot be taken as a genuine indication of the source of these items. (2) The Syromacedonian month of June is normally given as *Hasiran*; but at Heliopolis the form 'Ozīr was current, and *Ozirat*, like *Acpadi* and *Sobath* (and *Chawara*?) in the Hebrew list, may be thence derived.⁷ (3) The strict alphabetical arrangement of the *Liber Glossarum* shows that the form *Cinath* (not *Cinuath*) appeared in the month-list used by the compiler. This substitute for *Tamuz* is not otherwise attested. (4) Papias (XV b) has a second version for *Elul* (*Heia syriace September mensis dicitur*) almost certainly due to a correction in his MS. of the *Liber Glossarum*.

III. CAPTADOCIAN MONTH-NAMES. Formula: . . . *Cappadocum lingua* . . . *mensis dicitur*. Cf. Papias XIV a.

(DA 171)	Ianuarius	Datusa (LP Pap.).
(OS 12)	Februarius	Osamanai (LP; Osamania Pap.).
(SA 366)	Martius	Sandara (LPTV Pap.).
(AR 520)	Aprilis	Artana (LP; Artana T; om. Pap.).

⁶ Papias also had access to another source for Hebrew month-names of which the *Liber Glossarum* knows nothing. Papias gives (XIX a): Ianuarius, *Thobeth*; Martius, *Adar*; Aprilis, *Nisan*; Maius, *Iar*; Iunius, *Siban*; Iulius, *Tamul*; Augustus, *TAosa*

(= *Elul*?); September, *Elul*; October, *azung* (?); November, *Mazamon*. Notice also the list contained in the *Hermeneumata Leidensia* (C. G. Lat., iii. 72).

⁷ Cf. Ideler, i. 441, note 1; Ginzler iii. 33 (where the form *Ozīr* is given).

(AR 529)	Maïus	Arteisti (LP; Arteisti caput cum lingua T; om. Pap.).
(OR 283)	Iunius	Oroatata (PTV; Oroatuta L; om. Pap.).
(TE 79)	Iulius	Teiori (LP; Tedori TV; cf. Pap. XIV b).
(AM 29)	Augustus	Amarthath (PTV; Amartath L; om. Pap.).
(CA 997)	September	Catheorin (P; Catheorin TV; Cathorin L Pap.).
(MI 377)	October	Mitre (LP Pap.).
(AP 4)	November	Apamcinama (LP; Apaino inama T; om. Pap.).
(AT 50)	December	Atrade (LPV Pap. IX; september mensis T).

In this list the cycle of names is correct, but owing to some kind of dislocation, the equivalents are all wrong. The normal list is: Ianuarius, *Arteys*; Februarius, *Adrasstata*; Martius, *Teires*; Aprilis, *Amarpata*; Maïus, *Xanthikos*; Iunius, *Myer*; Iulius, *Apomyle*; Augustus, *Athra*; September, *Dalthu*; October, *Ozman*; November, *Sonda*; December, *Lylanos*. But the actual forms of the names found here are not to be regarded as very serious errors; for they are elsewhere attested as alternative forms.* *Catheorin* alone is abnormal and difficult to explain. That *Sandara* is labelled *De Glossis* (in TV) and *Oroatata* labelled *Hieronimus* (in LPTV) are insignificant errors. When Papias (XIV b) writes *Teiori Iulius mensis capadoce θεοφφω δεινέ*, the last two words are to be regarded as a separate item, having no connexion with the month-name. The alphabetical arrangement of the *Liber Glossarum* shows that the reading of TV (*Tedori*) was not that of the compiler's list.

IV. EGYPTIAN MONTH-NAMES. Formula: . . . *Aegyptiorum lingua* . . . mensis dicitur. Cf. Papias XIII b.

	Ianuarius	—
(FA 317)	Februarius	Famenoth (LP Pap.).
(FA 437)	Martius	Farnati (LP Pap.).
(PA 40)	Aprilis	Pacon (LP Pap.).
(PA 941)	Maïus	Paumi (LP Pap.).
(EP 38)	Iunius	Epyphi (P; Ephyphe L; Ephuphy TV; Epiphi Pap.).
(ME 527)	Iulius	Mesoro (LP; Mesores Pap. XIII e).
(AR 170)	Augustus	Archoitoth (PTV; Arcoitoth L; Archoitot Pap.).
(FA 658)	September	Faufi (LP; Pap.).
	October	—
(CI 1)	November	Ciaoh (LTV; Ciacin P; Cycaces Pap. IX).
(TI 25)	December	Tibicolach (P; Tibicolach L; Tibicolach TV; om. Pap.).

In the fixed Egyptian or Alexandrian year the month of March was called *Phamenoth*, May *Pharmuthi*, and so on. Papias, using a source not available to the compiler of the *Liber Glossarum*, has a second and more correct list of the months of the fixed year.* If the *Liber Glossarum* list also refers to the fixed

* Cf. Ideler, I. 442; Ginzler, III. 23.

* The list (XIII a) is: Martius, *Famenor*; Aprilis, *Pharmuth*; Maïus, *Phachon*; Iunius, *Pharni*; Iulius, *Epiphi*; Augustus, *seven*; September, *Tori*; October, *Phamphi*, *seven*;

November, *Adniz*. The months December-Februarius are lacking, possibly because this second list of Papias began with the old *casat anni* (Martius) and in the process of transmission shed its later items.

year we must posit a dislocation of a minor kind. Bröcker, however, thought the list referred to the wandering year of the Egyptians, and concluded that since *Thoth* was equivalent to August between A.D. 20 and A.D. 160, this list originated during that period. But he adduced no proof that the wandering year existed in practice after the edict of the Emperor Augustus, which in A.D. 10 made the Julian year compulsory for Egypt; and our increasing knowledge of the vagaries of glossaries and the errors which were the concomitants of their compilation and transmission will warn us not to give too ready an assent to Bröcker's suggestion. The form *Archoithoth* is not otherwise attested; Bröcker and Goetz interpreted it as ἀρχή *Thoth* (i. e. *Thoth*, the first month), and if they are correct we might conjecture that there is a Greek origin behind this list. Sir E. A. Wallis Budge, however (in a letter), thinks of it as a genuine name with the meaning 'Thoth, the Great One.' An explanation has been offered above of the form *Tibicofach*.

V. ETRUSCAN MONTH-NAMES. Formula: . . . *Tuscorum lingua* . . . *mensis dicitur*. Cf. Papias VII. To avoid repetitions it should be stated here that whereas *LP* give *tucorum*, *turcorum* or *tuquorum* as the gentile-name, *TV* (both derived from a lost MS. which suffered as well as gained at the hand of an emendator) in half the instances give *tuscorum*. Papias generally has *tuscorum*, either because he himself emended or because his MS. of the *Liber Glossarum* was akin to the *TV* family.

	Ianuarius	—
	Februarius	—
(VE 87)	Martius	Velcitanus (<i>PTV</i> ; Veleitanus <i>L</i> ; Velitanus <i>Pap.</i>).
(CA 17)	Aprilis	Cabreas (<i>LPTV</i> ; <i>om. Pap.</i>).
(AM 311)	Maius	Ampiles (<i>LPTV</i> ; Amphiles <i>Pap.</i>).
(AC 240)	Iunius	Aelus (<i>LP Pap.</i>).
(TR 108)	Iulius	Traneus (<i>LP Pap.</i>).
(ER 207)	Augustus	Ermius (<i>LP Pap.</i>).
(CE 230)	September	Celius (<i>LP</i> ; Caelius <i>TV Pap.</i>).
(XO 1)	October	Xosfer (<i>LPTV</i> ; Xosfer <i>Pap.</i>).
	November	—
	December	—

This list of the *Liber Glossarum* is unique as an authority for the names of the Etruscan months. Corssen (*die Etrusker*, i. 849 note) comments on them as they are presented in Papias. *Xosfer* he regards as an impossible form, since *X* is not normally the initial letter of any Etruscan word. He suggests that *X* is a misreading (by whom?) of an Etruscan monogram for *UT*, and that the name is really *Utofer*. It is well to remember, however, that in the *X*-section of the *Liber Glossarum* there are a number of items where *X* is used to represent the Greek *Chi* (e. g. *Xrisin*, *Xristus*); and the Etruscan name may, therefore, be *Chosfer*. The equivalent of August (*Ermius*) should also be regarded with some suspicion, since it is sufficiently close to *Ἐρμῆος* to be an intruder from a Greek list. From the omission of the months November-February

we may conjecture that the list began with March and was already defective when the *Liber Glossarum* was compiled.

VI. ATHENIAN MONTH-NAMES. Formula: . . . *Thenerum lingua* . . . mensis dicitur. Cf. Papias III, where the name of the people is given as *Teucrum* or *Teucrorum*. That the list indeed refers to Athens admits of no doubt, since *Mounychion* and *Skiophorion* are present.

(EC 1)	Januarius	Ecatombeon (<i>LP Pap.</i> ; tenerarum lingua <i>L.</i> ; aspiratur add. <i>Pap.</i>).
	Februarius	—
(PI 35)	Martius	Pianeption (<i>LPTV</i> ; om. <i>Pap.</i>).
(ME 210)	Aprilis	Memasterion (<i>LP</i> ; Memarterion <i>TV</i> ; om. <i>Pap.</i>).
(PO 501)	Maius	Posteon (<i>LPV Pap.</i> ; Posteon tenens linguam <i>T</i>).
	Iunius	—
(GA 77)	Iulius	Gamenon (<i>LPTV</i> ; Gameon <i>Pap.</i>).
(AN 403)	Iulius	Antesterion (<i>LP</i> ; om. <i>Pap.</i>).
(EL 18)	Augustus	Elafebolion (<i>LP</i> ; Elaphabolion <i>Pap.</i>).
(MU 216)	September	Municion (<i>PT</i> ; Monicion <i>L.</i> ; Munition tenedum <i>Pap. VI</i>).
(TA 243)	October	Targelion (<i>LTV</i> ; om. <i>P Pap.</i>).
(SC 209)	November	Sciroforion (<i>LPTV</i> ; Seytophorium <i>Pap.</i> ; novem versis dicitur <i>P</i> ; vocembris <i>T</i>).
	December	—

All that can be said for these month-names is that their relative order is accurate; but their equivalents in Roman months are seriously at fault, owing no doubt to a dislocation or a series of dislocations which took place during the transmission of the list. A list of Athenian month-names would be of greater use than any other list (except perhaps a Hebrew one), would be copied oftener, and consequently be more liable to corruptions. In the *Hermeneumata Monacensia* (Corp. Gloss. Lat. iii, 210), under the title of *Menses Anthioccensium* (sic), we find the Athenian months as seriously disorganised as in the *Liber Glossarum* list. For ease of comparison I append the normal sequence of Attic months:—

January-February, Γαμηλιών; February-March, Ἀνθεστηριών; March-April, Ἐλαφβολιών; April-May, Μουνυχιών; May-June, Θαργηλιών; June-July, Σειροφοριών; July-August, Ἐκατομβαιών; August-September, Μεταγηντιών; September-October, Βοηδρομιών; October-November, Πυανηγιών; November-December, Μαιμακτηριών; December-January, Ποσειδεών.

VII. MACEDONIAN MONTH-NAMES. Formula: . . . *Macedonum lingua* . . . mensis dicitur. Cf. Papias XI b.

(AD 294)	Januarius	Adineos (<i>LP Pap.</i> ; Adineus <i>TV</i> , = Ἀδινεαῖος).
(PE 866)	Februarius	Peritios (<i>LT</i> ; Peritos <i>P</i> ; om. <i>Pap.</i> = Περίτιος).
(DI 1141)	Martius	Distros (<i>LP Pap.</i> = Δίστρος).
(XA 1)	Aprilis	Xanticoos (<i>PT</i> ; Xandicoos <i>Pap.</i> ; om. <i>L.</i> = Ξανδικός).

(AR 535)	Maius	Artemisios (LPTV; Artemeysios Pap. = Ἀρτεμίσιος).
	Iunius	—
	Iulius	—
	Augustus	—
(PA 281)	September	Panemos (LP; om. TV Pap. = Πάνημος).
(YP 9)	October	Yperboreteas (P; om. LT; Yperboretheus V; Hyperbetheus Pap. = Ὑπερβoreaῖος).
(DI 521)	November	Dios (LP Pap. = Δίος).
(AP 32)	December	Apelleos (LPTV Pap. = Ἀπελλαῖος).

This list of the Syromacedonian months agrees in all essentials with that in vogue at Antiochia,¹⁰ and a similar list under the title of *Μηνες Antiochenium* (sic) is found in the *Hermeneumata Monacensia* (C. G. Lat. iii. 210). *Panemos*, however, should be the equivalent of July, and for September we should have *Γορπιαῖος*. The list is completed with *Δαίσιος* (= June) and *Λῶος* (= August). In the *Panemos* item *L* reads *December* in place of *September*, and the error seems due to a confusion with the Perinthian month *Panemos*, which immediately precedes (i. e. PA 280). In *PTV* the *Ξαρθικός* item is erroneously labelled as *De Gloesia*. Papias (XIa) had access to another but still incomplete list of these months.¹¹

VIII. BITHYNIAN MONTH-NAMES. Formula: . . . *Bithyniensium lingua* . . . *mensis dicitur*. In *TV* we frequently find *bitimensium*. Cf. Papias X.

(DI 528)	Ianuarus	Dionisios (LP; am. Pap. = Διονίσσιος).
(ER 7)	Februarius	Erachios (PTV; am. I Pap. vitiniensium lingua P; utiniensium TV. = Ἑράκιος).
(DI 522)	Martius	Dios (LP Pap. = Δίος).
(BE 105)	Aprilis	Bendidios (LP Pap. IX. = Βενδίδιος).
	Maius	—
(PR 1203)	Iunius	Prietios (LP Pap. = Πριέτιος).
(AR 281)	Iulius	Areos (LP Pap. = Ἀρείος).
(AF 110)	Augustus	Afrodisios (PTV; Afrodiseus L; am. Pap. = Ἀφροδίσσιος).
(DE 726)	September	Demetreos (LP; Demereos TV; Demetrius Pap. = Δημήτριος).
(HE 130)	October	Hereos (LP Pap. = Ἡραῖος).
(ER 205)	November	Ermeos (LP Pap.; Ermeus TV. = Ἑρμαῖος).
(ME 607)	December	Metreos (LP; am. Pap. = Μητρώος).

Save for the omission of *Στράτιος* (= May) this calendar is accurate.¹²

¹⁰ Cf. Gimal, iii. 31; Bischoff in Pauly-Wissowa (s.v. *Kalendar*).

¹¹ They are: Aprilis, *Ξαρθικός*; Iunius, *Πίος* (= Δίος?); Iulius, *Panemos*; Augus-

tus, *Λῶος*; September, *Γορπιαῖος*; October, *ὑπερβoreaῖος*; November, *Δίος*.

¹² Cf. Gimal, iii. 22.

IX. PERINTHIAN MONTH-NAMES. Formula: . . . *Perinthiorum lingua* . . .
mensis dicitur. Cf. Papias I.

(CA 91)	Januarius	Calameos (<i>P</i> ; Calamensis <i>LT Pap.</i> IX. = Καλαμαῖος).
	Februarius	—
(LE 120)	Martius	Lencos (<i>LP Pap.</i> VIII; proiniciorum lingua <i>P</i> ; initiorum <i>L</i> ¹ ; inpiorum <i>L</i> ² ; iuniorum <i>Pap.</i> = Ανραιος).
	Aprilis	—
(BO 22)	Maius	Boedromion (<i>LP Pap.</i> IX. = Βοηδρομιών).
(CR 230)	Iunius	Croimon (<i>LPT</i> ; Cromon <i>Pap.</i> = Κρονιόν).
(PI 36)	Julius	Pianepion (<i>LP</i> ; <i>om. Pap.</i> = Πιανοφιών).
(PO 474)	Augustus	Posideon (<i>LP Pap.</i> IX. = Ποσειδών).
(SE 2)	Augustus	Sebastos (<i>LP</i> ; Sabastes <i>Pap.</i> = Σεβαστός).
(AN 404)	September	Antesterion (<i>LP</i> ; <i>om. Pap.</i> = Ἀνθεστηριών).
(AR 533)	October	Artemeios (<i>LPT</i> ; Artemeysios <i>Pap.</i> = Ἀρτεμῖσιος).
(DE 1064)	November	Desios (<i>LP Pap.</i> = Δαῖσιος).
(PA 280)	December	Panemos (<i>LP Pap.</i> = Πάνημος).

For this fairly complete list of the month-names current at Perinthus the *Liber Glossarum* is our only authority. When treating of the Papias glosses Bröcker placed the month *Anraios* in a separate section under the misapprehension that it was a Punic month; but the readings of the MSS. of the *Liber Glossarum* show how the mistake of Papias arose—he tried to make sense out of nonsense. The alphabetical arrangement of the *Liber Glossarum* shows that the wrong form *Croimon* was present in the compiler's list; but we have no means of deciding between *Posideon* and *Sebastos* as the equivalent of August. In Papias we have the *Panemos* item given thus: *Panemos perinthiorum lingua vel macedonum decembris mensis*; and it seems that his MS. of the *Liber Glossarum*, like *L*, presented the Macedonian month in a confused form (cf. *supra*). Bischoff, knowing only of those items which are included in the first section of Papias, rather rashly, I think, rejected all except *Kronion* and *Panemos* and regarded the others as intruders from a Macedonian or Asiatic list. Yet since these month-names (excepting *Kronion*, *Sebastos* and *Daḗsios*) are all attested for Miletus, Cyzicus and Olbia, it does not seem impossible that they should have been used at Perinthus also.

X. BYZANTINE MONTH-NAMES. Formula: . . . *Byzantinorum lingua* . . .
mensis dicitur. Cf. Papias II.

(PE 1266)	Januarius	Petagniclos (<i>LP</i> ; Pet agniclos <i>T</i> ; <i>om. Pap.</i> = Πεταγνῖσιος).
(DI 519)	Februarius	Dionysius (<i>LP</i> ; Dionysius <i>Pap.</i> = Διονύσιος).
(EI 9)	Martius	Eiclios (<i>LP</i> ; <i>om. Pap.</i> = Εἰκλειος).
(AR 534)	Aprilis	Artemeios (<i>LP</i> ; Artemeios <i>T</i> ; Artemeysios <i>Pap.</i> = Ἀρτεμῖσιος).
(LI 298)	Maius	Liclos (<i>LP</i> ; Lycios <i>Pap.</i> = Λύκειος).

(BO 76)	Imius	Bosporius (LP; <i>om. Pap.</i> ; lingua iaur mensis T. = <i>Βοσπόριος</i>).
(IA 152)	Iulius	Iateos (LP; Iateor V; Iatheos <i>Pap.</i> = <i>Ἰατίνθιος</i>).
(AG 178)	Augustus	Agrantos (LP <i>Pap.</i> = <i>Ἀγριάνιος</i>).
(MA 370)	September	Malaforus (LP; Maleforus <i>Pap.</i> = <i>Μαλοφόριος</i>).
(EB 72)	October	Ereo (LPTV; <i>om. Pap.</i> = <i>Ἡραῖος</i>).
(CA 754)	November	Carnios (LP; Carnios TV; Carinos <i>Pap.</i> = <i>Καρνεῖος</i>).
(MA 1)	December	Machamios (LP; Machamos <i>Pap.</i> = <i>Μαχανεύς</i>).

For this full list also the *Liber Glossarum* is our only authority. Of these names *Πεταγείτιος* (or *Πεδαγείτιος*) is found in Calymna, Calchedon, Cos and Rhodes; *Εὐκλείος* in Corcyra; *Δύκειος* in the Chersonesus; *Ἰατίνθιος* in Lacedaemon, Rhodes, Cos, Calymna and Thera; *Ἀγριάνιος* and *Καρνεῖος* in Lacedaemon and Rhodes; *Ἀρτεμίσιος*, *Ἡραῖος* and *Διονίστιος* are well distributed all over Greece; but *Βοσπόριος* and *Μαλοφόριος* are found nowhere else. Bischoff is misled by Papias into printing *Καρνῖος* in place of *Καρνεῖος*.¹²

XI. THE MONTH-NAMES OF THE 'GREEKS.' Formula: . . . *Hellenorum lingua . . . mensis dicitur*. Cf. Papias IV, where the name of the people is variously given as *hellinum*, *hellenum* and *hellenorum*.

(SA 20)	Ianuaris	Sabastos (LP; <i>om. Pap.</i> = <i>Σεβαστός</i>).
(AG 202)	Februarius	Agripeos (PTV <i>Pap.</i> ; Agripeus I. = <i>Ἀγριππαῖος</i>).
(LI 52)	Martius	Libenos (LP <i>Pap.</i> = <i>Λιβαῖος</i>).
(OC 98)	Aprilis	Octeos (LP; Octenos TV; Octias <i>Pap.</i> = <i>Ὀκτάβιος</i>).
	Maius	—
(NA 83)	Iunius	Naroneos (LPTV; Narones hebraica lingua <i>Pap.</i> XIX b. = <i>Νερωαῖος</i>).
(DR 31)	Iulius	Druseos (LP; Druseo <i>Pap.</i> = <i>Δρουσαῖος</i>).
(AF 109)	Augustus	Afrodiseos (LP; Afrodisisos <i>Pap.</i> = <i>Ἀφροδίσιος</i>).
(AN 93)	September	Anchiseos (LP; Anchisios TV; Anchysios <i>Pap.</i> = <i>Ἀγχισαῖος</i>).
(PO 169)	October	Pomeos (LP; Pomes TV; Poinos <i>Pap.</i> = <i>Ῥωμαῖος</i>).
(EN 23)	November	Encadeos (LP; Encados <i>Pap.</i> = <i>Νινεαδαῖος</i>).
(CA 317)	December	Capetoleos (LP <i>Pap.</i> IX. = <i>Καπετωλαῖος</i>).

These Hellenistic months, which are named in honour of Augustus and his house, follow one another in the same order as the months of the older calendar which is attested for Cyprus. In the Cyprian calendar, however, *Σεβαστός* is the equivalent of October, *Ἀγριππαῖος* the equivalent of November, and so on. Either this list preserved in the *Liber Glossarum* has suffered dislocation or it is the calendar of some other part of the Roman Empire than Cyprus.

Such are the month-lists used by the compiler of the *Liber Glossarum*. In most cases it is possible for us to check them by other evidence. In the case

¹² *De Fastis Graecorum antiquioribus* (Leipziger Studien, vii, p. 400, note 12). In his article (N.V. Kalender) in Pauly-

Wissowa he only recognises *Ἀρκαῖος* (sic), *Πάριος* and *Κουαῖος*.

of the Etruscan, Perinthian and Byzantine months, however, the *Liber Glossarum* is our chief authority. What weight must be given to these three lists may be judged from the amount of accuracy we find in the others. Very frequently, as we have seen, the equivalents in Roman months are wrong, but the relative order of the months themselves is less frequently misleading. Sometimes there is a suspicion that some names of a list are intruders, and occasionally a name has been corrupted almost beyond recognition. The three unique lists must, therefore, be accepted with reservations, though they probably contain more truth than error.

B.

All the items given above will be represented in the edition of the *Liber Glossarum* by the lemma-word and the reference (= Mens.). There are a few more items which will be referred to as (= mens.), the interpretations being suppressed. They come neither from the month-lists given previously nor from any other known and definable source of the *Liber Glossarum*. This miscellaneous collection of waifs and strays is here given in alphabetical order:—

(AB 9) *Ab*: *Iulius mensis qui et quintilis* (Abi P; quintus L). Two of the items of Papias (XIX d *Abi hebraice Iulius*; XIX e *Abai Iulius mensis, qui et quintilis*; *hebraicum est*) are versions of this.

(AB 10) *Ab*: *apud Hebraeos dicitur quem nos Augustus mensem vocamus* (LP; Abdar V). This may really be an item from the Hebrew month-list in which the month-name *Ab* is omitted. The item is fused in the MSS. with AB 10a, which deals with the Syrian month of *Ab*. This latter has in its formula *nominatur* in place of *dicitur*, and it may well be that the compiler at first was in some uncertainty about the formula he would use.

(AR 1) *Ar*: *apud Hebraeos vocatur mensis secundus*. The name is presumably a corruption of *Iyyar*. Papias seems to have a number of versions of this item: IX *Iar mensis secundus id est Aprilis*; XIX c *Ar apud Hebraeos mensis secundus dicitur*; *Zar apud Hebraeos dicitur secundus mensis id est Aprilis*; *Idas vocatur apud Hebraeos mensis secundus*.

(AU 209) *Augustum mensem*: *in honorem Augusti imperatoris Romani qui Caesaris successit Pagani consecraverunt* (L; imperatores P).

(CA 585) *Cannus*: *apud Hebraeos mensis quartus*. A corruption of *Tammuz*.

(IU 139) *Iulium mensem*: *a Iulio Caesare vocatum Romani dixerunt*. This item is labelled, perhaps correctly, in the MSS. as *De Glossis*, though it may be a remodelled version of Isidore *De Natura Rerum*, 4, 3.

(IU 140) *Iulium mensem*: *in honore Gaii Iulii Caesaris imperatoris Romani Pagani consecraverunt*. Notice the similarity between this item and the *Augustus* item above (AU 209).

(MA 351) *Maius mensis*: *dictus a Maia matre Mercurii sive a maioribus natus qui erant principes rei publicae. nam hunc mensem maioribus, sequentem vero minoribus, Romani consecraverunt, unde et appellatus est Iunius. antea enim*

populus in centuria seniorum et iuniorum divisus erat. The last sentence of this item reminds one forcibly of a portion of Servius' scholium on Geo. 1, 13 (*nunc autem populus Romanus in centurias iuniorum et seniorum divisus fuerat*). It is at least within the bounds of possibility that some of these Roman month-items are derived, not from Servius (since he was not a source of the *Liber Glossarum*), but from a longer and earlier scholium (only partly preserved by Servius) which was used in the compilation of the full *Abstrusa* glossary (an immediate source of the *Liber Glossarum*).¹⁴

(MA 790) *Maresuan*: *apud Hebraeos October mensis qui et octavus.* Cf. Papias XIX v.

(MA 839) *Martius mensis*: *Marti est consecratus.*

(ME 357) *Mensis Sextilis*: *messis Augustus. In menses eo tempore appellati sunt Iulius et Augustus quando Iulius Caesar Augustus imperium adeptus est.* In the compiler's source this item was not improbably combined with QUI 179 (cf. *infra*).

(OC 99) *October mensis*: *a numero septem vocabulum. est enim octavus a Martio qui est principium anni apud Hebraeos.*

(QUI 179) *Quintilis*: *nomen mensis Iulii quia quintus a Martio qui est caput anni. Ab apud Hebraeos.* The MSS. label this item as *De Glossis*. The last three words are a gloss on *caput anni*.

(SE 445) *September mensis* (= Isid. Etym. 5, 33, 11 + Placidus, 26, 17) + *Septembrem autem menssem Lucius Antoninus Commodus imperator ad nomen suum transferre conatus est ut Commodus diceretur* (*Septembrium LP; Antonus P; Antonius L; transfereret P*).

(SI 617) *Sivan*: *tertius mensis qui est Maius (LP; est malus TV).* Papias (IX) has *Sivan tertius mensis Martius*.¹⁵

C.

Professor Lindsay has drawn my attention to an eighth-century Lyons MS. now in the Vallicelli Library at Rome (E 26). Half-way down fol. 136 v. Bede's *De Temporum Ratione* ends, and after the last words (*mercamur accipere palmam*) the scribe has continued *FINIT LIBER DE TEMPORIBUS AMEN DO GRATIAS DE ANNO Annus primum decem mensium fuit*, etc. A librarian at some time or other marked off the work entitled *De Anno* and in the margin

¹⁴ Notice that in his comment on the words *vere sunt* Servius does not confirm his remarks to the months of spring, but goes briefly through the whole calendar. Did he find in his source (Donatus?) a little disquisition on the Roman calendar, its history and the etymologies of the month-names?

¹⁵ The following items also of Papias do not appear in the *Liber Glossarum*, though some of them may be merely versions of items we have already considered: Va.

Ianuarius graece *Βασίλειος* (= Αἰθυσίος); *Martius* graece *Δίστριος*; *Aprilis mensis* *Χανδριος*; *Maius* graece *Αρτεμισιος*; *Iunius* graece *καρτιδαυριος*; *Iulius mensis* graece *πρωτος*; *Augustus* graece *Περικλειος*; *September* graece *Γορπειος*; *November* graece *Δεσ.* Vb. *Brithane* graece *October*. IX. *Antonius* *Malus mensis* vel *Αρτεμισιος*; *Thomus mensis* *Iunius*; *Taminius* *Iunius mensis*; *Tyrus mensis* *καρτιος* qui est *Augustus*; *Gorpeius* *November mensis*. XII *October* *αυτις* *καρτιου*.

has written *Libellus Bedae de Anno*. This little tractate, however (extending from 136 v. to 137 v.), does not appear among the printed works attributed to Bede, nor, so far as I can discover, has it been published elsewhere. Before discussing its authorship I will give a transcription of it from a photographic facsimile, adopting on occasion the readings of an eighth-century corrector:—

DE ANNO. Annus primum decem mensium (mensium *man.* 1) fuit qui trecentos (trecentas *MS.*) et quattuor dies habebat; licet, ut auctores plurimi prodiderunt, apud Aegyptios quattuor, apud Arcades tribus, apud Acaernanes sex mensibus computatus fuisse referatur. post, a Numa rege Romanorum secundo, inter Decembrem et (vel *MS.*) Martium Ianuarius et Februarius fertur adlectus, ut trecentis quinquaginta quattuor diebus, quos duo decies luna renovata < complet > quae vicenis novenis (novines *MS.*) et semis vicibus cursum suum efficit (effecit *man.* 1), impleteretur. postremo additis decem diebus atque quadrante, quo per quadriennium dies unus accrescit et quarto anno (unus punctus crescit quarto *man.* 1) quem bissextum vocamus inseritur, impletus est. cuius initium cum Aegyptiis, qui nonas idusque non morunt mense Septembri, cum Graecis Novembri, Martio cum Iudaeis habetur; nos Chaldaeorum rationem secuti a Ianuario, cuius ante dies octo et sol ad alticrem tramitem surgens recurrit et, quod est amplius, Dominus et Deus Noster, Dei Filius, Iesus Christus corporaliter natus est, ordiemur.

IANUARIUS dictus a Iano habet dies xxxi; vocatur apud Hebraeos (Haebraes *MS.*) Sebet, apud Aegyptios Tybi, apud Athenienses Posideon (Posideor *MS.*), apud Graecos alios Andynais (edineas *MS.*).

FEBRUARIUS dictus a fibro verbo habet dies xxviii. vocatur apud Hebraeos Adar, apud Aegyptios Meclir, apud Athenienses Gamelion, apud Graecos Peritios. Idibus februariis (idus feb. *MS.*) Roma liberata est de obsidione Gallorum.

MARTIUS habet dies xxxi; vocatur apud Hebraeos (Haebraes *MS.* sic et *step.*) Nisan, apud Aegyptios Famenoth, apud Athenienses Antesterion, apud Graecos Distros.

APRILIS habet dies xxi. vocatur apud Hebraeos Iar, apud Aegyptios Farmuti, apud Athenienses Elafybolion, apud Graecos Xanthicos (graeceas xacticus *MS.*).

MAIUS dictus a maioribus habet dies xxxi. vocatur apud Hebraeos Sivan, apud Aegyptios Pachon, apud Athenienses Mounychion (munchion *MS.*), apud Graecos Artemision.

IUNIUS dictus a iunioribus habet dies xxx. vocatur apud Hebraeos Tamuz, apud Aegyptios Pauni (pini *MS.*), apud Athenienses Thargelion (thargilion *MS.*), apud Graecos Desica.

IULIUS dictus a Iulio Caesare habet dies xxxi. cum Quintilis antea diceretur, vocatur apud Hebraeos Ab, apud Aegyptios Ephiphy (pisi *MS.*), apud Athenienses Schiroforion (forion *MS.*), apud Graecos Panemos.

AUGUSTUS habet dies xxxi. prius Sextilis dictus ab Octaviano (octavi anno *man.* 1) Augusto, vocatur apud Hebraeos Elul (aelul *MS.*), apud Aegyptios Mesore, apud Athenienses Hecatombaion (eca tumbion *MS.*), apud Graecos Loos.

SEPTEMBER dictus a numero habet dies xxx. vocatur apud Hebraeos Tishri (tesri MS.), apud Aegyptios Thoth (tohut MS.), apud Athenienses Metageitnion (meta dignion MS.), apud Graecos Gorpiaios (gorpieos MS.).

OCTOBER dictus a numero habet dies xxxi. vocatur apud Hebraeos Maresuan, apud Aegyptios Faofi, apud Athenienses Boedromion, apud Graecos Hyperheretios.

NOVEMBER dictus a numero habet dies xxx. vocatur apud Hebraeos Casleu, apud Aegyptios Atyr, apud Athenienses Pyanopsion (psa nepseion MS.), apud Graecos Dios.

DECEMBER dictus a numero habet dies xxxi. vocatur apud Hebraeos Tebet, apud Aegyptios Choiak (cyca MS.), apud Athenienses Maimacterion (memacterida MS.), apud Graecos Appelleos.

So far as the Hebrew, Egyptian and Athenian month-names are concerned, this little tractate is remarkably accurate, and the month-names which are referred to the 'other Greeks' agree entirely with the correct list of Macedonian months. But is the *Libellus* a work of Bede? If we turn to Bede's account of non-Roman months (*De Temporum Ratione*, xi-xiv), we discover that only in the Egyptian months does his list agree with that given by the *Libellus*. He has no separate or complete list of the Athenian months. His Hebrew months commence with *Nisan* as the equivalent of April instead of March. The months of the 'Graeci' which he gives are a mixture; for they agree with the normal Macedonian list from March to November, but December is given as *Elaphelolion*, January as *Nuchion* and February as *Thargelion*. We need not go further and inquire whether the exordium of the *Libellus* could have come from Bede. It is clear that this tractate cannot be a work of Bede nor even a compendium based on his work.¹⁰ The ascription of the librarian is simply explained when we remember that in the MS. the preceding work was indeed from the pen of Bede. The librarian hazarded a guess at the authorship of the *Libellus* which we must regard as ill-founded.

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¹⁰ The Biele edition of Bede (1563) contains a tractate headed *De Divisionibus Temporum* (Vol. I. p. 117 ff.), which Giles rejected as spurious. In this tractate

there is a section (*de mensibus*) which deals with month-names; but Canon Plummer informs me that it does not agree with the *Libellus* printed above.

ARMS, TACTICS AND STRATEGY IN THE PERSIAN WAR.

At all times arms, tactics and strategy must be in one sense or another interdependent. But in modern warfare I imagine it would be generally agreed that strategy was less mutable and more important than tactics or armament. Even here there are obvious and notable exceptions to the general rule. In the Austro-Prussian War, it was the superiority of the Prussian breech-loading needle-gun to the Austrian muzzle-loader which won the battle of Königgratz, and so justified the bold strategy of Moltke. In the late war, the heavy German and Austrian howitzers broke down with unexpected rapidity the resistance of the elaborate Belgian fortresses, and thus compelled the retreat from Mons; again, the use of tanks, both heavy and light, on a large scale was a decisive factor in more than one of the great struggles that led up to the final defeat of the Germans. Nevertheless in modern warfare such differences are in the main temporary and accidental; if, for instance, the Germans began the war with superior heavy artillery, before its close they were surpassed by the Allies; if they secured an initial advantage by the use of poison gas, here too the Allies in the end showed themselves superior to the inventors of this deadly instrument of war. The advantage gained by inventors is mainly that of surprise, and is therefore evanescent, not permanent. In the main the fleets and armies on either side are equipped in the same way, and (if we leave out of account the morale, numbers and resources of the nations engaged) victories are gained and wars decided most of all by strategy, the massing of troops at the right time and place, and secondarily by tactics, the best use of them in actual battle.

But in many ancient and mediæval campaigns, and in particular, as I shall hope to show, in the Persian War, the case is quite different. The wars I mean are those fought between two widely separated races accustomed to a different physical environment. Then it may naturally happen that each race or nation has developed an armament and a style of fighting suitable to the nature of the country in which it dwells, and is practically unable to alter its national arms and tactics. In such cases it will be the rule rather than the exception, that the nature and character of the arms used by the two nations will determine the tactics, and the tactics in turn the strategy of the campaign. The reason for this is that the issue of a battle may often depend entirely on the nature of the ground on which it is fought; hence it will often be the main object of a general's strategy to compel or induce the enemy to fight on ground which decisively favours one method of fighting, or fatally handicaps another.

The best examples which history offers of this are the great struggles in ancient or mediæval times between East and West. Here as a rule the opposing armies differ entirely in character. The Western nation is apt to rely on solid masses of heavy-armed warriors, the Eastern on cavalry and archers skirmishing in open order. This contrast is nowhere better seen than in the Persian War, but something like the same difference meets us again in later history, in the wars of Rome with Parthia, or in the Crusades, though in them, while the Orientals still trust to light horse and archers, the men of the West rely no longer solely or mainly on infantry, but on heavy-armed horsemen, supported by infantry armed with missiles. But the conditions of victory and defeat as outlined by Sir C. Oman¹ are highly significant. He notes that 'against the Turk the Crusaders were generally successful if they took care (1) to combine their cavalry with a solid body of infantry armed with missile weapons, (2) to fight on ground where the infidel could not employ his usual Parthian tactics of surrounding and harassing the enemy' (e.g., at the battle of Antioch, A.D. 1098). 'If, on the other hand, the Frank chose to advance recklessly into unknown ground in desolate regions, where he could be surrounded, harassed and finally worn out,' (as at Carrhae, A.D. 53), 'he was liable to suffer terrible disasters.' Yet more instructive are the wars between Rome and Parthia. The Parthians relied in the main on cavalry, their infantry being practically worthless. But they had not only mounted archers, but also heavy cavalry, armed with lances, and protected, both man and horse, with coats of mail.² The strength of Rome, at least till Diocletian, was the legionary infantry, which, though it was far more mobile than the hoplite-phalanx, and possessed in the *pilum* some means of reply to attack from a distance, was yet quite unable to close with a cavalry force on open ground. The legion remained invincible in the hilly and broken country suitable for its arms and tactics, but on the sandy plains of Mesopotamia it was at a hopeless disadvantage. The Parthian horse-archers could swarm round the Romans, shooting them down from a safe distance; then, if the Roman horse and light-armed were ordered to drive them off, they would retreat before them, and as soon as the Roman horse and auxiliaries got separated from the legions, they were again harassed and shot down by the Parthian horse-bowmen, and finally overwhelmed by the mail-clad lancers. Such was the fate of young Crassus near Carrhae; and after his fall, the main body of infantry was a yet more helpless prey to the encircling foe. No doubt the ineptitude of the Roman commander contributed to the appalling disaster of Carrhae; but even Antony, a leader of great resolution and resource in adversity, seems to have been only saved from a similar fate in 36 B.C. during his retreat from Media, because he was able to reach in time the shelter of the hills.

In this dependence of the relative efficiency of the two armies on the nature of the ground the Persian War resembles the Parthian campaigns of the Romans. Indeed, though neither army is so well equipped, the contrast between the two is even greater. The Roman legion was far more mobile

¹ *History of the Art of War*, p. 294.

² Cf. Dio Cass., xii. 15. Plutarch, *Crassus*, 24 f.

than the hoplite-phalanx: it had a missile, though but of short range, in the *pilum*, and was better, though still inadequately, supported by light troops and horse. And, on the other side, the Parthian had efficient heavy cavalry, fit for a decisive charge, while the Persian eschewed shock tactics and relied entirely on shooting or throwing missiles. In consequence, the unsupported Greek hoplite is even more helpless than the legionary on the plain, the Persian cavalry far less fitted than the Parthian to engage in hand-to-hand fighting.

It may perhaps seem that an even closer parallel might be found in the campaigns and battles of Alexander. But further examination does not confirm this view. For in these battles both sides possessed efficient cavalry and a hoplite-phalanx. Darius and his lieutenants strove to make good their acknowledged deficiency in solid infantry by enlisting large numbers of Greek mercenaries. At Issus he is said to have mustered 30,000, a number greater than that of the heavy-armed infantry on the other side, and both at the Granicus and at Arbela the Persians put great faith in these foreign mercenaries. And, on the other side, though the Macedonian phalanx proved itself a strong tower of defence, superior in quality to the hoplites opposed to it, its notorious defects as an attacking force, so fatal to it when opposed to the legion at Cynoscephalæ and Pydna, might already have been discerned at Issus and Arbela. In point of fact Alexander always used his heavy cavalry to make the decisive attack, and it was in this arm even more than in infantry that he excelled the Persians, who still failed to grasp the superiority of shock tactics. His task might have been rendered more difficult had Darius understood how to use the open plain of Arbela to the best advantage. He should have exhausted the Western army by surrounding and harassing it with swarms of archers and light horsemen, instead of trying to crush it by mere weight of numbers. The incompetence of the Persian king and the inferiority of his troops make these battles resemble rather 'the early English victories in India, where the few striking boldly at the many triumph easily over every kind of difficulty.' As the Crusading knights were certain to defeat the undisciplined masses of Egyptian lancers, 'provided they had infantry with them to serve as a support and rallying point for the cavalry,'² so Alexander's Macedonian horsemen, supported by the phalanx, could face with confidence the hosts of Darius. His victories are essentially the triumph of quality over quantity, not of infantry over cavalry.

Now doubtless the Persian War too was in a sense a triumph of the same kind, nor do I mean to deny that the greatest lesson of the struggle is the superiority of the ordered and disciplined freedom of the city state to the vast but amorphous empires of the East. But from a purely military point of view the superiority is not altogether on one side. The grossly exaggerated numbers given by Herodotus,³ and his vivid picture of all the peoples, nations and languages believed by him to have been mustered under the banners of Xerxes,⁴ have made an ineffaceable but rather misleading impression on history. I do not doubt that the Persian fleet and army was immensely

² Oman, *loc. cit.*

³ vii. 184-6.

⁴ vii. 61-69.

superior in numbers,⁶ but its inferiority in quality is largely a question of the particular circumstances of the fighting. In organisation and in the technical side of war there is some ground for believing that the Persian was actually superior. Although Dr. Delbrück's⁷ contrast between the Persians as 'professional soldiers' (*Berufskrieger*) and the Greeks as a citizen militia (*Bürgeraufgebote*) is exaggerated, yet the proportion of professional soldiers on the Greek side (the Spartiates) must have been smaller than that on the Persian, where at least the Immortals, and probably the other Persians, the Medes, the Assyrians, and the Egyptians, were regular soldiers. Again, there is good evidence⁸ of a complete system of officering and organisation on a decimal basis in the Persian army, while it may well be doubted if the citizen militia of the ordinary Greek state were as well found in this respect. Clearly even in 418 B.C. the elaborate Spartan system of officers remained a bright exception to the general lack of organisation in Greek armies.⁹ Further, the technical branches in the army of Xerxes seem to have been excellent. If we take engineering, the royal road through Thrace inspired the barbarous tribes with awe¹⁰ and remained in use for at least two centuries,¹¹ while the bridge over the Hellespont¹² and the canal through the Athos¹³ peninsula have served ever since 'to point a moral and adorn a tale.' Yet we should not allow the fertile imaginations or the perverse misinterpretations of Greek and Roman writers to blind us to the boldness of design and skill in execution shown in these great engineering works. Again, the extensive and successful commissariat of the Persian host appears in Herodotus (vii. 118 f.) disguised in the garb of the ruinous cost of feeding the great king. Yet the foresight shown in accumulating large stores of provisions at various points on the route,¹⁴ and the fact that there is no hint of a failure in the commissariat at least during the advance of Xerxes, surely indicate considerable prudence and power of organisation in the higher command of the army. Lastly, if the use of fire-signals is as familiar to the Greek as to the Persian,¹⁵ the care taken by the Persians to mark a dangerous reef¹⁶ or, again, the appliances used by them in the treatment of wounds,¹⁷ evidently excite the surprise as well as the admiration of the Greek historian.

We must now consider more in detail the arms and tactics of the forces which confronted each other at Marathon, Thermopylae and Plataea. The Greek army admits of a simple description; it was throughout a hoplite-phalanx composed of infantry heavily armed with helmet, shield, cuirass and greaves, having short swords, but trusting for offensive purposes most to the thrusting spear (seven to eight feet long) and to the weight and solidity of their serried ranks of shields and breastplates. In no battle had the Greeks any cavalry; indeed at Plataea the best horsemen in Greece, the Boeotians

⁶ Cf. my commentary on Herodotus, vol. ii, pp. 363-8.

⁷ *Geschichte der Kriegskunst*, I² p. 48.

⁸ Hdt., vii. 81, and my commentary, vol. ii, p. 367.

⁹ Thuc., v. 60.

¹⁰ Hdt., vii. 115.

¹¹ Liv., xxxix. 27.

¹² Hdt., vii. 26.

¹³ *Ibid.*, vii. 22 l. 37.

¹⁴ *Ibid.*, vii. 25.

¹⁵ *Ibid.*, vii. 183; ix. 3.

¹⁶ *Ibid.*, vii. 183.

¹⁷ *Ibid.*, vii. 181.

and Thessalians, were fighting in the Persian ranks.¹⁸ Light-armed men were present in large numbers at Plataea¹⁹ (and possibly at Marathon and Thermopylae²⁰), but their military value must have been small, since the only corps to whom effective service is ascribed, or of whom it is expected, is that of Athenian archers.²¹ It may be that the Greeks still looked with contempt on light troops. Instances of their effective use are practically unknown before the Peloponnesian War, and even then light troops can only defeat hoplites when the ground is too rough and broken for the hoplite-phalanx, as in Actolia²² or on Sphacteria²³ or when working in combination with cavalry as before Spartolus,²⁴ Amphipolis,²⁵ and Syracuse.²⁶ Probably, however, none of the loyal Greek states possessed as early as 480 B.C. any organised force of peltasts, so that the absence of effective light troops at Plataea was not due to choice but, like that of cavalry, to necessity.

The hoplite-phalanx advanced into battle in close order. Not only was it of supreme importance to keep the line unbroken, but, further, each man naturally tried to shelter his unprotected right side under the shield of the man next him.²⁷ Hence the Greeks fought in compact masses without marked intervals. The desire to throw the full weight of their force into the first charge led them to neglect the use of reserves. The depth of their formation varied, but I think we are justified in taking eight as the normal depth in the fifth century. It is true that Xenophon (*Anab.* I. 2. 4) calls a depth of four the 'customary order' of the Ten Thousand, 401 B.C., but this is clearly a minimum.²⁸ It was the depth of the English dismounted men-at-arms at Agincourt, where their numbers were scanty. Even the thin red British line was never less than two deep, nor could such a line hope to resist the shock of cavalry or the weight of a column before the days of fire-arms, and it may well be doubted whether a formation only four deep, possible though it was for the practised mercenaries of Cyrus, could have been successfully employed by the citizen militias of the fifth century. At any rate the Athenians are eight deep at Delium²⁹ in 424 B.C., and again at Peiraeus³⁰ in 403 B.C., while before Syracuse, in 415 B.C., they fight in two divisions, each of which is eight deep.³¹ Again, the average though not the uniform depth of the Spartans at Mantinea in 418 B.C. is eight,³² and Dercyllidas marshals the rather mixed force, with which in 397 B.C. he faced Tissaphernes and Pharnabazus, eight deep.³³ And even when an army is drawn up in a deeper formation, there seems to be some tendency to keep to a multiple of four or eight; for instance, the Spartans at Leuctra were twelve deep,³⁴ and the Syracusans

¹⁸ *Hdt.* ix. 31, 68.

¹⁹ *Ibid.* ix. 28, 29.

²⁰ *Ibid.* vii. 229; viii. 35.

²¹ *Ibid.* ix. 22, 60.

²² *Thuc.* iii. 97 f.

²³ *Ibid.* iv. 33 f.

²⁴ *Ibid.* ii. 79.

²⁵ *Ibid.* v. 10.

²⁶ *Ibid.* vii. 6.

²⁷ *Ibid.* v. 71.

²⁸ The story that the Spartans fought at Dipaea in a single unsupported line (*Isocr.*, *Archid.*, § 99) may be confidently regarded as a fiction of rhetoric.

²⁹ *Thuc.* iv. 94.

³⁰ *Xen.*, *Hell.* ii. 4, 34.

³¹ *Thuc.* vi. 87.

³² *Ibid.* v. 98.

³³ *Xen.*, *Hell.* iii. 2, 16.

³⁴ *Ibid.* vi. 4, 12.

before Syracuse sixteen.³⁵ Most significant too is the agreement among the allies in the Corinthian War in 394 B.C., that no contingent should be drawn up more than sixteen deep,³⁶ since it shows that the Greeks were well aware that each state might selfishly try to secure for its own contingent the advantages of depth and weight in a column, even at the cost of allowing the enemy to outflank the allied forces. It is even more significant that it was the Boeotians who in the battle of Corinth broke this agreement and deepened their column,³⁷ since the deep column was characteristic of Theban tactics,³⁸ long before its supreme development by Epaminondas, whose ranks at Leuctra were fifty deep.³⁹ Such a depth in any other Greek force is always due to lack of space to deploy, as when the troops of the Thirty Tyrants form in a column fifty deep on the road to Munychia.⁴⁰ Possibly these high figures are round numbers, and really represent depths of twenty-four and forty-eight; in any case we are justified in regarding eight as the normal depth of a Greek phalanx, and probably in taking a depth of four as the irreducible minimum, and one of twelve or sixteen as the deepened or double phalanx.

The tactics of the hoplite-phalanx were of the simplest kind. It advanced in a compact mass, and relied for success on the weight of its onset, the thrust of its spears and the push of its shields.⁴¹ Where both sides fought with determination superior weight triumphed, as at Sellasia.⁴² But the Greek leaders had to face a new problem in the Persian War. The phalanx, whether Greek or Macedonian, could only act to the best advantage on level ground,⁴³ and was apt to lose cohesion in rough and broken country, as at Cynoscephalae.⁴⁴ But to risk envelopment by the Persian cavalry on the open plain was manifestly absurd for a purely hoplite force. Alexander could do so, because his phalanx was flanked and covered by light troops and cavalry. But in the Persian War the Greek leaders needed a position easily defensible against cavalry, which yet allowed them, if opportunity offered, to turn defence into attack. The mere blocking of passes might be useful, as at Thermopylae, for defence, but gave no opportunity of counter-attack. What was needed was a line of hills looking down upon a plain, as at Marathon and Plataea. If the Persian could only be induced to attack the Greek army while its flanks and rear were securely covered by the hills, the superiority of the hoplite in hand-to-hand fighting would ensure his victory. And even if the barbarian avoided this error, some happy chance, such as the temporary absence of the Persian horse, might enable the Greek general to leave the shelter of the hills and strike a decisive blow, without any serious risk of being outflanked and encircled. In any case such a position, difficult enough to find, offered the Greek leaders their one and only chance of combining secure defence with the hope of a victorious and decisive counter-offensive.

³⁵ Thuc., vi. 67.

³⁶ Xen., *Hell.*, iv. 2, 13 and 14.

³⁷ *Ibid.*, iv. 2, 18.

³⁸ The Thebans were twenty-five deep at Delium in 424 B.C. (Thuc., iv. 94).

³⁹ Xen., *Hell.*, vi. 4, 12.

⁴⁰ *Ibid.*, ii. 4, 11.

⁴¹ *Ibid.*, vii. 223; ix. 62. Thuc., iv. 90.

⁴² Polyb., ii. 89.

⁴³ Thuc., iv. 33 f.

⁴⁴ Polyb., xviii. 14.

It is much more difficult to form any clear and consistent idea of Persian arms and tactics. In the great host, so vividly pictured by Herodotus (vii. 61-99), there are some seventeen styles of armament.⁴⁵ Even if we disregard the picturesque but utterly useless outlying barbarians, such as the Indians, Ethiopians, Libyans and Arabians, we must recognise at least four widely divergent types. These are—

1. The light-armed footmen from Anatolia, whose characteristic weapons are the small round targe and the javelin.⁴⁶

2. The heavy-armed infantry, with metal helmets, large shields and some form of cuirass, and for offence spear and sword or dagger. To this type belong the Asiatic Greeks and their neighbours, the Lydians,⁴⁷ Carians, Pamphylians and Cypriots,⁴⁸ and with minor variations, the Assyrians,⁴⁹ Egyptians and Phoenicians.⁵⁰ It should, however, be noted that all of these, except the Lydians and Assyrians, fight exclusively or principally as marines.

In broad contrast with these two types are the nations who fight both on foot and on horseback, and who rely principally or exclusively on the bow.

3. The pure Iranian type, if we may believe Herodotus (vii. 64-8), had no defensive armour, and for hand-to-hand work relied mainly on the dagger, though the Bactrians have short spears and the Scythians axes.

4. The Medo-Persian,⁵¹ which besides the bow and dagger, includes a spear, a wicker shield, and in some cases a corselet.⁵²

It is obvious that the proper use of such very diverse forces is a far more difficult military problem than that of a hoplite-phalanx. Possibly if the Persian king had been a military genius, he might have perceived that his chief need was to develop and improve his heavy infantry so as to hold the Greek hoplites in front, while his archers, javelin-men and horsemen assailed their flanks and rear. The English combination of dismounted men-at-arms with flanking forces of archers proved just as fatal to the solid columns of Scottish spearmen from the days of Dupplin Muir and Halidon Hill (A.D. 1322-3) to the more famous field of Flodden (A.D. 1513), as it did to the chivalry of France at Crécy, Poitiers and Agincourt. But in 480 B.C. the heavy infantry were mainly used as marines; and the Persian vainly trusted to overwhelm the hoplite with horsemen and archers only, on ground little suited to them. As things were, the masses of inferior infantry proved rather a hindrance than a help, since their comparative immobility made it possible for the Greeks to close with them, whereas the cavalry unhampered might perhaps have pursued with success the Parthian tactics of drawing the enemy on to open ground, where he could be surrounded, harassed and finally worn out.

On their side the Greeks must surely have realised the decisive advantages they possessed for fighting hand-to-hand in their longer spears and more complete panoply. These are the simple military lessons drawn from Thermopylae

⁴⁵ Cf. Macan, *Hdt.*, vii.-ix., vol. 9, pp. 167-75.

⁴⁶ *Hdt.*, vii. 72-3, 91, 2.

⁴⁷ *Ibid.*, vii. 74.

⁴⁸ *Ibid.*, vii. 90, 23-3.

⁴⁹ *Ibid.*, vii. 63.

⁵⁰ *Ibid.*, vii. 89.

⁵¹ *Ibid.*, vii. 61, 2.

⁵² *Ibid.*, vii. 113; ix. 22.

and Plataea by Herodotus (vii. 211; ix. 62-3). Whether they had been anticipated by Aristagoras⁵² may well be doubted; but Marathon at least had demonstrated the superiority of the Greek hoplite on his own ground to the best warriors of the East. I cannot, however, take Marathon as an instance of my thesis that tactics dominate strategy, because I still hold that the strategy of that campaign was dictated by political motives.⁵⁴ On this theory the Persians were anxious to draw the field army as far as possible from Athens, so that their partisans within the walls might have a chance of betraying the city to them; while Miltiades felt bound to face them in the field, because to remain within the walls would have been to forfeit any claim on the succour of Sparta,⁵⁵ and to expose Athens to the fate of Eretria.⁵⁶ But so long as the whole Persian force lay inactive at Marathon, he could safely remain on the defensive; when a part was re-embarked to sail round to Athens and stir up sedition there, he seized the chance of attacking the remnant left at Marathon, probably in the absence of their formidable cavalry.⁵⁷

The tactics of course depend on the weapons of the two armies. The whole object of the Athenian charge is to get to close quarters with as little loss as possible from the Persian archers. It is worth observing that a charge at the double when within bowshot of the enemy, preceded by a steady slow advance, is exactly the manoeuvre attributed to Clearchus at Cunaxa both by Diodorus (xiv. 23. 1) and by Polyænus (ii. 2. 3). The statement is probably untrue, since it contradicts the eye-witness Xenophon (*Anab.* i. 8. 18), but as it would appear to come from Ephorus, it shows that in the fourth century this was recognised as the proper way to attack archers.⁵⁸ The other noticeable point in the tactics of Miltiades, the weakening of the centre⁵⁹ while the wings are kept strong, admits of a simple explanation. No doubt he may have been taking advantage of accidental peculiarities in the ground, but this hypothesis is not necessary. The fear of being outflanked would lead him to diminish the depth of his centre, perhaps from eight to four, so as to increase perhaps to double its length; while he would keep his wings in deeper formation, probably the normal eight deep, so that if after all he was outflanked, he might be strong at the exposed points. Miltiades was certainly not anticipating the tactics of Epaminondas, since the essence of that general's dispositions was to attack in heavy column on the one wing, his own left, while he refused battle with the other; Miltiades, on the other hand, was strong on both wings, weak only in the centre. Finally, we may remark that bold as was Miltiades' advance, it was not, assuming the absence of cavalry, rash or ill-advised. Owing to the smallness of the plain at Marathon, it was impossible for the Persians to avoid the shock of the charging hoplites, even if they wished to do so, because they were pinned between the mountains, the marshes, and the sea. Probably they did not yet recognise the superiority of the hoplite in close fighting; indeed on this occasion their best troops broke the thin Greek lines in the

⁵² *Hdt.*, v. 49 and 97.

⁵⁴ Cf. Munro in *J.H.S.*, xix. 188 f.

⁵⁵ Cf. *J.H.S.*, xxxix. 53.

⁵⁶ *Hdt.*, vi. 109; cf. 100, 1.

⁵⁷ Cf. *Suidas*, *μαρμαίονες*.

⁵⁸ Cf. *C. Q.*, xiii. 42.

⁵⁹ *Hdt.*, vi. 111.

centre. It was only the triumph of the united Greek wings over the Persian centre which finally decided the fate of the battle.⁶⁰

The Greeks who had to face the hosts of Xerxes must have learnt from Marathon their superiority to the Persians at close quarters; but they must also have been aware of the weakness of their heavy infantry on open ground, where the archers and horsemen of the enemy could evade the shock of the hoplites' charge, and assail the unprotected flanks and rear of the phalanx. Even if they still despised light troops (cf. *sup.*), they would have feared to face the cavalry. Thessalian horsemen had some thirty years before cut up Spartan infantry on the plain near Athens;⁶¹ just as thirty years later they were able to confine an invading Athenian army to the immediate neighbourhood of its camp.⁶² The later experiences of the Athenians before Syracuse⁶³ do but confirm the rather obvious lesson of the effectiveness of cavalry both in cutting off stragglers and in a flank attack on hoplites. On an open plain the hoplites, unable to come to close quarters, with cavalry sweeping round their flanks and archers shooting them down from a distance, would have been in a desperate position. One case quoted to contrary, the successful retreat of the Ten Thousand, does not, I think, hold good. The Greek leaders were at first utterly depressed by their lack of horsemen and the inferiority of the Cretan archers to the Persian.⁶⁴ They meet their difficulties partially by improvising a little troop of horse, and by discovering some two hundred Rhodian slingers whose range exceeded that of their opponents. Clearly unsupported hoplites would have been a helpless prey. For once I think Dr. Delbrück⁶⁵ is right in suggesting that Tissaphernes was not really bent on the immediate destruction of the Ten Thousand, a feat which must have cost much Persian blood, but was content to shepherd them into the Carduchian mountains, in the belief that the fierce tribesmen and severe winters of that inhospitable region would surely make an end of them. It is also true that on one later occasion the Ten Thousand venture to attack the cavalry of Pharnabazus with only infantry supports,⁶⁶ their own few horsemen being on the other wing;⁶⁷ but this is just the exception that proves the rule, since Xenophon's chief reason for attacking was that to retreat with the enemy so close at hand was to court disaster.⁶⁸ At any rate his hero Agesilaus fully recognised in 395 B.C. that without cavalry he could not venture to meet the Persians on the plains, and set to work to raise an adequate force.⁶⁹

We may be absolutely certain that a feat, to which the trained mercenaries of the fourth century were unequal, could not have been attempted by the citizen militia a century earlier. This at once rules out the suggestion that the Greeks might have used the ranges round Thessaly as would a modern strategist, i. e. have made no attempt to hold the numerous actual passes, but concentrated a strong force behind, to fall on the enemy's isolated columns as

⁶⁰ *Hdt.*, vi, 113.

⁶¹ *Ibid.*, v, 63.

⁶² *Thuc.*, i, 111.

⁶³ *Ibid.*, vii, 4, 6, 15.

⁶⁴ *Xen., Anab.*, iii, 2 and 4.

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⁶⁵ *Gesch. der Kriegskunst*, 1^e, p. 144.

⁶⁶ *Xen., Anab.*, vi, 5, 30; cf. § 9.

⁶⁷ *Loc. cit.*, § 28.

⁶⁸ *Loc. cit.*, § 141.

⁶⁹ *Xen., Hell.*, iii, 4, 15.

they straggled down from the passes.⁷⁰ For if once the Persians got down into the plain, the Greeks must have known they would lose their tactical superiority, unless they were under the delusion that the Thessalian horse was strong enough to meet the Persian. On the other hand, in a narrow pass the well-armed hoplites, trained to act in masses, could and did repulse large numbers of enemies less fully armed and not accustomed to shock tactics. Thus the occupation in succession of Tempe and Thermopylae was clearly the best measure possible. This is true even if their hope and purpose was absolutely to repel the invading host; but if their immediate object, as is probable, was to fight a delaying action, which might give their fleet time and opportunity to strike a decisive blow, then obviously it was better to block the actual passes. And if the utmost that the Peloponnesians in 480 B.C. would attempt north of the Isthmus was to hold up the Persian army for a time and give the Greek fleet a chance, we can understand how they came to entrust the defence of Thermopylae to a really insignificant number of hoplites. In any case, till the Persian fleet lost the command of the sea, the Greeks limited themselves on land to the most passive form of defence, the holding of the passes and the fortifying of the Isthmus.

But the effect of arms and tactics on strategy comes out most clearly after the defeat of the Persian navy in the campaign of Plataea. The Greeks were now by no means overwhelmingly outnumbered.⁷¹ Indeed if we include in the reckoning the ineffective light-armed Greeks, the totals may have been approximately equal, though the number of hoplites was but a third at most of Mardonius' forces. Yet the Peloponnesians were only driven into action by the open threats of the Athenians,⁷² and when they came in contact with the enemy, remain at first strictly on the defensive on the bastions of Mount Cithaeron. Pausanias had strong motives for taking the offensive. The need for freeing Greek soil from the barbarian by driving Mardonius from Central Greece was urgent. The Greek citizen militias, like the feudal levies of the Middle Ages, were at all times ill-fitted for a prolonged campaign, forty days being regarded as almost a limit.⁷³ In this case the difficulty of keeping them together for any length of time was increased by the composition of the Greek army. In its ranks there were contingents from some two dozen states, eight of whom contributed substantial forces, a thousand or more hoplites.⁷⁴ Since Pausanias resisted these inducements to attack, he must have been convinced of the necessity of avoiding action on ground suitable for the operations of cavalry. Mardonius on his side was eager to fight, since he must have known that the advance of the Greek fleet across the Aegean might cause Xerxes to recall him to defend Ionia. But Mardonius too, after the first repulse of his cavalry,⁷⁵ was only willing to fight on ground of his own choosing. The position was almost a stalemate. Both sides were in the strongest position for defence. Pausanias, well posted on the slopes of Mount

⁷⁰ Delbrück, *op. cit.*, p. 72.

⁷¹ Cf. Munro in *J.H.S.*, xxiv, 144, 152, and my commentary on Herodotus, ii, pp. 298 f., 304, 306.

⁷² *Hdt.*, ix, 6 f.

⁷³ *Thuc.*, ii, 57; cf. i, 141.

⁷⁴ *Hdt.*, ix, 28.

⁷⁵ *Ibid.*, ix, 20 f.

Cithaeron, covered the ways to the Isthmus, from which he drew his supplies, and from which reinforcements were coming in,⁷⁶ or might still be expected.⁷⁷ Mardonius similarly covered his fortified camp and his base of supplies, Thebes, while the plain of the Asopus furnished him with a suitable field for the action of horsemen. These clear facts explain the intelligent (and probably inspired) advice given by the soothsayers on both sides, that the omens were favourable for a defensive battle, unfavourable for attack.⁷⁸ It may seem fantastic to say that some of the best of our modern critics have shown in this matter less grasp of the military situation than these ancient seers; yet it is to me utterly incredible that even after his success in repulsing the Persian cavalry and killing their leader Masistius, Pausanias can ever have conceived the idea of turning the Persian right and marching ten miles across the open plain to Thebes. Everyone admits that this striking manoeuvre was never carried out; in my opinion it is the child of the imagination of critics dominated by modern notions of strategy. No one can value more highly than I do the contributions of Dr. Grundy and Professor Woodhouse to the understanding of the Persian War, but here their reconstruction⁷⁹ is based on an unsound theory. Any such movement must have inevitably and immediately transferred the whole of the tactical advantages to the enemy. The Persian cavalry, which even on the Asopus ridge harassed the Greeks beyond all bearing,⁸⁰ would have assailed them on the open plain at an overwhelming advantage. Nor does it seem in the least likely that the Greeks can have hoped with their slow-moving, heavy-armed infantry to take their far more mobile enemies by surprise. Indeed in this matter modern experience confirms ancient; the futility of any such movement, unless made by horsemen only, against the Boer mounted infantry, is a crucial example. It is surely far more probable that Pausanias deliberately advanced to the Asopus ridge and no further, because his object was to provoke Mardonius to attack him there. He saw that the Persian had become too wary again to assail unbroken hoplites on the bastions of Cithaeron, but hoped to induce him to attack them on the lower hills near the Asopus, which were far more open to assault.⁸¹ Strategically, he has taken the offensive, and throughout his object is to fight, but only on his own terms, that is, on ground more favourable to hoplites than to cavalry. Tactically, his object is to tempt the enemy to attack him in a strong defensive position, as Bruce drew on the English at Bannockburn.

Mardonius was too prudent to fall into the trap and preferred to make the position of the Greeks untenable by cutting off their supplies⁸² and reinforcements, and eventually by sending his cavalry to sweep through the trough in the hills and seize the spring, Gargaphia.⁸³ The inevitable retreat by night with its chapter of accidents brought about the desired result, where elaborate design had failed. When Mardonius saw the Greeks in full retreat, split up

⁷⁶ *Hdt.*, ix. 41.

⁷⁷ *E.g.* the men of Elis and Mantinea
Hdt., ix. 77).

⁷⁸ *Hdt.*, ix. 36-8.

⁷⁹ Grundy, *Great Persian War*, p. 473.

Woodhouse, in *J.H.S.*, xviii. 41, 45.

⁸⁰ *Hdt.*, ix. 40, 49.

⁸¹ Macan, *Hdt.*, vii.-ix., vol. II p. 379.

⁸² *Hdt.*, ix. 39.

⁸³ *Ibid.*, ix. 49.

into three separate corps, he naturally thought the moment had come for a decisive blow. At the head of the best Persian troops he dashed across the Asopus straight at the Spartans.⁸⁴ Pausanias, despite the hail of darts and arrows, kept his men well in hand till the Persian infantry was irretrievably committed;⁸⁵ then at last the Tegean and Spartan hoplites charged, and after crashing through the shield wall, naturally had all the best of the hand-to-hand combat that followed.⁸⁶ Superior arms, discipline and tactics brilliantly redeemed the strategic failure of the Greek retreat.

It may be thought that in thus tracing the influence of arms on tactics, and of tactics on strategy in land warfare, I have been traversing ground already too familiar. I shall now try to show that in the naval warfare too the same rule holds good.

In the naval tactics of the rowing ships of antiquity there were of necessity only two different modes of attack:

(1) Boarding, preceded by the use of missiles; the men on board are the attacking force.

(2) Ramming, the prow of the ship itself being the weapon of offence.

Either method may be facilitated or modified by some new invention, such as the specially strengthened beak, and prow to prow attack used by the Corinthians and Syracusans,⁸⁷ or the 'curcus' employed by Duilius at Mylae against the Carthaginians,⁸⁸ but these do not concern us, as we hear of no such devices in the Persian War.

It may be well to illustrate briefly the two methods from Thucydides, whose accounts of sea-fights are far clearer than those in Herodotus. He scorns as out of date the boarding tactics still used in 433 B.C. by the Corinthians and Corcyreans,⁸⁹ and holds up to admiration the bold manoeuvres of Phormio in the Corinthian Gulf.⁹⁰ But he never clearly states the conditions necessary for the successful employment of the *ἐπὶ πλοῖον* and *περίπλοον*. These were, (1) as the efficient cause, great superiority on the part of the Athenian triremes both in speed and handiness. Such superiority could only be won and kept by building lighter ships and by a more thorough and efficient system of training for the crews. (2) As a necessary condition, plenty of sea-room in which to manoeuvre. Inadequate sea-room indeed nearly cost Phormio his second victory,⁹¹ just as later it fatally handicapped the Athenians in the harbour of Syracuse.⁹² Indeed in the final battle there, the Athenians are obliged to fight the old-fashioned land-battle on shipboard, using archers, javelin-men and boarders,⁹³ and naturally fail in this unaccustomed form of warfare.⁹⁴

In the Persian War it is, I think, clear that the Greeks of the mother-country had no such superiority in seamanship as would have enabled them

⁸⁴ *Hdt.*, ix. 59.

⁸⁵ Cf. the tactics of Richard Coeur de Lion at the battle of Arsouf, A.D. 1191 (*Oman*, *op. cit.*, 309 f.).

⁸⁶ *Hdt.*, ix. 61-3.

⁸⁷ *Thuc.*, vii. 34, 36.

⁸⁸ *Polyb.*, i. 22.

⁸⁹ *Thuc.*, i. 49.

⁹⁰ *Ibid.*, ii. 83, 84.

⁹¹ *Ibid.*, ii. 90.

⁹² *Ibid.*, vii. 36-41, 52, 79.

⁹³ *Ibid.*, vii. 90, 92, 97.

⁹⁴ Cf. *Grandy*, *Thucydides*, p. 308.

to make effective use of the *διέπλους*, still less of the *περίπλους*. It is true that Herodotus (viii. 9) ascribes to them at least the intention to use the former before the battle of Artemisium, and more definitely describes the Ionians as practising the manœuvre before the battle of Lade (vi. 12). He may mean that the Chians employed it in the actual fighting (vi. 15), but the large numbers of marines carried on their ships,⁶⁵ and their capture of many ships from the enemy point rather to the use of boarding tactics. Most probably then Herodotus was guilty of an anachronism, but if this be not so, then it is most likely that the Ionians had learnt the manœuvre from the best sailors of the East, the Phoenicians. It is certain that the Carthaginians used it against the Romans, and Sosylus, Hannibal's Greek tutor, alleges that Heraclides of Mylassa at Artemisium foiled the Phoenician device of *διέπλους*, by keeping a second line in reserve ready to attack them when they had penetrated the first line.⁶⁶ The objection that this story cannot be fitted into Herodotus' narrative of the engagements is not necessarily fatal to its truth. In any case the Greeks of the mother-country cannot have been in a position to use the manœuvre. Not only were they outnumbered, but their ships were heavier in build and worse sailers than those of the enemy.⁶⁷

No doubt Plutarch (*Them.*, 14) differs on this point from Herodotus, but Plutarch's notices of the development of the Athenian fleet do not carry conviction. His main point at Salamis is that the Eastern ships were loftier and less handy than the lower and lighter Greek vessels, a trait that he may have erroneously transferred from some later battle, such as Actium. And when he comes to Cimon (ch. 12), he makes that admiral widen the light ships built by Themistocles, and join the fore and aft decks with gangways, plainly with a view to boarding tactics. This tradition about Cimon seems the most authentic record in Plutarch's story, and yet it is most unlikely that he would have gone back to heavier ships and boarding tactics if the Athenians had already adopted ramming with light and handy vessels. I think then we may fairly regard the light ships ascribed to Themistocles as an anachronism, and place the evolution of the new tactics in the years of the empire of Athens, when her fleet had become a standing force, not as early as the Persian War.

It would indeed have been almost a miracle if the Greek fleet at Artemisium and Salamis had been capable of such manœuvres. Far the strongest contingent in it, the Attic navy, was in the main the creation of the last year or two, so that its crews could not possibly have had the long practice necessary for skilful manœuvring, while the best Peloponnesian sailors were half a century later still content with the now old-fashioned boarding tactics.⁶⁸ Further, if we may trust the rather vague description of Herodotus (viii. 11), the Greeks on the first day at Artemisium try to guard against an encircling movement on the part of the enemy by forming in a moon, or more probably half-moon,

⁶⁵ Forty on each ship (*Hdt.*, vi. 15), while ten was the normal number on Athenian ships in the Peloponnesian War. Cf. *Thuc.*, ii. 23; iii. 94, 95; iv. 76 compared with iv. 101.

⁶⁶ Cf. Wilcken in *Hermes*, xli. 103 f.; Tarn in *J.H.S.*, xxvii. 216; and for a like precaution, Xen., *Hell.*, i. 6, 29-31.

⁶⁷ *Hdt.*, viii. 10 and 60.

⁶⁸ *Thuc.*, i. 49 et sup.

with [prows, outwards. Unlike the Corinthians in 429 B.C.,⁹⁸ however, they do not allow themselves to be encircled and thrown into disorder, but successfully charge the enemy prow to prow. Possibly they hoped to break the enemy's line, more probably they aimed only at boarding in the ensuing mêlée. For it is significant that on that day the successful Greeks capture thirty barbarian ships, while in the third day's fighting, the most successful of the enemy, the Egyptians capture five Greek ships with their crews.¹⁰⁰ The inference is clear that boarding was the chief method of attack, and for this the Egyptians were well equipped, as their marines were heavily armed and carried boarding-pikes.¹⁰¹ Further, since each ship in the king's fleet had on board thirty Persians, Medes or Saces as marines besides the native levies,¹⁰² boarding must surely have been regarded as the regular mode of attack.

At Salamis the general confusion was great, and it is rather difficult to determine the exact nature of the fighting. But there cannot have been room to manoeuvre in the narrow straits, so that the presumption is all in favour of boarding tactics. On the other hand, if there be any truth in the statement of Ephorus that no less than forty Greek ships and two hundred Persian ships were sunk,¹⁰³ ramming must have been freely used. Even the early accounts, though they give no such figures, clearly describe ramming,¹⁰⁴ and imply that it was not uncommon. But it is noticeable that ramming is in some cases simply preliminary to boarding,¹⁰⁵ and is in general regarded rather as the result of the confusion reigning among the barbarians¹⁰⁶ than of any special Greek manoeuvre. And there are quite definite instances of capture by boarding both by Greeks who fought for Hellas,¹⁰⁷ and by their kinsmen in the Persian ranks, in particular by two Samians.¹⁰⁸ The most remarkable feat is that of the Samothracian javelin-men, who, when their own ship was sinking after being rammed, first cleared the decks of hostile marines, and afterwards captured the Aeginetan ship which had sunk their own.¹⁰⁹ At Mycale too the Greeks made ready to use boarding tactics,¹¹⁰ but found the Persian fleet beached and protected by a stockade. This general survey of the relevant incidents in the battles leads, it would seem, to the conclusions that at Salamis in particular, and in the Persian War in general, boarding was still the principal, though not the only method of attack, and that a naval battle still resembled a land battle in essentials, that is, it depended in the main on the armament and efficiency of the marines.

Lastly we have to consider how far Greek strategy was dictated by tactics, that is, ultimately by the numbers and nature of the opposing fleets, and by

⁹⁸ Thuc., ii. 83.

⁹⁹ Hdt., viii. 17.

¹⁰⁰ *Ibid.*, vii. 89.

¹⁰¹ *Ibid.*, vii. 184. Even if we doubt the statement as it stands, we can hardly reduce the total number of marines below thirty. Cf. Maenn. *Hdt.*, vii.-ix., vol. ii. p. 154.

¹⁰² *Ibid.*, xi. 19, 2.

¹⁰³ Aesch., *Pers.*, 410. *Hdt.*, viii. 87, 90.

¹⁰⁴ *Hdt.*, viii. 84, 92.

¹⁰⁵ Aesch., *Pers.*, 415. *Hdt.*, viii. 87-90.

¹⁰⁶ *Hdt.*, viii. 92. Simon. *fr.* 13, ap. Plut. *de Malign.*, 36.

¹⁰⁷ *Hdt.*, viii. 85.

¹⁰⁸ *Ibid.*, viii. 90.

¹⁰⁹ *Ibid.*, ix. 92.

the armament of the marines. The enemy, *pace* Dr. Delbrück, was superior not only in numbers (perhaps two to one), but also in the speed and handiness of their ships.¹¹¹ Hence the plan which he suggests,¹¹² and relying on a rather vague passage in Plutarch (*Them.* 7), attributes to Themistocles, that of sailing off towards the Hellespont and fighting an independent naval battle in the open sea as far from Greece as possible, is utterly absurd. On the contrary, the one chance was to compel or induce the enemy to fight in a confined space, where numbers were an encumbrance and superior sailing powers useless. Accordingly the one object of Themistocles is either, as at Artemisium, to force, or, as at Salamis, to entice the enemy into a strait or sound suitable for his purpose.¹¹³ In such narrow seas the ramming would usually be prow to prow and would be followed by boarding. And in such a battle the stouter ships of the Greeks and the heavier armour of their marines would give them a decisive advantage. To meet such tactics as those of the Samothracian javelin-men (*cf. sup.*) and of the Medo-Persian marines, who doubtless carried bows,¹¹⁴ the Athenians are said to have sent to Crete for archers,¹¹⁵ presumably to supplement the four Attic bowmen allowed to each ship.¹¹⁶ But in the main the Greeks doubtless trusted to the superiority of the hoplite over Oriental marines in boarding, and this superiority in quality, combined with numerical inferiority, made it a prime object of their strategy to fight in narrow seas.

Is it fanciful to see in this strategic necessity a convincing argument for the truth¹¹⁷ and importance of the message of Themistocles to Xerxes? ¹¹⁸ Even after reading and hearing Sir Reginald Custance's arguments, I still feel it is the only adequate explanation of the fatal advance within the straits of Salamis. It would be presumptuous to criticise the crucial importance attached by the Admiral to the flanking position held by the Greek fleet if Xerxes attempted to advance to the Isthmus.¹¹⁹ But one may well doubt if the Greek leaders were aware of the strength of their position, or if even a Themistocles could have kept the Peloponnesians together, had Xerxes despatched a force across the Saronic Gulf to the Argolid, where it might reasonably expect a friendly reception.¹²⁰ As he had advanced without apparent difficulty from Therma to Thermopylae unsupported by his fleet, it does not appear that he was so immediately dependent on his ships for supplies as to make it impossible to detach them on a separate mission. Again, Xerxes in his attack on Thermopylae was in advance of his fleet at Aphetae almost as much as he would have been, had he marched to the Isthmus, while the fleets still lay off Salamis. No doubt Xerxes may have been led to attack merely by overweening confidence in his own strength, but is it not more likely that he was enticed into the trap by the craft of Themistocles?

Whatever be the view taken on this minor question, I hope I have made

¹¹¹ *Hdt.*, viii, 10 and 60.

¹¹² *Gesch. der Kriegskunst*, I², 75-6.

¹¹³ *Hdt.*, viii, 60. *Thuc.*, i, 74.

¹¹⁴ *Hdt.*, vii, 184; *cf.* 61 f.

¹¹⁵ *Ktesias*, 26.

¹¹⁶ *Plutarch, Them.*, 14; *cf.* Mauro in

J.H.S., xxiv, 147.

¹¹⁷ As against Beloch, *Klio*, vii, 485.

Obst., Die Feldzug des Xerxes, p. 142.

¹¹⁸ *Aesch., Pers.*, 335 f. *Hdt.*, viii, 75.

¹¹⁹ *Custance, War at Sea*, pp. 26, 27.

¹²⁰ *Hdt.*, vii, 156-2.

my main thesis clear and acceptable. It is that, where the armament of two opposing forces differs radically in character, arms determine tactics and tactics strategy. This axiom holds in the Persian War both on sea and on land, at Artemisium and Salamis, as well as at Thermopylae and Plataea. Finally, while it invalidates some of the theories taken from modern strategists by recent critics and historians of the Persian War, in the main it confirms as well as elucidates the ancient authorities.

W. W. How.

A NEW VASE SIGNED BY PAMPHAIOS

[PLATES III, IV.]

By the courtesy of the Hon. Marshall Brooks I am able to publish here a red-figure kylix now in his possession at Portal, Tarporley.

Of the provenance of the vase nothing is known. The present owner has kindly supplied me with the following particulars, which are all that is known of its history since its discovery. It formed part of the collection of Greek vases and Greek and Etruscan antiquities belonging to Miss Caroline Augusta Tulk, of Failand House, Bristol, which in 1864, after her death, was sold by auction by Messrs. Fergus Brothers of Bristol. At this sale it was acquired by Mr. Edward Preston, from whose collection it passed by purchase into that of the present owner, a few years ago. In the Sale catalogue of 1864 the number of the kylix was 270. This is the only printed record of the vase which I have been able to trace. This fact is the more remarkable since the foot bears the name of the potter Pamphaios, already well known and associated with some of the most notable of Greek vase-paintings; and apart from this, the quality of the draughtsmanship on side A of the exterior is such as to claim attention on its own account. Fortunately, this side is the least damaged part of the vase; the rest has suffered a good deal from breakage and from restoration not too well carried out.

The following data are meant to supplement and explain (as far as is necessary) the drawings and photographs.¹

In the reproduction of the former, black is equivalent to varnish-paint (in relief-lines or wash); light grey to the reserved red surface of the vase; dark grey to wash or lines of thinned varnish-paint; and body-colour to matt reddish-brown pigment.

Diameter 33 cm. (41·5 with handles).

Height 12·5 cm.

Restorations (left blank in the drawings): from one-half to two-thirds of side B on the outside, and the corresponding part of the inside, i. e. roughly the upper left-hand third of the picture. On A the restoration is mostly confined to re-painting along the lines of the cracks, which are numerous.

Shape: wide bowl, with curve somewhat broken in repainting; spreading foot in two degrees (Fig. 1).

¹ The former were executed for me by Mr. Frederick Foeter, of Old Trafford, Manchester. For the photographs I am indebted to the kindness of Dr. Guppy, of the John Rylands Library, Manchester, in whose custody the vase was placed for this purpose, and who also gave me every facility for examining it.

Decoration: reserved strips along rim of bowl, insides of handles, edge of raised central part of foot, and outer rim of foot.

On the latter, under B, in black paint:

ΠΑΝΘΑΙΩΣ ΕΡΟΙΩΕΣΕΝ

Around interior picture (I) plain reserved ring; below exterior scenes (A and B) border of black-figure palmettes pointing alternately up and down, with dots between. The curved stems enclosing the palmettes are in relief. There is a conspicuous break in the continuity of the pattern under Herakles' foot on side A, where two adjoining palmettes point upwards, and the chain of stems is interrupted.

I. (at right angles to the axis of the handles). Nuda youth, facing right



FIG. 1.—KYLEX SHOWN BY ΠΑΝΘΑΙΩΣ.

and stooping slightly forward, stretches out both arms to arrange a large striped cushion on the sloping head-rest of a couch. A low table with curved legs stands behind him, under or beside the couch. The restorer tried to make this table into a chair, by giving it a high curved back projecting above the couch on the left (Fig. 2).

In relief-line: contours of face and eye (not nostril or pupil); all contours of body (except soles of feet) whether against black ground or on red; all lines of cushion, couch and low table, except ornamental pattern along frame of couch.

This latter in *thinned carnish-paint*; also inner markings of torso and right knee.

A. Herakles and centaurs (Plate III).

Three centaurs—two from the left, one from the right—attack Herakles and his companion, who are at bay in the centre, fighting vigorously back to back. The centaurs fight with freshly uprooted pine trees, Pindar's *χλωπαῖς δαρυῖσι*; the heroes with sword and spear. The scene is out in the open: Herakles has hung his cloak, carefully folded, and his quiver on the long, drooping boughs of a tree. Only the presence of his companion makes one

hesitate to connect this scene with the banquet Herakles enjoyed *παρὰ Φόλῳ*, in the wild hill-country of Elis, when Pholos' envious and unmannerly subjects showed so un-Hellenic a disregard for the ampler gestures of hospitality.

Herakles, so far as we know, was alone on that occasion. Possibly there has been some contamination² with the Thessalian group of centaur legends, where another hero, Theseus, engages with the centaurs on behalf of the civilised Lapiths. Or else the painter may have found it convenient to introduce here



FIG. 2.—PAMPHAIOS KYLIK: INTERIOR.

the faithful Iolaos, whom tradition associated with Herakles in so many of his labours.

The centaurs have large heads, very deep from front to back; and the one on the left has a great expanse of forehead, on which the veins stand out. No parallel case on a vase of this period is known to me.

His head is bent downwards, and the shaggy ends of his beard lie against his chest. Both the left-hand centaurs have long narrow ears. They wear wreaths set far back on their heads.

² As in Euripides, *Herc. Fur.*, 376 ff.

A peculiarity in the drawing of the second is the double line of his right collar-bone.

The centaur on the far right, whom Herakles grips by the shoulder and forces down, thus giving his body a bow-shaped curve, differs from the others in his still balder head, his broken eye, and his wreath, which, in the stress of battle, has been stripped bare of leaves. The attitude of the human part of his body resembles that of the woman with the pestle, 'Andromache', on the Brygan Hipposia cup. He gathers himself together for a final blow, with both arms swung back over his head and grasping a straight branch of pine.

Herakles, his opponent, holds a drawn sword in his right. He wears the usual lion-skin, with fore-feet knotted in front, and flying tail; the strokes around the neck suggest bristles rather than a mane. His trim beard and 'Grecian' profile, and the eye, narrower than is usual in the Herakles type on vases, emphasise the champion of Hellenic culture confronted with the *φῆρες λαγυρίστες* of the backwoods.

His companion, seen in three-quarter back view, lunges forward in the opposite direction to attack the two left-hand centaurs. He is armed with spear and shield (device, a lizard). The surface of this figure has suffered from the flaking-off of the relief-lines: two curved vertical ones marked the groove between the shoulder-blades; the other lines, which must have formed part of one flying foot of the lion-skin, have been wrongly restored to suggest drapery.

A description of this picture seems hardly complete without inclusion of the grasshopper under the handle: can it be unintentional that he so whimsically repeats, in minuscule, the main lines of the centaur figure next to him?

In relief: face and body contours throughout, whether against black or red ground (except profile of lips in second centaur from left); front of beard continuing line of chin; ends of beard on underside; ears of the two centaurs on the left (the only ears drawn); nostrils and eye contours throughout, also pupil (half-circle) of broken eye in third centaur; and eyebrows of Herakles and companion and second centaur. Contours of all accessories, e.g. pine trunks and branches, shield (not device), sword, spear, quiver with ornaments, drapery on tree, trunk and boughs of tree, and lion-skin (though not the spots or bristles on it).

Relief-lines covered by black paint of ground, and therefore omitted in drawing: a pine branch projecting upwards behind the first centaur's head; the line of his shoulder and neck continued upwards through the hair; and in the third centaur, the outer contour of the back behind the shoulder, and a second contour line in front of the hindmost hoof.

Hair contour reserved throughout: second centaur has raised dots along crown of head.

Plain black for eyebrow and pupil (where not in relief), and for moustache; for shield device, and dots round lion mouth.

Thinned brownish paint is used for veins in forehead of first centaur, and nipple of his right breast; for left nipple of second centaur, for spots on Herakles' lion-skin, and bristles of mane against red ground; and for musculature behind shoulder of third centaur.

Red pigment for wreaths of centaurs, foliage of growing tree (dots) and the green of the uprooted pines (short cross-strokes).

The hairs of the lion's mane along its upper edge are rendered by *incised strokes* on the black ground.

Preliminary sketch visible in fore-part of first centaur's horse-body, extended leg of Herakles' companion, and body-contours and back of head of third centaur.

Correction of drawing.

1. Moustache and fringe of Herakles' hair, and moustache and eyebrow of third centaur, are black; not red.

2. For omitted relief-lines, see above.

B. (fragmentary). Entry of Herakles into Olympus (Plate IV.).

On the cup, as it stands, nearly two-thirds of this scene is restored. In what is left of the original design we see, on the left, Hermes (winged hat and shoes, tip of *kerykeion*), and then Herakles, who turns round to exchange greeting with him but moves to the right, following Athena, who is already stepping on to the chariot, reins in hand. Herakles wears his lion-skin, on this occasion, with the lower part neatly buckled at the waist in front. He carries his club over his left arm and shoulder; his bow and quiver hang at his back.

Athena wears a long tunic falling in straight folds, and over it, like a cape, the aegis, which reaches to below the hips. Nothing remains of her head but the helmet, with crest and long tail-piece.

To the right of Athena, a magnificent winged and crested helmet is all that remains of a figure which must have stood in advance of her behind the horses of her chariot, and also facing to the right. The horses of her chariot are missing; but from the right-hand end of the picture, a horse comes in the opposite direction, with head erect. The fore-part is missing, but we have an indication of the next figure in a hand laid across the horse's neck and grasping a loose bridle or halter. Above, an eagle flies to the left.

The ornament under the handle to the right is badly mutilated. It was probably a single heart-shaped ivy-leaf on a stalk springing from just within the palmette border below. The design is fairly common at this period and is found on several of the vases signed by Pamphaios.³ The wedge-shaped bar which crosses it is probably the continuation of the first centaur's tail on A. Possibly the tail of the horse next the handle on B ended similarly.⁴ The design as repainted is quite meaningless.

In relief: all lines and contours throughout, (including eye-contours, eyebrows, scale pattern on aegis, spots on hide, etc. — with the following exceptions).

No relief-contour where sole of foot comes against border. Edges of hair and beard, plain (except for strokes on underside of beard). Plain black, not relief, for pupil of eye (in both cases), moustache of Herakles, central part of his buckle, dots round mouth of lion-hide and on Athena's helmet, and border of heavy dots along her aegis.

The lower end of the crest of the winged helmet has no relief-contour.

Thinned earth-paint is conspicuous in two places: it is applied with a brush, as an uneven wash, to the whole of the lion-skin; and it is used for the feathery markings of the wings of the helmet in front of Athena; also for the horizontal lines low down on her tunic, and the bridle against the neck of the horse on the right.

Correction of drawing: the portion of Athena's aegis which lies between the lower edge of her helmet, the back contour of the shoulder, and the cruck which cuts across the shoulder, is restored.

³ *Viz.* B.M. 1907, 10-20; B.M. E 815; Tod's kylix in the Villa Giulia (= Nos. 12, 13, 19 bis in Hoppin's list).

⁴ For tails interrupted by handle-ends,

compare the Pamphaios kylix B.M. E 11 (= No. 8 of Pamphaios in Hoppin), where the tails of the pegasus are continued under the handles and almost meet.

On the question of authorship I have not felt able, with the material at my disposal, to arrive at any definite conclusion. It is natural in the first place to look for a possible identification of the painter of this new cup with one or another of those who produced the twenty-two⁵ vases we already possess with the signature of the potter Pamphaios.

Of the hands that have so far been distinguished among these, only two, in my opinion, come into question. The one is the author of the famous British Museum Kylix (E 12 = No. 9 in Hoppin) whom Beazley has named the Sleep and Death painter, and to whom he assigns at least four other of the Pamphaios vases, as well as numerous unsigned ones. The other—if indeed he is to be distinguished from the last-named—is the painter of the excellent kylix recently discovered at Todi, and now in the Villa Giulia Museum at Rome (= Hoppin, 19 *bis*. *Int.*: Odysseus under the ram).

As regards the first, one might mention the use of the same pattern of b.f. palmettes (though differently drawn) with a precisely similar break, in the kylix E 12; and among other resemblances, a fondness for the use of thinned varnish, as on the hair of one of the winged figures of E 12, and on the lion-skin on B of our vase.

And in the other works probably by the same hand as E 12, *e.g.* the B.M. kantharos E 154, a kantharos at Boston (*Röm. Mitt.*, V. Pl. 12), and the B.M. kylix E 11, we meet with details characteristic also of the Tarporley cup, such as the double line of the collar-bone, and the treatment of the drapery edge.

But none of these points of contact must be stressed overmuch; and for a connexion with the Todi kylix the evidence is still less decisive.

Authorship apart, our knowledge of the compass of red-figure art cannot but be enriched by the accession of a piece, perhaps rather uneven in quality, on which the best work certainly surpasses in vigour and expressiveness the vases which, on stylistic and other grounds, suggest themselves for comparison.

MARY HERFORD BRAUNHOLTZ.

⁵ Hoppin, Vol. II, p. 277, makes the number of complete vases signed by Pamphaios, and available for comparison, 21, or 23 counting the two signed also by the painter Epiktetos. But he counts

one, which was already in Klein's list, twice over (Hoppin, No. 19). The total should therefore be 20, or, counting Epiktetos' two, 22.

NOTES ON GREEK SCULPTURE

[PLATE V.]

I. MYRON'S PERSEUS AND MEDUSA

(The identification of the Rondanini Medusa here stated was first suggested in a discussion by Miss C. K. Jenkins and is published at her request.)

THERE is probably no sculptor as to whose work our notions have been more completely revolutionised in recent times than Myron. This change is due partly to new discoveries, but more to the identification of statues already known and exhibited. It is above all Myron's treatment of the head that has been hitherto inadequately realised, and for this the Massimi head, widely known through casts and photographs, is to a great degree responsible. The somewhat dull and heavy expression of this head does indeed remind us of Pliny's words, "*ipse tamen corporum tenuis studiosus animi sensus non expressisse (videtur).*" And the copyist who made this statue may very probably have been influenced by some such commonplace of artistic criticism. But the recent identification of two more extant works of Myron, the Perseus of the Antiquarium at Rome (Plate V) and the Athena in Frankfort, together with the replicas of the head of this last statue in Dresden and in the Vatican cellars, have completely changed our impressions as to his style, and are likely to have far-reaching results. Another statue that has recently come to be attributed generally to Myron is the well-known Cassel Apollo and its numerous replicas in various museums—notably a head in Vienna (Fig. 1) and another in the National Museum at Athens. All of these show the simplicity and severity of the art of the earlier part of the fifth century, together with a certain dignity and richness of effect which lead up to the work of Phidias. Above all, there is a fullness of intellectual and even spiritual life about them which contrasts strangely with the Massimi head. Correct inferences as to the style of Myron had already been drawn by Furtwängler and others. And it is particularly interesting to note in this connexion how Furtwängler traced the influence of Myron upon Cresilas. The expression which that sculptor gave to statues like the Diomed and the Amazon was especially admired by ancient critics in his wounded figures.

Among these works of Cresilas Furtwängler found an appropriate place for the famous Medusa Rondanini in Munich (Fig. 2). If we allow for the staring immobility of death, which has always made this head both fascinating and terrible, it has a close resemblance in features, and even in general effect, to the

Vienna version of the Cassel Apollo, and still more to the Perseus of the Antiquarium. May we not then infer that it is to be attributed not to Cresilas, but rather to Myron, the master of Cresilas, probably in his maturer years? And if we accept the probability of a Myronic attribution, a further step in identification at once suggests itself. Myron's Perseus must in all probability have held the head of Medusa in his hand, for he is described by Pausanias as



FIG. 1.—HEAD OF APOLLO IN VIENNA UNIVERSITY.
(After Jahnschke, 1915, *Taf. I.*)

'having done his deed against Medusa.' Since then we find the Medusa Rondanini Myronic in style, it can hardly be anything but the head which Perseus held. The probability of this has been obscured by the way the Munich head is mounted, almost like a mask in relief, upon a flat slab.¹ The Biadelli copy,² on the other hand, is not so mounted, but is worked free on all sides, and has somewhat the appearance of a mask. It may be objected that

¹ This mounting is modern, as stated by Mrs. Strong, Burlington Catalogue, 1904, p. 2.

² *Ibid.*, Pl. XXXIV.

such a mask-like representation is not suitable for the Gorgon's head as held by Perseus. But it would clearly be desirable, from the technical point of view, to lighten as much as possible the weight of the object held by Perseus. And, if the actual work of a modern sculptor may be quoted in illustration, Canova, whose Perseus is a reminiscence of such ancient types of the hero as were known to him, placed in the raised hand of the hero what is virtually



FIG. 2.—MEDUSA ROMAN COPY IN MARBLE.

a free copy of the Medusa Rondanini.² Canova thus seems to have anticipated spontaneously the identification that is here suggested, though of course he had no data for forming any opinion as to the style of Myron, and was more influenced by Graeco-Roman sculpture.

Myron's Perseus was almost certainly in bronze, though this is not expressly stated by ancient authorities. Something of the character of a bronze work is to be seen in the head in the Antiquarium; in the British Museum copy it

² See plate in *The Works of Canova*, by Henry Moses.

has been to a great extent softened away, so that A. S. Murray⁴ not unnaturally attributed that copy to a fourth-century original. The Medusa Rondanini, in its clear-cut outlines and definite forms, is evidently a closely accurate reproduction of a bronze original; and in these characteristics it greatly resembles the Apollo head in Vienna. It is a valuable addition to the growing list of Myron's works, and once more testifies to the versatility as well as the strength of a master who is in many ways the most original of all ancient sculptors.

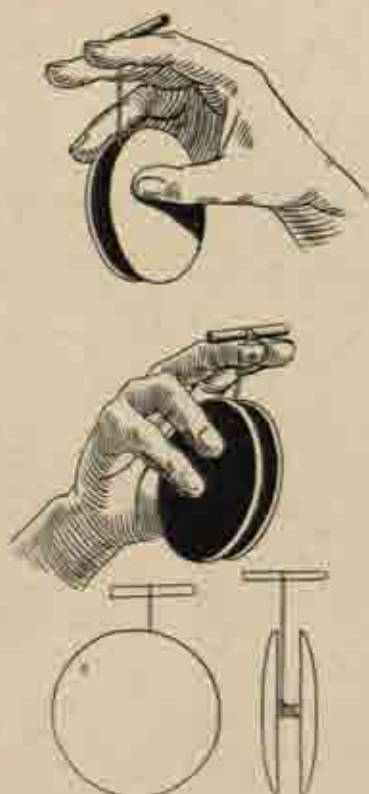


FIG. 3.—TWO SKETCHES OF HAND HOLDING BANDALORE, AND DIAGRAM OF BANDALORE.

II. THE MOTIVE OF THE CERIGOTTO ATHLETE

The life-size bronze statue of an athlete,⁵ found in the wreck of an ancient ship close to the little island of Cerigotto, has given rise to much discussion among archaeologists. The attitude, with the right arm extended, was not easy to explain. Some identified the statue as a heroic subject, such as Perseus holding up the head of Medusa; others as an orator; others, again, preferred to recognise in it a piece of athletic genre; but none were able to account for the exact position of the statue, especially as to the fingers of the outstretched right hand. These are in a peculiar and characteristic position; the first and second fingers are outstretched, with a small interval between them, and the thumb and the other two fingers are placed in such a way as to hold a small and light object supported by their tips. The position of the fingers is not at all suitable for throwing or catching a ball, or for any other action that has been suggested

—least of all for holding up a heavy object like Medusa's head.

For the true explanation of the motive of the statue I am indebted to Mrs. Neild, who writes as follows:—"I saw the figure within a few days of its completion—or rather restoration—at Athens, and then at once suggested an explanation which has become but more convincing as the years have passed. I venture, therefore, to pass it on to you.

"The figure is playing with a wooden bandalore or double disc joined with a cylindrical bar, round which is wound somewhat over a yard of string. The end of the string is secured by being tied to a bar supported by the first

⁴ *J.H.S.*, II., p. 55.

⁵ Reproduced in *J.H.S.*, 1903, PL VIII, IX.

and second fingers, the string and bandalore hanging between. The game consists in dropping the bandalore secured by the string, and, before it reaches its limit, giving a slight jerk, which brings it climbing up the string again so that it can be grasped between the thumb and the third and fourth fingers. This is the position of the hand. Its thumb and last two fingers grasp the disc; its first and second hold the bar and string. The disc is about to be released or has just been caught.

I have quoted this description in full, because some readers may never have seen a bandalore or known how to use it. A drawing of it is therefore appended (Fig. 3). It is still occasionally to be found; and it was certainly used by the ancient Greeks, as is proved not only by pictures on vases,⁶ but by the actual survival of some examples in terra-cotta.⁷ I do not think there can be the least doubt that Mrs. Neild's suggestion is correct; it has only to be stated to be convincing. It is only the somewhat unfamiliar character of the bandalore that has hitherto led to its being overlooked.

It is true that the vase-painting just quoted represents the bandalore as a child's toy. On the other hand, the example extant in the National Museum at Athens, with its delicately painted mythological scenes, may have been intended for the use of an Athenian lady. But a bandalore need not surprise us in the hand of an athlete. Its skilful manipulation requires a delicate balance and a complete muscular control such as would offer a valuable supplement and corrective to the more violent exercises of the palaestra.

The new interpretation of motive confirms the attribution of the statue to the early Hellenistic period, a dating which has met with general acceptance among archaeologists, though some have suggested an earlier origin. So long as the motive was uncertain, it appeared as if the position of the statue was chosen to display the figure to the greatest advantage, as is the case with the *Diadumenos* of Polyclitus or the *Apoxyomenos* attributed to Lysippus. But now that the motive is ascertained, the subtle balance of the figure provides an interest in itself, and gives the statue a characteristic place among the works of athletic genre that have survived from ancient Greece.

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⁶ Bötticher, *Gr. und Sicil. Vasenbilder*, p. 62.

Bötticher, *Gr. und Sicil. Vasenbilder*, Taf. 32.

⁷ *Ep. Arch.* 1883, p. 117, Pl. 3, cl.

FIRE-FESTIVALS IN ANCIENT GREECE

Fire-festivals are widespread throughout the world. They occur in Europe to the present day. Bonfires are kindled at certain times of the year, especially in Lent and on St. John's Day. Sometimes the fire is kindled on a hill or a mountain-top, sometimes in the plain or in the village; often a figure with varying names is burnt, and in some countries living beasts were once burnt in the flames of the pyre.

The fire-festivals of ancient Greece have not attracted much attention among scholars. The custom is not very common, it varies considerably in details and has been appropriated by different deities in different localities, so that the identity of the rite has been obscured. The best known cases are from Central Greece. In the cult of Artemis Laphria at Patrae, formerly at Calydon, living beasts—birds, boars, stags, wolves, bears, and their young—were thrown into the flames of a great pyre.¹ In the cult of the same goddess at Hyampolis in Phocis human images and other paraphernalia were laid on the pyre.² On the top of Mount Cithaeron a pyre was built with great care, a wooden image, called Hera, was brought thither in grand procession from the town of Plataeae, and sometimes other images from other Boeotian towns were added. On the spot each town offered an ox to Zeus and a cow to Hera: these were filled with incense, and together with the images were burnt on the pyre. Private people also made their offerings.³ It seems that a similar festival at Tithorea in Phocis was transferred to Isis.⁴

A very striking discovery has added a new instance to those above cited. In August, 1920, the Ephor Dr. Pappadakis discovered on the summit of Mount Oeta the place of the pyre of Heracles, of which Livy speaks.⁵ Within a peribolos there are a small sanctuary with an altar and a smaller quadrangular peribolos, dating from Roman times, enclosed by stone walls, each side of

¹ Pausanias, VII. 18. 11-13; Nilsson, *Greek Fests*, pp. 218 ff.

² Paus. X. 1. 6; Plutarch, *Mal. vii.* p. 244 B 2; *Gr. Fests*, pp. 222 ff. It is told of the hunter Proteus that he despoiled Artemis, went mad, and flung himself upon a pyre (Apollodorus, *op. cit.* II. 2). I think that this is an aetiological myth, intended to explain the rite in which a human effigy was burnt upon a pyre in the festival of the hunters' goddess.

³ Paus. IX. 3. 1-7; *Gr. Fests*, pp. 50 ff.

⁴ *Gr. Fests*, pp. 154 f.

⁵ *Liv.* XXXVI. 30. The last very circumspet treatment of the apotheosis of Heracles by Dr. Farnell, *Greek Hero Cults*, pp. 166 ff., adheres to the Oriental origin of the myth on the sound reason that we could only explain how such an action came to be imputed to Heracles if there was some ritual which could engender such a myth as an explanation of itself; for instance, if the effigy of Heracles was periodically burnt on a pyre on Mount Oeta, I think that this requirement now is fulfilled.

which is about 20 metres long. The area within this peribolos was covered with a thick layer of ashes interspersed with numerous bones of animals, sherds of pottery, bronze weapons and tools and two archaic statuettes of Heracles. Two sherds on which a dedication to Heracles was scratched in archaic letters make it quite certain to whom the cult belonged.⁶ The area of this peribolos is not an altar, it can only be explained as an enclosure within which each year the pyre of Heracles was built up and burnt down, and the remains of the offerings laid upon the pyre were preserved in the ash layer. As I have pointed out elsewhere,⁷ this interesting discovery proves that the myth of the end of Heracles on the pyre of Mount Oeta is an aetiological myth, which originated in the rite of the fire-festival.

The fire-festival seems, however, to be an old, somewhat decayed rite in Greece. In the southern parts of the country the only evident instance is the festival of the Curetes at Messene.⁸ In their sanctuary animals, from oxen and goats to birds, were thrown into the flames.⁹ That the rite should have belonged to the Curetes seems at first sight startling, but I think it is to be explained by the rôle of the Curetes as protectors of tamed animals. This is attested by Cretan inscriptions.¹⁰ Further, the famous hymn of Palaikastro shows that the Curetes were daemons of the annual fertility. This aspect of the Curetes agrees very well with the well-known significance of the annual fire-festival. More might be said on this point, e.g. the rôle of culture-heroes which Diodorus ascribes to the Cretan Curetes might be emphasised, but enough has been said to show that the connexion between the Curetes and the fire-festival is a natural one.

There are without doubt more survivals of the old rite. It follows from a story in Pausanias that a fire was kindled on the heights of Larissa at Argos and another at Lyrkeia: the festival was celebrated each year and was called the festival of the fires (*πυρσῶν ἑορτή*).¹¹ It may be deduced from Pausanias that torches were used in this festival, as in many modern ones of the same kind, but certainly the origin is seen in two bonfires kindled on two hill-tops.

The sacrifice made to Coronis at Titane is in some respects similar to those here described.¹² It may be remembered that the animals were not always thrown into the fire alive, as was done at Patrae. The human mind of the Greeks and the common ritual of the sacrifice induced them to kill them before throwing them into the flames. The characteristic point is that animals of many kinds were used and that they were wholly burnt, as was done in the cult of the heroes (but the fire-festival is, of course, not a chthonic sacrifice). An ox, a sheep, and a sow were sacrificed to Athena, the corpses were brought to the statue of Coronis and burnt on the ground; the birds were burnt on the

⁶ Only a preliminary report of the excavations has hitherto appeared, *Αρχαιολογικὴ Ἀνασκαφὴ*, V, 1919, *passim*, pp. 25 *seq.*; cf. *B.C.H.* XLIV, 1920, p. 393 f.

⁷ In a paper, *Der Flammstein des Herakles auf dem Oib*, in *Archiv für Religionswissenschaft*, XXI, 1922, pp. 310 *seq.*

⁸ Paus. IV, 31, 91 *Gr. Fests.*, pp. 433 f.

⁹ Dedication to *Kάπριος ἐπὶ οὐρανῷ*, *Mon. Ant.*, XVIII, p. 178; another, almost identical, mentioned *B.S.A.* XV, p. 353. Both from the foot of Mount Ida, not far from Prusias.

¹⁰ Paus. II, 25, 4; *Gr. Fests.*, p. 479.

¹¹ Paus. II, 11, 7; *Gr. Fests.*, pp. 410 ff.

altar. But as Coronis is said to be a heroine, this may perhaps be considered as a sacrifice belonging to the hero cult.

I need not expound the significance of the fire-festivals. This topic and the controversies about it are well known to every one conversant with the elements of the science of religion through the works of Dr. Mannhardt, Sir James Frazer and many others. If I recur to examples which I treated at some length several years ago—although, owing to the plan of my book on Greek Festivals, dispersedly and not in the comprehensive manner which these interesting rites deserve—it is not only with a view to emphasising the significance of the fire-festivals by a collection of the instances, but in the hope of carrying the search for traces of them further.

The discovery of the site of the pyre of Heracles on Mount Oeta has already been mentioned. The area within which the pyre was kindled was enclosed by a quadrangular stone wall which marked and confined the heap of fuel. This enclosure may perhaps shed light on another very curious sacral construction in another part of Greece.

On the wind-beaten acropolis of Prinias, which is situated on the way from Knossos to Phaestus, the Italian archaeological mission has unearthed two very early archaic temples, and also remains of sculptures belonging to one of them, which, like some other archaic temples, seems to have had two naves.¹² It cannot be decided whether one of these temples is older than the other; in material and construction they are quite similar. The interesting point is a structure which is found in the centre of the cella of both temples. The irregularly quadrangular cella of temple B has an area of about 8 by 4.5 metres; in its centre there is a not quite quadrangular enclosure, 2.75 by 1 to 0.9 metre, formed of rough stones about 0.1 metre thick set upright in the ground. The clay within this enclosure is reddened by fire. At the western side of the enclosure a small round altar is situated, a segment of the base having been hacked away so that the altar could be set close up to the wall of the enclosure.

In temple A the same construction is found in the cella, which is not perfectly quadrangular, 9.7 by 5.9 to 6.35 metres; the enclosure is quadrangular, 2.4 by 1.4 metres. It is made of flat limestone slabs about 0.1 metre thick. The slabs are set upright, so that only a rounded edge emerges above the ground. Within the enclosure ashes and burned bones of animals were found on a layer of very fine clay, which had been burnt and reddened by fire. Beneath this there was everywhere, except in the middle, a second layer of irregular stones laid in compact clay.

Further excavation in this temple disclosed in the S.E. angle of the cella, 0.35 metre beneath the floor, twelve stones set on end, forming an arc of a circle; a little higher up and more to the south there are four further stones set up in the same way. In connexion with these circular enclosures and on different levels, layers of burnt clay, ashes, coals, and bones were noted, similar to those found in the quadrangular enclosure. It is evident that these must be still

¹² *Annuario d. Scuola Arch. in Atene*, I., 1914, pp. 19 ff.

older constructions of the same kind and for the same cult as that to which the quadrangular enclosure of the temples belonged. This carries us at least to the very beginning of the Greek age of Crete, for the layers beneath the temples contain sherds and other remains of the transitional epoch between the Late Minoan and the 'Geometric' period.

The archaeological evidence shows that animals were burnt within an enclosure on the temple floor. Whether the earlier circular enclosures were situated within a temple is at least uncertain. Nothing points in this direction. It is perhaps more plausible that they were in the open air. Certainly these constructions remind us very much of the *Opfergrube* of the chthonic cult, but the sculptures found within temple A are evidence that the cult that took place in this temple did not belong to chthonic deities or heroes. The sculptures in question have a very curious form and belong to an early archaic period. There is a statue of a goddess seated on a throne; she wears a polos on her head; the lower part of her stiff garment is decorated with animals, a horse, a lion, and a sphinx. The throne rests on a long beam which projects beyond the feet of the goddess. The upper side of this beam is roughly channelled and cannot have been exposed to view. On the one side is a row of lions, on the other stags; the underside shows an image of the same goddess standing: this side must have been visible. Fragments of a second similar group have also been found. Dr. Pernier has reconstructed this beam, sculptured beneath and on the two sides, and with a seated statue of a goddess at each end, as a lintel above the door of the cella, and in fact any other reconstruction seems hardly possible.

Anyhow there are two seated images of the goddess, and in addition to these one sculptured in relief on the beam, to which presumably another quite similar one corresponded at the other end. There can be no doubt that these images represent the goddess who was venerated in the temple, and who this goddess is, the animals make clear: it is the Mistress of the Animals, Artemis. In front of temple A and in the opisthodomos of temple B a quantity of fragments of great *pithoi* with reliefs have been found. One of them is significant. The fragments of the neck of a *pithos* show twice repeated the 'winged Artemis' holding in each hand a rampant horse by one foreleg.

The cult in which animals were burned in the enclosures on the floor of the temple belonged to Artemis, the Mistress of the Animals, the same type as the Artemis Laphria of Calydon-Patras and of Hyampolis. It seems certain, then, that the cult of Primas was of the same kind, viz. that the enclosure served for the pyre just as in the case of the great enclosure on Mount Oeta, and that this pyre was the pyre of the annual fire-festival in which animals were burnt. It is curious that the enclosure is situated within a temple, but neither was an altar for the common burnt sacrifice placed within a temple, nor can this enclosure be an altar. In temple B an altar is erected near the enclosure.

Thus we have found the fire-festival in the early archaic age in Crete, and it may be asked if there are other traces of the same rite. To find these we have not only the cult of Artemis to consider, since the fire-festivals have been connected with different gods. There is the quaint figure of the brazen giant

Talos, who leapt around Crete thrice a day and chased away foreigners by throwing stones. If he caught anybody he seized him and leapt into the fire with him. This myth is undoubtedly influenced by the Carthaginian custom of sacrificing children by throwing them into the glowing brazen idol of Moloch, but, on the other hand, Talos is evolved out of an old Cretan god, who became identified with Zeus.¹² A gloss of Hesychius says: *Ταλαίος ὁ Ζεὺς ἐν Κρήτῃ*, and Zeus Ταλλαῖος is known from Drires and Olous. A chain of the Ida massif was called *οὐρεὰ Ταλλαῖα*. The god was venerated on a mountain, and this makes it more plausible to find the same god in the Zeus Ταλαίριος of the mountain peak Taleton in Taygetos. Ancient mythologists have explained Talos as the sun, but the explanation does not suit the above-mentioned feature of the myth. It may perhaps be better understood as a mythological reflex of the practice of throwing human effigies upon the pyre at a fire-festival. If Zeus Ταλαίριος is the same god as Ταλλαῖος, that will lend colour to the supposition, since he is coupled with the vegetation goddesses Auxesia and Damoia in a Spartan inscription.

This is, however, very uncertain, and if any one is tempted to make the persistent identification of Cronos with the Carthaginian Moloch more comprehensible by means of a reference to the Greek fire-festivals, in which human effigies were burnt on the pyre, it will nevertheless be a mere guess, for we are nowhere told that the fire-festival belonged to the cult of Cronos. There is only a notice in the Attidographer Istros to the effect that the Curetes in olden times sacrificed children to Cronos in Crete,¹³ and at Messene the fire-festival belonged to the cult of Curetes. But this may be a learned invention, as Professor Pohlenz has tried to show.¹⁴

There is a difficulty that may be pointed out. Since the chief instances of the fire-festival occur in Central Greece and the analogy of the European fire-festivals is especially striking, one might be tempted to regard this cult as belonging to the Greek stratum. But the suggestion is not convincing, for fire-festivals are very common in all parts of the world, and especially in the Oriental religion. Cronos and Zeus Tallaios belong certainly to the pre-Greek stratum, and for my own part I am convinced that so also does Artemis, the Mistress of the Animals, to a certain extent.

An answer to the questions raised here cannot be given, and it is impossible to proceed beyond suppositions, which may be ingenious, but are in fact very uncertain, perhaps arbitrary. So it may suffice to state that archaeological evidence shows that the fire-festival belongs both to the cult of Heracles on Mount Oeta and to the cult of Artemis on the acropolis of Prinias in Central Crete.

Land.

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¹² The references are collected by Mr. A. B. Cook, *Zeus*, I, pp. 729 ff.

¹³ In Porphyrios, *De abstinentia* II, 10.

¹⁴ In the paper *Cronos und die Titanen*, in *N. Jahrb. f. klass. Altertum*, XXXVII, 1910, pp. 349 sqq.

THE 'SOPHOCLES' STATUE: A REPLY

I TRUST I may be allowed to answer briefly the long criticism which Professor FR. Studniczka has devoted, in the first part of this volume, to my essay 'Poet or Lawgiver.' The views expressed in that criticism are not new to me. As soon as my paper appeared, I sent a copy of it to Dr. Studniczka; he answered me by a long letter giving his reasons for dissenting from my theory. Indeed—to use a phrase of his own—my learned contradictor felt so 'confident' in the strength of his arguments, that he proposed I should make use of them to write myself, in this Journal, a recantation of my essay—a liberal offer which I was unable to accept, not out of any personal feeling, but simply because a careful study of Dr. Studniczka's case has utterly failed to shake my well-founded conviction.¹

At the beginning of his paper, Dr. Studniczka remarks that, of all the arguments brought forward by me, the only one which might have decided the question 'turns out to be a worthless relic from the dead stock of E. Q. Visconti's *Greek Iconography*.' This is not stating the case fairly. I never pretended to upset the traditional theory by any sensational revelation of unknown material. I simply contended—and contend—that the existing documents had been wrongly interpreted, and some of them badly published; therefore, to facilitate a more correct interpretation, I collected them once more and laid them before the eyes of the reader, in accurate reproductions; as, for instance, the Florence herm of Solon, hitherto only known to archaeologists by the untrustworthy print in Visconti.

As far as *isotia* are concerned I could return Dr. Studniczka's reproach; for neither has he brought forward, in defence of the common theory, any unknown or unquoted document, nay, any *ratio, ratiuncula*, or, to use his own neologism, *ratiocantuncula*: he simply repeats, with unabaken faith, the old assertion of Melchiorri, Welcker and other antiquaries of the 'forties, that the head of the Lateran statue 'indisputably' represents the same person as the small Vatican bust of the *Sala delle Muse*, inscribed Σοφ|οκλῆς.

Now first a word about the inscription. Dr. Studniczka writes (p. 57): 'inscribed on the plinth Σοφ|οκλῆς, or rather Σο|φοκλῆς (*Museo Pio-Clement.*, vi. p. 144).' It is very remarkable that Dr. Studniczka, who in another passage

¹ Of course I am grateful to the wide and accurate scholarship of Dr. Studniczka for correcting some minor slips which occurred in my essay. Thus I wrongly ascribed to Winter (p. 57) the theory that the Lateran type, instead of

the (fanciful) 'Shird Sophoclean type,' was derived from a statue by Silanton. So also (p. 39) the name of Arad is to be substituted for that of Balis, in archaeology it is not true to say *de minimis non curat—professor*.

of his paper (p. 63) judges so severely Visconti's 'light-hearted readiness to correct unwelcome evidence,' accepts here so confidently—as Kaibel, *I.G.* xiv. 1211,² and others did—Visconti's reading in the *Museo* and *Iconography* (Pl. IV.). But if we refer to Visconti's *original* and *unprejudiced* rendering of the inscription, as he gave it in his manuscript *Schedae* dated 1780 (that is, very shortly after the discovery of the bust in 1778), we see that he read only five letters, thus: $\Lambda\text{K}\Delta\text{H}\text{C}$, without the slightest trace of a Φ .³

In order to make quite sure of this point (already clear for me from an excellent photograph) I asked a young and well-trained archaeologist, M. Marcel Durry, member of the French School at Rome, to compare once more very carefully the bust in the *Sala delle Muse*. He sent me not only a copy but a rubbing, and an excellent tracing, a photograph of which is here appended (Fig. 1), and which leaves no doubt whatever that Visconti's original reading was quite correct (except that he did not perceive the horizontal stroke of the H) and that there is no vestige of (nay, on the preserved part of the plinth



FIG. 1.—INSCRIPTION ON VATICAN BUST.
(From a Tracing.)

no room for) the pretended Φ , which may be finally dismissed as an *illusio optica*, or, perhaps, as a wilful addition of Visconti's afterthought.⁴

Consequently the reading $\Sigma\phi\phi\alpha\lambda\eta\varsigma$ is really not a *reading* at all, but a *conjecture*; of course not an improbable one, but if an archaeologist preferred completing the inscription as $\Delta\epsilon\lambda\phi\alpha\lambda\eta\varsigma$, the famous physician, or $\text{Εμπεδ}\phi\alpha\lambda\eta\varsigma$, I see no material argument to prove him to be wrong, except perhaps the vague similarity between the Vatican head and the well-authenticated Sophocles heads of the Farnese type—a similarity which is precisely denied by Dr. Studniczka, as before by Bernoulli.

Now as to the 'indisputable' identity of the Lateran and Vatican heads. How far from the truth is this time-honoured assertion, the reader may judge

² Kaibel certainly did not compare the original, a most regrettable negligence, the bust being so near at hand; of course, all later editors have blindly followed Kaibel.

³ I have again compared Visconti's *Schedae*, MS. 9097 at the Bibliothèque Nationale, *fonds latin*. The copy is written on a scrap of paper, pasted on p. 1, on which other legends of busts (Alcibiades, Zenon,

Antisthenes, etc.) are mixed.

M. Durry writes: 'Le *Hefbig* (French and German editions) se trompe lourdement en parlant de six lettres: on en voit trois et deux moitiés (O and C). Du Φ , si jamais il a existé, aucune trace: on ne peut supposer une fracture postérieure à la découverte, puisque ce buste semble être entré immédiatement dans les collections pontificales.'

for himself. Dr. Studniczka is actually to be thanked for having shown side by side (1) the Vatican bust and the Florence herm (p. 58)—rightly considered as a faithful replica of the Lateran head—seen *de face*: (2) the Vatican and Lateran heads in three-quarter view (p. 60). In presence of these four photographs, I simply maintain that the likeness between the two heads is confined to the arrangement of the hair and beard—largely a matter of fashion—as well as the string or fillet (*στρογγύλιον*), which, whatever may have been its function for priests and magistrates, appears also in portraits of private persons such as the Naples herm (*J.H.S.*, 1904, p. 83). In many respects the contrast between the two heads is far too striking to be explained away by such words as 'a coarse extract, partly exaggerated, partly simplified' (Studniczka, p. 61). Let the reader note especially:

(1) The shape of the brow, which in the Lateran type (particularly in the Florence herm, where the restoration of Tenerani, appealed to by Dr. Studniczka, does not come in question) is smooth and mildly rounded, whereas in the Vatican bust it rises and falls sharply like a pointed arch;

(2) The deep vertical furrows of the forehead, so characteristic of the bust, and quite or nearly absent from the two other heads;

(3) The thick, almost pouting underlip of the bust, equally unparalleled in the statue and herm;

(4) The long, curled moustache of the bust, rather similar to that of the genuine Sophoclean heads, but quite different from the Lateran type.

But above all—a far more important item than any particular feature—I must repeat that the *general expression* differs totally in the two heads: strongly individualised, thoughtful, sullen, almost sulky in the bust, with the glance, as it were, turned inwards; rather impersonal, but happy, serene, mild and winning in the Lateran head, the glance slightly directed upwards, that is—*pace Studniczkae dixerim*—towards an invisible audience piled up the tiers of a distant *cavea*.

Altogether, I find more similarity between the Lateran head and, say, the Periander herm in the Vatican (Fig. 2) than with the 'Sophocles' bust.

I am not *quite sure* that this latter really represents Sophocles,² but if it does, then the Lateran head certainly does not.

Of course, I never considered, as a sheer impossibility, the coexistence of two distinct portrait types of the same illustrious personage. Dr. Studniczka's learned display of *precedents* in that line (p. 63) is an interesting but useless *hors d'œuvre*: moreover, in every instance quoted, the second type seems to have originated in the Hellenistic or Roman age, which is not the case in Dr. Studniczka's hypothesis. For he postulates here, as his predecessors did, two fourth-century Sophocles types, one originating in the 'Iophon' statue, towards

* Even if the supplement *Σοφοκλῆς* holds good, we must keep in mind that we have a notable example of a bust inscribed *Ζεῶν* (Vatican, 319 = Heider, 22) which is in reality a portrait of Plato, and vice versa a bust inscribed *Πλάτων* (Uffizi,

Bernoulli, II, 20, 2) which certainly does not represent Plato. In both cases there is no serious reason for suspecting the antiquity (comparative, of course) of the inscription.

100 B.C., and the other in the 'Lycurgus' statue, towards 340. Now, I can only repeat that the existence of the Iophon statue is, to say the least, 'not proven,' for Dr. Studniczka has not been more felicitous than former scholars in trying to extract a sense from the mutilated phrase of the anonymous biography on which this hypothesis rests.*

Moreover, is it likely that Iophon, whose chief fame rests on the unnatural legal proceedings which he introduced against his aged father, should have erected to him a life-sized statue immediately after his death—a very unusual honour in those days? As to Dr. Studniczka's further conjecture (p. 66), that this was the 'cult statue' of the sanctuary consecrated to Sophocles



FIG. 2.—PERICLES (VATIKAN HERMS).

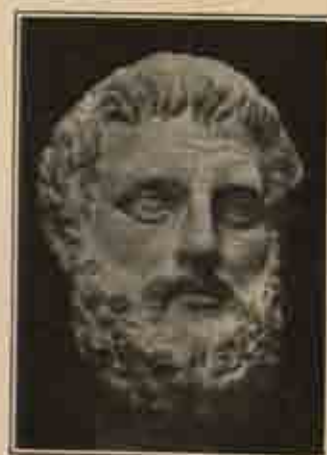


FIG. 3.—SOPHOCLES (LATHRAS STATUE).

as 'heros Dexion,' it has no firmer basis than a 'saying' reported by the *Etymologicum Magnum* about that heroisation,⁷ a saying, in my opinion, highly suspicious; for Pintarch, who, in his life of *Numa*,⁸ speaks at length of the connexion of Sophocles with Asclepius, has no word about this pretended heroisation, although he could have found no better opportunity to mention it. There is no doubt that there was in Athens a heros Dexion intimately connected with Amynos and Asclepius; we have now epigraphical evidence

* *Εἰς τὴν δὲ* (Sophocles) *καὶ οὐκ ἐστὶν Ἀσκληπιὸς* *ἱερουργῶν*. In fact he was Ἀσκληπιὸς τοῦ ἱεροῦ καὶ καλεῖται ἱερουργὴς ἐν ἱερῶν καὶ οὐκ ἐστὶν ἱερουργῶν. The MSS. differ widely in detail from each other, as may be seen in referring to the apparatus of Westermann.

⁷ *Etym. Magnum*, s. v. *Δείων*; παρὰ τῶν Ἀθηναίων τοῦ Ἀσκληπιῶνος ἱερουργῶν—τοῦτο αὐτοῦ ἐκείνου τοῦ Ἀσκληπιῶνος καὶ οὐκ ἐστὶν Ἀσκληπιὸς ἱερουργῶν.

⁸ *Numa*, iv, 9.

of his *hieron*,⁹ but his identification with the poet Sophocles seems to be an idle gossip of Istros,¹⁰ or of some such Alexandrian *littérateur*. The name seems much older, as shown by the existence of a *patron* of Δεξιμαχίδης in Kamiroi.¹¹

But be this as it may: the Studniczka hypothesis involves a grave contradiction which the author has perceived, but failed to justify. 'In the actual representation of distinct persons,' Dr. Studniczka writes very justly (p. 63), 'the predilection of Greek arts for typical rendering of nature yielded very slowly to the claims of individual likeness.' Either this sentence is meaningless, or it means that when two portrait types of a great man occur in the fourth century, the elder one is sure to be more 'idealised,' the younger one more true to nature. Now there is no doubt—nor does Dr. Studniczka discuss the point—that the so-called 'Lateran' Sophocles, with his inexpressive, fine, commonplace features—to speak only of his head—is strongly 'idealised,' whereas the 'Farnese' type, the aged and sullen Sophocles, is eminently realistic. But when it comes to dating, Dr. Studniczka claims as original, for this latter type, the Iophon statue of 400, and for the idealised Lateran type the Lycurgus statue of circa 340 B.C.¹ Here we have the classical *hysteron proteron* sophism on which I will not waste a word. And really when Dr. Studniczka, having recognised, not without hesitation, a quite contrary evolution in the Euripides portrait type, writes (p. 65), 'the tendency of the transformation is opposite in both the examples,' he presumes too much upon the reader's docility. Such a process as is here postulated is an utter impossibility in the history of Attic art and would suffice alone to overthrow the whole structure so artificially piled up, on so slender a basis, by Melchiorri and his successors.

Before concluding, the reader should be reminded of the corner-stone on which my whole reasoning rests: the motive, the drapery, the general attitude and spirit of the statue of which, until now, I have only discussed the head. All these particulars point imperatively not to a poet, not to a philosopher, but to a statesman, an orator. Poets in standing attitude are, in all certain instances we know of, represented either as absorbed in meditation or revelling, according to the character of their poetry; in every, or let us say in almost every case, they are signalled by a characteristic attribute. With all his admirable scholarship, Dr. Studniczka has not been able to bring forward a single unexceptionable example to the contrary, and I am afraid that his fanciful explanation—Lycurgus, having represented Aeschylus and Euripides with the traditional symbols, chose to represent Sophocles, the gentleman-poet, without—will elicit from the reader a smile which is not of approval. Really it was very easy for the sculptors to provide each of the three great dramatists with a distinct attribute: the mask for one, the scroll for another, the lyre for the third (an appropriate attribute for Sophocles, whose talent as a lyre player was famous). Nor do I see that Dr. Studniczka has sufficiently taken into account the striking analogy of the Aeschines statue, on which, partly at least, is based my assumption that the man before us is an orator, draped

⁹ Koerte, *Att. Mit.*, xxi (1896), p. 226, No. 6 towards 325 B.C., p. 303, No. 7.

¹⁰ Cf. the *Bios*, p. 131, West.: *hieron* is

ἡρώς Ἀλφειοῦ, ἡ δὲ τῆς καὶ ἑσπέρης Ἀφροίτης καὶ ἑσπέρης Ἀφροίτης καὶ ἑσπέρης Ἀφροίτης.

¹¹ *I.O.*, Ins. I. 603.

in the solemn fashion which in the late fifth century was upset by the innovation of Cleon.

I am not a friend of the argument *ex auctoritate*, and I saw with no little surprise the wide use which Dr. Studniczka makes of this sort of evidence in several passages of his article, counting the authorities instead of weighing them, and, of course, granting the epithet of *competent* only to those scholars who share his opinion. However, I cannot refrain from quoting here the judgment—published some time after my essay had been in print—of the best refined and artistically educated of all contemporary archaeologists, of the best connoisseur of Greek costume who has ever existed: I mean the lamented Professor Heuzey. In his admirable work, *Histoire du costume antique*, which came out this year, shortly after the death of the author, Professor Heuzey mentions and reproduces twice (Figs. 18 and 53) the statue of the Lateran. Now in what terms does he comment on it? I think it worth while to quote the principal passages. P. 28: '*Nous savons que les anciens hommes politiques, comme Périclès, s'appliquaient à paraître devant le peuple drapés avec art, le bras enroulé dans le manteau, sans que le geste dérangeât les plis de la draperie. Quelques figures, représentant sans doute des rhéteurs*¹² *qui se rattachaient par tradition à la vieille école, nous font connaître cet ajustement d'une superbe ordonnance, Fig. 18,*' (that is, the Lateran statue). And again, p. 100 (after having quoted the *locus classicus* of Aeschines, *Contra Timarchum*): '*La position du manteau sur les deux épaules produit un jeu de draperies très mouvementé. On peut en juger par quelques statues, où les artistes se sont efforcés de conserver la tenue des anciens orateurs. Telle est, par exemple, la prétendue statue de Sophocle, Fig. 53.*'

If, as I just said, authorities are to be weighed, not counted, I may confidently oppose the great name, the half-century of experience, the sure and exquisite taste of Léon Heuzey to the long list of German and Italian scholars marshalled by Dr. Studniczka, scholars who, may it be said in passing, have done little else in this matter than repeat faithfully and blindly what had been said by Melchiorri and Welcker at a time when the study of Greek costume, the chronology of Greek art, were still in their infancy. I do not know what Professor Heuzey would have thought of my further proposal to recognise in the Lateran statue a copy of the statue of Solon described by Aeschines, and in that statue a work of Képhissodotos.¹³ Nor do I exactly know what Dr. Studniczka thinks of the admirable emendation of Pliny's text by W. Klein.¹⁴

¹² Of course I object to this term, which is admissible in the case of Aeschines, but not of the Lateran statue, copy of an excellent original of, at latest, the middle of the fourth century.

¹³ Heuzey was too old and ill when I prepared my essay to allow me to submit it to his appreciation, but I know (and stated, in a footnote, p. 52) that in his celebrated lectures at the École des Beaux-Arts he had never accepted the traditional denomination.

¹⁴ I ought to have remarked that the text of Pliny is, as usual, derived from a Greek source, and that, in translating the Greek sentence, Pliny was guilty of a slip: the original Greek certainly used the word *gale* in the sense of arm, and Pliny rendered it wrongly by *manus*; in statues of the Lateran type the right arm (which is surely in question) is strapped up in the folds of the mantle, but the right hand just emerges from them.

on which this last theory is based, because 'highly contestable' is an evasive epithet, and brackets are not an argument. But be this as it may, the latter part of my essay is, as I cautiously presented it, largely a matter of conjecture, about which opinions are free; not so the first part, where I believe myself to have *proved* that the Lateran statue represents neither Sophocles nor any other poet, but an orator, a statesman of the old time. On this point I safely appeal to the aesthetic and historic *feeling* of every well-trained visitor of our Museums, and to the future consensus of unprejudiced archaeologists:

μεγάλη ἡ ἀλήθεια καὶ ὑπερισχύει.

THEODORE REINACH.

ALEXANDER THE GREAT AND THE PERSIAN LION-GRYPHON

ALTHOUGH the coinage of Alexander the Great has of late years been intensively studied, and an immense advance made, almost entirely by the efforts of Mr. E. T. Newell, in its classification and dating, little attention has been paid to one detail which seems to me worthy of more careful consideration. This is the decoration of the bowl of the helmet of Athena on the gold coinage (Fig. 1). Müller (*Alex. le Grand*, p. 3) says merely that the bowl is most usually adorned with a serpent, sometimes with a running gryphon, rarely with a sphinx, and sometimes with nothing at all. He makes no attempt to explain these emblems, regarding them doubtless as purely decorative. There is no doubt that from quite early times such creatures had been used for purely ornamental purposes to support the crests of helmets.¹ Between using them actually to bear the crest and as decoration in relief on the bowl there is no significant difference. If, therefore, no plausible explanation of the meaning of these emblems on the coinage of Alexander is forthcoming it is not unreasonable to suppose that they are purely decorative: but that position should not be assumed until the possibility of their having a meaning has been thoroughly explored.

Mr. Newell himself (*The Dated Alexander Coinage of Sidon and Akko*, pp. 24-5) has a few remarks on the interpretation of the serpent and gryphon emblems:

The gryphon, an Eastern conception, was symbolic of irresistible might or supernatural power; both lion and eagle-headed gryphon occur repeatedly in Hittite and Mesopotamian art as demonic forces or companions of the gods; in Egypt the monster with hawk's head and lion's body was symbolic of the royal power. 'In placing this fierce monster upon the warrior-goddess' helmet the Sidonian artist may have wished to suggest the irresistible impetus of the Greek advance; or perhaps to symbolise the East now conquered by Athene's aid.' (We shall see that this latter suggestion contains more than a hint of the truth.) Then there is the well-known myth of the gold-guarding gryphons; what emblem could have been more appropriate for the gold coinage? Finally, Newell mentions the symbolical significance of serpent and gryphon as emblems of longevity and eternity; but he does not explain what special appropriateness to the gold coinage they possess in this respect.

Dr. Philip Laderer (*Zeitschr. für Numismatik*, 1922, p. 195) does not deal with the gryphon, but has a very attractive theory about the serpent (Fig. 1, No. 1). He first clears the ground by disposing of the alleged anticipation

¹ Döringberg et. Saglio, *etc. gloses*, pp. 1450 f.

of Alexander by others in the use of this emblem on the helmet of Athena on coins. The examples which have been alleged, as on certain coins of Pharsalus, are, he maintains, nothing of the kind; the apparent serpents are merely decorations resembling the spirals or volutes which are so familiar to us as helmet-ornaments. The serpent on the helmet of Athena was therefore, he considers, so far as coinage is concerned, a real innovation on Alexander's part. In conformity with his theory that the type as a whole was inspired by the statue of Athena Promachos on the Acropolis of Athens, Lederer explains the serpent as the attribute—and the most important attribute—of the City-goddess.



FIG. 1.—GOLD STATERS OF ALEXANDER THE GREAT. (Enlarged 2-1.)

This last conclusion we may incline to accept, as the best at present forthcoming; but one of the premises requires modification. I find it difficult to believe that the objects on the helmet at Pharsalus are not serpents, in view of such a specimen as that in the Ward Collection.² And the coinage of Lampsacus provides clear evidence of the use of the serpent as a decoration for the helmet of Athena long before the time of Alexander.³ But the destruction of this premise does not necessarily take the ground from under Lederer's theory that Alexander's type was inspired by the Athena Promachos.

We now have to consider the gryphon. What is generally known as the

² Catal. No. 449.

(Period II, v. 460-470 A.C.), p. 19 (Period

³ Goebler in *Nomismata* xl. (1923) p. 8. III, 470-357 A.C.).

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Greek gryphon proper—although it is of Oriental origin—is a winged monster with lion's body and bird's head. On the great majority of staters with the types of Alexander other than those with the serpent, the running monster with straight wings that we see on Athena's helmet is of this type (Fig. 1, No. 3). But it is with some surprise that I have discovered that the other running monster, not so common but still frequent, with curled instead of straight wings, is of a different type; in fact its head is that of a lion, on which horns are occasionally discernible (Fig. 1, No. 2).¹ In other words, it is the Persian lion-gryphon. I need not here go into the extremely complicated genealogy of the creature.² Suffice it to say that, as developed by the Persians out of its Babylonian form, the authentic lion-gryphon was a lion, with lion's head bearing curved horns, curled wings, lion's fore-legs, hind-legs like an eagle's and eagle's tail. The curling of the wings in the Persian gryphon was, be it noted, not a native Persian feature, but due to the Greek influence which penetrated Iran at a comparatively early date. In adopting the lion-gryphon from the Persians, the Greeks dropped the aquiline character of the hind-legs and tail, so that in the Graeco-Oriental form, from the fifth century onwards, the lion-gryphon was indistinguishable from the lion save by its wings and horns. It is instructive to compare such a fine example of the Persian monster as is seen on a Lewes House gem (Beazley, Pl. I, No. 8) with the Greek version as we find it on the well-known staters of Panticapaeum (Head, *Coins of the Ancients*, Pl. 21, Nos. 1 and 2). Both are shown in Fig. 2.³

Now, although slightly modified, made less monstrous, by the Greek refining instinct, this lion-gryphon, as more than one writer has remarked, always remained to the Greeks associated with Persia; the consciousness of its Persian origin seemed always present to the Greek artist, who usually represented it as in conflict with Persians, slaying them or being slain by them. The lion-gryphon was conceived by the Greek as the enemy *par excellence* of the Persian. Now we see the appropriateness of this emblem on the coinage of Alexander.

Let us consider rather more closely the place and time of its use.⁴ The area is somewhat curiously limited. It is not found on any of the Western issues, i.e. in Europe or Western Asia Minor. It occurs at Sidon, at Acre-

¹ The detail is so small that it hardly appears in the reproduction. I must ask my readers to take it on trust.

² See the articles 'Gryps' by Furtwängler in Roeder's *Lexikon* and by Prinz and Ziegler in Pauly-Wissowa's *Real-encyclopädie*, esp. also Dalton, *Treasures of the Orient*, p. 87; and Rostovtzeff, *Iranians and Greeks in South Russia* (1922), p. 80: 'the lion-headed griffin' of Panticapaeum 'is the Iranian animal, created in Babylonia, and thenceforward common throughout Asia, especially in the Iranian area.'

³ I have to thank the Director of the

Boston Museum of Fine Arts for permission to reproduce the cylinder.

⁴ In this (as in all the questions of chronology and classification hereafter dealt with) I am specially indebted to Mr. Newell, who, when I called his attention to the real character of the monster with the curled wings, at once examined the whole of his unrivalled collection from this point of view and placed his notes at my disposal. I may note here that he knows of one, but only one, example of a bird-headed gryphon with a curled wing, viz. on a stater which is a variety of Müller 776.

Prolemais, at Tarsus; possibly also in Cyprus. As regards time, we find it first at Sidon, on Newell's type *c*, which is the third of the four types which he attributes to the period 'end of 333 to circa 330 B.C.' If it was issued before the crowning victory of Gaugamela on Oct. 1, 331, it can at any rate hardly be much earlier than the date; in the late spring or early summer of 331, when Alexander started for Thapsacus.* At Ace it appears in 329-8 B.C.; at Tarsus in 327 B.C. Before its appearance, the decoration of the helmet had been a



FIG. 2.—THE PERSIAN LION-GRYPHON.
(Impression of Chalcidony Cylinder and Gold Coin of Pauriogastum, 2 : 1.)

serpent. On many coins this serpent decoration continues to be used, even on the staters issued after Alexander's death by his successors. Is it a mere coincidence that either immediately before the beginning of the campaign which was to terminate in Gaugamela, or about the time of the victory itself, there first appeared on the gold coinage the emblem which every Greek who saw it would recognise as significant of the attack on the Persian royal power?

* I understand from Mr. Newell that he now inclines to the view that some if not all the staters and didrachms which he had placed in his first group at Sidon, dating

them from the end of 333 to circa 330 B.C., may really have been struck at Damascus, and not earlier than Gaugamela. This revised view suits my purpose admirably.

But there is an objection to be met. Alexander had a mint in Babylon, probably also in other cities in the East. Mr. Newell's classification and attribution of the Alexandrine coinage of this region is not yet published; but the general characteristics of what is for convenience known as the Babylonian style are fairly recognisable, and it seems quite certain that the lion-gryphon never occurs on this Eastern coinage. It is, as we have seen, limited to the Cilician and Phoenician district. If the objector asks why Alexander did not advertise his Persian sovereignty in the very heart of his new Empire, the answer is that there such an advertisement was unnecessary. Where it was necessary was in outlying satrapies, and that is precisely where we find it.

The bird-headed gryphon on the coins with which we are concerned is always, with one possible exception, represented with straight wings, probably with the object of differentiating it from the lion-gryphon; but it should be observed that curled wings are just as appropriate to it in Greek art as they are to any other winged monster. However this may be, the bird-headed gryphon does not, according to Newell, appear on Alexandrine coins earlier than the reign of Philip Arrhidaeus. During his reign it is found in N.W. Asia Minor, and frequently at Babylon. It is also found at the latter mint after his death. At Sidon, where the lion-gryphon and the serpent had shared the honours from about 331, the bird-headed gryphon suddenly appears in the year Oct. 316-Oct. 315, ousting both the other emblems completely. At Ace the bird-headed monster had not so easy a victory; it and the lion-gryphon are used side by side on years 25 to 30, which seem to correspond to the period 322/1-317/6.⁸ Henceforth only the bird-headed gryphon is used, except that the serpent makes its appearance during one year, 33.

Thus the lion-gryphon had but a short life; it was threatened by its rival in 322, and disappeared altogether in 317. The threat to its existence coincides with the year of the disaster to Perdicas in Syria and the return of Antipater to Macedonia with Philip Arrhidaeus and the young Alexander in his care (autumn 321). Its complete disappearance in 317-316 coincides with the years of Philip's death (317) and of the imprisonment (316) of the young Alexander by Cassander in Amphipolis—with, that is to say, the elimination from the political stage of the representatives of the royal house of Macedon and the blood of Alexander. The coincidences seem to be significant. They are at any rate as close as one is entitled to expect. Communications between various parts of the ancient world were not so perfect that political changes could be always immediately and accurately reflected in such matters as coinage.

The serpent, as we have already seen, is most plausibly explained as the attribute of the Promachos. On the other great statue of Athena at Athens, the Parthenos, the helmet was adorned with a sphinx, bearing the middle crest, and with gryphons at the side, according to Pausanias; some of the copies show Pegasi instead of gryphons, but the later coins of Athens, which are our most accurate records of the head, always have the gryphons. As

⁸ Mr. Newell informs me that there are coins dated 25 struck with his obverse die J (*Coinage of Sidon and Ace*, Pl. VII 4)

which he had hitherto supposed to be used first in year 20.

these creatures support crests, their wings are curled. The gryphons are of the bird-headed species, of course. Like the serpent, this species of gryphon was not unknown on the helmet of Athena as shown on coins before the time of Alexander; it is found, for instance, in the fifth century at Thurium and at Velia in Italy, on a fourth-century Lesbian sixth of a stater, and early in the fourth century, if not earlier, at Soli in Cilicia, a place whose coins show marked Athenian influence. On the gold coins struck after Alexander's death with his types it may therefore possibly be purely ornamental; or it may be a reminiscence of the Parthenos, the two emblems, serpent and bird-headed gryphon, thus recalling the two most famous statues of Athena. In any case it would not, to a Greek, be associated with the conquest of the East; and that may even have been a reason for adopting it at a time when the mints where it was used were in the possession of rulers who no longer laid claim to Persia. Ptolemy held Phoenicia from the summer of 320 until 315; he made no claim on the East, and it is during this period that the bird-headed gryphon establishes itself. It is true that Newell (*op. cit.* p. 35) has put the question whether the sudden appearance of this emblem at Sidon in the very year (315) when Antigonus arrived in Phoenicia may not be connected with that ruler's policy. But, as we have seen, it had already shown itself at Ace-Ptolemais very soon after the death of Alexander. Is it, as the Egyptian symbol of royalty, due to the influence of Ptolemy?

Of the four emblems on the helmet, there remains only the rarest, the sphinx, to be considered (Fig. 1, No. 4). On Mr. Newell's authority it may be stated that, with the exception of a single coin of uncertain attribution (Pozzi Catal. 864), it is confined to Babylonian and Persian mints. It occurs at the beginning of Alexander's coinage at Babylon; it is found on some coins of Seleucus struck in those parts. Had it been a typical Egyptian sphinx, one would have been tempted to say that Alexander advertised his Egyptian sovereignty in Mesopotamia and Persia as he did his Persian sovereignty in Phoenicia. But it is a typical Greek sphinx, with curled wings, sometimes seated, sometimes lying, sometimes springing forward. The sphinx, as we have seen, was the supporter of the middle crest of the helmet of the Parthenos. It is also known as a helmet emblem of Athena before Alexander's time, as e.g. on a fine coin of Pharsalus of about 400 B.C. in the Jameson Collection, and on coins of Thurium of the fourth century. It seems probable, in view of the limitation of its area, that the sphinx on the Alexandrine coins has some special significance; but I can make no suggestion.

To sum up: the Persian lion-gryphon, hitherto unrecognised on the coinage of Alexander the Great, is seen to have been used by him as a manifesto of his claim to the sovereignty of Persia; with his death it begins to be discarded, and disappears within half a dozen years amid the wreckage of his Empire. These dates for its duration have been established on the evidence of a chronological arrangement based on other grounds; it remains to be seen whether it, in its turn, may be used for confirming or adding precision to that chronological arrangement.

G. F. HILL.

CONSTANTINOPOLITANA

I. THE TOMBS OF CONSTANTINE PALAIOLOGOS AND THE GOLDEN GATE

Of the many resting-places assigned, by patriotic fancy, we must regretfully admit, rather than by well-authenticated traditions, to the last Greek emperor of Constantinople, none is more picturesque or more appropriate than the Golden Gate, through which, when the years are fulfilled, the victorious army of the Greeks is to enter the city and take possession once more of their ancient heritage. More than this, as Professor Polites has remarked,¹ relatively ancient traditions of the saviour-king, who is to rise from the sleep of death at this historical moment, speak of him as dwelling *ἐν τῇ πρώτῃ ἀκρῇ τῆς Βυζαντιδος*, which may well enough be interpreted of the Golden Gate, standing as it does at the south-west corner of the triangular city.

Despite this appropriateness, we note in the traditions a certain discrepancy as to one essential point—the identity of the sleeper at the Golden Gate. He is either the emperor Constantine Palaiologos, or his predecessor John Palaiologos, or—S. John the Evangelist.² All these traditions are historically almost equally incredible. But the intrusion of S. John, who, according to mediaeval traditions, sleeps without tasting of death in his tomb at Ephesus, is at least intelligible in this setting. The figure of John Palaiologos, on the other hand, seems to be no more than a bridge effecting the transition between the deathless saint, John, and the deathless emperor, Palaiologos, of popular tradition. This hypothetical development would be explicable if we could find such a combination as the existence at the Golden Gate of a body marvellously preserved, and therefore reputed that of a saint, which was ignorantly identified first for obvious reasons with S. John, and later swept into the long cycle of local legends concerning the sleeping saviour-king. It seems possible that some, though not all, of the missing links can be supplied.

A curious story is related in 1717 by Lady Mary Montagu, wife of the British Ambassador at Constantinople, of an Egyptian mummy sent by way of Constantinople as a present to Charles XII. of Sweden, then at Bender.³ The Turks, she says, 'fancied it the body of God knows who; and that the state of their empire mystically depended on the conservation of it. Some old prophecies were remembered upon this occasion, and the mummy was committed prisoner to the Seven Towers.'⁴

This might be regarded as the idle gossip of contemporary Constantinople, were it not corroborated nearly a century later. The French Consul and

¹ *Commentary on Daplaiaen*, No. 33, where the curious reader will find full references for this whole legend-cycle.

² *Carmoy et Nicolaïdes, Folklore de Con.*

Constantinople, p. 102.

³ Charles XII. took refuge in Turkey after the battle of Poltava (1709).

⁴ *Lettres* (12mo., London, 1805), ii. 198.

traveller Pouqueville tells the story of the mummy from a Turkish history, of which part was translated for him by M. Ruffin: 'the mummy, which was sent 'ninety-four years before' as a present from the king of France to the king of Sweden, 'was about to be forwarded to its destination when it was stopped by the Janissaries upon guard at the gate of Adrianople. Being sealed with the signet of the kaimakam, it was supposed to be the relic of some saint, and was deposited at the Seven Towers.'²

The reason of Pouqueville's interest in the mummy and its story was that he himself had happened to re-discover it during his captivity (1799-1801) in that fortress in a chamber of the northern tower of the Golden Gate itself.

Pouqueville 'never heard it said, as Lady Mary Wortley Montagu affirms, that the Turks attached to it the idea of a palladium on which hung the preservation of the empire,' which he regarded as 'one of the pleasing fictions of her work.' But in the light of the prophecies which have circulated for so long among Greeks and Turks alike of the saviour-king who should arise from the dead to deliver the city from the Moslem yoke, it is probable that Lady Mary Montagu's story is substantially correct, and that in the occurrences she relates is to be found one source of the modern tradition locating the tomb of Constantine Palaiologos at the Golden Gate.

II. THE HARBOUR-CHAIN AT THE MUSEUM AT S. IRENE

A massive iron chain preserved at the church of S. Irene at Constantinople (now the Military Museum) has for some years been universally accepted as the historic barrier of the Golden Horn during the siege of Constantinople by the Turks. The identification has never been disputed, though there seems no evidence beyond that of tradition to support it. As the museum of S. Irene has only in the last few years been made accessible to the general public, it is hard to say exactly when the tradition regarding the chain began. It is not mentioned by Théophile Gautier (1853), who describes the contents of the museum in some detail,⁷ while Paspatis, whose knowledge of Constantinople was unrivalled in his time, was evidently unaware of its existence in 1877.⁸ The tradition concerning it is thus demonstrably of recent origin: it will appear from the sequel that there are considerable grounds for rejecting it.⁹

The chain at S. Irene is shown in Fig. 1. It is composed of links measuring about 2 ft. 6 in. in extreme length, the thickness of the iron being that of a man's wrist. The links are of two main types, a simple long oval and a 'figure-of-eight'; an intermediate form, oval with compressed sides, approximating to the 'figure-of-eight' shape, also occurs. The 'figure-of-eight' link is the most frequent and characteristic.¹⁰

² *Charge d'Affaires at Constantinople, 1805-6.*

⁷ *Travels*, London, 1813, p. 257.

⁸ *Constantinople*, p. 288.

⁹ *Revue des Deux Mondes*, p. 179. M^{me}. de Gasparin (c. 1860) was told it was the chain of the Dardanelles (*à Constantinople*, p. 171).

¹⁰ Since writing this I find my opinion has the independent support of Sir Edwin Pears (see Schlumberger, *Siege de Constantinople* (1914), p. 332, n. 1).

¹¹ Details kindly communicated by Mr. W. S. George.

A chain seems to have been used to close the mouth of the Golden Horn from the time of Leo the Isaurian onwards.¹¹ The chain employed during the Latin siege of 1204 is described by a contemporary authority as *aussi grosse come le bras d'un homme*.¹² It seems to have been removed by the Crusaders.¹³ Of the chain used in 1453 no precise account has come down to us. Two centuries later, Evliya tells us,¹⁴ alleged fragments of it were shown at the arsenal of Constantinople: each link was as wide as a man's waist. So late as the sixties of the last century a single link of the chain was said to be preserved at Top-hané: it is described as more than a metre long, elliptical in shape, and as thick as a man's arm.¹⁵

It will be noted that the characteristic 'figure-of-eight'-shaped link, which is to any ordinary observer the outstanding peculiarity of the chain



FIG. 1.—THE CHAIN AT S. IRENE.
(From W. S. George, *Church of S. Irene at Constantinople*, fig. 1.)

at S. Irene, is mentioned in none of the foregoing descriptions. Evliya's comparison of the links to a man's waist naturally suggests rather an ordinary circular or oval shape. In default of more positive evidence we cannot regard the pedigree of the S. Irene chain as established.

On the other hand we have record of a harbour-chain elsewhere which possessed the peculiarity we have insisted on above. In 1843 Ludwig Ross was shown in a magazine of the Hospital at Rhodes a chain seven hundred and fifty feet in length which was said to have closed the harbour in the time of

¹¹ Du Cange, *Const. Christianism*, I. vi.

¹² Brachon, *Recherches*, I. I. 486.

¹³ Du Cange, *loc. cit.*

¹⁴ *Yivriye*, tr. von Hammer, I. I. 14.

¹⁵ Glavary in *ΣΑΛΑ*, ΣΑΛΑΡΕΣ ΝΑΥΕΣ, iv.

1807, p. 86: Δαδελανίει μὲν δὲ, περὶ δὲ τοῦ αἰῶνος αὐτοῦ βασιλευσῶντος αὐτὸς ἐπιβουλευόμενος τοῦ τὸν Χρῆστὸν καὶ τοῦ τοῦτο ἔργου ἐκείνου, ἐκείνου ἀλλοτριώσας, καὶ ἀνέβητο ἐπὶ τὸ ἐν πύργῳ.

the Knights.¹⁶ The links of this chain were a foot and a half long and 'shaped like an oval pressed in on both sides' (*wie ein an beiden Seiten eingetrücktes Oval gebildet*).¹⁷ Guérin, visiting Rhodes in 1854, asked to see this chain, but was told that it had been removed to Constantinople.¹⁸

Now the dates of Ross's and Guérin's visits to Rhodes fell within the reign of the reforming Sultan Abdul Medjid (1839-61). It was under the auspices of the latter's Master of Artillery, Fethi Ahmed, about 1846, that the nucleus of the present Imperial Museum was formed; the collections were deposited in the church of S. Irene and its forecourt.¹⁹ A few years later there seems to have been an attempt to modernise the armament of Turkish fortresses: certainly in the succeeding reign of Abdul Aziz (1861-76) old cannon, removed from Rhodes and the Dardanelles, found their way to the Museums of Artillery at the Invalides and at Woolwich.²⁰

It seems, then, at least probable that the chain now shown at S. Irene never defended Byzantine Constantinople, though it may have played an equally honourable part in the defence of Rhodes; that it was removed by the military authorities from Rhodes to Constantinople between 1843 and 1854 and found its way to S. Irene during the early years of the museum. Further search may explain the erroneous tradition which has arisen concerning it by the discovery, perhaps at S. Irene itself, of the authentic chain of the Golden Horn.

III. CHRONOLOGICAL NOTES ON THE CAPTURE OF CONSTANTINOPLE

A hitherto unpublished manuscript note on the capture of Constantinople by the Turks occurs in the British Museum MS. 34060, 1 b,²¹ and runs as follows:

εἰς ἀντὶ ἰσχυρῆς καὶ ἡμέρας σαββαίου ἦλθαν ἀπὸ τῆς κωνσταντινουπόλεως
καράβια τρία κρητικὰ τοῦ Σιγούρου τοῦ ὁδοῦ καὶ τοῦ φιλομάτου:

¹⁶ The Knights are known to have closed their harbour with two chains. The first, placed in 1476, was stretched across the mouth of the inner harbour, between the fort of S. John (on the windmill mole) and the 'Arak' (de Naillac's) tower, a distance of about 720 feet. The second, made in 1522, barred the wider mouth (1800 feet) between the fort of S. John and that of S. Nicolas. Both are described as thick and very substantial (Piccardi, *Itinéraire*, p. 24 f.). A third chain is said to have protected the narrow mouth (540 feet) of the north or galley harbour ('Mandraki') in Turkish times, and is mentioned by several authors so late as the second half of the seventeenth century (Thérèse (1656), *Voyages*, I. 369, copied by Le Beau, *Voyage*, I. 547; Verrard, *Choix Remarques* (1701), p. 330).

¹⁷ *Reisen auf den griechischen Inseln*, p. 83.

¹⁸ *Rhodes*, p. 121; cf. Biliotti, *Rhodes*,

p. 191.

¹⁹ See Mendel's preface to the *Sculpture Catalogue of the Imperial Museum*, I. pp. 2-31.

²⁰ *Catalogue du Musée d'Artillerie (Invalides)*, v. 35; *Woolwich Museum of Artillery, Catalogue*, pp. 29, 189; cf. Preface, xxxii. Many old guns of the Knights' time were seen by Newton in 1853 (*Travels and Discoveries*, I. 162); in the following year some of these had been taken and melted for the mint (Guérin, *Rhodes*, p. 117). The plundering of Rhodes had begun already by 1856 when the doors of the Hospital came to Versailles. The chain of Smyrna port is reported to be in the Archivio of S. Peter's (Hase, *Walks in Rome*, II. 274).

²¹ The volume is a mixed folio volume of theological work, mostly collections of canons with historical pieces and a few letters. It is mostly of the fifteenth century, but it also includes a portion of a twelfth-century MS.

λέγοντες ὅτι εἰς τὴν κθ' τοῦ μηνὸς μηνός τῆς ἁγίας Θεοδοσίας ἡμέρα τρίτη²² ὥρα γ' τῆς ἡμέρας ἐπεδήσαν οἱ ἄγαρηνοὶ²³ εἰς τὴν Κωνσταντινούπολιν τὸ φώσάτον²⁴ τοῦ τούρκου τζαλαπή²⁵ Μεεμέτ· καὶ εἶπον ὅτι ἐπέκτειναν τὸν βασιλεῖα τὸν κὸρ Κωνσταντῖνον τοῖς δραγασι καὶ παλαιολόγον· καὶ ἐγένετο οὖν μεγάλη θλίψις καὶ πολλὸν κλαυθμὸς εἰς τὴν Κρήτην διὰ τὸ θληβερὸν μῆνυμα ὅπερ ἦλθε· ὅτι χεῖρον τούτου οὐ γέγονεν, οὔτε γενήσεται· καὶ κύριος ὁ θεὸς ἐλεῆσαι ἡμᾶς· καὶ λυτρώσεται ἡμᾶς τῆς φοβεράς αὐτοῦ ἀπειλῆς·

Many similar chronological notes on the fall of Constantinople have been collected by Lambros.²⁶ This has a special interest in that the part taken by the three ships here mentioned is described in Barbaro's account of the siege.

On the 9th April 1453, when the great chain was stretched across the Golden Horn to keep the Turkish fleet out of the harbour, nine ships were appointed to lie inside the chain to defend it against possible attack. Amongst these were three Cretan, whose *patroni* and tonnage are given as follows: ²⁷

Ser Zaan Venier da Candia de botte	800
el Filamati de Candia de botte	800
el Guro de Candia de botte	700

Of these, the third and second are quite evidently the *καράβια τοῦ Σγούρου* and τοῦ Φιλομάτου of our note.

At the taking of the city the Venetian captain of the galleys of Tama, Aluvixe Diedo, seeing that the city was lost, went to the *podestà* of Pera to ask how the Venetians stood with the Turks, and whether it was not best for their ships to leave at once: the *podestà* replied that he would send a messenger to the Grand Turk to settle the question. This he failed to do but, to ingratiate himself with the Turks, he shut the gates of Pera, thus retaining the Venetian captain a prisoner. Meanwhile the crews in the harbour prepared to set sail without their captain. The latter, at last persuading the *podestà* to let him go, went on board. The ships began to warp themselves out till they came to the chain, which was still in position. They were therefore forced to cut the chain with axes. They sailed out and lay at Diplokiomion (Beshiktash) in the hope of rescuing some compatriots. As none were forthcoming, the fleet set sail at midday with a north wind of twelve miles an hour. They were thus able

²² [On this account the Greeks still hold Tuesday a *die nefas*: not having access to our manuscript, they regard the whole day superstitiously, avowing ignorance of the hour at which the Turks entered Constantinople. — M. M. H.]

²³ *I. e.* Moslems: cf. Theodor Balamoun (middle twelfth century) quoted by W. W. Story, *Roba di Roma*, ii, 31.

²⁴ The word seems derived from the Italian: *foussata* is the ordinary modern Albanian word for *army*. It occurs in a

fifteenth century Greek MS. from Mount Athos (P. Meyer, *Haupturkunden*, p. 171).

²⁵ *I. e.* Tchelebi.

²⁶ *Nici* EXA, 1910, col. 160 f. (Nos. 126-131).

²⁷ Barbaro, *Giornale dell' Assedio di Costantinopoli*, ed. Cornet, Vienna, 1856, p. 29. These Cretan ships on the chain are mentioned by Leonard of Chios and by Phrantzes (p. 218). The latter says two were from Kydonia and one from Candia.

to escape Turkish pursuit.²⁸ The three *patroni* of Candia are again enumerated slightly differently as *le tre nave de Candia, le qual son Ser Zuon Venier, ser Antonio Filanuti ed galina*.²⁹

It will be seen that in both enumerations three Cretan ships are mentioned, together with four *patroni*, of whom three coincide with those of the chronological note.

From the *chronica* of Zorzi Dolfín, written after 1478, we are enabled to glean something of the Cretan ships' further voyage. They arrived in four days at Negropont, where they met a Venetian squadron bound for the relief of Constantinople. The news eventually reached Venice exactly a month after by way of Lepanto and Corfu.³⁰

F. W. HASLUCK.

²⁸ Barbaro, p. 57 ff. The escape is also related by Zorzi Dolfín, *Belagerung und Eroberung von Constantinopel aus der Chronik von Zorzi Dolfín*, ed. G. M. Thomas in *Sitzb. d. b. Ak. Wiss.* 1868, II. p. 40.

²⁹ Barbaro, p. 59.

³⁰ Dolfín, *loc. cit.* For the date when the news was heard at Moscow see Hans Rot in *Beitr. zur Vaterl. Gesch. zu Basel*, 1881, N.F. p. 407.

THE MULTIPLICATION OF TOMBS IN TURKEY

It is by no means uncommon to find in Turkish, as in other Mahomedan lands, two or even more tombs attributed to the same person. The development of the supernumerary tomb or tombs is susceptible of several explanations, which are worth setting forth both for their intrinsic interest and as contributing to the knowledge of similar phenomena in other religions.

Duplicated tombs of perfectly historical persons are not unknown. Murad I., for instance, has authentic tombs at Brousa, his capital, and at Kossovo, where he fell. Tradition, which is probably in this case true, says that the latter contains his heart and bowels and the former his embalmed body.¹ The grave of Suleiman Pasha, son of Orkhan, who died and was buried at Bulair, is claimed also by Yenisehehr in Bithynia.² The explanation here may be the same as in the case of Murad I.'s two graves, or it may be that Suleiman established a pious foundation at Yenisehehr with a *turbe* intended to enshrine his remains. Similarly, the official grave of Osman, the founder of the dynasty, is at Brusa, though Sngut, his father's seat, lays claim to the honour.³

It would be interesting to know whether there lies at the back of this some half-forgotten custom of formally burying the *placenta*, as in ancient Egypt and modern (Moslem) Kordofan.⁴ That the *placenta* is considered of importance among the modern Turks I know from Dr. Chasseaud of Smyrna. Certain memorials commemorating the birthplace of saints (e.g. of Suhayb at Daouss⁵ and of Sidi Battal at Malatin)⁶ may be monuments raised over the supposed resting-place of their *placentae*.

In the case of legendary or semi-legendary personages it is easy to see that traditional 'graves' may be discovered and identified independently by different populations. Where a figure has won a large place in local legend, heroic or ecclesiastical, all remarkable sites and objects tend to be connected with his name. A remarkable tomb or sarcophagus, if such is discovered, is without question attributed to the local hero, and each community possessing such a monument naturally insists on the authenticity of its own and the false claims of all others. In this way Digenes Akritas, the Byzantine border-knight, has come to have three tombs, near Trebizond, in Crete, and in Karpathos.⁷

¹ Ippen, *Notiz Beirut*, p. 147.

² Hammer-Hollert, *Hist. Emp. Ott.* i. 202; d'Olauson, *Tablau de l'Emp. Ott.* i. 101; Seaman, *Orkhan*, p. 90.

³ Lenke, *Asia Minor*, p. 18.

⁴ Seligmann in *Bildgess. Egypte*, p. 451.

⁵ Le Strange, *E. Caliphate*, p. 134.

⁶ Hadji Khalifa, *tr. Armain*, p. 680.

⁷ *Polites, Byzantines*, Nos. 73 ff.

The remains of his Mealemi counterpart, Sidi Battal, are claimed, not only by the *tekke* bearing his name near Eski Shehr, but by Caesarea⁸ and apparently also by Kirshehr.⁹

In the case of Digenes folklore has undertaken to reconcile the conflicting traditions by the assumption that his body was so gigantic that it could not be buried in one grave, and, consequently, that each of the reputed graves was so far genuine that it contained a portion of his remains. A similar explanation is supplied by the well-used legend of the saint who carries his head: ¹⁰ one tomb is supposed to contain the head and another the body.

The dervish orders, probably with the precedent of popular stories of this sort before them, have elaborated the idea for the purposes of their propaganda. Of a Nakshbendi saint, Hassan Baba, it is related that, having incurred the wrath of a sultan, he fled through various cities, in each of which his disciples erected a cenotaph to delude the sultan's emissaries into believing that Hassan Baba was dead. Tombs of Hassan Baba exist at the village named after him at the entrance to Tempe, at Monastir, and at Kossovo: there are supposed to be seven in all. The Monastir tomb, as doubtless all the others, is locally claimed as the genuine one.¹¹

The Bektashi saint Sari Saltik is similarly credited first with seven and afterwards with forty tombs, but each is supposed actually to contain his body.¹² The story goes that the saint when dying gave instructions that seven coffins should be made and his body placed in one of them. The seven coffins were given to seven kings, each of whom found the body of the saint in the coffin allotted to him, and preserved it in his own kingdom. Three of these kingdoms were in Christian Europe, so that the alleged tombs in them gave a new impetus to Ottoman conquest. The extension of the number of tombs from seven to forty has aided in the identification of several Christian saints' tombs (notably those of SS. Naoum and Spyridon) with the miraculously multiplied tombs of Sari Saltik.

We may surmise that similar stories are circulated with regard to the saint Karadja Ahmed, who has been adopted into the cycle of the Bektashi. He has numerous tombs in Bithynia and Phrygia, with others at Scutari and Uskub.¹³

Both Sari Saltik and Karadja Ahmed seem to have been originally tribal chiefs, and as such before their adoption by the Bektashi have been worshipped as *epousui* in more than one place, where the tribe named after them had settled.

F. W. HASEGCK.

⁸ *Sheme, Anadolu*, p. 146; Le Strange, *E. Caliphate*, p. 146.

⁹ Le Strange, *op. cit.*, p. 152, n. 2.

¹⁰ See e.g. my 'Stones Cults' in *B.S.A.* xix, 72.

¹¹ F. W. H.

¹² See my 'Studies in Turkish History and Folk Legend' in *B.S.A.* xix, 203.

¹³ See my 'Ambig. Sanct. and Bektashi Propaganda' in *B.S.A.* xi, 110.

A BLACK-FIGURED HYDRIA OF THE POLYGNOTAN PERIOD¹

[PLATE VI.]

In 1903 the Russian Archaeological Commission purchased a hydria from a dealer at Olbia which is now in the collection of ancient vases in the Hermitage (Fig. 1). Being considered by some authorities a forgery, the vase was not published in the Report of the Commission.² I can assert that there is no doubt as to the authenticity of the vase. Apart from small injuries there are no important parts broken off or restored. The shape, but for some slight variations, is that of a typical late archaic hydria; sharp divisions are avoided, the shoulder being connected with the body by a soft curve and the same profile used for the foot. The ring above the foot is quite flat and not separated from the foot. On the lip of the vase there are two sharp projecting tongues instead of the "rotelle" of the archaic type (Fig. 2).

The handles are round and curved slightly upwards. The varnish is very bad and dull, being laid on very thin, so that the surface of the clay shows through. There are spots where the fire has turned the black varnish red. The clay is of a dull yellow colour, badly cleaned, with holes in the polished surface, evidently in consequence of small stones and pieces of glimmer which have broken away. The surface of the clay, in the panel reserved for the design, is of a reddish colour.³ The greater part of the foot, the stripes under the horizontal handles, the inner parts of all three handles and the outer part of the lip are left unvarnished. Judging from the quality of the clay and the special character of the varnish, the vase appears to be Etruscan work.

I must mention, indeed, that according to the assertion of the dealer the vase was found at Olbia: and local Etruscan ware does not appear in the Ionian Black Sea colonies. But the import of local Italic ware into Russia in modern times is very considerable; the statements of dealers cannot, therefore, be taken into account.⁴

The shoulder panel is separated from that on the body of the vase by a thin line; the ground line on the body is drawn rather high up on the vase.

¹ For information as to the provenience of the vase I am indebted to Mr. B. Pharmakowsky, who bought it on behalf of the Russian Archaeological Commission. The explanation given below, that the subject is taken from the myth of Kyklos, was suggested by Mr. Pharmakowsky and Mr. Boroffka.

² Inv. No. 3145 (Olbia, 1903, No. 69); h. 45 cm. Reproduced from drawing by Miss Ukhanova.

³ It is not the lustre used on Attic vases in order to give brilliancy to the clay, but a reddish colour like that on late Corinthian craters.

⁴ In the Hermitage collection there are specimens of Lucanian and Apulian vases bought from dealers as having been found in South Russia. Scientific excavations have never brought to light any piece of local Italic ware.

1. *The shoulder* (Plate VI.) : a hind (?) crouching, the head turned back, is attacked by a griffin on the left and a panther on the right. Each strikes the hind on the head with one front paw, and with the other attacks the legs of the hind. Eyes and claws are painted white. The arrangement of the two beasts is unusual and remarkable: the back parts are drawn in profile, the bodies turn very sharply outward so that the upper parts of the backs



FIG. 1.—ERESUNAN N.Y. HYDRIA IN THE HERMITAGE MUSEUM.

appear to be seen from above: the head of the panther is drawn in the same manner. Thus these two figures are shown not as in a plane but as if in space.

2. *The body* (Plate VI.) : Heracles bearded, club in his right hand and bow in his left, is looking to his left. He wears the lion-skin on head and back, the paws hanging down from the arms, the tail held in the left hand. The hair is rolled over the forehead. Above him is suspended his quiver; his scabbard has fallen between his legs, and looks as if it were standing on the ground. The eyes, teeth and claws of the lion are painted white. Parts of quiver and scabbard, and the handle of the club, are of the same colour, as if made of

metal. In the same position as Heracles (looking to left) a beardless warrior is moving to right in the position of attack, seen from the back and facing left. He swings the spear in his right hand against Heracles, holding his shield in his left: the device is a white star surrounded by dots. He is helmeted, and wears a corslet over his chiton: a sword hangs at his right side. His quiver has fallen between his legs. Eye, crest of helmet, edge of chiton, device on shield, metal parts of quiver, end of sword and sword-rings are painted white. On his right a strongly stylised branch grows from the ground-line. Between the two figures in the field there are three curved lines above a flower-like object in a holder decorated with volutes. It is obviously a thunderbolt; and the wavy lines thus represent the lightning. The lower part of the thunderbolt is meant to be entering the earth.⁵



FIG. 2.—DIAKON OF SAPPHO.

published by Klein⁶ and the vases in Naples and Berlin treated by Endt.⁷ The same use of white dots and stripes, the same style in the treatment of the body and the same arrangement of the folds are found on all these vases. Especially noteworthy is the use of the same system of composition:—certain of the figures are represented not in a plane, as is usual

Heracles in combat with a warrior, and the thunderbolt, suggest that the picture is an abbreviated representation of a gigantomachy, the complete composition being meant to include the Olympian deities. But the thunderbolt does not strike the warrior, it only separates the two heroes: for this reason I prefer the explanation mentioned above, that the scene is taken from the myth of Kyknos. Two passages quoted by Engelmann⁸ correspond exactly to the present picture: the first from Apollodorus (*Ἑλθεὶς ἐπαυρὸς διὰ λυγρὴν μάχην*); the second from Hyginus (*Jovis inter eos fulmen misit atque illos eos destruxit*): although the representations hitherto known include the figure of Zeus between the combatants.⁹

The group of vases which stands closest to our vase consists of the amphora

⁵ The form of the holder proves that the object is a thunderbolt represented in the form of a flower, and not a flower. I do not know exact analogies. In a less developed form the type occurs on the kylix of Olivos and Euxitheos at Corneio, *Mon.* X. Pls. 23-4; Jacobsthal, *Der Blüt.*, II, p. 69. Cf. p. 13 sq.

⁶ *Bowcher's Lec.*, s.v. Kyknos, p. 1692.

⁷ Unless the same myth is intended, on the bronze chariot from Perugia, a good analogy to the present scene, as rightly suggested by Mr. Boroffka, *Ant. Denkm.* II, Pl. 14; Peterson, *Röm. Mitt.*, 1894, p. 281.

⁸ *Oriental. Jahresh.*, 12 (1910), pp. 150 ff. Pls. V-VIII.

⁹ *Beitr. zur Jon. Vasenmalerei*, pp. 29 sq.

in the black-figured style, but in space. On the Hermitage hydria the left foot of Heracles is so drawn that the figure appears to be coming out of space; similarly, the left foot of Kyknos gives the motion of the figure into the depth of space; there is something like a turning of both the figures about an axis which passes through the thunderbolt. Like the archers on the Würzburg amphora, the figures are arranged in such a way that the motion of the upper part contradicts that of the lower part, the two forces counteracting each other and balancing the figure. Compare the tuba-blowers on the Berlin vase.

Above I described the Hermitage hydria as Etruscan; the same origin has been suggested for the Berlin vase by Furtwängler and Zahn.¹⁰ I think that the Hermitage hydria gives conclusive support to this view, the technical characteristics being obviously Italic; it is true that Ionian influence is predominant, and the vase is to be regarded as a variety of a species, not as a representative of an independent school.

As to the date, Studniczka¹¹ considered the whole group contemporary with the oldest red-figured vases; Endt¹² connected them with the Caeretan hydria and the Clazomenian style; Klein ascribes them to a late archaic Ionian school. The accepted date would thus seem to be the second half of the sixth century. This seems too early, even judging from certain features of the vases already known; the Hermitage hydria proves that these vases must be ascribed to an archaistic school of the Polygnotan period, that is, the second quarter of the fifth century.

The attitude of the two figures on the Hermitage vase corresponds to that of the Harmodios and Aristogeiton by Kritios and Nesiotes and similar figures; the drawing of the muscles is the same as on the Amazonomachy crater from Ruvo,¹³ where we also find parallels for the fore-shortened drawing of the legs and toes. The short, curved, incision-lines as a whole are in favour of a later rather than of an earlier date. The Würzburg amphora itself has certain characteristics which point to this late date. In the shoulder-picture representing Aphrodite rescuing Aeneas there are two archers drawn from behind with feet like the warriors on the Petrograd hydria and the Ruvo crater. The figure as a whole is almost identical with the archers on the Polygnotan crater in New York,¹⁴ only seen from behind; in the other shoulder-picture the figures are stepping out like those of the Kritios and Nesiotes group. In the Berlin vase the two men with the tubae are identical with the archers on the Würzburg amphora. This late date—between 470 and 460—explains the very vigorous drawing of the centauromachy on the Naples hydria, and the general freedom and carelessness, which recall the fifth-century Panathenaic amphorae or even the Cabirion vases.

I do not deny the close connexion of our vases with Ionian schools like that of the Clazomenian and Caeretan groups; indeed I consider them a late derivation from the same archaic school; but the pictures on the body of the Naples hydria and the Würzburg amphora are not in pure archaic style: the severe

¹⁰ See Klein, *l.c.* p. 151. Studniczka and Klein prefer to assume an Ionian fabric.

¹¹ *Jahrb.*, 1896, p. 208.

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¹² *Beitr. zur. ion. Vasenmalerei*, p. 32.

¹³ Furtwängler-Roehrdorf, *Pl.* 26-28.

¹⁴ *Ibidem*, pp. 117-18.

parallel lines of the drawing on the Berlin vase and other particulars in the drawing of the folds—for instance, the ends of them—are archaistic rather than archaic. It is interesting to note that the artist has tried to draw the main pictures in the archaic manner, using the free style of contemporary art only for some of the figures in the minor friezes. The reason may perhaps have been a religious one.



FIG. 3.—COLUMN-CRATER IN THE HISTORICAL MUSEUM, MOSCOW.

In conclusion, I think that peculiarities in the forms of the beasts adorning the shoulder of the Hermitage hydria will throw fresh light on the date of certain groups of Etruscan vases which have hitherto been termed late archaic. Lack of adequate reproductions renders it impossible to treat the subject in detail. I publish here a column-crater in the Historical Museum of Moscow (h. 24.2 cm.; diam., including handles, 25.7 cm.); this vase is closely akin to the Hermitage hydria both in shape and in drawing, but is also closely connected with a large group of Etruscan vases (Fig. 3). This group, or part of it, must therefore be dated much later than has been done hitherto.

The Moscow crater belonged to the Samokvassoff collection, which was formed in Russia, but not by means of scientific excavations; it is obviously Etruscan work, clay and varnish having the characteristic dull colour, and must have been brought to Russia in modern times. Foot, handles and neck are black: on the body, three-winged sphinxes walking to the left on a very high ground-line; on the shoulder, dots and tongues with white dots and stripes; on the upper edge, palmettes with volutes and ivy-leaves (Fig. 4). The contour of foot and foot-ring is the same as in the Hermitage hydria; and



FIG. 4.—COLUMB-CRATER: UPPER EDGE.

details such as the drawing of the paws and the eyes, and the use of white dots, connect it with the same vase. But the crater belongs to a well-known group of "Etruscan" vases, many of which are published in Sieveking and Hackl's *Catalogue* of the Munich collection, p. 89 sq. I draw attention to the vases Nos. 870 and 879 on Pl. 37 and Figs. 139-140, the former an amphora, the latter a hydria. Not all the vases enumerated in the *Catalogue* (*i.e.*) are of the late date proposed for the Hermitage hydria and the Moscow crater. It seems highly probable that a development could be traced from the late archaic period to the archaistic vases treated in this article; but the identity of school and style cannot be denied.

OSCAR WALDHAUER.

Petrograd.

THE DATE OF THE ATHENA ROSPIGLIOSI TYPE.

[PLATES VII., VIII.]

THE great number of replicas¹ of the youthful Athena known as the Rospigliosi type proves that the original was a famous statue. The bad state of preservation as well as variations in the different copies have made it difficult



FIG. 1.—ATHENA, FLORENCE.

to date the original; the lack of good reproductions has also caused misunderstandings and has led astray the scholars who have dealt with the type. I think it necessary, therefore, to publish here a Hermitage fragment of very good workmanship, which is untouched and un-restored by any modern master. I shall not here undertake to explain the strange attributes—stars on the aegis, sea-monster in the Rospigliosi statue; the present purpose is merely to fix the date of the original.

The fragment reproduced here² for the first time in fairly good photographs (Plates VII., VIII.) was found in 1823 in the so-called Vigna del Collegio Inglese on the Palatine at Rome, and formed part of the Museo Campana until 1861. The Emperor Alexander II bought a part of this collection for the Hermitage; among these marbles

the fragment of the Athena statue found its way to the then newly-arranged Museum of Ancient Sculpture. Being only a fragment it was exhibited in a rather dark corner and could not be sufficiently well studied. A rough drawing in Gerhard's *Antike Denkmäler* and a very small illustration in Kienitzky's *Catalogue* of 1901 were the only accessible publications. Still the good, precise

¹ *Fortwängler, Alciatore*, p. 557, n. 1. Theodore Reinach: see below, n. 18.

² Hermitage, 262. Description by

Kienitzky (1901), No. 24a, by Gaidéonoff, 135. Gerhard, *Ant. Abh.*, p. 24, *Ant.*

Bilder, VIII. 2. Total height 1.15 m.

execution of the fragment as well as its untouched condition ensure a prominent place for it in the list of replicas.

The head with part of the neck, the feet and legs as far as the edge of the mantle, the right forearm and hand are broken off and missing. The rest, as remarked above, is quite intact and of very good workmanship; the surface is slightly polished, as was usual in the time of the Emperor Hadrian. On the back between the shoulder-blades a *pentello* is preserved, as used by copyists for measuring with a compass.

The statue in Florence² (Fig. 1) is in the best state of preservation, except for the right arm, which is wrongly restored; but the head, which was broken off, is joined to the figure in the right position. These two best replicas agree with each other in all the main lines; we can therefore take them as true copies of the lost original. The replica found in Rome on the site of the temple of Minerva Medica³ gives also the same lines, as far as we can judge from the very bad drawing published in the *Monumenti*.

Three replicas differ from the type as represented by the copies quoted. The statue in Palazzo Rospigliosi⁴ with the head wrongly joined to the figure is somewhat simplified by the copyist in the treatment of the mantle. A very characteristic feature of the style as shown by the first three copies is the series of curved lines along the right side of the figure interrupting and varying the monotony of the long oblique lines. These eye-shaped curves are omitted by the master of the Rospigliosi replica, so that the parallelism of the folds is still more



FIG. 2.—ZETA, DRESSER.

² Dötschke, *Ant. Bildw. in Oberitalien*, III, p. 152. Amelung, *Palmyr.*, No. 77. Gerhard, *Ant. Bildw.*, VIII, 3. The photograph reproduced is Plat., *Alinari*, No. 1265; Amelung's statement: "Restored are the right arm from the middle of the upper arm, the lance, pieces of neck, of breast and of legs, the nose, the fore-part of the helmet."

³ *Mus. dell' Inst.*, Suppl. XXVIII, 1.

⁴ Matz-Duhn, *Zentralt. Bildw.*, I., No. 621. Arndt-Amelung, *Essays on the History of Art*, III. Matz-Duhn's description: "The head

was broken off, but belongs to the figure; the nose is restored. The right arm from the middle of the upper arm is also restored, but the direction is given by the support on the right hip. Perhaps the statue held a lance, as on the sea-monster a trace of a support can be made out. New are also a part of the mantle edge on the left arm, a piece of the right leg from the middle of the calf as far as the foot, the body and the tail of the sea-monster."

emphasised. The tendency to give a stronger character to the whole is obvious also in the disposition of the folds on the upper edge in relation to the lines on the body. The Florence replica and the Petrograd fragment offer a somewhat sharp contrast between the heaped mass of folds on the upper edge, and the more isolated lines on the body. There is no such contrast on the Rospigliosi statue, the lines on the upper edge being less deep, the parallel folds on the body more abundant. Lastly, the lower edge of the mantle is not formed by a horizontal line, but by an oblique one, parallel to the main folds on the body.



FIG. 3.—BOYA, FRIEZE OF THE PASTOPHOROS. (N. 13, 17, 18.)

The torso in the Galleria Lapidaria of the Vatican ⁶ shows changes in the same direction, but in this case the folds between the left arm and the body are also treated in another manner, just as in the Rospigliosi statue.⁷ The Berlin replica ⁸ is worked over and cannot be taken into account.

This comparison shows at least two replicas of good workmanship which agree with each other, the others differing in many points but not forming a separate type. We are therefore right in basing our judgment with regard to

⁶ *Gall. Lap.* 29; *Amelung, Vat.* I, p. 190 sq., Pl. 22; *Hofsg. Führer*, I, No. 32.

⁷ The lines represented on this replica are singular and not given by any other

replica; they cannot, therefore, be used for comparison concerning the original.

⁸ *Beschreibung*, p. 73.

the style on the first two copies: the Florence statue and the Petrograd fragment.

Athena is represented as a young girl⁹ clad in a short chiton with short sleeves and a mantle; the mantle lies on the left shoulder, is drawn across the back under the right arm and is thrown again over the left shoulder, covering the left arm. The aegis is treated quite differently in the various replicas; therefore in all probability on the original statue there was no aegis at all. Most of the copies show the aegis covered with stars,¹⁰ a peculiarity on which were based different explanations. But it is a fact proved by many examples that



FIG. 4.—POSEIDON, FRAGMENT OF THE PACTERION

copyists enriched their works with various details: on the replicas of the type in question there occur a sea-monster and an owl, obviously also to be regarded as additions made by the copyists. The varying details on the aegis—stars, gorgoneion—prove that there was no sure tradition about the distribution of them, and therefore it must be concluded that this part also we owe to the caprices of the copyists. The right leg is placed slightly forward, the left hand rests on the hip. The lost right arm hung downwards, as proved by the traces of supports on the Rospiigliosi replica. The fragment in the Hermitage shows the same traces: one support, obviously for the right arm, is

⁹ On the Hermitage fragment the form of the right breast is obviously exaggerated.

¹⁰ Except the statue in Palazzo Rospiigliosi and in Berlin.

to be seen on the right leg near the hip, another one in the middle of the right calf. The right hand was slightly turned, as proved by the piece of the forearm preserved. It seems, therefore, most probable that the right arm hung down and held the lance; the trace of a support on the right calf perhaps connected this lance with the leg; the lance was leaning against the right shoulder.

The expression of the statue is based especially on the upward movement of the head. The impression of strong motion is further produced by the parallel oblique lines of the mantle. But, again, the position of the right hand making together with the lance a straight, nearly vertical line, and the heavy vertical folds on the left side, furnish a strong frame and counteract the motion. It is very characteristic that the plane formed by the shoulders almost coincides with the plane laid across the hips, i.e. the body in itself has very little motion. The statue offers, therefore, a most interesting combination of repose and movement.

The date of the original has been fixed in the first years of the fourth century. After Wolters¹¹ had been inclined to connect the statue with Hellenistic art, Furtwängler¹² tried to prove that the original belonged to Scopas. Amelung¹³ denied Scopasian character in the head, remarking that the form of the eyes did not show any signs of the new manner of expressing pathos, being drawn in a rather earlier manner. He proposed, therefore, to ascribe the statue to Timotheos, the master of the Nereids from Epidauros and of the Leda type.

We must first put the question whether the strong scheme of composition corresponds to the aims of fourth-century art? Whether a master even from the end of the fifth century would not try to enlarge the impression of pathos and movement by means of more complicated and expressive movements of the arms, especially of the right arm? But, of course, these questions must only weaken the assumption of a late date for the statue. Amelung himself¹⁴ has shown the development of the form and lines given by the mantle thrown over one shoulder. Parallel folds in an oblique direction proved to be in the fifth-century manner. But there are sculptures undoubtedly belonging to the middle of the fifth century which offer the most striking analogies to the Athena type in question.

Let us first take the statue of Zeus in Dresden¹⁵ (Fig. 2) and compare the lines of the folds of the mantle. The edge below is almost a horizontal line, only the first fold turning upwards parallel to the upper edge; then we see a series of parallel oblique lines interrupted by eye-shaped, curved lines. This system corresponds to the treatment of the mantle on the Athena statue. The folds falling under the left hand are almost identical on both figures; very close appear to be the small folds cut in under the right arm. The particular treatment of the folds on the right side as described above occurs also in the type of the Hope Athena.¹⁶ Lastly, the date is fixed precisely

¹¹ Friedrich-Wolters, *Gipsabgüsse*, 1438.

¹² *Meisterwerke*, p. 327.

¹³ *Führer*, No. 77; Holbig, 1st Nov. 32 and 101; *Annalen*, III, p. 98 ff.

¹⁴ *Basile von Mantinea*, p. 33 sq.

¹⁵ *Tron, Festschrift für Bemmelfeld*, p. 39 sq., Pls. II, III; Herrmann, *Verzeichnisse* (1915), No. 68 (with plate).

¹⁶ *Preyer, Jahrb.*, 1913, p. 244 sq.

by the striking analogy offered by the boy *hydroporoi* on the Parthenon frieze¹⁷ (Fig. 3): the position of the figure, the angle formed by the right knee, the folds under the knee are the same; the eye-shaped curved lines belong to the system of folds represented best in the Poseidon of the east frieze (Fig. 4).

The identity of style in all these figures compels us to date the original of the Athena type in question in the decade 450-440 B.C.; the waved lines of the chiton even show vestiges of the 'strong style' of the preceding period.

The question now to be asked is if the head agrees with so early a date. The movement as such is well known as occurring in the early fifth century from the famous Eros Soranzo of the Hermitage.¹⁸ Many of the Athena copies show indeed features of a much freer type; the Rospigliosi head on the other hand has obviously severe features; but this latter copy showing archaistic tendencies, the exaggeratedly severe expression of the head is not a proof. Mr. Théodore Reinach recently published a bronze head in his collection, a replica of our Athena¹⁹ (Fig. 5). It is most characteristic that this head as published in his plate, i.e. full-face, does not give the impression of pathos; on the contrary, if we did not know to what statue the head belonged, we should be inclined to ascribe it to a statue in repose. It is the same with the head of Myron's Discobolos, which does not at all reflect the movement of the body. Comparing this head, e.g., with the head of the Hope Athena, there cannot be any doubt that its style corresponds to the sculpture of the middle of the fifth century as well as the stylistic features of the body.

The result seems a little strange. A statue of Athena, representing the goddess as a girl, belonging to the time of Phidias! But Myron's well-known Athena is a real predecessor of it. If Hermes was represented as a youth by a



FIG. 5.—BRONZE HEAD OF ATHENA.
Th. Reinach Coll.

¹⁷ North, VI. 18. For the folds see especially V. 13.

¹⁸ No. 102; Kiewitzky, No. 153. Waldhauer, *Pythagoras* (in Russian), p. 72 ff.

¹⁹ *Gazette des Beaux-Arts*, 1922, Juillet.

Ag. 24 ff. His theories that the Athena belonged to a group by Kephisodotos and that the Sophocles statue offers analogies cannot be adopted, as shown above.

master belonging to the group of the Olympia sculptors,²⁰ why could not Athena have been portrayed in the same way? The fact proves once more that the fifth century anticipated many if not most ideas developed further by the fourth century and later.

We cannot name any master for the original of this charming type. It must be an Attic sculptor, who worked in the time of Phidias, but was endowed with the energy and artistic keenness of the preceding period.

OSCAR WALDHAUER.

Petrograd.

²⁰ Bieber, *Ath. Mitt.*, 1912, p. 174, the replica in Pal. Cosani, E.-A. 318.

AN INDEX OF GREEK LIGATURES AND CONTRACTIONS

INTRODUCTION

THIS Index owes its origin to the deciphering of a folio printed in Greek in Paris in 1628. As other books came under my eye, I found that in addition to the ligatures which I had analysed there were still many others, and I was so beguiled by their manifold and often obscure forms that I went far afield in my researches. It was surprising, no less than disconcerting, that with the exception of Proctor, to whom reference will presently be made, no one in modern days had occupied himself with a phase of Greek typography which, owing to its crabbedness and elusive contractions, based no doubt upon the Tironian practices of the scribes, had estranged students from the study of later Greek literature.

Beginning with the Baskerville fount of 1763, I worked backwards, overtaking the Paris fount, till, with a Froben as a complication, I was entangled in an Aldine. This led me to Proctor's erudite monograph on *The Printing of Greek in the Fifteenth Century*, which was of great value, for by its means I was able to verify my own decipherings and at the same time to add to my list fresh examples from the texts and founts which he had analysed.

Apart from Proctor's work only three lists were accessible. The first was that of Aldus Manutius (1494-5), who gave clues to the more complicated sorts¹ in one of his founts, adding that he passed over many 'connexiones' as they could be identified very easily. The next list was that printed at the end of the Greek Grammar of Ramus (Hanover, 1605), in which the Aldine 'connexiones' were included and others as well, a thoughtful proceeding if the Grammar was to be of any use, for it was printed almost entirely in ligatures. There were over 300 examples in this list. The last was the *Grande Police* of Fourmier le jeune, Paris, 1764, which gave 376 ligatures in a fount of 776 sorts.

Obviously these lists could print only such sorts as existed in their founts; the Fell types, for instance, had extremely few, a sign that the English printers had begun to discard the ligature in favour of the simple sort.

Owing to the melting down of founts containing ligatures, an Index of this kind cannot be printed from type; it has to be copied by hand and reproduced by process from the manuscript. When it is considered that in an old fount there were hundreds of sorts—sometimes over a thousand—it is conceivable that in the preparation of this Index of over 500 ligatures some rare examples may have been overlooked, and therefore any additions will be gratefully acknowledged. When a fresh fount was examined its contractions were

¹ A "sort" is the printer's term for a single character or piece in his fount.

compared with those already noted in order to secure accuracy. The deciphering was simple when a modern reprint was available, but the works which afforded the richest harvest were for the most part strange treatises on all manner of subjects, from Astronomy to Gastronomy, which had remained enshrined if not interred in their original garb. In these the open letters of a word threw light upon the ligature, and when these failed, examples and sentences had to be collated. Again, though the meaning of a ligature was clear, its shape was not accepted until a number of specimens in the same book had been examined in order to exclude the possibility of a batter or broken type.

This is not the place to discuss what was the unit in a combination sort. My sole purpose is to assist the eye of the student, and purists in typography will perhaps visit me with their censure for including as a ligature a combination which consists of a 'kern' and a ligature. A 'kern'—French, *créné* or *crénage*—is defined as 'that part of a letter which overhangs its body, as in a lower-case l.' (Jacobi, *Printing*, sixth edition, p. 63). But in Greek typography a 'sort' is said to be 'kerned' when part of the body or shoulder is cut away so as to allow the next 'sort' to be brought so close that there is no visible space between the two. Thus *sigma alpha* or *tau alpha* (there are many other instances) were frequently kerned so as to present an unbroken continuity, and as they appeared to run into one another they were accepted as ligatured. Hence it is possible that some of the examples were copied from two sorts so neatly kerned that they looked like one. My aim, however, was to reproduce appearances and shapes rather than to split hairs over typographical niceties. Accents and breathings are shown when they form part of the ligature, but in doubt the word itself, and failing it the context, will prove the surest guide.

It is rather late in the day to asperse the practices of the early designers of Greek founts or to quarrel with their type-setters. *Litera scripta manet*. What the 'litera' meant is the whole function of this Index. The compositor who read *alos* as we prefer it had no scruples about printing it as *αιος* and *διος* in one and the same line. Compare xi. 20 and 21. In one fount *απαρισκω* occurred with a different ligature for each *ap*, as though the breathing demanded discrimination. The compositor merely picked up the sort that was nearest. There are dozens of instances of misplaced accents and breathings, of different sorts and different ligatures for the same letters in one line of print. The crux in xix. 18 might weigh against accuracy in transcription. But it is just these liberties which the fifteenth-century compositors took which disconcert the scholars of the twentieth. Examined in the light of scholarship the ligature is wide of the mark in the placing of a circumflex over a short vowel, but the contraction exists in print. What happened was this. The compositor had to get in the words *λαυδαντες* *αυς*, but in order to justify his line he left out the space and ran two words together. So he kerned *omikron* and *tau*, put the apostrophe and breathing over *omikron*, and the circumflex on top. A short vowel circumflexed is, like metal on metal or colour on colour in heraldry, *pour enqueris*, and an Index of this kind, if it is to serve its purpose, must contain examples of inconsistencies and perversions, for it is these, far more than the stereotyped ligatures, that are difficult to interpret.

Ligatures are more easy to read when they are detached from the words in which they occur, and therefore when a syllable or word has a variety of ligatures, as iii. 1 to 8, the reading is given once only so as to avoid crowding and repetition. Detached specimens of a single sort, such as ii. 18, or xxiii. 13, are written on the same line.

The sorts in brackets show the manner in which symbols and contractions are combined with sorts, as in xi. 23 and xxiii. 12. The sort viii. 2 is an example of an apostrophe and rough breathing kernered, though it looks like an error in transcription. It is the unexpected that complicates deciphering, especially in founts of small size, and it is safer not to pillory the interpretation of a ligature without patient inquiry, for, however wrong the compositor, the scrupulous transcriber cannot be held accountable for breaches of scholarly decorum. The pitfalls are many, but it is hoped that this *farrago literarum* will be of some use in allaying the apprehensions of those who have been deterred from investigating early books printed in Greek owing to the forbidding aspect of their typography.

I wish to acknowledge my indebtedness to Mr. V. Scholderer of the British Museum for his interest and advice, and for his calling my attention to some examples which I had overlooked.

WILLIAM WALLACE.

	i	ii	iii
	α α' α'' α'''	αρ αρ	γαρ γαρ
	α' α'	α' α'	α' α'
	αβι αβι	αβι αβι	αβι αβι
	αβω αβω	αβω αβω	αβω αβω
5	αι αι	αι αι	αι αι
	αλ αλ	αλ αλ	αλ αλ
	αλλ αλλ	αλλ αλλ	αλλ αλλ
10	αμ αμ	αμ αμ	αμ αμ
	αμ αμ	αμ αμ	αμ αμ
	αμ αμ	αμ αμ	αμ αμ
	αν αν	αν αν	αν αν
15	αυ αυ	αυ αυ	αυ αυ
	αυ αυ	αυ αυ	αυ αυ
	αυ αυ	αυ αυ	αυ αυ
	αν αν	αν αν	αν αν
20	αξ αξ	αξ αξ	αξ αξ
	απο απο	απο απο	απο απο
	αυ αυ	αυ αυ	αυ αυ
	αυ αυ	αυ αυ	αυ αυ
	αυ αυ	αυ αυ	αυ αυ
25	αρ αρ	αρ αρ	αρ αρ
	αυ αυ	αυ αυ	αυ αυ

IV	γ	γον	V	δι	δι	VI	ειναι
	γγ	γε		δια	δια	εκ	εκ
	γυ	γυ		δια	δια	ελ	ελ
5	γυ	γυ		δρ	δρ	ελατταν	ελατταν
	γυ	γυ		δω	δω	εν	εν
	γω	γω		δω	δω	ειν	ειν
	γω	γω		δω	δω	ειν	ειν
	γω	γω		δω	δω	ειν	ειν
	γω	γω		δω	δω	ειν	ειν
10	δα	δα		ει	ει	ειν	ειν
	δα	δα		ει	ει	ειν	ειν
	δα	δα		ει	ει	ειν	ειν
	δα	δα		ει	ει	ειν	ειν
15	δα	δα		ει	ει	ειν	ειν
	δα	δα		ει	ει	ειν	ειν
	δα	δα		ει	ει	ειν	ειν
	δα	δα		ει	ει	ειν	ειν
	δα	δα		ει	ει	ειν	ειν
20	δα	δα		ει	ει	ειν	ειν
	δα	δα		ει	ει	ειν	ειν
	δα	δα		ει	ει	ειν	ειν
	δα	δα		ει	ει	ειν	ειν
	δα	δα		ει	ει	ειν	ειν
25	δα	δα		ει	ει	ειν	ειν
	δα	δα		ει	ει	ειν	ειν
	δα	δα		ει	ει	ειν	ειν
	δα	δα		ει	ει	ειν	ειν
	δα	δα		ει	ει	ειν	ειν

vii	ερ	ερ	viii	η η κ λ λ η	ix	κ λ λ
				ω η		κα
				ω η		και
5						κα
						κα
						κα
						κα
						κα
						κα
						κα
						κα
10						κα
						κα
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25						κα

intervention of demon or devil. It is, however, easy to criticise details: the important fact is that the later Roman Empire has been included within the scope of the book. Teachers would welcome an English translation.

N. H. B.

Deux Typica byzantins de l'époque des Paléologues. By H. DELEHAYE.
(= Extrait des Mémoires publiés par l'Académie royale de Belgique (Classe des lettres, etc.) Collection in 8°. Deuxième Série. T. XIII.) Pp. 213. Bruxelles: M. Hayez, Imprimeur de l'Académie royale de Belgique, 1921.

Every new book published by Père Delahaye only causes the reader to wonder the more at the depth and breadth of the author's scholarship, at his critical acumen, at the sanity of his judgment.¹ In the present work he has reproduced the typicon of the Monastery of Our Lady of Good Hope (ἡγία Θεοτόκος Ἐλεούσα) from a MS. of Lincoln College (Greek 35) now in the Bodleian, and the typicon of the Monastery of Lips identified by him in the MS. of the British Museum (Addit. 22745). To these is added the still rare *horos* τυπικὸν ἡγίας Ἀννίσσης τοῦ ἐπημερεύοντος τοῦ ἐπὶ δρανγάρῳ Σίμων from the Bodleian MS. Canonici 19. The founder of the Convent of Our Lady of Good Hope was Theodora, the daughter of the Sebastocrator Constantine, brother of the Emperor Michael Palaeologus (1259-1292); in his discussion of the typicon Père Delahaye considers the relationships of the different members of the family, particularly with reference to the poems of Manuel Philes. The Convent of Lips was originally founded by Constantine Lips, drangarius of the fleet under Romanus and Constantine Porphyrogenetus: the present typicon relates to its re-foundation, after the Latin occupation, by Theodora, widow of Michael VIII, the aunt of the founder of the Convent of Our Lady of Good Hope. The first typicon gives an elaborate topographical circumscription of the limits of the convent lands, but we are unable, nevertheless, to locate the site with any certainty, and as Père Delahaye remarks, "Bien ne montre mieux que l'embarras que l'on éprouve au milieu de cette abondance de détails combien la topographie de Constantinople est encore mal connue" (p. 152). In reading any detailed account of life in the capital (e.g. the miracles of S. Artemidus) one cannot but feel the extent of our ignorance of that topography. Père Delahaye's discussion of topographical questions is thus very welcome, and in particular may be noted his remarks upon the term *ὑπομνησμός*, since that title of the Virgin has caused great confusion amongst modern writers. The organisation of these convents and the regulation of monastic life are carefully considered (e.g. the food, ecclesiastical festivals, etc.), while the student of monasticism will be specially grateful for the admirable bibliography which Père Delahaye has compiled of all published editions of Byzantine typica.

The writer of this notice recently suggested in this Journal that the time had come to attempt a history of East Roman monachism; but the life of the *cenobite* in the Byzantine world can hardly be separated from that of the solitary: the two themes are intimately connected. Could not a corporate effort be made to produce a history of asceticism in the East Roman Empire on an adequate scale, written not only with knowledge, but with intimate sympathy? The sensitive intuition of Hall, the first-hand acquaintance of monastic life possessed by Dom Butler, the textual scholarship of Kurtz, the mastery of the literature and methods of hagiology of Delahaye—could not all these be brought into collaboration? With the aid of Marr and Peeters, of Kamshark and Bouda, of Loparev and Latunsher, of Anrich and Lietzmann—to mention no other names—a work might surely be produced which would illuminate the whole development of Byzantine religious thought. Is the idea chimerical?

NORMAN H. BAYNES.

¹ Cf. his recent work on the Egyptian martyrs and his *Les Saints syriens* (Brussels, 1923).

Kopien und Umbildungen griechischer Statuen. By GEORG LITTOLD. Pp. 293. Munich: C. H. Beck, 1923. 8s. 10d.

An exhaustive study of the practice of copying statues in antiquity. The school of Pergamon appears to have been the first to have systematically reproduced famous sculptures and the industry was soon flourishing in various centres of Asia Minor and above all at Athens, which seems to have been the source of supply for Rome and Italy up to the beginning of the Empire. The choice of subject and local peculiarities of the various schools are discussed at length and the problem of chronology receives ample discussion. The work is an important contribution to our knowledge of the industrial medium through which our knowledge of ancient sculpture is largely derived. It is to be regretted that no illustrations are provided.

O ANOTYMIANISMOS. By A. KERAMPOPOULOS. Pp. 144, with 21 illustrations in the text. Athens: *Hestia*, 1923.

A study, based on literary evidence and on the recent discovery of a burial ground for criminals near Old Phaleron, of Attic methods of capital punishment, more particularly of the much favoured method of clamping to a board, or *δρεσπερσμός*. The book, which is written in Greek, is not pleasant reading and might be recommended as a corrective to the conventional rose-coloured view of ancient Athens. When we remember the oft-repeated dictum of our school books that slave-torture and punishment in Athens must have been child's play in contrast with the brutality of Rome, it is refreshing to read Mr. Keramopoulos' candid confession that a Roman death by crucifixion was a speedy and humane end in comparison with the lingering horror of the Greek method.

Tartessos: ein Beitrag zur ältesten Geschichte des Westens. By A. SCHULTEN. Pp. viii + 93, with 2 maps. Hamburg: L. Friederichsen & Co., 1922.

This is an account of the history and civilisation of Tartessos, the Biblical Tarshish. Our difficulty in reviewing it is that we do not know how much of it is seriously intended. We agree that Tartessos existed, quite probably somewhere in Andalusia; we cannot contradict our author when he thinks that it rose in the second millennium B.C. and fell about 500 B.C.; we are quite willing to add it to the long list of possible origins for the Atlantis legend; we see no reason why the Hellenic Geryon may not have been a king of Tartessos; nothing would surprise us less than that it possessed a highly developed civilisation with excellent political institutions and a far-flung cultural and industrial empire; and our hearts burn within us when we think of the Tartessian literature six thousand years old. But after raising our enthusiasm to fever height, it was unkind of our author to bring us to earth by the brutal candour of the title of his last chapter—'Where was Tartessos?' Let us echo his pious wish that some Schliemann, some Arthur Evans, may speedily arise to discover for us the treasures of this Knossos of the West.

Der Fries des Tempels der Athena Nike. By CARL BRUNEL. Pp. 41, with 9 plates. Berlin: Joseph Altmann, 1923.

A study of the sculptured frieze of the little temple of Wingless Victory on the Acropolis. The author divides the extant slabs between three or possibly four artists: a sculptor of the Phidian school, whose work must be earlier than the frieze of the Theseion; a follower of the Attic-Ionic school of about 420 B.C.; a third artist of similar date, but with a more decorative style, with whose work may be compared the balustrade reliefs; and one slab appears to be a restoration, or imitation of other parts of the frieze. These results confirm

the view of Dörpfeld, that the temple was commenced about 450-440 B.C.; its construction was suspended while Pheidias was engaged on his great project of the Propylaea and finally completed in the Post-Pheidian period.

Warfare by Land and Sea. By E. S. MACARTNEY. Pp. xix + 206, with 4 plates. George G. Harrap & Co., 1923. 6s.

This is one of the series of handy volumes published in America under the title of 'Our Debt to Greece and Rome.' It is written with the Great War uppermost in the author's mind, and may be described as a series of comparisons of ancient and modern practice in respect of tactics and strategy, the moral being that the principles of war are the same in all ages. This is no doubt true, and to emphasise those points of similarity is no doubt legitimate from the point of view of the authors of the series, but the result is to give rather a confused idea of what ancient military methods really were.

Les Arts somptuaires de Byzance. By JEAN ERMENOLT. Pp. 164, with 67 illustrations in the text. Paris: Ernest Leroux, 1923.

A study of the luxury arts of Imperial Byzantium, drawn from both literary sources and extant remains—embroideries, ivories, metal-work. The author shows the care exhibited by Constantine and successive emperors to foster the industries of the capital, and traces the development of fashions in dress and ornaments up to the taking of Constantinople. Concluding chapters discuss the reaction of the two influences—Classical and Oriental—which went to build up Byzantine art. Every page of the text, like the illustrations, is stiff with cloth of gold and precious stones; but it is surprising that in so sumptuous a work the principal illustrations were not given in plate form; the book would have gained considerably from a few reproductions in colour.

The Arts in Greece. By F. A. WASHBURN. Pp. viii + 111. London: Longmans, Green & Co., 1923. 6s.

Three essays dealing respectively with Greek dancing, music and painting, and emphasising the different conception of these arts in ancient times. Of the three sections, that on music is the most interesting, and the writer's comparisons of Greek poets with modern composers are happy. The essay on painting largely deals with vase-paintings, a subject on which the writer does not appear to have up-to-date knowledge; his account of Euphronios reads as if compiled in the light of the knowledge of a generation back, nor is it fair to Brygos to single him alone out for the pillory on the score of indecency.

Histoire du Costume antique. By LÉON HERTZ. Pp. xv + 308, with 8 plates and 142 illustrations in the text. Paris: Edouard Champion, 1922. Fr. 60.

A series of studies of drapery forms as found on Greek and Roman monuments compared with the effect of experiments upon the living model; in some parts the work incorporates earlier essays upon the same theme by the veteran author who, we learn from the preface of M. Edmond Pottier, did not live to see the publication of this book, in which he summed up the results of many years of demonstrations of the principles of antique drapery for artists and dramatists. The result is a work which will be welcomed with acclamation by the fancy-dress designer, and which fairly exhausts the variations of arrangement possible for the quadrangular piece of cloth which forms the basis of ancient costume. The title is somewhat misleading, as there is singularly little attempt to treat the subject historically and all elements of costume other than body drapery are entirely omitted.

Musées Impériaux Ottomans: Catalogue des Sculptures grecques, romaines et byzantines. Pp. xii + 668, with 576 illustrations in the text. By GUSTAVE MENDEL. Constantinople: Imperial Museum, 1914.

The earlier volumes of this monumental work were reviewed in this Journal in 1913 and 1915; we now signalise the entry into the Library of the Society of the third and concluding volume, which apparently was prepared and printed in 1914, but which has only now come into publication. Regrettable as the delay is, it has not diminished the value of M. Mendel's work. In appearance and general arrangement, this part is similar to its predecessors; each monument receives the same minute and detailed description accompanied by full bibliographies, illustrations and diagrams. In one respect, the intrinsic beauty of the monuments it contains, this volume, as the author frankly admits, is inferior to its forerunners; its contents comprise no important architectural *ensemble*, no single piece of first-class artistic merit, but are composed of sepulchral and votive reliefs, sarcophagi, altars, mosaics, architectural fragments and the other miscellaneous categories which traditionally find their appropriate home in the third volume of a sculpture catalogue. Unpromising material as a rule; but the dominant impression one gains from M. Mendel's work is the extraordinary amount of life and individuality with which he has contrived to invest even the most trifling fragment. The eye is arrested by some novelty of type or detail on almost every page, especially in the section dealing with the mass of local relief work, which is so abundantly represented at Constantinople. The geographical arrangement of this material, to illustrate the various provincial styles of Asia Minor, would have been interesting, but M. Mendel has preferred the classification by types which, by reason of the lack of geographical details, generally becomes obligatory upon any large Museum. A lengthy appendix is devoted to new accessions and exhibits; an eloquent witness to the rapid growth of the collections in the pre-war years.

Alexandria ad Aegyptum. By EV. BASCRIA. Pp. xi + 368; 2 plates, with 357 figures in the text. Bergamo: Istituto Italiano d'Arte Grafiche, 1922.

This guide to Alexandria, ancient and modern, appeared in 1914 in French and is now republished in English; the English version, however, is not a mere translation, but has been considerably enlarged and revised. A concise description of the featureless modern city is followed by excellent summaries of the history and topography of ancient Alexandria and of the remains excavated in modern times; to this is appended an account of the Græco-Roman Museum of the municipality, complete with bibliographies and adequately supplied with illustrations. As a compendium of information on the ancient capital of the Ptolemies the work possesses solid merit.

Les Vases grecs et Reliefs. By F. COURBY. Pp. x + 398; with 17 plates and 117 illustrations in the text. Paris: E. de Boccard, 1922.

This book will be welcomed as filling a real gap in the literature of ancient ceramics; it is a history, in greater detail than has yet appeared, of relief decoration on vases in the Greek world from the earliest Minoan times down to the Roman period. The plan of the book excludes such Italian fabrics as the black ware of Cales studied by Pagenstecher, or Arretine vases; and this is a misfortune, for these fabrics are closely connected with the pottery of more eastern centres; in fact M. Courby has himself found it impossible to carry out his system to its logical end, seeing that in the case of other categories he has found it necessary to treat of their Italian imitations. Had the author thought fit to exclude the chapters on archaic vases with decoration in relief, which have really no connexion with the main body of the book, and to give us instead some account of those Italian fabrics, we should have had for the first time a more or less complete account of Hellenistic pottery, a task for which M. Courby with his long acquaintance with the pottery finds of Delos

was peculiarly fitted. Nevertheless the book marks a very definite advance in the scientific treatment of many little-known fabrics; types of pottery such as Megarian bowls, which have long been known, are treated with a completeness that has hitherto been lacking; other types for the first time receive recognition. Much of the material has never previously been published, and M. Courby may justly claim the credit due to pioneer work. Naturally the book also shows some of the defects of pioneer work, in a certain lack of proportion and in the singular inadequacy of some of the sections; for example, pottery with stamped patterns, perhaps the commonest of all types on most sites, is dismissed with the remark that although made during three centuries, it is difficult to find any trace of internal evolution, which is not the case. However, M. Courby has given us so much that is new that it would be ungrateful to complain about omissions. The diagrams of shapes, patterns and stamps, collected with the most painstaking industry, will not be the least useful part of the book.

Cook's Travellers Handbook for Constantinople, Gallipoli and Asia Minor. By ROY ELSTON. Pp. 267, with three maps. London: Thos. Cook and Son, 1923.

This guide is not and does not profess to be a rival to Baedeker or Murray, but is cast on more popular and general lines; it is frankly for the tourist who is content to travel along the beaten track, and for whom it is sufficient to describe one or two of the principal mosques of Stamboul and to add a remark that the others are all on similar lines. The author presumably knows the requirements of his readers and it would be futile to reproach him with omissions. With regard to what he has done, the introductory chapters on Turkish history and on the inhabitants of Turkey deserve commendation as a spirited and fair-minded piece of writing; and the account of the battlefields and cemeteries of Gallipoli is a new and melancholy feature which from now on will become permanent in all guide-books to this area. The chief criticisms we would make are that the maps are wholly inadequate, and that the spelling of ancient names requires overhauling; misprints like *Katharina*, *Eumenis*, *Tantulus*, are far too common.

FitzeWilliam Museum: Catalogue of the McClean Collection of Greek Coins. By S. W. GROSCH. Vol. I. Western Europe, Magna Graecia, Sicily. Pp. x + 380, 111 colotype plates. Cambridge: The University Press, 1923. £4 4s.

The author and his University Press are alike to be congratulated on this noble volume, which, delayed by the war and its consequences for nearly eight years, at length makes its appearance. The collection of Greek coins (over 10,000 in number) formed by Frank and John McClean, father and son, is one of the glories of the Fitzwilliam Museum, to which the latter presented it towards the close of his life. The elder McClean began collecting in a happy hour. Cabinets of the first importance—Cartraw, Ashburnham, Muntagne and Bunsbury—were being dispersed, but prices had not yet soared to the golden heights of to-day, when a collector must generally be content to limit his scope if his object is something more than a mere beauty show. Thus the foundations were laid of a fine general collection: it was John McClean's purpose to fill in gaps, strengthen the weak spots, and above all, by devoting himself to the systematic acquisition of long series of similar issues, to provide a detailed collection for scientific study. He died before he could achieve his object, but the present volume shows how great was his success in dealing with Sicily and Italy. It contains over 3000 coins, more by a third than the corresponding section of the late Sir Hermann Weber's collection. It is especially important that over two-thirds of the coins appear on the plates, for, apart from the volume just mentioned, there is no comprehensive publication of these coinages with photographic illustrations, and many of the less important issues, especially the bronzes, have never been figured at all. The general view that this volume renders possible emphasises again the richness

and variety of the fifth and fourth centuries in Italy and of the fifth century in Sicily, the preponderance of Tarentum being almost as decided in the one as is that of Syracuse in the other. Very marked is the appearance of Attic influences on the earliest coinage of Thurium (here represented by no less than 65 examples of stater and sixth, some of great rarity) and its immediate effect at Naples, Terina, Vellei and among the hellenised Campanians. Equally interesting it is to see the brilliant coinages of the great Sicilian communities of the fifth century replaced during the fourth in part by Syracusan, but mainly by Punic imitative issues, just as Demetrius and the Carthaginians between them reduced the cities to impotence or ruin. Mr. Grose has already discussed (*Nova Chron.* 1915, p. 179; *ibid.* 1916, pp. 113 and 201; *ibid.* 1917, p. 169) a number of points arising out of his work in the catalogue; for example, the important identification of the light-weight staters of the early third century at Croton, and the date of the silver issued by the Campanian mercenaries in Sicily, which he has shown to belong to the beginning, instead of the middle, of the fourth century.

As has been already indicated, the excellence of the collection lies in its general level rather than in the number of outstanding coins, of which it will be enough to mention here three or four. No. 2555 is the splendid tetradrachm of Segesta from the Ashburnham Collection with the nymph's head, of which another example is in the National Collection; No. 2392 is a tetradrachm of Messana apparently in alliance with Locri—Mr. Grose calls attention in this connexion to the little-known coin of similar types in the dell' Erla collection showing the name of Locri alone. Both these coins are a hundred years earlier than any other recorded coins of Locri; the summary style of the McClean specimen and the fact that it is over-struck on another coin points to a hasty and probably exceptional issue. No. 2377 is a variety of the very scarce and interesting tetradrachms apparently struck by the Samian exiles after their flight from Darius and before they had found themselves a permanent home in the West. No. 2401, another tetradrachm of Messana, shows possible traces of the engraver Kimon's signature beneath what is certainly a very Kimonian head. Nos. 2481 and 2678 are of especial interest as being among the earliest of the class of Punic imitations, well before the close of the fifth century. It is hard to agree with Mr. Grose that the reverse die of the first, which bears traces of the ethnic ΣΥΡΑΚΟΣΙΩΝ, is 'a Syracusan die appropriated by the Panormian mint' rather than a literal copy; or that the second, in spite of a similar inscription, is a Syracusan and not a Punic coin. The plough symbol on this coin, otherwise unknown at Syracuse, is a link with the corn-grain symbol on the other, and in style they are as like as two peas. At the same time and in the same way the Eastern Semites were making imitations of Athenian coins inscribed ΑΘΕ.

Mr. Grose has done his work carefully and well; the descriptions are detailed; weight, size and die position recorded with meticulous accuracy. By a welcome variation in the usual geographical arrangement, all the fourth-century Carthaginian issues are incorporated under Sicily. The indexes are very full and include even monograms. A few doubtful points or corrections are perhaps worth recording. Nos. 6, 7; these coins, reading HIS-PANORVM, are generally regarded as issued for Sextus Pompey's Spanish mercenaries in Sicily. No. 182 (Cales) is an imitation of No. 278 (Naples); both attributions seem quite doubtful and the first coin has the air of a barbarous imitation. Of No. 296 (Cumae) there is another example from the same dies in the British Museum which is regarded as false, though it is only fair to add that the Arosen specimen now at Berlin is apparently accepted there. The older attribution of No. 211 to Cumae should now be abandoned in favour of Scylletium. No. 683 (and probably No. 682), catalogued under Tarentum, should be transferred to Naples, where a similar coin already appears under No. 240. The chronological arrangement of the Metapontine series leaves a good deal to be desired: Nos. 959-72, 974-6 and 991 (with ΝΙΚΑ) are surely all earlier than 330 B.C. and some of them earlier than 400. Few numismatists will now accept the little gold coins of Locri (here No. 1788) as genuine, and, to judge by the illustration, grave suspicion on this count should attach to the later tetradrachm of Naxos (No. 2472). This coin was formerly in the Rhonopoulos Collection, but it is the only example from these dies that the reviewer can trace (all other specimens being linked to each other by die couplings) and its clumsy style seems to call for condemnation. The tetradrachm of Selinus, No. 2578, which appears

to be unpublished, has a tablet in the field of the reverse; may not this bear an artist's signature,—perhaps the full name of which the initial H appears on the obverse?

It is very much to be hoped that the publication of this most important work may be continued: its value would be further increased if it were possible to include the Leake Collection in the later volumes.

TAPAΣ OIKISTHΣ. A Contribution to Tarentine Numismatics. By MICHEL P. VLASTO. Numismatic Notes and Monographs, No. 15. Pp. 234, 13 colotype plates. The American Numismatic Society, 1922.

This intensive study is devoted to the interesting series of fifth-century coins bearing for distinctive type the seated figure often known as the Demos of Tarentum. The author adopts, with justice, the more recent view that we have to deal not with the personified Demos, but with Taras the pre-Spartan founder of the city, drawing the further conclusion that the dolphin rider who forms the pendant type must, for the fifth century at least, be regarded as the Spartan oekist Phalanthos. The interpretation of the type as Taras, instead of Demos, removes all ground for making the democratic revolution of 473 the occasion when this coinage was inaugurated. The initial date is put accordingly, on grounds of style, at c. 485, and the coins are arranged chronologically, by the aid of die couplings where possible, in four periods, the last ending c. 400. Such a monograph, which is practically a Corpus of the series (though the author's modesty disclaims this title), must appeal chiefly to numismatists. Every die is carefully described and illustrated, mostly from Mr. Vlasto's own incomparable collection. Interesting information is incidentally forthcoming as to the wear and treatment of dies, while attention should be drawn to the appendices with analyses of three finds. Of wider interest is the general view obtainable from the plates of the formation and development of Tarentine art during the period: the joint Ionian and Peloponnesian influences on the early coins, with their suggestion of Spartan grave reliefs, the regression common to most Italian mints towards the middle of the century, and the subsequent revival under the inspiration of the great Attic schools of sculpture and painting, are all clearly revealed.

Before concluding we must add another protest to the chorus which greets the appearance of each successive monograph in this series. The format is quite unsuitable—at least for Greek coins. In this case an attempt has been made to overcome the small size of the page by folding the plates, but the cure is almost worse than the disease.

Tyrus Rediviva. By EDWARD T. NEWELL. Pp. 23, 3 colotype plates. The American Numismatic Society, 1923. \$2.50.

Mr. Newell's work on the coinages issued in the name of Alexander during and after his lifetime is of the first importance to students of this tangled period. He has already covered the greater portion of the ground in a series of monographs, in general sweeping away the facile attributions to the thousand and one mints of Müller which had previously held the field.¹ As regards the present study, in which Mr. Newell succeeds in identifying the Alexander coinage of Tyre, all a reviewer can do is to praise it and to indicate its results. No mint had been allowed in this great city for nearly twenty years after its destruction by Alexander—even the copper currency for local use being struck at Sidon. It appears to have been Antigonus who re-established the Tyrian mint about 307-6 B.C., probably in connexion with his attempt on Egypt, and its issues were continued without interruption

¹ *Distributions of Certain Tetradrachms of A.L.* New York, 1912 (reprint from American Journal of Numismatics, 1911-12). *Some Cypriot Alexanders*, Num. Chr., 1915, p. 294. *Nikollos King of Paphos*, *ibid.*, 1919, p. 64. *Dated A.L. coinage of Sidon and Ake*, Yale Univ. Press, 1916. *Tyrians under A.L.* American Journal of Numismatics, lii (1918), p. 69. *A.L. Coinage of Sinope*, *ibid.*, p. 117. *Myriandros-Alexandros at Issos*, *ibid.*, liii (1919), Part II. *A.L. Hoards—Introduction and Kyprissin Hoard*, New York, 1922 (Numismatic Notes and Monographs, No. 3). *A.L. Hoards—Dumunhur*, New York, 1923 (*do.*, No. 19).

after his death by Demetrius till the latter's downfall and the passing of all Phoenicia into the hands of Ptolemy. Incidentally these results bear out the view of Reinach and Tarn, as against Niese following Droysen, that Tyre did not fall to Seleucus in 293. Two interesting points may be noted: coinage of smaller pieces with local types was allowed concurrently with the regal tetradrachma, and the final issues of the latter though still bearing the types of Alexander show the name of Demetrius. On the establishment of the Egyptian power the mint continued its operations (without even a change of staff!) in favour of the Ptolemies. The coinage issued after the further change from Lagid to Seleucid rule has already been dealt with by the author in his study of the First Seleucid coinage of Tyre (*Num. Notes and Monographs*, No. 10).

The Cambridge Ancient History. Edited by J. B. BURY, S. A. COOK, and F. E. ADCOCK. Vol. I. Egypt and Babylonia to 330 B.C. Pp. xxii + 704, 13 maps and plates. Cambridge: University Press, 1923. 35s.

To write history which combines the brevity of *Who's Who* with the completeness of Baedeker is not an ideal to which historians can look with equanimity as the ultimate recompense of an established reputation. Only the genuine lover of his own language can in his contribution escape the essential boredom of his limitations. The editors of the first volume of the *Cambridge Ancient History* have staked their all upon a selection which includes all the popular favourites. The form displayed is, as might be expected, uneven. Professor Myers alone maintains an elegance of style which gives him a long lead and retains our interest to the last. The remainder pursue an uneven course over what is, at times, a ground of very heavy going.

Professor Myers describes at the outset a world of slowly evolving continents until man emerges and enters upon 'a career of pedestrian adventure and manual exploitation.' The writer's use of Breasted's Egyptian evidence is particularly illuminating and is, no doubt, new to many historians (no such use of it is made by Professor Poet in p. 230 ff.). For the palaeolithic period he lays too much stress at times on slender evidence. Bone whistles in palaeolithic strata (pp. 50-1) may, indeed, suggest 'organised action' or that 'men hunted now in a horde and obeyed a leader.' But they may also suggest that men liked to make artificial noises, or kept dogs, or whistled their orders, like the Balkan shepherd, to their flocks (the last a devastating theory for the usual conception of palaeolithic economy!).

His account of the overlap between palaeolithic and neolithic, however, is unambiguous and illuminating. The suggestion of an ultimate derivation of lake-dwelling culture and 'Danubian' pottery from an eastern centre (pp. 74, 77-8) is at present a conjecture only, but one that is now more and more frequently supported by new discoveries. The surprising correlation of Bosnia with Malta in the neolithic period awaits and can reasonably expect confirmation. The influence of Aegean culture on the Etsch region seems, on the other hand, to be over-estimated, and Minian bronze swords are not, to the reviewer's knowledge, found on the Middle Danube (p. 106). Chapters I and II, however, remain as clear an exposition of a vast and intricate subject as can be hoped for or desired.

Dr. Macalister, under the chapter heading, 'Exploration and Excavation' (pp. 112-144), gives an admirable summary; but his excursions in pp. 130-142 into Aegean chronology overlaps awkwardly with Mr. Wace's similar account (pp. 173-180) and seems unnecessary. Moreover, Dr. Macalister, while giving a catalogue of the so-called 'Helladic' periods (which it should be remembered have not come into general usage outside the publications of their originators), yet retains the Minoan terminology in full and definitely uses Late Minoan I in reference to the acropolis of Mycenae (p. 140).

Mr. Wace's account of Aegean civilisation is exhaustive and thorough. It is interesting to find that he believes that Middle and Late Minoan Crete possessed an 'officialdom of an oriental type' (p. 594). This makes it possible to accept the view stated with emphasis by Macalister, that (p. 137) Aegean art is 'totally different from the Greek art of

classical times'. But it is difficult, in view of this, to find a spiritual home for Dr. Hall's 'Greek feeling' which he detects in XIIIth Dynasty Egyptian paintings (p. 575). Both Mr. Wace and Dr. Macalister hold no doubt at all as to the equation of Troy VI with Homeric Troy (pp. 136 and 613). Yet this is a chronological equation only; the equation of the two cultures involves serious difficulties. Mr. Wace further accepts Cretan suzerainty on the mainland of Greece in the four centuries after 1600 B.C. (p. 597), attributes 'Helladic' development to Cretan influence (p. 608), and even accepts a group of Cretan colonies. The derivation of the earlier 'Helladic' Bronze Age from Crete (p. 604) or from the Cyclades emphasises a still earlier influence from Crete. From this restatement of Mr. Wace's views emerges a new term, 'Mino-Helladic' (p. 609). Does this prefigure the abandonment of the 'Helladic' terminology?

Of the North Aegean Mr. Wace has little to say. His promise (p. 589) to deal with Macedonia and Thrace is fulfilled with a series of regrets (p. 612), and he makes the common mistake of classing Macedonia with Thrace and Thessaly together in one single area in both Neolithic and Bronze Ages. This is problematic in the earlier and impossible in the later period. His belief that Minyan ware is found in Macedonia (p. 607) is unsupported by fact. For a future edition it is, perhaps, worth noting that on Map 12, which illustrates Aegean culture, Monastir is included, though nothing Aegean has been found there, while Melos and Aegina are not marked as sites, and for Sparta we should read Therapne.

Dr. Hall's contribution on Egyptian and Babylonian art is clear and will be useful for reference, but not for a comprehension of the growth of artistic capacity or of the development of artistic method in those countries. It is, perhaps, worth noting that the 'Macgregor head' of Amenemhet III is not, as stated (p. 574), still in the Macgregor Collection, nor is the Ramesses III halberd, the earliest iron weapon in the Egyptian area (p. 572); an iron spearhead from Nubia belongs to the 12th Dynasty.

It is impossible to judge the merits of all the sections of this book in the space of one review, nor is any one reviewer capable of pronouncing an opinion on a work which contains so much material and covers so wide a field. The editors are, however, to be congratulated on the compilation of the first volume of this useful and learned series.

S. C.

The Educational Theory of Plutarch. By K. M. WESTAWAY, D.Lit. Pp. 242. University of London Press, 1922. 7s. 6d.

The title of this book implies that Plutarch had an educational theory; and its publication suggests that this theory will repay the time and labour spent in its examination. Both these assumptions are a little precarious. Miss Westaway believes that Plutarch was not only a 'practical teacher,' but 'at heart a great educationalist' (p. 223); but more than once she admits that his ideas on education are scattered widely among his voluminous writings, and 'hardly constitute anything so definite as a system' (p. 12). And after she has been at the pains to collect and systematise these ideas, they emerge for the most part as a pallid and shrunken *résumé* of the great and fruitful theories of the 5th and 4th centuries B.C., when there were giants in Athens with vivid, adventurous creative intellects at work upon vital, profound, and pressing problems. It seems a pity to seek in the uninspired pages of Plutarch that which can be had in rarer and fuller form from the masters themselves. Educationalists will not miss much if they neglect what Plutarch has to say on their subject; they dare not neglect the profound reflections of Socrates, Plato, and Aristotle. For the history of the first and second centuries of the Empire, especially from the provincial's point of view, Plutarch is of great importance; and in that connection, Miss Westaway's analysis of many of his writings is of value; but as a contribution to educational theory—owing partly to the unoriginal nature of Plutarch's thinking, partly to the confusion of thought from which Miss Westaway's pages are themselves not always free—the value of the book is more open to question.

P. A. S.

The Pyrrhic Accent and Rhythm of Latin and Keltic. By THOMAS FITZHUGH, Professor of Latin in the University of Virginia. Pp. 24. Reprinted from *Alumni Bulletin*, April, 1923.

In this pamphlet Professor Fitchugh resumes in very vigorous language a thesis which he has maintained in a series of publications extending over a number of years. That thesis is that although Ennius and his successors apparently used Greek metres it is entirely wrong to suppose that they were able to get away from the older, native Latin rhythm based on word accent, not on syllabic quantity. Horace, 'The Hellenomania,' had, according to Professor Fitchugh, to use this old accent and rhythm 'perforce in every breath and line.' It is doubtless true that the Greek metres were, to a certain extent, a literary pose and that popular verse continued to be composed in native metres which there is some reason to suppose were based on accent, not on quantity. It may also be allowed that the acoustic effect of a Latin hexameter read by a Roman was different from that of a Greek hexameter read by a Greek. But in detail Professor Fitchugh's thesis rests on unproved and unprovable theories. Nor has he strengthened his case by the introduction of speculations on the subject of Celtic metres of the history of which he demonstrably knows nothing. His etymology of *triumphus*, 'a foot of three,' may be mentioned as a curiosity.

J. E.

Manuel des Études grecques et latines. By L. LAURAND. Pp. 934. Paris: Auguste Picard, 1921.

Appendice I, Les Sciences dans l'Antiquité. By L. LAURAND. Pp. 51. Paris: Auguste Picard, 1923.

This ponderous volume may be likened to the Cambridge *Companions to Greek and to Latin Studies* united within one cover; it contains 'the mass of facts which are indispensable to the knowledge of classical antiquity and to the reading of ancient authors.' Compared with the English *Companions*, it is more elementary, and more purely literary in scope. The opening sections deal with the geography and history of Greece, then comes a heterogeneous chapter on Hellenic private and public institutions. Greek literature is then summarised at greater length, and a long chapter on Greek historical grammar completes this portion of the work. The like course is followed in dealing with Latin, and in conclusion a section deals with Greek and Latin prosody, palaeography, epigraphy, numismatics, etc. The arrangement in severely logical sequence of paragraphs, the very complete bibliographies attached to each section, and the copious indices combine to make a very useful work of reference for school purposes. The first of a series of appendices has more recently appeared, dealing with the scientific knowledge possessed by the ancients. This follows the general plan of the larger work and under the heads of Mathematics, Astronomy, Physics, Chemistry, Natural History and Medicine endeavours to sum up briefly the attainments of Greek and Roman thinkers in these fields.

Führer durch die Antikensammlung des Landesmuseums in Klagenfurt. By RUDOLF EDER. Pp. vii + 122, with 101 illustrations in the text. Vienna: A. Holder, 1921.

A useful little guide to a collection mainly composed of local Roman finds; it includes some sculptures of good style, an interesting Mithraic fragment and a curious votive relief in lead with scenes from a mystery-cult.

De oud-christelijke Monumenten van Ephesus. By DR. J. N. BAKHUIZEN VAN DEN BRINK. Pp. 208, with 8 illustrations in the text. The Hague: Nederlandsche Boeken Stempdrukkerij, 1923.

Studies, mainly epigraphical and topographical, of the remains of the Christian and Byzantine period at Ephesus.

Populonia. By **ASTONIO MISTO.** Pp. 171, with 13 plates and 26 illustrations in the text. Florence. R. Bemporad e Figlio, 1922.

A study of the literary traditions of origin and of the extant remains as revealed by recent excavations of this famous coast town of the Etruscans. The excavations, which are being continued, have disclosed groups of chamber tombs containing both burials and cremations, with rich funerary furniture of the Villanova and early Etruscan periods.

Die Denkmäler und Inschriften an der Mündung des Nahr-el-Kelb.
By **F. H. WEISSBACH.** Pp. 54, with 14 plates and 16 illustrations in the text. Berlin and Leipzig: Walter de Gruyter, 1922.

The sixth part of the publication of the results obtained by the Deutsch-Türkisches Denkmalschutz-Kommando under Wiegand during the war in Syria. It is a completely illustrated description of the well-known reliefs and inscriptions carved in the rock at the mouth of the Dog River in Phoenicia.

The Climate of the Eastern Mediterranean. Pp. 300. London: H.M. Stationery Office. 5s.

A mass of statistics dealing with the various climatic phenomena of the area between Malta and the Persian Gulf.

Photographs of Manuscripts. Pp. 28. London: H.M. Stationery Office, 1922. 1s.

A collection of official reports from ambassadors to the Foreign Office respecting facilities for obtaining photographs of manuscripts in public libraries in most European countries, Egypt, China and the United States. In view of the difficulty or impossibility of borrowing the actual MSS. from libraries abroad, these short reports will be of real value to students in this country.

Euripides: seine Dichtung und seine Persönlichkeit. By **HUGO STEIGER.**
Pp. vi + 124, with one plate. Leipzig: Theodor Weicher, Dieterichsche Verlagsbuchhandlung, 1912.

This forms the fifth section of the well-known series of *Das Erbe der Alten*. It is an analysis of the ethical and religious opinions of the poet, and is concerned less with literary form than with subject matter.

The Greek Theater and its Drama. By **ROY C. FLECKINGER.** Pp. xxviii + 368, with 84 illustrations in the text. Chicago: University Press, 1922.

The first edition of this compendious work on the Greek drama was reviewed at length in this Journal in 1919; the present reprint is similar in content save for some new illustrations and several pages of addenda.

The Use of Myths to create Suspense in Extant Greek Tragedy. By **W. W. FLINT.** Pp. 87. Concord, N. H.: Rumford Press, 1922.

A study of the use of myths on the Greek stage, analyzing the use of conflicting local legends of the same myth, or artistic elaborations in some earlier literary work, to produce the dramatic effects of anticipation or uncertainty.

Die Frauengestalten im attischen Drama. By KARL KUNST. Pp. viii + 207. Vienna and Leipzig: Wilhelm Braumüller, 1922.

An examination of the female characters in the works of the Attic dramatists. While the male characters in the earliest extant plays are strongly individualised types, the women, whatever the rôle assigned to them, conform to a stock pattern of femininity, and it is not before Menander that the female characters are finally shown, like the male, as individualised dramatic types.

Le Travail de la femme dans la Grèce ancienne. By P. HEUST. Pp. 122. Utrecht: A. Oosthoek, 1922.

A dissertation on the economic side of female life in old Greece. The writer remarks that the subject has previously escaped treatment, save in one aspect, for which he refers to articles in the dictionaries, *s. v.* *Hetaïra*. His conclusions are that women played an insignificant part in agriculture, were absent from some trades where they are now found, but monopolised other occupations to a greater degree than at present; the social position of women in these various activities and the general ideas of antiquity on female labour are also examined.

The Uses of Symbolism in Greek Art. By JANET M. MACDONALD. Pp. 56. Chicago: Bryn Mawr College, 1922.

A dissertation the contents of which are sufficiently indicated by its title. The authoress concludes that part of the greatness of Greek art lies in the avoidance of symbolism, and that Greek art is the great example of non-symbolic art.

Hagios: Untersuchungen zur Terminologie des Heiligen in den hellenisch-hellenistischen Religionen. By EDUARD WILIGER. Pp. 108. Gießen: Alfred Töpelmann, 1922. 2s.

An examination of the signification in primitive Greek ritual of words from the root *hag* (*ἅγιος, ἁγίος*, etc.). The development is traced from the earliest use to signify something taboo or unclean down to the purely subjective use with the names of Christian saints.

St. Basil and Greek Literature. By L. V. JAMES. Pp. 123. Washington D.C. Catholic University of America, 1922.

A study of the classical quotations in St. Basil and of the relations between Christian teaching and Pagan thought in the fourth century of our era.

Hymns of the Greek Church. Translated by the Rev. G. E. WOODWARD. Pp. 40. London: Society for the Promotion of Christian Knowledge, 1922. 2s.

A collection of seventy-three Greek hymns reprinted from the *Christian East*, and collected from various sources; it is hoped to give the English reader 'some fresh ideas as to the vastness and richness of the Eastern Church treasury of sacred song.' The Greek text is reproduced with a metrical version attached; and brief notes on saints and other obscurities are appended.

Travels and Sketches. By FREDERIX POULSEN. Pp. 235. London: Chatto and Windus, 1922. 7s. 6d.

A medley of anecdotes of Danish farm life, German student days, adventures in a noble Polish household and Mediterranean travel, mainly in humorous vein. This revelation of the lighter side of the learned Keeper of the Ny Carlsberg Glyptotek contains nothing of startling novelty or importance, but the book makes amusing reading.

De Profusionum Receptaculis Sepulchralibus. By G. P. OIKONOMOS. Pp. 63 + 17 illustrations in the text. Athens: Ex officina P. D. Sacellari, 1921.

A study of the methods adopted in antiquity for conveying offerings, libations, etc. into the tomb by pierced tiles and tubes.

Mathematics and Physical Science in Classical Antiquity. By J. K. HEIBERG. Pp. 110. 2s. 6d.

Greek Art and Architecture: Their Legacy to us. By P. GARDNER and R. BLOMFIELD. Pp. 76, with 17 illustrations in the text. 3s. 6d.

Greek Biology and Greek Medicine. By CHARLES SINGER. Pp. 128, with 19 illustrations in the text. 2s. 6d. Oxford University Press. 1922.

Reprints of sections from the *Legacy of Greece* which has previously received notice in these pages: In the last of the three a section on Aristotle has been added.

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RULES

OF THE

Society for the Promotion of Hellenic Studies.

1. The objects of this Society shall be as follows :—

I. To advance the study of Greek language, literature, and art, and to illustrate the history of the Greek race in the ancient, Byzantine, and Neo-Hellenic periods, by the publication of memoirs and unedited documents or monuments in a Journal to be issued periodically.

II. To collect drawings, facsimiles, transcripts, plans, and photographs of Greek inscriptions, MSS., works of art, ancient sites and remains, and with this view to invite travellers to communicate to the Society notes or sketches of archæological and topographical interest.

III. To organise means by which members of the Society may have increased facilities for visiting ancient sites and pursuing archæological researches in countries which, at any time, have been the sites of Hellenic civilisation.

2. The Society shall consist of a President, Vice-Presidents, a Council, a Treasurer, one or more Secretaries, 40 Hon. Members, and Ordinary Members. All officers of the Society shall be chosen from among its Members, and shall be *ex-officio* members of the Council.

3. The President shall preside at all General, Ordinary, or Special Meetings of the Society, and of the Council or of any Committee at which he is present. In case of the absence of the President, one of the Vice-Presidents shall preside in his stead, and in the absence of the Vice-Presidents the Treasurer. In the absence of the Treasurer the Council or Committee shall appoint one of their Members to preside.

4. The funds and other property of the Society shall be administered and applied by the Council in such manner as they shall consider most conducive to the objects of the Society: in the Council shall also be vested the control of all publications issued by the Society, and the general management of all its affairs and concerns. The number of the Council shall not exceed fifty.

5. The Treasurer shall receive, on account of the Society, all subscriptions, donations, or other moneys accruing to the funds thereof, and shall make all payments ordered by the Council. All cheques shall be signed by the Treasurer and countersigned by the Secretary.

6. In the absence of the Treasurer the Council may direct that cheques may be signed by two members of Council and countersigned by the Secretary.

7. The Council shall meet as often as they may deem necessary for the despatch of business.

8. Due notice of every such Meeting shall be sent to each Member of the Council, by a summons signed by the Secretary.

9. Three Members of the Council, provided not more than one of the three present be a permanent officer of the Society, shall be a quorum.

10. All questions before the Council shall be determined by a majority of votes. The Chairman to have a casting vote.

11. The Council shall prepare an Annual Report, to be submitted to the Annual Meeting of the Society.

12. The Secretary shall give notice in writing to each Member of the Council of the ordinary days of meeting of the Council, and shall have authority to summon a Special and Extraordinary Meeting of the Council on a requisition signed by at least four Members of the Council.

13. Two Auditors, not being Members of the Council, shall be elected by the Society in each year.

14. A General Meeting of the Society shall be held in London in June of each year, when the Reports of the Council and of the Auditors shall be read, the Council, Officers, and Auditors for the ensuing year elected, and any other business recommended by the Council discussed and determined. Meetings of the Society for the reading of papers may be held at such times as the Council may fix, due notice being given to Members.

15. The President, Vice-Presidents, Treasurer, Secretaries, and Council shall be elected by the Members of the Society at the Annual Meeting.

16. The President shall be elected by the Members of the Society at the Annual Meeting for a period of five years, and shall not be immediately eligible for re-election.

17. The Vice-Presidents shall be elected by the Members of the Society at the Annual Meeting for a period of one year, after which they shall be eligible for re-election.

18. One-third of the Council shall retire every year, but the Members so retiring shall be eligible for re-election at the Annual Meeting.

19. The Treasurer and Secretaries shall hold their offices during the pleasure of the Council.

20. The elections of the Officers, Council, and Auditors, at the Annual Meeting, shall be by a majority of the votes of those present. The Chairman of the Meeting shall have a casting vote. The mode in which the vote shall be taken shall be determined by the President and Council.

21. Every Member of the Society shall be summoned to the Annual Meeting by notice issued at least one month before it is held.

22. All motions made at the Annual Meeting shall be in writing and shall be signed by the mover and seconder. No motion shall be submitted, unless notice of it has been given to the Secretary at least three weeks before the Annual Meeting.

23. Upon any vacancy in the Presidency occurring between the Annual Elections, one of the Vice-Presidents shall be elected by the Council to officiate as President until the next Annual Meeting.

24. All vacancies among the other Officers of the Society occurring between the same dates shall in like manner be provisionally filled up by the Council until the next Annual Meeting.

25. The names of all Candidates wishing to become Members of the Society shall be submitted to the Council, in whose hands their election shall rest.

26. The Annual Subscription of Members shall be one guinea, payable and due on the 1st of January each year; this annual subscription may be compounded for by a single payment of £15 15s., entitling compounders to be Members of the Society for life, without further payment. All Members elected on or after January 1, 1921, shall pay on election an entrance fee of one guinea.

27. The payment of the Annual Subscription, or of the Life Composition, entitles each Member to receive a copy of the ordinary publications of the Society.

28. When any Member of the Society shall be six months in arrear of his Annual Subscription, the Secretary or Treasurer shall remind him of the arrears due, and in case of non-payment thereof within six months after date of such notice, such defaulting Member shall cease to be a Member of the Society, unless the Council make an order to the contrary.

29. Members intending to leave the Society must send a formal notice of resignation to the Secretary on or before January 1; otherwise they will be held liable for the subscription for the current year.

30. If at any time there may appear cause for the expulsion of a Member of the Society, a Special Meeting of the Council shall be held to consider the case, and if at such Meeting at least two-thirds of the Members present shall concur in a resolution for the expulsion of such Member of the Society, the President shall submit the same for confirmation at a General Meeting of the Society specially summoned for this purpose, and if the decision of the Council be confirmed by a majority at the General Meeting, notice shall be given to that effect to the Member in question, who shall thereupon cease to be a Member of the Society.

31. The Council shall have power to nominate 40 British or Foreign Honorary Members. The number of British Honorary Members shall not exceed ten.

32. The Council may at their discretion elect from British Universities as Student-Associates:—

(a) Undergraduates.

(b) Graduates of not more than one year's standing.

(c) Women Students of equivalent status at Cambridge University.

33. Student-Associates shall be elected for a period not exceeding five years, but in all cases Student-Associateship shall be terminated at the expiration of one year from the date at which the Student takes his degree.

34. The names of Candidates wishing to become Student-Associates shall be submitted to the Council in the manner prescribed for the election of Members.

35. Every Student-Associate must be proposed by his tutor or teacher, who must be a person occupying a recognised position in the University to which the Candidate belongs, and must undertake responsibility for his Candidate, in respect of Books or Slides borrowed from the Library.

36. Student-Associates shall pay an Annual Subscription of 10s. 6d. payable on election and on January 1st of each succeeding year, without Entrance Fee. They will be entitled to receive all the privileges of the Society, with the exception of the right to vote at Meetings.

37. Student-Associates may become Full Members of the Society, without payment of Entrance Fee, at or before the expiration of their Student-Associateship.

38. Ladies shall be eligible as Ordinary Members or Student-Associates of the Society, and when elected shall be entitled to the same privileges as other Ordinary Members or Student-Associates.

39. No change shall be made in the Rules of the Society unless at least a fortnight before the Annual Meeting specific notice be given to every Member of the Society of the changes proposed.

July, 1923.

THE SOCIETY FOR THE PROMOTION OF HELLENIC STUDIES.

OFFICERS AND COUNCIL FOR 1923-1924.

President.

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- Athens, La Bibliothèque Nationale, Athens, Greece.
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 London, The Cecchetti Society's Library, 178, Clarendon Gardens, W. 2.
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 New York, The Hoffman Library, St. Stephen's College, Annandale on Hudson, New York, U.S.A.
 Oundle, The Library of Oundle School, Oundle, Northants.
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 Prag, The Library of the Archaeologisches Institut, Deutsche Universität, Prag 1, Clementinum.
 Wellington, N.Z., The Library of Victoria University College, Wellington, N.Z.

PROCEEDINGS

SESSION 1922-1923

During the past Session the following Meetings were held:—

- (1) November 7th, 1922. Mr. B. Ashmole: *New Light on the Ludovisi Throne* (see *J.H.S.* XI.ii. p. 248). Prof. Percy Gardner: *Two recent acquisitions of the Ashmolean Museum* (see below, p. xviii). Mr. A. H. Smith: *A bronze statuette of Alexander wearing the aegis* (see below, p. xvii).
- (2) December 12th, 1922 (Students' Meeting). Mrs. Culley: *Black-figured vases* (see below, p. xviii).
- (3) February 13th, 1923. Prof. H. J. W. Tillyard: *Greek Church Music* (see below, p. xviii).
- (4) May 15th, 1923. Sir Charles Walston: *Establishment of the classical type in Greek art* (see below, p. xviii).
- (5) May 22nd, 1923. Mr. J. T. Sheppard: *The Ancient Theatre* (see below, p. xx).
- (6) The ANNUAL MEETING was held at Burlington House, on Tuesday, June 26th, 1923. Sir Frederic Kenyon, President of the Society, taking the chair.

Mr. George A. Macmillan, Treasurer of the Society, presented the following Report for the Session 1922-23:—

The Council beg leave to submit their report for the Session now concluded:—

They think well of the Society's activities in all departments: they congratulate the Treasurer on his novel and satisfactory feat of producing a balance instead of a deficit—and they know all the time that there has been a drop in membership of something like forty in numbers.

This is the bad-rock fact: If there are not enough people sufficiently interested in one or other aspect of ancient life to combine to keep the knowledge of it alive, above all if the supply of young scholars is to run short, no effort of the Council or its Officers can do more than galvanise the Hellenic Society into spasmodic life.

The Society's future rests with the young, and for long time past consideration has been given to their needs. Careful scrutiny has been followed by liberal action, and it is now recommended that the whole resources of the Society, Journal, Library, Photographic Collection and Meetings, should be thrown open to the new class of Student Associates for an annual half-guinea without entrance fee. Frankly it means giving with a generous hand what has been hardly come by. The Council, for the Society, has done its share in this new lampadepleoria. They look to the young for its result.

Obituary.—The Society has sustained the loss by death of its distinguished Vice-President, Sir John Sandys, an old and valued Member of the Council, Mr. Talfourd Ely: an Hon. Member, M. Valerios Stais, Director of the National Museum at Athens; and a great Aristotelian Scholar, Mr. W. L. Newman.

Changes on the Council, etc.—In the course of the Session, Prof. F. Camont,

Prof. J. C. Hoppin, Prof. F. Poulsen and Prof. M. Rostovtzeff have been made Hon. Members of the Society. The Council have nominated for election Mr. R. W. Livingstone as a Vice-President, and Mr. B. Ashmole, Mr. J. G. Milne, Mr. H. Ormerod, Mr. F. N. Pryce, and Mr. M. S. Thompson as members of the Council. They have recently made their Librarian a life member *honoris causa*.

Relations with Other Bodies.—The Society continues its financial grants to the British Schools in Athens and Rome. The Council think no expenditure more justified than that which helps to give vitality to study by fresh discovery. They congratulate the School at Athens on the publication of hitherto inaccessible remains from the site of Palaikastro in Crete. The School's supplementary volume which contains these is admirably clear in arrangement and fully illustrated. The work will be completed in one further Supplement to the Annual.

The alliance with the Society for the Promotion of Roman Studies continues to work smoothly and efficiently on the friendly footing now long maintained. Perhaps it is not sufficiently understood that the resources of both Societies at Bloomsbury Square are open to any member of either. A small restriction, framed in the interest of both bodies, is that a member of one Society is entitled to borrow three books only, while members of both are allowed six.

The Council's Sub-Committee appointed to suggest plans for the further development of the Society's work continues its sittings. The recently published *Claim of Antiquity*, a pamphlet containing annotated lists of books on classical study, was drawn up by them in conjunction with their Roman colleagues, and they made the recommendations for the new class of Student-Associates.

Index of the Journal.—The combined detailed index of the Volumes of the *Journal* subsequent to Volume XVI, 1890, is now in the press. It will be issued free to Members with this year's publications. Nothing could more greatly enhance the value and utility of the *Journal* than this index. As it is not charged for, Members will readily understand that it may be necessary to curtail to some extent the text of the accompanying half-volume. The thanks of the Society, and indeed of all interested in the study of antiquity, are due and have been offered to the compilers, Mr. and Mrs. Arthur Smith.

[1]

Meetings.—On Nov. 7th, 1922, at the first General Meeting of the Society, three communications were made.

Mr. Bernard Ashmole read a paper entitled 'New Light on the Ludovisi throne,' which will appear in the Society's *Journal*.

Professor Percy Gardner described and showed photographs of two recent acquisitions of the Ashmolean Museum. The first was a marble female head of life size, from the collection of the late Lord Downe. The interesting point about it was the hair and head-band, which very closely resembled those of the head at Bologna which Furtwängler had regarded as a copy of the Lemnia of Pheidias. On the other hand, the neck was of fourth-century type, making the whole enigmatical. The second acquisition was a gracefully draped statuette, about four feet in height, which was in the collection of Mr. Vincent Robinson of Beaminster, and probably came from a tomb. The body was of Greek island marble, the head, which was very pleasing, of finer material. Both belonged to about 300 B.C.

Mr. Arthur Smith showed illustrations of a bronze statuette of Alexander wearing the aegis which had recently been acquired by the British Museum.

The statuette, originally in the late Dr. Fouquet's notable collection of Greek bronzes in Cairo, had been acquired by the help of the National Arts Collection Fund. It was about 12 inches high, and represented Alexander wearing a Macedonian chlamys wrought in the form of the divine aegis, with the Gorgoneion on the left breast.

Sir Charles Walston and Mr. S. Casson contributed observations.

- (2) On Dec. 12th, at the first Students' Meeting, Mrs. Cully showed the slides in the Society's collection covering the section on Black-figured Vases. There are over 120 of these, and their beauty and humour were much appreciated. It is desired to hear of a student who would show the slides of Red-figured Vases in the same way.

- (3) On Feb. 13th, at the second General Meeting, Professor H. J. W. Tillyard gave a lecture, with musical illustrations and lantern slides, on 'Greek Church Music.'

Professor Tillyard began by showing that Byzantine music was nearly all liturgical and must be studied in conjunction with sacred poetry. Only short fragments of the early Christian poetry (up to the fifth century) survived in the service-books of the Church, and even the greatest of all her poets, S. Romanos (c. A.D. 500) was represented only by a few brief extracts. The bulk of the hymnody was composed in the seventh, eighth and ninth centuries. The most favoured forms of hymn were *Stichera* *Idiomela* (short hymns with proper tunes) and *Canons* (hymns with eight or nine odes based on the Canticles). The earlier Byzantine musical MSS. always contained either the one class or the other; it was not until the fifteenth century that we found Liturgies, Psalms, *Polychronisms* (wishing 'long life' to Emperors, etc.) set to music. Attempts had been made to use the classical musical notation for Christian hymns (example in *Oxyrrh Papyrus* 1786); but this notation was forgotten some time after the third century; and the Byzantine notations grew up independently. Their origin was disputed. The following were the chief forms: (1) *Ecphonetic*—recitation-marks used chiefly in *Lectonaries*; these probably had not a definite musical value; (2) *Linear or Early Neumes*.—Many varieties were found and the meaning of the signs was still mainly uncertain. Possibly, like the Western Neumes, they only gave a rough guide to the melodic progression; (3) *Round or Hagiaopolitan Notation*.—System using interval-signs with fixed value. This notation could be translated with virtual certainty as to the main course of the melodies; (4) *Cucuzelian*—an elaboration of the foregoing invented by John Cucuzelos, A.D. 1300. The interval-signs were used with the same values as in the Round System, but new subsidiary signs and a more complex rhythm appeared. Hymns existing in the Round Notation were often copied for several centuries without change of notation; but in the seventeenth and eighteenth centuries nearly all the tunes were altered, probably under Oriental influence; (5) *Chrysanthine*.—Chrysanthus, the Archimandrite, invented and published in 1821 the notation still in use in the Greek Church. He simplified the interval-signs, but added numerous symbols to express chromatic changes, characteristic of Oriental music. All Greek Church music had been printed in this notation.

Most authorities agreed that the Byzantine modes corresponded to the eight modes of Gregorian music; but besides these the Byzantines had a chromatic species, which survives in our time. Mediaeval Greek chant was sung in unison without any instrumental accompaniment. The rhythm was free, not barred at regular intervals, but following the stress accents in the text. The ancient Greek quantities were disregarded. The elaborate florid writing of the Cucuzelian era seemed to have been a decadence. Our aim should be to recover by patient decipherment the music of the best period of the Round Notation, of which ample examples are found in the libraries of Southern Europe and the Levant.

Before reading his paper Professor Tillyard played an example of Greek classical music obtained from a papyrus found in Egypt. The Byzantine musical illustrations were admirably rendered by Miss O. Hemingway and the Rev. Percival Stanley, to whom, as well as to the lecturer, the thanks of an appreciative audience were warmly accorded.

- (4) On May 13th, at the third General Meeting, Sir Charles Wulston read a paper on the 'Establishment of the Classical Type in Greek Art.' He began by saying that as regards the human form, both figure and face, it was unnecessary to define

what, in ordinary language, is recognised as the classic type. The question was: When and how was this classic type established? It would be seen that it did not exist during the many centuries of prehistoric life, of which there was now such vast material in extant monuments. In endeavouring to solve this problem he had come to the conclusion that the establishment of the Greek type, as regards the body and the face, was really achieved between the years 470 and 450 B.C. He suggested a definite meridian line, namely, in the Temple of Zeus at Olympia; and here again between the Eastern and Western Pediments of that temple, the exact line passing through the Western Pediment, associated with the name of Alcámenes, to whom he ascribed exceptional importance in this general progress. For the fullest ultimate expression, however, of the classical type it was necessary to wait another ten or fifteen years, to the dominance of the art of Pheidias, as manifested to us in the sculptures of the Parthenon.

As regards the proportion of the human figure, the peculiar type, as presented to us in the monuments from the Minoan age, especially in the narrow waist, persisted throughout all the later centuries down to the close of the sixth century B.C., and even survived in sculpture and in vase painting of some of the greater masters in the first half of the fifth century B.C. Chiefly by the aid of datable coins and black- and red-figured vases, both the recedence and the survival of this earlier un-Hellenic type could be traced down to that date. Among the several causes which led to the emancipation from conventional types the chief influence was the establishment and organisation of the palaestra: the Eastern or Minoan type of the skilled performer developed into the athletic type of the Greek ephebus.

As regards the head and the facial angle, the more Eastern type, from the Minoan age onwards, persisted in the works of purely Hellenic art down to the same period in the fifth century. Its chief characteristic might be called the triangular system (as opposed to the square or oblong system), more especially in the oblique and not perpendicular line from forehead to nose. The final establishment of the Greek head with the more rectangular facial line of brow and nose was really consummated in the schools of Pheidias and Polykleitos, and might possibly be due to the fusion of the Ionian and Dorian types in the school of Hagalaídas, especially in the works of that master's Attic pupil, Pheidias. Both in facial angle and in the treatment of the eye, the earlier type survived in the mythical, heroic and typical Greek heads, while greater naturalistic freedom was shown in the heads of centaurs, satyrs, negroes, and all other "barbarians."

In the treatment of the eye, especially in its profile view, he found the dominance of the earlier types down to the very gates of the middle of the fifth century B.C., when in all other respects comparative perfection in artistic rendering had been achieved. This was amply proved by illustrations from coins, vases, reliefs and statues.

The influence of the palaestra was again strikingly manifest in the sphere of composition, especially in vase paintings. It also showed itself in architectural sculpture, especially in pedimental groups.

In spite of certain advance marked in the composition and elaboration of the Eastern Pediment of the Temple of Zeus at Olympia, the persistence of the earlier influences was still to be noted, and, in composition, the palaestric or purely plastic system still prevailed; nor had the Greek type been fully established. On the other hand, in the Western Pediment, which must be identified with Alcámenes, the Greek type in the profile view of the face and of the eye was practically established; while a new and distinctive system of composition, including pictorial foreshortening, must be contrasted with the more conservative elements in the Eastern Pediment. It was thus to Alcámenes, the precursor, but subsequently the pupil of Pheidias, that the decisive step in the establishment of the Greek type must be attributed.

The lecture was very fully illustrated with lantern slides, supplemented by

the exhibition of casts. The President expressed the Society's obligations to the lecturer.

- (5) On May 22nd, at the second Student's Meeting, the members heard Mr. J. T. Sheppard's lecture on the "Ancient Theatre." This was given as a specimen of the new sets of slides, lent complete with text for educational purposes, of which particulars were given in the last part of the *Journal* (*J.H.S.* 42, p. xlvii). A large audience warmly approved of Mr. Sheppard's lecture and the Council's experiment.

The Joint Library and Photographic Collections.—The progress made in this department of the Society's work is recorded in the following figures, covering (a) a pre-war Session, (b) last Session, (c) the Session just concluded.

	(a) 1912-13	(b) 1921-22	(c) 1922-23
*Books added to the Library.....	489	311	227
Books borrowed.....	948	1,520	1,640
Slides added to the Collections ..	363	320	614
Slides borrowed	3,578	8,343	9,716
Slides sold	500	1,299	1,751
Photographs sold	345	355	304

The Council acknowledge with thanks recently published books from H.M. Government of India, the Trustees of the British Museum, Abg. Akademi, La Société Archéologique d'Alexandrie, the American Academy in Rome, the Catholic University of America, the Anglo-Hellenic League, the Austrian Archaeological Institute, Bryn Mawr College, the Colchester Museum, Le Musée Impérial de Constantinople, Ny Carlsberg Glyptotek, L'Université de Genève, the Archæologisches Seminar der Universität in München, the County Borough of Rotherham, the Society for the Promotion of Christian Knowledge, the Carnegie Institute, Washington, Kunstgeschichtliches Museum der Universität Würzburg, the University Presses of Cambridge, Chicago, Harvard, Liverpool, Oxford, Yale.

Acknowledgment is also made to the following publishing houses: Messrs. B. T. Batsford, O. Beck, G. Bell & Sons, Blackwell, B. Blackwood, Bocca, E. de Boccard, C. & E. Camesa, E. Champino, Chatto & Windus, Comité d'Édition de l'Histoire de Chio, Constable, Duckworth, Emporad & Son, Walter de Gruyter, Gyldenfal, Harrap, B. Heller, Hodder & Stoughton, E. von König, J. Long, Lungmans, Green & Co., Maclehose, Jackson & Co., Macmillan, Marshall, Jones & Co., F. Meiner, Mothuen, Humphrey Milford, O. Reissland, F. Schöningh, E. A. Seeman, Verlag Schwyls, Studi e fonti per la Storia della regione Tiburtina, Teubner, A. Topelmann, Vandenhoeck & Ruprecht, Wagner & Debes, Marcus Weber, Winter, Die Nederlandsche Boeck- en Steendrukkerij, and N. Zanichelli.

The following have also kindly given books: A. R. Anderson, Prof. A. Andréas, W. Braumüller, W. H. Buckler, S. Casson, the Editors of the *Classical Review*, Mrs. Douglas Cow, Prof. R. M. Dawkins, Rev. Hippolyte Delbays, J. Ebersolt, Dr. S. Eitrem, G. Gardikas, H. R. Hall, J. P. Hall, Mrs. F. W. Hasluck, B. Haussoullier, A. D. Keramopoullos, L. Lafranchi, K. A. Lascaris, L. Laurand, A. W. Lawrence, Dr. W. Leaf, R. W. Livingstone, Prof. E. Loewy, Dr. H. H. Mack, Miss G. H. Macurdy, Mr. & Mrs. Grafton Milne, A. Modona, Dr. G. P. Oeconomus, P. Orsi, J. Penoyre, Dr. F. Poulsen, Dr. F. Preisigke, Prof. Rhys Roberts, Prof. H. J. Rose, Lady Sandys, L. V. Solon, Dr. J. Sundwall, Dr. F. Studniczka, F. Tandy, Dr. J. H. Thiel, G. D. Hardinge-Tyler, M. P. Vlasto, Dr. O. Waldhauer, Dr. R. M. Wheeler, Prof. T. Wiegand, Dr. A. Wilhelm, F. A. Wright, and E. Wüst.

* Exclusive of periodical publications.

The most important addition to the Library has been the acquisition, by the generous gift of Lady Sandys, of over 130 volumes specially selected from the library of the late Sir John Sandys. These have been marked with an appropriate label and will keep alive the recollection of an untiring student and famous scholar.

Accessions of special interest are: the first volume of the British Museum *Catalogue of the Coins of the Roman Empire*, by H. Mattingly; Bruun and Koerte, *Relievi delle urne etrusche*; the first instalment of the *Corpus Vagorum Antiquorum* presented by the French Government; H. Diehl, *Die Papyrokrathier*; a collection of thirty pamphlets on pre-historic archaeology by M. Hoernes; H. Kinn, *Das Glas im Altertum*, presented by Dr. Studniczka; the edition of Pausanias by Hitzig and Blumner, an item of the Sandys bequest; the *Zeitschrift der Savigny-Stiftung für Rechtsgeschichte* presented by Mr. W. H. Hückler.

It is proposed next year to print for the first time the Subject Catalogue of the Library. The large Catalogue of books under their authors, maintained in the Library, is in good order; but the supply of copies of this in the smaller form for sale is exhausted. It is thought that the Subject Catalogue will be more useful, especially for Members living at a distance.

The collection of Lantern Slides, under Mr. Wise's care, continues to do useful work. Nearly 10,000 slides were borrowed by Members during the Session. Supposing each slide to be seen by a moderately computed audience of twenty, it is clear that this collection already does much to arouse interest in classical study. The Sets of Slides are much appreciated, but there is considerable delay in the production of some of the texts to accompany them.

The collection of photographs and drawings grows rapidly. In particular, progress has been made with the work of getting the large drawings into good order and easy of access. These are the accumulation of years, and the work though repaying is slow. A classified list is in preparation.

The small Association of Friends of the Library continues to give invaluable help. The fact is there is neither room nor money for further increase of the permanent staff. But the figures quoted above show the increase of work, and there is no department of the Library or Photographic Collection which could now be carried on efficiently without the care and time which the Friends of the Library have generously given. In this connexion Miss Ainslie, Mr. Bailly, Mrs. Barge, Mrs. Culley, Miss Geare, Mrs. Milne and Miss Nash have deserved well of the Society. In the autumn there will be room and need for additional Friends.

Finance.—For the first time for some years our Income and Expenditure account shows a balance on the right side, which is a matter of considerable satisfaction. The principal factor is the reduced cost of the *Journal*, owing mainly to the fall in the price of paper and partly to a small reduction in the cost of printing. Other expenses vary somewhat under different heads and are slightly less in total. The receipts for sales and advertisements of the *Journal* amounted to £246, which, leaving out of account the special sales by the Society in the preceding year, is a distinct improvement, partly in the receipts from the publishers, and partly from sales of back volumes by the Society.

It is regretted that the receipts from Members and Libraries' subscriptions is a little less than last year. The number of members is now 1300, including 26 Hon. Members. There are in addition 296 subscribing libraries.

It is inevitable that the Society should lose a number of its Members each year by death and other causes, and if the current year's expenses are to be covered by its income, it is essential that Members should energetically endeavour to introduce new Members from among their friends. The help given in this way in the past is gratefully appreciated and a continuance is earnestly asked for in the future.

A word of thanks is due to a number of Members who have generously increased their annual subscription, and the Council trust that wherever possible other

Members will see their way to render similar assistance during the difficulties of the present time.

Figures are appended showing the Society's main expenditure and receipts, firstly pre-war, secondly for the year 1921, and lastly for the year 1922.

EXPENDITURE.

	Pre-war.	1921	1922
Journal	Av. £600	£1172	£909
Slides and Photographs	70	93	123
Expenses (Various)	240	389	344
Library	80	138	102

RECEIPTS.

	Pre-war.	1921	1922
Journal (Sales and Advertisements)	Av. £140	£462*	£246
Slides and Photographs	73	110	152
Subscriptions (Members and Libraries)	1200	1593	1557
Rents	80	180	135
Dividends	63	100	116
Interest	10	41	17

At the conclusion of the Report the President delivered the following address :—

It is usual on this occasion (unless, as last year, a special attraction can be substituted) for the President to say something with reference to the events of the past year, or to some special matter of interest to our Society. And first, it is fitting to record our losses. In number they are some sixteen—not, I imagine, more than a Society of this size must often suffer in twelve months: in importance and distinction they can seldom have been exceeded. Among them are two Professors, Prof. J. W. Marshall of Aberystwyth and Prof. H. C. Butler of Princeton; Mr. F. Legge, a retired scholar who did good work in an obscure field of early Christian literature; and two headmasters, Dr. James Gow, the former chief of the great school which still, I believe, cherishes in its Latin plays the tradition of the unreformed pronunciation, and Mr. F. W. Sanderson, that energetic pioneer in new methods and ardent champion of science for schoolboys, who yet retained his own admiration for the Classics. But beyond these there are four names who deserve special mention in this place and in connection with our Society.

First in point of time, since his death occurred almost at the date of our last Annual Meeting, was the loss of Sir John Sandys. He was one of the earliest members of the Society, a Vice-President for many years, chairman of the Cambridge Branch which carried on a semi-independent existence for many years, a constant attendant at meetings of this and other societies, a conspicuous figure-head at Cambridge, a stalwart champion of the Classics everywhere and always. His *History of Classical Scholarship* displayed his most characteristic merits, his industry, his punctilious accuracy in details, his wide range of knowledge and firm grasp of a great subject. His editions of classical literature, notably the *Racine* and the

* Special sale of back Volumes.

Alexander Diller, showed the same qualities of thoroughness and impartial scholarship, which will long make them the most complete and authoritative editions of these texts. To this general tribute of respect I should like to be allowed to add an expression of personal obligation. Circumstances brought me into relations with Sir John Sandys in almost the earliest days of my service at the Museum: and I cannot refrain from bearing my testimony to the courtesy, the kindness, the friendliness, the total absence of any assumption of superiority with which he treated a much younger and much less well-equipped scholar. And some twenty-five years later I again had special cause for gratitude to him, for the zeal and energy with which he threw himself into the struggle for the defence of the British Museum against the raid of the Air Ministry in January 1918.

In January of the present year we lost Mr. Talfourd Ely, a scholar not very well known (in spite of his *Manual of Archaeology*) outside this Society, but a most familiar figure to all who ever sat on our Council. I cannot remember the time when he was not a member of it, and the most regular attendant (and perhaps the most infrequent speaker) at its meetings. His regularity of attendance ensured his invariable re-election. He became an institution: one of those men who add a sense of weight and solidity to a consultative body, whose presence and countenance seem a guarantee of permanence, whom all were glad to meet and whom all were grieved to lose. A Society with loyal friends and supporters such as Talfourd Ely is assuredly founded on a rock.

Three months later we lost one of our Honorary Members, Mr. V. Stais. Of him the members of the Society who lived at the British School in Athens or who worked in Greece can speak with fuller and more personal knowledge; but all knew him as a leading figure among Greek archaeologists, and as the dispenser of those facilities for research and exploration which Greece allows so liberally to foreign scholars. I trust that nothing will impair the friendly relations which have long been established between successive administrators of Greek antiquities and successive Directors of our School.

And then, little more than a month ago, there passed away, at the great age of eighty-eight, one of the heroic figures of English scholarship, Mr. W. L. Newman. Scholar of Balliol before he was eighteen, Fellow before he had taken his First in Greats, sixty years ago he was one of the most impressive teachers of ancient history and political philosophy in the University. Then, still more than half a century ago, he retired; and in that retirement he wrought for thirty years at the great edition of the *Politics* of Aristotle, which will stand for his enduring monument. This is no pedant's book. It is the work of a man of wide knowledge, of inexhaustible industry, but also of sane judgment and a sense of proportion, who chose for his subject one of the wisest and most suggestive books of antiquity, and made it the text for a study of that wide range of human affairs of which it treats, and in respect to which Greek thought is so precious a guide and inspiration in dealing with our modern life and the problems of human society. It is one of the masterpieces of British scholarship—one of its characteristic masterpieces, I think we are entitled to claim, in its sobriety, in its good sense, in its lack of dogmatism, coupled with a complete mastery of its subject. Few of us can have known him, except by correspondence, but we were all proud of him, and his death leaves a gap in the roll of British scholars which will be hard indeed to fill. The Society was represented at his funeral by Mr. Penoyre, who laid on the grave a tribute of laurel in our name.

These are the leaders among those whose work for classical culture, which is the foundation and living inspiration of our own culture, is finished. What can we say of the work that is being done by their successors to-day, and of the character, the achievements, and the ideals of that British scholarship, of which such men as Newman and Sandys were the representatives? Looking back over the past twelve months, I do not see any grounds for discouragement. The quantity of the output is considerable; the quality of it is high. I cannot undertake to review

the whole field, or to give a survey of all that has been accomplished, whether in archaeology or in literature. Such surveys are provided for us in the periodical reports which are published in our *Journal*, or in the volumes of *The Year's Work* issued by the Classical Association. But I should like to take the opportunity of mentioning a few of the most conspicuous publications of the past year, and to say a word or two on what seem to me to be the characteristic merits and defects of our national scholarship. Criticism is the privilege claimed by those who, for whatever reason, are withdrawn from the active work of production; and those who do not admit the claim always have their remedy, since they need neither listen nor agree.

With regard to one volume, of no great size but of great weight, and covering the whole field of our province, I am sure there will be no difference of opinion. I mean the volume entitled *The Legacy of Greece*, edited by Mr. R. W. Livingstone, whom we hope to-day to honour ourselves by electing as one of our Vice-Presidents. It is a book of the first importance in the advocacy of the claims of classical study as an essential element in our modern culture and education. The several essays of which it is composed are written by some of the most eminent scholars and best writers of our time, and between them they cover the various provinces of the Greek genius with exceptional completeness. Especially in the chapters that deal with mathematics and science it contains a survey of Greek thought which will have much that is fresh to nearly every reader. It is a readable, stimulating book, attractive to any reader who has the least interest either in Greek thought or in the origins of our own, and a most valuable arsenal for propaganda.

Of new editions of Greek classics, two, I think, deserve special mention. The first is the edition of Herodas, commenced by Walter Headlam and completed by his pupil, Mr. A. D. Knox. To this I referred briefly last year, but it was then barely published, and there had been no time to study it. And first let me say in passing that now that the two editors who have paid most attention to the subject, Mr. Nairn and Mr. Headlam (to say nothing of Meister, Herwerden, and the new Dutch editor, Groenbloem, whose very useful edition appeared almost simultaneously with that of Headlam and Knox), have given their adhesion to the form *Herodas*, I hope we may agree to adopt it, rather than the alternative *Herondas*, popularised by Dr. Rutherford with that rather perverse preference for the less probable opinion, which was one of the characteristics of his independent genius. For the edition itself, it suffers, no doubt, from its double authorship. No man can use the materials of another with complete mastery, least of all a disciple who is handling the work left unfinished by a revered teacher. In form and presentment, therefore, the work is occasionally unsatisfactory. But it contains a mass of materials, compiled with exceptional knowledge and scholarship, and much acute reconstruction and exegesis, in which the share of Mr. Knox is by no means negligible. Headlam had laid himself out to illuminate the text of Herodas with all the resources that he could derive from the entire literature of Greece (not excluding the obscurer rhetoricians), a fresh survey of which he had undertaken for this purpose. Had he lived to complete his work on the lines which he had planned, we should have possessed one of the masterpieces of scholarship. As it is, we still possess (and must thank Mr. Knox for having rescued so much and founded it off so adequately) a fine edition of the newly discovered classic, and a storehouse of much valuable information, and of fine application of taste and judgment.

The second new edition of a Greek classic that I wish to mention is Mr. E. B. England's edition of the *Laws* of Plato. I can say less of it, because I have not had time to do more than glance at it; but it is well spoken of by those who have used it, and it deserves commendation as a courageous undertaking of a kind not too frequent in British scholarship, but yet particularly suitable to the British genius. I want to say something on these topics presently, and would meanwhile only note with satisfaction the achievement of a substantial piece of work, devoted

to a subject which has been somewhat neglected by scholars in general, who, in their worship of the *Republic*, have done less for the *Lives* than it deserves.

Among texts one should also mention, though necessarily briefly, the fifteenth volume in the long series of Oxyrhynchus Papyri, devoted wholly to literary texts, and notable especially for its contributions (alas! lamentably fragmentary) to Sappho, Alcæus, Pindar and Callimachus; Professor Joachim's edition of Aristotle's *De veteris et philosophi*, of which he has also contributed a translation to the Oxford Aristotle; and several additions, too numerous to specify separately, to that most useful series, the Loeb Library.* It is a legitimate cause of satisfaction that this country can claim three such valuable series as the *Scriptorum Classicorum Bibliotheca Oxoniensis*, the Oxford translation of Aristotle, and the Loeb Library, not forgetting that in the latter case the initiation, the sinews of war, and much of the spado-work are due to our friends and colleagues across the Atlantic, *quos honoris causa nominamus*.

With regard to treatises on classical subjects, *ad loca principum*. One must begin with Homer; and here it is a pleasure somewhat to extend the period covered by my survey, in order to include the recent volumes of Dr. Leaf and Mr. Allen (of both of whom we all think better than either is apparently willing to think of the theories of the other) on the geography of the *Troia* and the Catalogues of the Ships. We have also to notice the study of the end of the *Odyssey*, contributed by Prof. Bury to our own *Journal*, and the stalwart unitarianism of Prof. J. A. Scott and Mr. J. I. Sheppard. The history of the Homeric question since Wolf is curiously parallel with that of the New Testament question since Haug. In both cases the still waters or the sleeping dogs (whichever metaphor you like to apply) were violently disturbed by a powerful force of destructive criticism. In both the general conclusions of the destructive criticism were accepted as the gospel of enlightenment for some two generations. In both during the last generation the tendency has been strongly back towards the traditional view; but in both the traditional view has gained in fullness and in a living comprehension of the facts through the criticisms of its opponents. The result, in the case of the Homeric question, seems likely to be a far truer appreciation of the Homeric poems, which will yet leave us free to believe in Homer.

On the archaeological side, one may be pardoned for referring again to a book mentioned last year, the most important in its own sphere that has appeared for many years, Sir Arthur Evans' *Palace of Minos*. It is unnecessary to dwell upon it here, since our Society has already paid homage to it by devoting to its consideration the whole of one of our ordinary meetings; but in attempting to do justice to the recent achievements of British scholarship one could not, especially in this place, omit a work which records, or rather commences to record, one of the heroic achievements of contemporary archaeology. When we may look for the completion of the story, I cannot tell, since Sir Arthur is still busily engaged in extending his conquests rather than recording them; but it would be a thousand pities if it were not completed by the discoverer himself in the same masterly manner in which it has been begun. The only regrettable feature about it is that so long and complex a story, needing such ample illustration, must be a book which private scholars can hardly hope to contemplate except on the shelves of a public library.

Two other books deserve to be mentioned, because each of them is a treatment of a large and important subject, and a subject rarely handled on a large scale, and of a quality which entitles them to recognition not only here but in Europe as authorities of the first rank. I refer to Sir Thomas Heath's *History of Greek*

* In this connexion I should like (though it is not a product of British Scholarship) to call attention to the French counterpart of the Loeb Library, the Bibliothèque Guillaume Budé, which has already published an attractive series of Greek and Latin classics.

Mathematics and Professor Heitland's *Agricola*. Of both of these, and especially of the former, I can only speak with the respect of ignorance; but it is eminently satisfactory to see British scholars handling a large subject with the command of a master instead of compiling text-books.

There are other publications of recent date that might well be mentioned, such as Dr. Farnell's Gifford Lectures on the *Cult of the Greek States*, or Prof. Ure's *Origin of Tyranny*, and even so the catalogue would be difficult to complete; but time and space forbid. In this summary of the more outstanding contributions to Hellenic studies during the last year or a little more, I have spoken only of the work of British scholars, because it is to a consideration of the characteristic qualities of British scholarship that I want to lead up. Criticism may, I hope, be pardoned in Presidents who have to produce an annual address. But criticism need not be despondent, or captious, or depreciatory, even when one is speaking of one's own countrymen.

On the contrary, while there are certain respects in which our national scholarship (or, at any rate, the output of our scholarship) is deficient, I think that what we need is more confidence in ourselves, the counterpart of which will be increased respect on the part of others. It is not only in the sphere of politics that the national habit of self-depreciation has at times unfortunate effects. The survey which I have just given of the output of the most recent period is enough to show that neither in quantity nor in quality have we reason for much dissatisfaction. And if we cast our eyes back over a generation or two, and consider the books which are generally accepted as standard works of enduring merit, we can again find ground for satisfaction. To mention at haphazard those which come first to the memory, we can match such editions of classical authors as Conington's and Henry's Virgils, Munro's *Lucretius*, Mayor's *Juvenal*, Ellis' *Catullus*, Jebb's *Sophocles*, Jewett's *Plato*, Bywater's and Butcher's *Poetics*, Newman's *Politics*, Frazer's *Pausanias*, against any that have been produced in any other country. As sound, learned, sane, and instructive commentaries, dealing not merely with the details of textual criticism and exegesis, but with the spirit of the author and his place in literature or history or philosophy, they stand in the first rank, and the list could be extended without much falling off in quality. Sympathetic interpretation of an author is, I think, one of the strong points in British scholarship.

If, before completing what I have to say about our strong points, I may refer to what seem to me to be our weaknesses, my position as a whole will perhaps be clearer. It seems to me, in the first place, that we are deficient in enterprise. We leave so much to be done by the scholars of other countries, especially Germany, which we might very well do ourselves, or in which we might at least take a part.

Let me illustrate my meaning from a field with which I am more or less familiar. During the last thirty years there has been an extraordinary influx of new material from Greek papyri discovered in Egypt. Fortune has ordained that a large proportion of these, and nearly all the best of them, should come to this country; so that we have started not merely on an equality with others, but even with a certain advantage. But after the publication of the *editioes principes* we have left much of the further exploitation of the new material to others. No *editio princeps* exhausts its subject, and no first editor resents seeing his work followed up and superseded by that of others; and, without any question of suppression, there are necessarily a number of off-shoots and fresh developments, and re-handling of doubtful questions, which must be dealt with by somebody.

I do not wish for a moment to suggest that our country has wholly failed in this respect. On the contrary, in the case of three of the most important of the new texts, not only the first but the best editions, containing the most detailed commentaries, have been the work of British scholars: I mean Sandys' *Apollonius Rhodius*, Jebb's *Æschylus*, and the editions of *Hecatas* by Nairn and Headlam.

and Knox. These are interpretative commentaries on a large scale, whereas Continental scholars have for the most part confined themselves to the textual criticism of these authors, or the treatment of isolated problems. But whereas foreign scholars (especially in Germany) sprang with enthusiasm for the new material offered to them in England (in some cases clamouring for access even before the *editio princeps* was published), British scholars have been backward in contributing to the criticism or reconstruction of new texts first published abroad. They have contributed little to Menander or Timotheus, or the oration of Hyperides against Athenogenes, or the commentary of Didymus on Demosthenes. Even with regard to texts first published at home, they have not (with the exception of Mr. R. J. Walker) followed up the *Ichniidae* of Sophocles with the interest which it deserves, nor (with the exception of Mr. E. M. Walker) have they made much study of the *Hellenica Oxyrhynchus*.

One exception I must note, the little book entitled *New Chapters in Greek Literature*, published rather more than a year ago by Messrs. Powell and Barber, and containing short studies of the additions made to our knowledge of Greek literature by the discoveries of recent years. It deals with no author earlier than the fourth century B.C., and therefore does not touch on Bacchylides, or the evidence as to the Homeric text derivable from Ptolemaic papyri, or on the contributions made to the text of Sappho, Alcaeus, Pindar, and other Greek lyrics, to which Mr. J. M. Edwards has devoted so much labour and ingenuity; but Aristotle, Hyperides, Timotheus, Herodas, Menander, Callimachus, and certain minor authors are discussed in a fresh and interesting manner, and I only wish these studies had been longer. There is much more work to be done on the literary papyri, and I wish that British scholars would undertake it.

Still more is this required in respect of the non-literary papyri. The immense mass of documents that have come to light during the last thirty years have furnished material to Continental scholars (especially in Germany) for a whole library of studies on the history of Egypt under the Ptolemæ, Roman, and Byzantine régimes, on its law, its economics, its administration, and on the bearings of these data on the Græco-Roman world in general. Such works as Bouche-Latour's *Histoire des Lagides*, Wilcken's *Griechische Ostraka*, Wilcken and Mitteis' *Grundzüge und Chrestomathie der Papyrikunde*, Lesquier's *Institutions Militaires de l'Égypte sous les Lagides* and *L'Armée Romaine d'Égypte d'Auguste à Dioclétien*, Otto's *Priester und Tempel im hellenistischen Ägypten*, Jonguet's *La vie municipale dans l'Égypte romaine*, Somke's *Ptolemäische Prozessrecht*, Schäfer's *Einführung in die Papyrikunde*, Rostovtzeff's *Large Estate in Egypt in the Third Century B.C.*,—these are all substantial works of learning, in which the results gleaned from the study of hundreds and thousands of papyri have been put together for the benefit of scholars and the advancement of knowledge. To these one must add a mass of smaller contributions in programmes and periodicals by such scholars as Wilcken, Wessely, Gradenwitz, Meyer, Crönert, Wenger, Plaumann, Preisigke, and others far too many to mention. I do not refer to the editing of texts, since here we have perhaps done our share, notably in the work of Grenfell, Hunt, Mahaffy, Smyly, and Bell; and their editions include many examples of admirable working out of the problems suggested by the texts which they publish. But outside such publications of texts with notes and commentaries we have done comparatively little. Two departments of knowledge may be excepted. In the application of the evidence of the papyri to Biblical Greek, the work of Moulton and Milligan fully equals that of Deissmann; and in the elucidation of the economic history of Byzantine and Arab Egypt nothing has been done better than certain articles by Mr. Bell. It is not ability to deal with the subjects suggested by the papyri that we lack; it is the men that will give the time and the trouble that such study demands.

Various reasons may be adduced to account for this deficiency; but two are, I think, predominant. One is purely material, namely the extent to which

our younger scholars at the Universities are immersed in tutorial work. This can only be remedied when financial conditions admit of the realisation of the ideal that all would accept, that a University teacher should have time for original work. That is a point which I need not labour. Every one will agree that the ideal of a University includes research and study as well as teaching, and every one will agree that teaching divorced from study must before long become arid and uninspiring. The difficulty lies solely in the *res angusta domi*, and those who are responsible for University teaching will be glad enough to remedy it as soon as the means are at their disposal.

The other cause is more fundamental. It is what I have already referred to as a certain lack of enterprise characteristic of the average British scholar. There is a tendency to accept things as they are, to leave to others the working out of new subjects and the propounding of new theories; and there is also a tendency to attach undue importance to work that appears under a foreign name. The former tendency I have heard described as *laxness*, though I should not use so harsh a term myself, and should rather ascribe it to a not unnatural reluctance to concentrate on a single branch of knowledge, and so acquire the special skill and experience needed for such work. The latter is, I think, unquestionably due to diffidence—to a readiness to accept, and an unwillingness to question, what other men have affirmed. The two are, however, connected, for the diffidence is in part due to a sense that one has not sufficiently worked out the subject to be justified in assuming magisterial airs. With command of a subject comes confidence; and it is for the cultivation of this command and this confidence, over the whole sphere of Hellenic study, that I want to plead, especially with the younger generation of our scholars.

I think we ought to look squarely in the face our national weaknesses, and also our national strength. Our weakness seems to me to be this inclination to work out a subject thoroughly, and so to acquire the complete knowledge which entitles a man to draw conclusions and to formulate new theories which will command the respect of others. We have not the gift, which the Germans pre-eminently have, of collecting all the material bearing on a particular subject. A German book of reference is generally fuller and more exhaustive than an English, and a German edition is likely to be more complete, on the material side, than an English. We are also less ready to question established tradition and to propound new theories. I do not say that this is wholly a defect, but it has a tendency towards stagnation, and when the subject matter is new, as in the case of the papyri or of new archaeological discoveries, initiative and originality are essential.

While, therefore, we shall necessarily be dependent on the work of others so long as we do not undertake the labour of collecting materials for ourselves, I still do not think we ought to accept dependence on the conclusions to be drawn from them. In the capacity of forming sound judgment upon evidence, I think the British mind is naturally strong; while, on the other hand, the readiness of German scholars to propound new theories makes them prone to accept them on inadequate evidence, and to proclaim them dogmatically as established facts. This, if I may say so with all respect, seems to me often to be the case even with scholars of such recognised genius and learning as Wilamowitz, Harnack, Eduard Meyer and Fortwängler. Their theories must always command respect, by reason of their great knowledge of the fields in which they have worked; but even they have expressed, with much emphasis, views of literature or history or art which have failed to establish themselves in the face of criticism. In the case of scholars of lesser calibre we are still more entitled to preserve our independence of judgment. In English books, foreign scholars are habitually quoted as authorities in preference to our own countrymen; in French or German books the opposite is the case. If we do not appreciate our own scholarship, we cannot expect others to do so; and I am convinced that there is no necessity for this national self-depreciation.

In sanity of judgment, in capacity for realising an historical situation and for appreciating the motives which govern action, I do not think we are inferior to any other nation. Our national history and experience give us special advantages in handling the interpretation of history, and I think we should have the courage of our convictions. What we need is the sound basis of knowledge on which to base our judgments.

Of course I know that there are exceptions, and brilliant exceptions, to the generalisations I have been making. No one would accuse Sir James Frazer of lack of industry in the collection of materials, or Sir William Ridgeway of lack of confidence in enunciating original opinions, or Sir Arthur Evans of lack of initiative in the handling of new discoveries; while Mr. Beazley's work on Greek vases is a model of originality and resource in the intricate and delicate task of handling a mass of materials that have been long before the world but never yet reduced to order. But in the main I believe my generalisations to be true, and I want to exhort British scholars to greater enterprise and greater self-confidence, based upon a fuller mastery of a selected subject.

There is no lack of fields in which their industry may be exercised. Even on the great masters of Greek and Roman literature there is still much that can be done. Warde Fowler has shown us that even Virgil is not exhausted, and Prof. Murray, Dr. Leaf, Mr. Allen and many others have shown us that Homer is inexhaustible. We have no edition of Aeschylus or of Euripides on the same scale as Jebb's Sophocles. We have no commentary on Thucydides since Arnold. Although (or is it because?) Oxford has devoted many generations of intensive study to the *Ethics* of Aristotle, we have no edition of it comparable to Newman's *Politics* or Bywater's *Poetics*. And in this place we are especially bound to remember the legacy left to us by our last President, a full commentary on Strabo. These are all tasks for which British scholarship is eminently fitted. Foreign scholars usually confine themselves to the textual criticism of the author whom they are editing; the commentary appeals more to our British turn of mind, and this aptitude should be cultivated.

I feel I should end with an apology. In taking on myself, from the position of a looker-on, to criticise British scholars, I would ask you to believe that I do so with no feeling of superiority. On the contrary, it is just because I believe that British scholars have high qualities which they do not sufficiently recognise in themselves, and which they do not sufficiently recognise in their compatriots, that I have ventured to take this opportunity of saying what has long been in my mind. If foreign scholars often do not quote an English authority, but prefer to make references to the works of their own countrymen, it is in part because many of them do not read our language easily. For most people it is easier to obtain and read books written in their own language, and if the information needed is to be found there, they do not think it necessary to look farther. But this is no reason why we should acquiesce in the neglect of our own contributions to scholarship. Modesty is a very estimable quality, but national self-depreciation is a trick rather than a virtue. It is not peculiar to classical scholarship. It is particularly evident in much of our art criticism. I do not for a moment wish that it should be replaced by a blatant self-satisfaction or self-advertisement. I only wish that in all departments of knowledge our scholars, art critics, historians, men of science and men of letters should exercise the decent manly self-confidence to which they are entitled, and so, without depreciating others, enhance the value of our national contribution to the general advance of knowledge.

It is in this hope that I would wish God-speed to all those who during the coming year will be working in the great cause of the promotion of Hellenic Studies.

The President then formally moved the adoption of the Report which was seconded by Mr. A. G. R. Hayter. The Report was carried unanimously.

The Vice-Presidents and Members of the Council, nominated for election or re-election, were unanimously elected on the President's motion which was seconded by Dr. A. Van Buren.

The President then detailed sundry alterations in the Rules, notice of which had been circulated. The Council had recommended that the rule for the election of members should be simplified, and the alteration was approved. The Council had further recommended that the privileges of Student Associates should be increased and their fees lessened. This course was also approved by the Meeting, and the necessary changes in the Rules authorised.

Dr. ' JOURNAL OF HELLENIC STUDIES ' ACCOUNT. FROM JANUARY 1, 1922, TO DECEMBER 31, 1922. Cr.

	£	s.	d.	£	s.	d.
To Printing and Paper, Vol. XLII.....	302	1	4			
" Plates	37	2	6			
" Drawing and Engraving	24	2	2			
" Editing and Reviews	78	10	6			
" Packing, Addressing, and Carriage to Members	137	8	1			
				205	7	3
By Sales, including back Vols. Per Macmillan & Co., Ltd.....				100	11	9
" Hellenic Society				41	15	6
a Receipts from Advertisements				41	1	0
" Balance to Income and Expenditure Account				662	10	4
				£209	4	7

LANTERN SLIDES AND PHOTOGRAPHS ACCOUNT FROM JANUARY 1, 1922, TO DECEMBER 31, 1922.

	£	s.	d.	£	s.	d.
To Slides and Photographs for Sale	67	19	0			
" Slides for Hire	40	3	11			
" Photographs for Reference Collection	14	15	6½			
" Balance to Income and Expenditure Account	28	18	5			
				£151	16	10

LIBRARY ACCOUNT. FROM JANUARY 1, 1922, TO DECEMBER 31, 1922.

	£	s.	d.	£	s.	d.
To Purchases	45	4	9			
" Binding	56	9	6			
				99	4	4
				£101	14	3

BALANCE SHEET. DECEMBER 31, 1922.

<i>Liabilities.</i>		<i>Assets.</i>	
	£ s. d.		£ s. d.
To Debts Payable	203 2 5	By Cash in Hand—Bank	974 0 0
" Subscriptions paid in advance	42 0 0	Assistant-Treasurer	38 1 3
" Endowment Fund	915 74 0	Petty Cash	62 16 11
(Includes legacy of £200 from the late Canon Adam Farrer and £200 from the late Rev. H. F. Tozer)			1074 18 4
" Emergency Fund (Library Fittings and Furniture)	394 18 0	Debts Receivable	377 0 8
Total Received	394 18 0	Investments (Life Compositions)	1854 3 11
" Life Compositions and Donations—		" (Endowment Fund)	800 0 0
Total at Jan. 1, 1922	223 4 0		2654 3 11
Received during year	47 5 0	Less Reserved against Depreciation	100 0 0
	2298 9 0		2554 3 11
Less carried to Income and Expenditure Account—Members deceased	36 15 0	Emergency Fund—Total Expended	446 0 0
	2262 14 0	Valuations of Stocks of Publications	345 8 0
Surplus Balance at Jan. 1, 1922	511 10 8	Library	359 0 0
Add Balance from Income and Expenditure Account	24 19 8	Expenses 'Strabo' carried forward	1 1 40
Surplus Balance at December 31, 1922	530 0 0	Paper in hand for printing Journal	34 0 0
	530 0 0		5181 18 8

Examined and found correct.

(Signed) C. F. CLAY,
W. E. F. MACMILLAN.

TWENTIETH LIST OF
BOOKS AND PAMPHLETS

ADDED TO THE
LIBRARY OF THE SOCIETY
SINCE THE PUBLICATION OF THE CATALOGUE
1922—1923

*With this list are incorporated books belonging to the Society for the
Promotion of Roman Studies. These are distinguished by n.s.*

NOTE.—The whole Catalogue will now be reprinted in
Subject Order.

- Abbott (G. F.)** *Greeks and the Allies, 1914—1922.*
7 $\frac{1}{2}$ × 5 in. pp. x + 242. 1922.
- Adamsen (R.)** *The development of Greek philosophy.* Edited by
W. R. Sorley and R. P. Hardin.
2 × 6 in. pp. xi + 326. Edinburgh and London. 1908.
- Aelius Aristides.** See Boulanger (A.), *Aelius Aristide et la sophistique.*
- Aeschylus.** With Engl. transl. by H. W. Smyth. Vol. I. *Suppliant
maidens—Persians—Prometheus—Seven against Thebes.*
[Loeb Class. Libr.] 6 $\frac{1}{2}$ × 4 $\frac{1}{2}$ in. pp. xi + 426. 1922.
- Aeschylus.** *The Agamemnon.* Translated into English verse by
E. Thring. 7 $\frac{1}{2}$ × 5 $\frac{1}{2}$ in. pp. viii + 58. 1904.
- Aeschylus.** *The House of Atreus, being the Agamemnon, Libation-
bearers and Furies.* Translated into English verse by
E. D. A. Morshead. 6 $\frac{1}{2}$ × 4 $\frac{1}{2}$ in. pp. xxxiv + 185. 1904.
- Aeschylus.** *The Oresteia.* Translated by R. C. Trevelyan.
7 $\frac{1}{2}$ × 5 $\frac{1}{2}$ in. pp. 153. 1922.
- Aeschylus.** See Coplestone (R. S.).
- Alciphron.** *Epistularum libri. IV.* Ed. M. A. Schepers.
6 $\frac{1}{2}$ × 4 $\frac{1}{2}$ in. pp. xxv + 225. Leipzig. 1905.
- Alexandria.** *La Société Archéologique d'Alexandrie. Bulletin de la
S. A. d'A. From Vol. I. (1898).*
9 $\frac{1}{2}$ × 6 $\frac{1}{2}$ in. Alexandria. *In progress.*
Mémoires (3 earlier miscellaneous).
9 $\frac{1}{2}$ × 6 $\frac{1}{2}$ in. Alexandria. 1895—1908.
Mémoires. From Vol. I. (1922).
11 × 9 in. Alexandria. *In progress.*
- n.s. Allardice (J. T.) and Junks (E. A.)** *An index of the adverbs of
Plautus.* [St. Andrews Univ. Publ., 11.]
8 $\frac{1}{2}$ × 5 $\frac{1}{2}$ in. pp. 71. Oxford. 1913.

n.s.—the property of the Roman Society.

- Amantos (K. I.)** Ὁ Ἑλληστυπὴς τῆς Μικρῆς Ἀσίας κατὰ τὸν Μεσσηνίαν.
8 × 6 in. pp. 142. Athens, 1919.
- Ameis (K. F.)** *Editor.* See *Homer, Homeri Odyssee.*
- Ammon.** See *Maximus et Ammon.*
- Anderson (A. R.)** A short bibliography on Scottish history and literature. 8½ × 5½ in. pp. 13. Glasgow, 1922.
- Andréadès (A.)** La législation ouvrière en Grèce.
9½ × 6½ in. pp. 36. Geneva, 1922.
- Andréadès (A. M.)** Τὰ κατεστημένα Κοινοβουλευτικῶς καὶ αἱ χρεῖραι αὐτῶν δημοκρατικῶς βασιλεῦ.
8½ × 6½ in. pp. 15. Athens, 1923.
- Anthology, the Greek.** See *Neaves (Lord).*
- Apelt (O.)** *Translator.* See *Libanius.*
- Aristophanes.** The Ecclesiazusae. Translated into corresponding metres by B. B. Rogers. 7½ × 4½ in. pp. 83. 1923.
- Aristophanes.** Equites. Edited by F. H. M. Blaydes.
9 × 5½ in. pp. xx + 326. Halle, 1892.
- Aristophanes.** Ranae. Edited by J. van Leeuwen.
9½ × 6½ in. pp. xx + 227. Leyden, 1896.
- Aristophanes.** Vespaes. Edited by F. H. M. Blaydes.
9 × 5½ in. pp. xxiv + 485. Halle, 1893.
- Aristotle.** Constitution d'Athènes. Texte établi et traduit par G. Mathieu et B. Haussoulhier. [Collection Guillaume Budé]. 8 × 5½ in. pp. xxxi + 101. Paris, 1922.
- Aristotle.** Ethics, with English notes by W. E. Jelf.
9 × 5 in. pp. x + 231. Oxford, 1856.
- Aristotle.** The Nicomachean Ethics. Translated by R. Williams.
9 × 5½ in. pp. xiv + 303. 1869.
- Aristotle.** Meteorologica. Translated by E. W. Webster.
9 × 5½ in. pp. vi + c. 136. Oxford, 1923.
- Aristotle.** The Rhetoric, with a commentary by E. M. Cope. Revised and edited by J. E. Sandys. 3 vols.
9½ × 5½ in. pp. xx + 300 (average per vol.). Cambridge, 1877.
- Aristotle.** See *Grant (A.).*
- Aristotle.** See *Jaeger (W.).*
- Ashmolean Museum.** Summary Guide. 3rd edition.
7½ × 5 in. pp. 178. Oxford, 1920.
- Aurelius (M.)** The Thoughts of the Emperor M. Aurelius Antoninus. Translated by G. Long. 7 × 4½ in. pp. lxxviii + 224. 1872.
- Baumeister (A.)** See *Herbst (W.). Historisches Quellenbuch.*
- Beazley (J. D.)** An Attic red-figured cup. [Burlington Mag., 41].
12½ × 10 in. pp. 2. 1922.
- Behrens (H.)** Untersuchungen ueber das anonyrne Buch De viris illustribus. 9½ × 6½ in. pp. 71. Heidelberg, 1923.
- Belfast Municipal Art Gallery and Museum.** Notes on Greek Sculpture. [By K. T. Frost].
8½ × 5½ in. pp. 23. Belfast, 1912.
- Belle (H.)** Trois années en Grèce.
7½ × 4½ in. pp. vii + 413. Paris, 1881.
- Beloch (J.)** Saggi di storia antica e di archeologia.
8½ × 6 in. pp. viii + 370. Rome, 1910.
- Beloch (J.)** Atlas von Campanien. See *Maps, Campania.*
- n.s. — the property of the Roman Society.

- Bendixen (J.)** *Editor.* See *Hrotsvitha*.
- Berlin.** *Berlins Antike Bildwerke.*
 I. Die Gyps abgüsse im Neuen Museum (= Bausteine zur Geschichte der griechisch-römischen Plastik).
 II. Gerathe und Bronzen im Alten Museum (= Kleinere Kunst und Industrie im Altertum). By C. Fiedlerichs.
 8 × 5 in. pp. x + 550 (average per vol.). Düsseldorf. 1868-71.
- Berlin, Royal Museums.** *Elephantine-papyri.* By O. Rubensohn.
 10½ × 7½ in. pp. 92. Berlin. 1907.
- Bernhardi (K.)** See *Schreiber (T.)*. *Kultur-historischer Bilderatlas.*
- Bernhardy (G.)** *Grundriss der griechischen Litteratur.* 3 vols.
 9 × 6 in. pp. xv + 750 (average per vol.). Halle. 1876, -77, -80.
- Bernhardy (G.)** *Grundriss der römischen Litteratur.* 5th Edition.
 9 × 5½ in. pp. xxx + 1009. Brunswick. 1872.
- Berry (G. G.)** *Translator.* See *Gomperz (T.)*. *Greek Thinkers.*
- Bertarelli (L. V.)** See *Italy. Italian Guide-books.*
- Besnault (A. Hauvette-)** *Les stratèges athéniens.*
 9½ × 6½ in. pp. x + 190. Paris. 1893.
- Biblica :** *Commentarii editi a Pontificio Instituto Biblico.* From Vol. 1. (1930).
 9½ × 6½ in. Rome. *In progress.*
- Bienkowski (P.)** *Antiquities in the collection Goluchow.*
Classical sculptures in Krakow. With a French *précis*.
Gallo-Roman antiquities.
A Græco-Egyptian head.
Greek lekythoi in Krakow. With a French *précis*.
Hellenistic pottery in Krakow.
(Six articles in Polish.)
 About 13 × 9½ in. Krakow and Poznań. 1919-22.
- Bienkowski (P.)** *De aliquot Cracoviensis Musei Principum Czartoryski Monumentis.* 8½ × 5½ in. pp. 64. Cracow.
- Bienkowski (P.)** *Die Darstellungen der Gallier in der hellenistischen Kunst.*
 13 × 10½ in. pp. viii + 151. Vienna. 1908.
- Bienkowski (P.)** *About a Mattei relief yet unexplained* [*Charakteria Morawski*, 1922.]
 9½ × 6½ in. pp. 32. Cracow. 1922.
- Bienkowski (P.)** *De simulacris barbararum gentium apud Romanos.*
 12½ × 10½ in. pp. 99. Cracow. 1900.
- Bienkowski (P.)** *De speculis etruscis et cetera in Museo Principum Czartoryski Cracoviae.*
 10½ × 8½ in. pp. 39. Cracow. 1912.
- Bienkowski (P.)** *De pace Romana in anaglypto quodam expressa.* [Eos, 1917.] 9½ × 6½ in. pp. 20. Cracow. 1917.
- Birt (Th.)** See *Mueller*, *Handbuch der Klassischen Altertumswissenschaft, Kritik und Hermeneutik.*
- Blass (F.)** *Die Rhythmen der asiatischen und römischen Kunstprosa.*
 9½ × 6 in. pp. iv + 221. Leipzig. 1905.
- Blaydes (F. H. M.)** *Editor.* See *Aristophanes*.
- Blomfield (R.)** See *Gardner (P.)*. *Greek Art and Architecture.*
- Bluemner (H.)** *Editor.* See *Pausanias*.
- Boissevain (U. P.)** *Editor.* See *Dio Cassius*.

- Boissonnade (P.)** *Le travail dans l'Europe chrétienne au moyen âge* (V^e-XV^e siècle). 9 × 5½ in. pp. 131. Paris. 1921.
- Bolt (F.)** *Vita contemplativa*. [Sitzungsber. d. Heidelberger Akad. d. Wissensch., phil.-hist. Kl., 1920, 8.]
9½ × 6½ in. pp. 34. Heidelberg. 1920.
- Bologna.** *Guida del museo civico, sezione antica*.
7 × 4½ in. pp. 79. Bologna. 1887.
- Bond (R. W.)** *The Pedlar, a narrative poem. Part I*.
7½ × 5 in. pp. xi + 167. Oxford. 1922.
- Bosanquet (B.)** *Translator. See Plato, The Education of the Young.*
- Boulanger (A.)** *Aelius Aristide et la sophistique dans la province d'Asie au II^e siècle de notre ère*.
10 × 6½ in. pp. xiv + 501. Paris. 1923.
- Bradley (H.)** *On the text of Abbe of Henry's Quæstiones grammaticales*. [Proc. Brit. Ac., 10.]
9½ × 6½ in. pp. 8. 1922.
- Breasted (J. H.)** *Ancient times, a history of the early world*.
7½ × 5½ in. pp. xx + 742. Boston. 1916.
- Brink (J. N. B. van den)** *De Oud-christelijke Monumenten van Ephesus, epigraphische studie*.
10 × 6½ in. pp. xiv + 208. The Hague. 1923.
- British Museum.** *Coins of the Roman Empire. Vol. I. Augustus to Vitellius. By H. Mattingly*.
10 × 6½ in. pp. cxxxi + 464. 1923.
- Id.** *Another copy.*
- British Museum.** *A short guide to the Sculptures of the Parthenon (Elgin Collection)*.
9½ × 7½ in. pp. 40. 1921.
- British School of Archaeology in Jerusalem.** *Bulletin. From I. (1923)*.
10 × 8 in. *In progress.*
- Brockhaus (C.)** *Aurelius Prudentius Clemens in seiner Bedeutung für die Kirche seiner Zeit*.
9½ × 5½ in. pp. viii + 334. Leipzig. 1872.
- Brodrick (W. J.)** *Demosthenes. [Anc. Classics for Engl. readers.]*
7 × 4½ in. pp. 174. 1877.
- Brodrick (W. J.)** *See Church (A.), Pliny's Letters.*
- Brownson (C. L.)** *Translator. See Xenophon.*
- Brunn (H.)** *I rilievi delle urne etrusche. Vol. I*.
13½ × 10½ in. pp. vii + 132. Rome. 1870.
This work was continued by G. Körte, q.v.
- Brunn (H.)** *Archaeologische Studien ihrem Lehrer Heinrich Brunn, zur Feier seines fünfzigjährigen Doctorjubiläums, dargebracht von A. Furtwängler, G. Körte, A. Milchhofer*.
13 × 9½ in. pp. 91. Berlin. 1893.
- Brunswick.** *Herzogliches Museum. Sammlung der Gypsabgüsse*.
7 × 4½ in. pp. 56. Brunswick. 1889.
- Buckler (W. H.)** *Historical and archaeological opportunities in the Near East*.
8 × 5½ in. pp. 11. Baltimore. 1922.
- Buecheler (F.)** *Editor. See Pervigilium Veneris.*
- Bulletin of the Hermitage Museum, St. Petersburg.** *From Vol. I, 1923, 10½ × 7½ in. pp. 76. St. Petersburg.*
In progress.

Bulletin de l'Institut archéologique Bulgare. From Vol. 1, 1921-1922. (In Bulgarian.)

10 $\frac{1}{2}$ × 7 $\frac{1}{2}$ in. Sophia. *In progress.*

Burn (R.) Rome and the Campagna.

11 $\frac{1}{2}$ × 9 in. pp. lxxxiii + 483. Cambridge and London. 1871.

Burnet (J.) Ignorance. [The Romanes Lecture, 1923.]

9 × 5 $\frac{1}{4}$ in. pp. 20. Oxford. 1923.

Bursian's Jahresbericht über die Fortschritte der Klassischen Altertumswissenschaft.

Supplementbände.

1905. Die Altertumswissenschaft im letzten Vierteljahrhundert. By W. Kroll.

1908. Bericht über die Literatur zur antiken Mythologie und Religionsgeschichte aus den Jahren, 1898-1905. By O. Gruppe.

1909-13. Bibliotheca scriptorum classicorum et graecorum et latinorum. Die Literatur von 1878 bis 1896. By R. Kussmann.

1909 Vol. I. Scriptores graeci. Part I.

1911 " " Part II.

1912 Vol. II. Scriptores latini. Part I.

1913 " " Part II.

1921. Bericht über die Literatur zur antiken Mythologie und Religionsgeschichte aus den Jahren 1906-1917. By O. Gruppe.

9 $\frac{1}{2}$ × 5 $\frac{1}{2}$ in. Leipzig.

Bury (J. B.) History of the later Roman Empire. 2 vols.

9 × 6 in. pp. xiii + 482 (average per vol.). 1923.

Id. Another copy.

Butler (A. J.) Amaranth and Asphodel: poems from the Greek anthology done into English verse.

7 × 4 $\frac{1}{2}$ in. pp. xxi + 277. Oxford. 1922.

Byzantine Research Fund. See Wadi Sarga.

Caesar, commentaries of. See Trollope (A.).

Cahen (E.) Editor and translator. See Callimachus.

Cairo. Supplementary Publications of the Service des Antiquités de l'Égypte. The Awan Obelisk, by R. Engelbach.

13 $\frac{1}{2}$ × 10 $\frac{1}{2}$ in. pp. 57. Cairo. 1922.

Cairo. Supplementary Publications. Excavations at Saqqara, 1912-1914. Archæe Mastabas. By J. E. Quibell.

13 $\frac{1}{2}$ × 10 $\frac{1}{2}$ in. pp. viii + 47. Cairo. 1923.

Caldor (G.) Editor. See Statius, Togai us Tebe.

Callimachus. Hymnes—épigrammes—les origines—Hécate—iambes—poèmes lyriques. Ed. and transl. E. Cahen. [Association Guillaume Baulé.] 8 × 5 $\frac{1}{4}$ in. pp. 194. Paris. 1922.

Cambridge Ancient History. Vol. I. Egypt and Babylonia to 1580 B.C. By J. L. Myers, S. A. Cook, A. J. B. Wace, S. H. Langdon, R. A. S. Macalister, H. R. Hall, T. E. Peet, R. O. Thompson.

9 $\frac{1}{2}$ × 6 $\frac{1}{2}$ in. pp. xxii + 704. Cambridge. 1923.

Id. Another copy.

- Cambridge, Fitzwilliam Museum. Catalogue of the McClean collection of Greek coins. By S. W. Gross.
 $11 \times 7\frac{1}{2}$ in. pp. x + 380. Cambridge. 1923.
22. Canfield (L. H.) The early persecutions of the Christians.
 $9\frac{1}{2} \times 6\frac{1}{2}$ in. pp. 215. New York. 1913.
- Carnuntum. Bericht des Vereines Carnuntum in Wien.
 9×6 in. Vienna. 1887-81.
 $12\frac{1}{2} \times 9\frac{1}{2}$ in. Vienna. 1889-1911.
23. Carter (J. B.) The religion of Numa.
 8×5 in. pp. viii + 189. 1906.
- Casaubon (L.) See Theophrastus.
- Casson (S.) Some Greek bronzes at Athens. [Burlington Mag., 41.]
 $12\frac{1}{2} \times 10$ in. pp. 3. 1922.
- Catullus. See Davies (J.).
- Cavalcaselle (G. B.) See Crowe (J. A.).
- Cebes. 'O $\rho\alpha\iota$ $\kappa\alpha\theta\eta\gamma\eta\tau\alpha\iota$ $\eta\mu\epsilon\tau\epsilon\varsigma$: accedit interpretatio Latina; ex editione J. Gronovii.
 $6 \times 3\frac{1}{2}$ in. pp. 91. Glasgow. 1757.
- Chapman (G.) Translator. See Homer.
- Chistol (M. V.) Twixt Greek and Turk.
 $8\frac{1}{2} \times 6$ in. pp. vi + 276. 1881.
24. Church (A.) and Brodribb (W. J.) Pliny's Letters. [Anc. Classics for Engl. readers.]
 $7 \times 4\frac{1}{2}$ in. 170 pp. 1872.
25. Cicero. Orationes. Ed. G. Long. 4 vols.
 $9\frac{1}{2} \times 5\frac{1}{2}$ in. pp. vi + 625 (average per vol.). 1855-62.
- Cicero. See Collins (W. L.).
- Cicero. Life and Letters. See Middleton (C.).
- Claim of Antiquity, The: with an annotated list of books for those who know neither Latin nor Greek.
 $7\frac{1}{2} \times 5$ in. pp. 30. 1922.
26. *Id.* Another copy.
- Claudian. With an English translation by M. Platnauer. 2 vols. [Loeb Class. Libr.]
 $6\frac{1}{2} \times 4\frac{1}{2}$ in. pp. xiv + 392. 1922.
27. Codrington (T.) Roman Roads in Britain.
 $7\frac{1}{2} \times 5$ in. pp. vi + 318. 1922.
- Colbert (M. C.) The Syntax of the De Civitate Dei of St. Augustine.
 $9\frac{1}{2} \times 6$ in. pp. x + 105. Washington, D.C. 1923.
- Collins (C. W.) Plato. [Anc. Classics for Engl. readers.]
 $7 \times 4\frac{1}{2}$ in. pp. 197. 1874.
- Collins (C. W.) Sophocles. [Anc. Classics for Engl. readers.]
 $7 \times 4\frac{1}{2}$ in. pp. 181. 1871.
28. Collins (W. L.) Cicero. [Anc. Classics for Engl. readers.]
 $7 \times 4\frac{1}{2}$ in. pp. 197. 1871.
- Collins (W. L.) Homer: The Iliad. [Anc. Classics for Engl. readers.]
 $7 \times 4\frac{1}{2}$ in. pp. 148. 1870.
- Collins (W. L.) Homer: the Odyssey. [Anc. Classics for Engl. readers.]
 $7 \times 4\frac{1}{2}$ in. pp. 136. 1870.
- Collins (W. L.) Lucian. [Anc. Classics for Engl. readers.]
 $7 \times 4\frac{1}{2}$ in. pp. 180. 1873.
29. Collins (W. L.) Plautus and Terence. [Anc. Classics for Engl. readers.]
 $7 \times 4\frac{1}{2}$ in. pp. 155. 1873.
30. Collins (W. L.) Virgil. [Anc. Classics for Engl. readers.]
 $7 \times 4\frac{1}{2}$ in. pp. 190. 1870.

- Constantinople.** *Musées impériaux ottomans. Catalogue des sculptures grecques, romaines et byzantines. III.* By G. Mendel.
 $10\frac{1}{2} \times 7\frac{1}{2}$ in. pp. xii + 668. Constantinople. 1911.
- Conze (A.)** *Römische Bildwerke einheimischen Fundorts in Oesterreich.*
 $12 \times 9\frac{1}{2}$ in. pp. 15. Vienna. 1877.
- Cook (S. A.)** See Cambridge Ancient History.
- Cope (E. M.)** *Editor.* See Aristotle, Rhetoric.
- Copenhagen.** *Fra Ny Carlsberg Glyptoteki Samlinger.*
 $11\frac{1}{2} \times 8$ in. pp. 111. Copenhagen. 1922.
- Copleston (R. S.)** *Aeschylus. [Anc. Classics for Engl. readers.]*
 $7 \times 4\frac{1}{2}$ in. pp. 196. 1870.
- Cordella (A.)** *Le Laurium.*
 $10 \times 6\frac{1}{2}$ in. pp. ix + 120. Marseilles. 1871.
- Corpus vasorum antiquorum.** France. No. 1. Musée du Louvre.
 E. Pottier. Fascicule 1. 13×10 in. Paris. *In progress.*
- Courby (F.)** *Les vases grecs à reliefs.*
 $10 \times 6\frac{1}{2}$ in. pp. x + 598. Paris. 1922.
- Crawford (O. G. S.)** *Air Survey and Archaeology. [The Geographical Journal, May 1923.]*
 $9\frac{1}{2} \times 6$ in. pp. 24. 1923.
- Crowe (J. A.) and Cavalcaselle (G. B.)** *A history of painting in Italy. Vols. I-III.*
 $9 \times 6\frac{1}{2}$ in. pp. 274 (average per vol.). 1903-5.
- Curle (A. O.)** *The treasure of Traprain, a Scottish hoard of Roman silver plate. $11\frac{1}{2} \times 9$ in. pp. xv + 131. Glasgow. 1923.*
- Curtius (E.)** *Alterthum und Gegenwart. Gesammelte Reden und Vorträge. 3 vols.*
 $8\frac{1}{2} \times 5\frac{1}{2}$ in. pp. vi + 530 (average per vol.). Berlin. 1882-89.
- Curtius (E.)** *The history of Greece. Trans. A. W. Ward. 5 vols.*
 $9 \times 5\frac{1}{2}$ in. pp. 550 (average per vol.). 1868-73.
- Dammann (W. H.)** See Hamburg.
- Davies (J.)** *Catullus, Tibullus and Propertius. [Anc. Classics for Engl. readers.]*
 $7 \times 4\frac{1}{2}$ in. pp. 180. 1876.
- Davies (J.)** *Hesiod and Theognis. [Anc. Classics for Engl. readers.]*
 $7 \times 4\frac{1}{2}$ in. pp. 166. 1873.
- Delehaye (H.)** *Deux Typica byzantina de l'époque des Paléologues.*
 $10 \times 6\frac{1}{2}$ in. pp. 212. Brussels. 1921.
- Demosthenes.** *Select private orations. Edd. F. A. Paley and J. E. Sandys. 2 vols.*
 $7\frac{1}{2} \times 5$ in. pp. xlv + 290 (average per vol.). Cambridge. 1898, 1910.
- Demosthenes.** See Brodribb (W. J.).
- De Witt (N. W.)** *Virgil's biographia litteraria.*
 $9 \times 5\frac{1}{2}$ in. pp. vi + 192. Toronto. 1923.
- Dick (F. C.)** *The Newton stone and other Pictish inscriptions.*
 $7\frac{1}{2} \times 5\frac{1}{2}$ in. pp. 64. Paisley. 1922.
- Diels (H.)** See Die Vorsokratiker.
- Digest.** 41, 1 and 2. See Zulueta (F. de).
- Dindorf (G.)** See Homer, Iliad.
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ROMAN BRITAIN.

The Wall of Hadrian.

All the slides in the collection dealing with the Roman Wall and neighbourhood are given in this list. Most are from negatives by the late Mr. J. P. Gibson, F.R.S., of Hexham.

- B9751 Map and section of the Wall.
- B9521 Map of the Wall.
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- B9742 The Great Wall of China, general view, for comparison.
- B9158 " " " detail.
- B9741 Typical view of the desolate country N. of the Wall, taken from Sewing Shields.
- B9752 Aesica, stone sill.
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- B9754 Amboglanna (Birdswald), R. Irthing from Camp.
- B9753 " wall turret.
- B9750 Blackcarts, I., wall : r., vallum.
- B9525 Boreovicus, plan of the fort.
- B9337 " the wall approaching from the W.
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- B9757 " N. Gate, with wall continued E. towards Sewing Shields.
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- B9762 Carvoran, two altars inscribed to the god Belatucadur.
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- B9726 " Museum, statue of Cybele.
- B9727 " " " profile view.
- B9771 " " " and Victory (from Boreovicus).
- B9770 " " relief of water nymphs.
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- c 581 Head of Aphrodite.* Kautmann type. Vatican Museums, 1922, front view.
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c 584 Female head,* Arcturus.* Vatican Museums, 1922.
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Pecten sarcophagus.

- #9368 *Dionysus and Ariadne*,* No. 751, Mus. Lat. Roma.
 #9369 *Hippolytus* : * L., with *Phaëdra*; c., hunting. No. 777, Mus. Lat. Roma.
 #9370 *Orestes and Pylades*,* etc. No. 799, Mus. Lat. Roma.

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 B1424 The 'sleeping watchman' *: statue of a child. Mus. Terme.
 B 932 Athena, archaic statue.* Naples Mus.

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| 29381 | " " * Bust in the Vatican. |
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M854 Jupiter.* statuette from Rutland. B.M.

Ternstroemia

- 20810 Archaic Medusa, antefix from Satrium (*J.R.S.*, 4, pl. 26, No. 1).
 20811 Archaic head from the Ara Coeli (*J.R.S.*, 4, pl. 22, No. 1).
 2542 Archaic Etruscan terracotta sarcophagus: two refining figures (B.M., *Terracotta Sarcophagi*, pl. 9).
 2592 Antefix: palmette and female bust (B.M., *Ant. of Terra-cottas*, c. 910).
 9500a Relief: a lady spinning, Acrop. Mus.
 c 935 *Id.*, restored drawing.
 9500b Relief: Athena mounting her chariot, Acrop. Mus.
 c 936 *Id.*, restored drawing.
 3377 Group representing a parturition.

VASES

* = from the original Vase.

† = from an adequate reproduction of the picture subject

- A 74 Corinthian Oenochos * (cf. Petrot and Chipiez, Vol. 9, fig. 320), coloured allics.
- © 937 Archale B.F. Amphora: Judgment of Paris. * (J.H.S., 1880, pl. 70).
- © 821 B.F. Amphora: a boxing match.* B.M.
- 1332 B.F. Amphora: the long distance race * (Gardner, *Greek Athletics*, p. 280, fig. 51).
- © 928 B.F. Vase. Athletes bathing in gymnasium. * Leyden.
- © 829 Hercules wrestling with the lion: Athens and Iohann.* R.F. Amphora, B.M. B193.
- © 823 Paeche Thieson.* R.F. Cylix, exterior. B.M. E73.
- 5463 Heads of two Mameads * from R.F. Amphora (Buschor, *Greek Vase Painting*, fig. 138).
- © 939 Heracles and Gera.* R.F. Vase (J.H.S., 1883, pl. 30).
- 3295 Achilles,* head of. Vatiou. The whole Vase = slide 928 (cf. J.H.S., I, pl. 6).
- 1114 The death of Priam.* R.F. Vase.
- 5580 Oedipus and the Sphinx.* R.F. Cylix, interior.
- 6510 The Expiration: a wrestler thrown. R.F. Cylix, interior (Hartwig, *Meisterwerke*, I, 21).

- 1231 *Crowning the Victor.* R.F. Cylix, interior * (*Arch. Zeit.*, 1852-3, pl. 52).
 8440 *Epeobius taking oath* (outline drawing).
 4198 *A Citharist.* R.F. Vase.
 c 829 *Youth taking leave of maiden.* R.F. Cylix, interior. B.M. E79.
 c 824 *Youth and old man.* R.F. Cylix, interior. B.M. E78.
 c 957 *A young artist carving a herm.* R.F. Cylix, interior.
 8439 *Domestic scene: Ladies at home.* *
 c 908 *A lady bathing.* R.F. Cylix, interior.
 c 825 *Condolence offered to mourner.* R.F. Cylix, exterior. B.M. E79.
 5824 *Youth and maiden on Attalekythos.* (Bauchop, *Great Four Painting*, figs. 143, 144).

PAINTING AND MOSAIC.

- 89812 *Boscureale: fresco of a sparrow.*
 89835 *Ostia, wall painting: head of a bearded man.*
 89813 " *children at a festival of Artemis: adoration at the shrine.*
 89814 " " " " " the procession.
 6497 *Pompeii, Europe and hell.*
 6498 " *Pan and nymphs.*
 6499 " *Heracles and Telephus.*
 89838 " *Goddess in car drawn by elephants.*
 c 174 " *house of the Vestii: fresco representing a chapel.*
 89651 *Rome, Palatine, Casa di Livia: a wreath of fruit and leaves.*
 89988 " *Hypogeum near Porta Maggiore: portrait head* (*Not. Scav.*, 1920, pl. 1a).
 89989 " " " " " " (*id.*, pl. 1b).
 89990 " " " " " " of a saint (*id.*, pl. 2a).
 89652 " *Graffito usually interpreted as parodying the Crucifixion, from the pedoecum on the Palatine.* *Mus. Kirsch.*

- c7105 *Delos, (?) mosaic of a trident.*
 c 493 *Ravenna, mosaic: Justinian and his train.*
 c 554 " " Justinian: portrait (Dalton, *Byz. Art.*, p. 9, fig. 8).
 c 492 " " Theodora and her train.
 c 537 " " Maximian: mosaic portrait (Dalton, *Byz. Art.*, p. 359, fig. 214).
 c 559 " " Classe, harbour and town.
 c 558 " " Palace of Theodora.
 c 560 " " The Good Shepherd.
 89393 *Rome, Mosaic in S. Maria Trastevere: Water-fowl: fishing scenes.*
 c 556 *Salonika, mosaic portrait head* (Dalton, *Byz. Art.*, p. 226, fig. 198).

MINOR ARTS.

- c 828 *Catana, Coin of R. O. Head of Satyr: R. Zeus enthroned.* B.M.
 c 183 *Syracuse, S. Dekadrachm and tetradrachm by Eusebetos.*
 89975 *Claudius, Canoe at Windsor* (*Archaeol.*, 45 (1), pl. 1).
 6551 *Justinian, lost gold medallion, stolen from Paris cabinet, from electrotyp.*
 c 555 *Ivory relief, an Empress* (Dalton, *Byz. Art.*, p. 213, fig. 128).
 5643 *Silver laryx from Corbridge, possibly the Judgment of Paris* (*J.H.S.*, 35, p. 67, fig. 1).
 c 563 *Silver saucupan from Chatteranges* (B.M. *Cat. of Silver Plate*, pl. 19, No. 136).
 c 564 " " " " " " 135.
 c 566 *Silver buckles from Chaource* (B.M. *Cat. of Silver Plate*, pl. 25, No. 148).
 89831 *Glass emery urns.* B.M.

Miscellaneous Dramatic.

- c 461 *The Agamemnon of Aeschylus: the King's entry to the palace* (drawing o. Cambridge production).
 c 246-250 *incina. Five slides illustrating the Oedipus Tyrannus of Sophocles.* (Drawings.)
 2615-2618 (4 slides). *Views of the performance of the Bacchae of Euripides, 1921, in the ancient theatre of Syracuse.*

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NOTICE TO CONTRIBUTORS.

THE Council of the Hellenic Society having decided that it is desirable for a common system of transliteration of Greek words to be adopted in the *Journal of Hellenic Studies*, the following scheme has been drawn up by the Acting Editorial Committee in conjunction with the Consultative Editorial Committee, and has received the approval of the Council.

In consideration of the literary traditions of English scholarship, the scheme is of the nature of a compromise, and in most cases considerable latitude of usage is to be allowed.

(1) All Greek proper names should be transliterated into the Latin alphabet according to the practice of educated Romans of the Augustan age. Thus ϵ should be represented by *e*, the vowels and diphthongs, *υ*, *αι*, *οι*, *ου*, by *y*, *ae*, *oe*, and *u* respectively, final *-ος* and *-ωρ* by *-us* and *-um*, and *-πος* by *-er*.

But in the case of the diphthong *ει*, it is felt that *ei* is more suitable than *e* or *i*, although in names like *Laodicea*, *Alexandria*, where they are consecrated by usage, *e* or *i* should be preserved; also words ending in *-ειωρ* must be represented by *-eum*.

A certain amount of discretion must be allowed in using the *o* terminations, especially where the Latin usage itself varies or prefers the *u* form, as *Delos*. Similarly Latin usage should be followed as far as possible in *-e* and *-a* terminations, e.g., *Præne*, *Stygæa*. In some of the more obscure names ending in *-πος*, as *Δαρυπος*, *-er* should be avoided, as likely to lead to confusion. The Greek form *-ον* is to be preferred to *-o* for names like *Dion*, *Hieron*, except in a name so common as *Apollo*, where it would be pedantic.

Names which have acquired a definite English form, such as *Corinth*, *Athens*, should of course not be otherwise represented. It is hardly necessary to point out that forms like *Hercules*, *Mercury*, *Minerva*, should not be used for *Hēracles*, *Hērmaes*, and *Athēna*.

(2) Although names of the gods should be transliterated in the same way as other proper names, names of personifications and epithets such as *Nike*, *Momencia*, *Hyakinthios*, should fall under § 4.

(3) In no case should accents, especially the circumflex, be written over vowels to show quantity.

(4) In the case of Greek words other than proper names, used as names of personifications or technical terms, the Greek form should be transliterated letter for letter, *k* being used for *κ*, *ch* for *χ*, but *y* and *u* being substituted for *υ* and *ου*, which are misleading in English, e.g., *Nike*, *apoxyomenos*, *diadumenos*, *rhyton*.

This rule should not be rigidly enforced in the case of Greek words in common English use, such as *agis*, *symposium*. It is also necessary to preserve the use of *ou* for *ου* in a certain number of words in which it has become almost universal, such as *boule*, *gerousia*.

(5) The Acting Editorial Committee are authorised to correct all MSS. and proofs in accordance with this scheme, except in the case of a special protest from a contributor. All contributors, therefore, who object on principle to the system approved by the Council, are requested to inform the Editors of the fact when forwarding contributions to the Journal.

In addition to the above system of transliteration, contributors to the *Journal of Hellenic Studies* are requested, so far as possible, to adhere to the following conventions:—

Quotations from Ancient and Modern Authorities.

Names of authors should not be underlined; titles of books, articles, periodicals or other collective publications should be underlined (for italics). If the title of an article is quoted as well as the publication in which it is contained, the latter should be bracketed. Thus:

Six, *Jahrb.* xviii. 1903, p. 34,

or—

Six, *Protagoras* (*Jahrb.* xviii. 1903), p. 34.

But as a rule the shorter form of citation is to be preferred.

The number of the edition, when necessary, should be indicated by a small figure above the line; e.g. Dittenb. *Syll*² 123.

Titles of Periodical and Collective Publications.

The following abbreviations are suggested, as already in more or less general use. In other cases, no abbreviation which is not readily identified should be employed.

- A. E. M.* = Archäologisch-epigraphische Mittheilungen.
Ann. d. I. = *Annali dell' Istituto*.
Arch. Anz. = Archäologischer Anzeiger (Beiblatt zum Jahrbuch).
Arch. Zeit. = Archäologische Zeitung.
Atk. Mitth. = Mittheilungen des Deutschen Arch. Inst., Athenische Abtheilung.
Baumeister = Baumeister, Denkmäler des klassischen Alterthums.
B. C. H. = Bulletin de Correspondance Hellénique.
Berl. Vas. = Furtwängler, Beschreibung der Vasensammlung zu Berlin.
B. M. Bronzes = British Museum Catalogue of Bronzes.
B. M. C. = British Museum Catalogue of Greek Coins.
B. M. Inscr. = Greek inscriptions in the British Museum.
B. M. Vases = British Museum Catalogue of Vases, 1893, etc.
B. S. A. = Annual of the British School at Athens.
Bull. d. I. = *Bullettino dell' Istituto*.
C. I. G. = *Corpus Inscriptionum Graecarum*.
C. I. L. = *Corpus Inscriptionum Latinarum*.
Cl. Rev. = *Classical Review*.
C. R. Acad. Inscr. = *Comptes Rendus de l'Académie des Inscriptions*.
Dar. Sagl. = Daremberg-Saglio, Dictionnaire des Antiquités.
Dittenb. Syll. = Dittenberger, Sylloge Inscriptionum Graecarum.
Ed. 'Apx. = *Ἐκδόσεις Ἀρχαιογραφ.*
G. D. I. = Gölitz, Sammlung der Griechischen Dialekt-Inschriften.
Gerh. A. V. = Gerhard, Auserlesene Vasenbilder.
G. t. A. = Göttingische Gelehrte Anzeigen.
I. G. = *Inscriptiones Graecae*.¹
I. G. A. = Rühl, *Inscriptiones Graecae antiquissimae*.
Jahrb. = *Jahrbuch des Deutschen Archäologischen Instituts*.
Jahresk. = *Jahreshefte des Österreichischen Archäologischen Institutes*.
J. H. S. = *Journal of Hellenic Studies*.
Le Bas-Wadd. = Le Bas-Waddington, *Voyage Archéologique*.
Michel = Michel, *Recueil d'Inscriptions grecques*.
Mon. d. I. = *Monumenti dell' Istituto*.
Müller-Wiss. = Müller-Wissler, Denkmäler der alten Kunst.
Mus. Marbles = *Collection of Ancient Marbles in the British Museum*.
Neue Jahrb. kl. Alt. = *Neue Jahrbücher für das klassische Alterthum*.
Neue Jahrb. Phil. = *Neue Jahrbücher für Philologie*.

¹ The attention of contributors is called to the fact that the titles of the volumes of the second issue of the *Corpus of Greek Inscriptions*, published by the Prussian Academy, have now been changed, as follows:—

<i>I. G.</i>	I. = Inscr. Atticae ann. Eusebia vetustissima.
"	II. = " " aetatis quae est inter Euseb. ann. et Augusti tempora.
"	III. = " " aetatis Romanae.
"	IV. = " Argolica.
"	VII. = " Megarica et Boeotica.
"	IX. = " Graeciae Septentrionalis.
"	XII. = " insul. Maris Aegaei praeter Delum.
"	XIV. = " Italiae et Siciliae.

Num. Chr. = Numismatic Chronicle.

Num. Zeit. = Numismatische Zeitschrift.

Pauly-Wissowa = *Pauly-Wissowa, Real-Encyclopädie der classischen Altertumswissenschaft.*

Philol. = Philologus.

Rev. Arch. = *Revue Archéologique.*

Rev. Ét. Gr. = *Revue des Études Grecques.*

Rev. Num. = *Revue Numismatique.*

Rev. Philol. = *Revue de Philologie.*

Rh. Mus. = *Rheinisches Museum.*

Bsm. Mitth. = *Mittheilungen des Deutschen Archäologischen Instituts, Römische Abteilung.*

Roscher = *Roscher, Lexicon der Mythologie.*

T.A.M. = *Tituli Asiae Minoris.*

Z. f. N. = *Zeitschrift für Numismatik.*

Transliteration of Inscriptions.

- [] Square brackets to indicate additions, i.e. a lacuna filled by conjecture.
- () Curved brackets to indicate alterations, i.e. (1) the resolution of an abbreviation or symbol; (2) letters misrepresented by the engraver; (3) letters wrongly omitted by the engraver; (4) mistakes of the copyist.
- < > Angular brackets to indicate omissions, i.e. to enclose superfluous letters appearing on the original.
- . . . Dots to represent an unfilled lacuna when the exact number of missing letters is known.
- - - Dashes for the same purpose, when the number of missing letters is not known.

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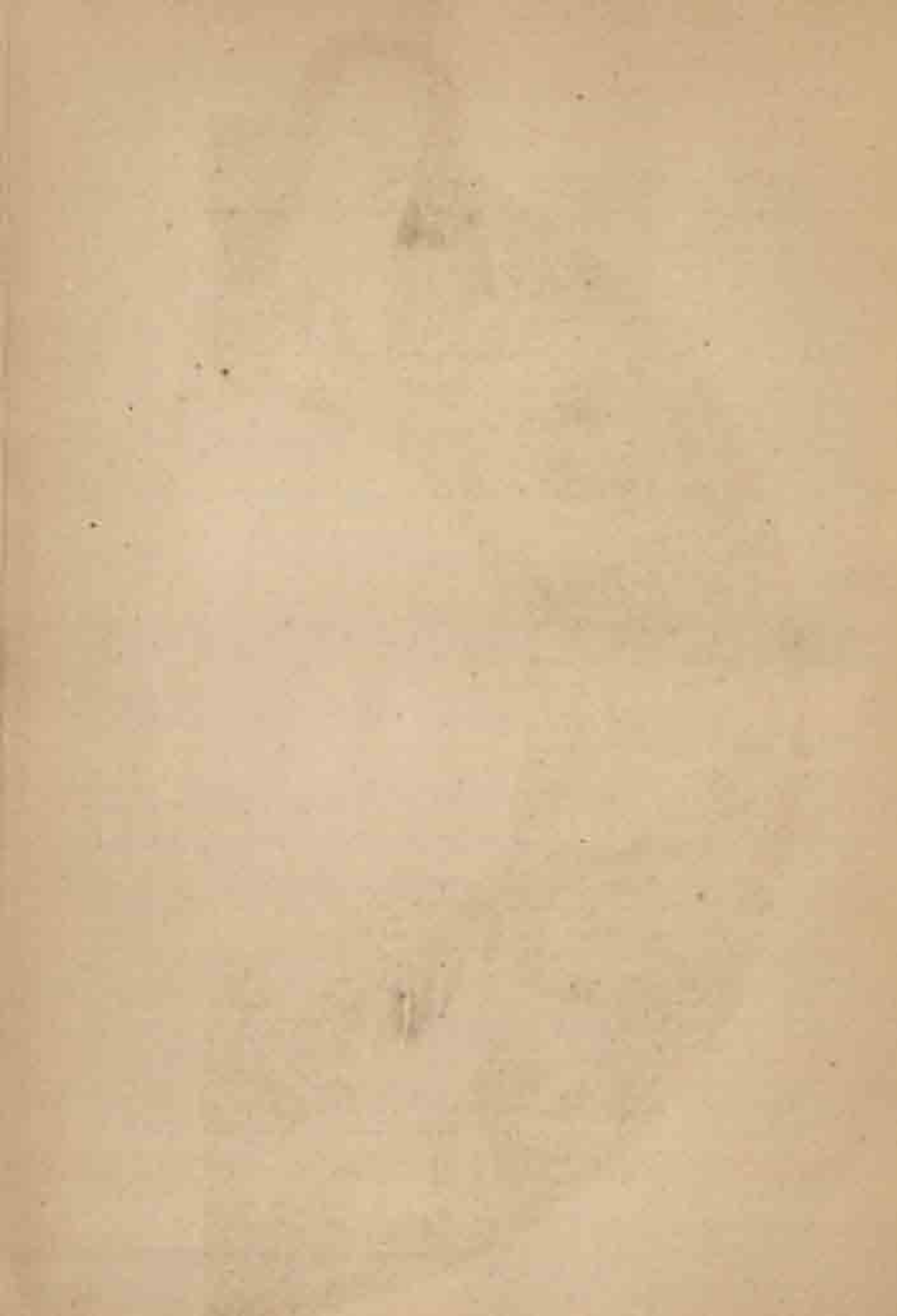
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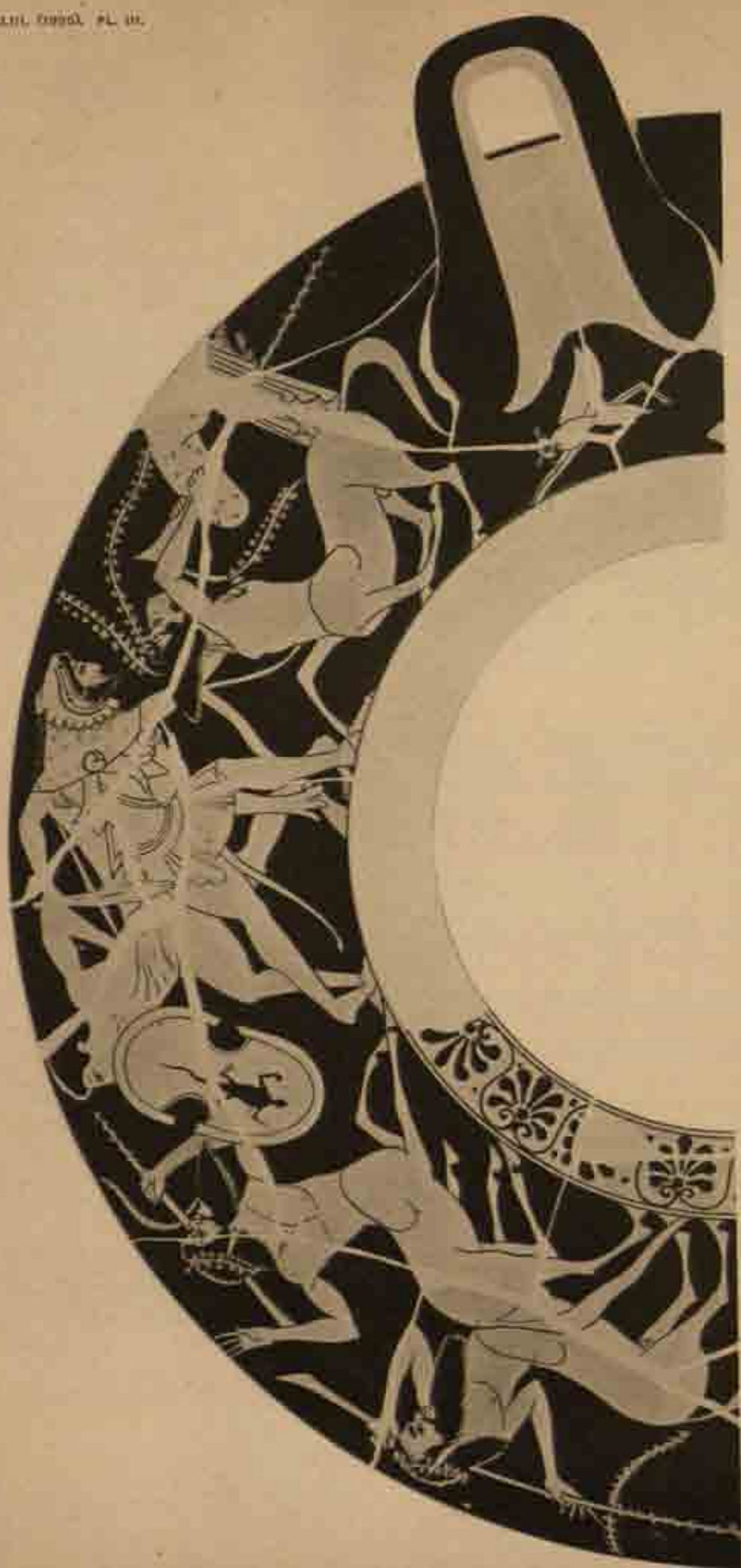
Quotations from MSS. and Literary Texts.

The same conventions should be employed for this purpose as for inscriptions, with the following *important exceptions* :—

- () Curved brackets to indicate only the resolution of an abbreviation or symbol.
- [] Double square brackets to enclose superfluous letters appearing on the original.
- < > Angular brackets to enclose letters supplying an omission in the original.

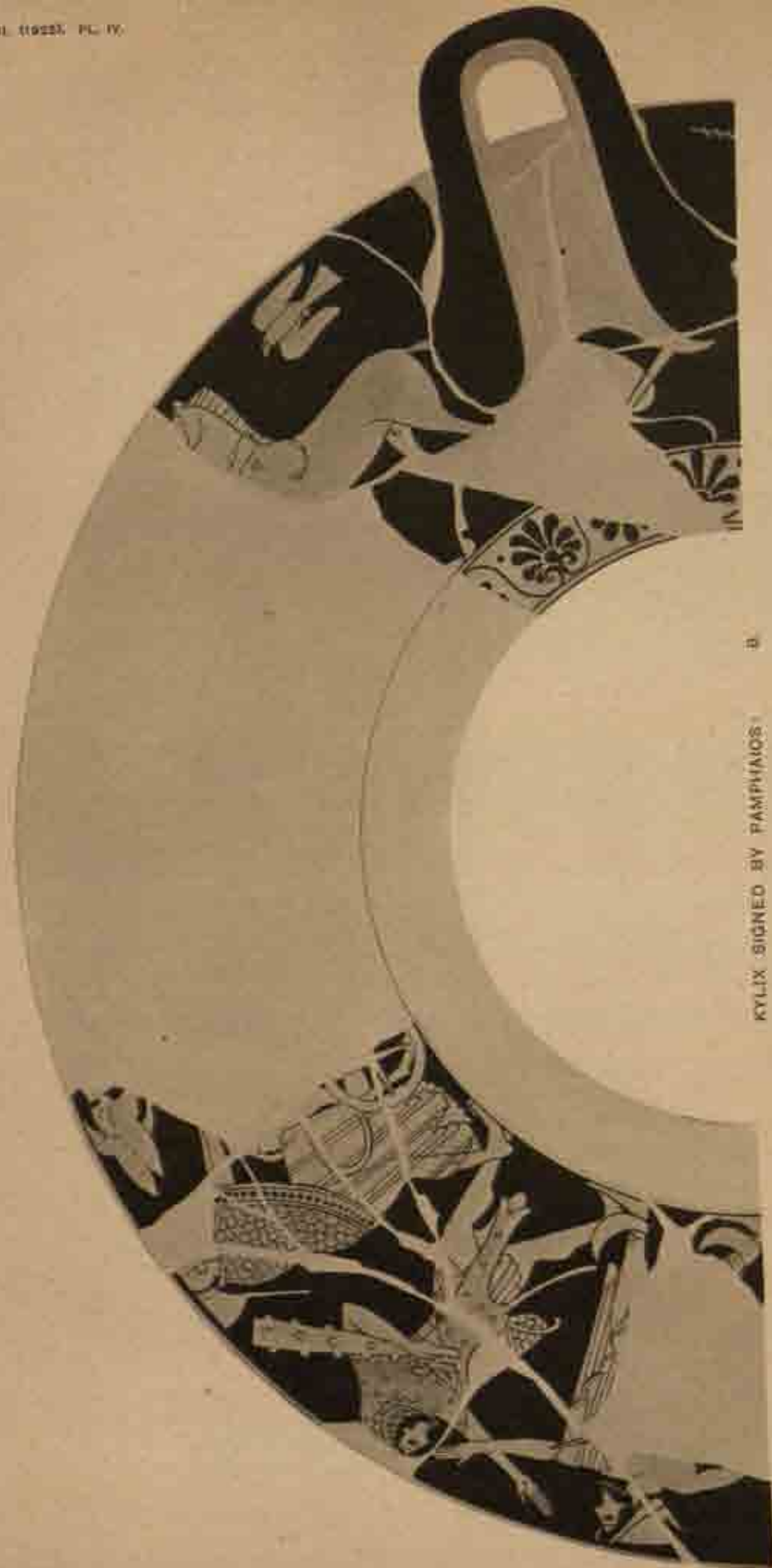
The Editors desire to impress upon contributors the necessity of clearly and accurately indicating accents and breathings, as the neglect of this precaution adds very considerably to the cost of production of the *Journal*.





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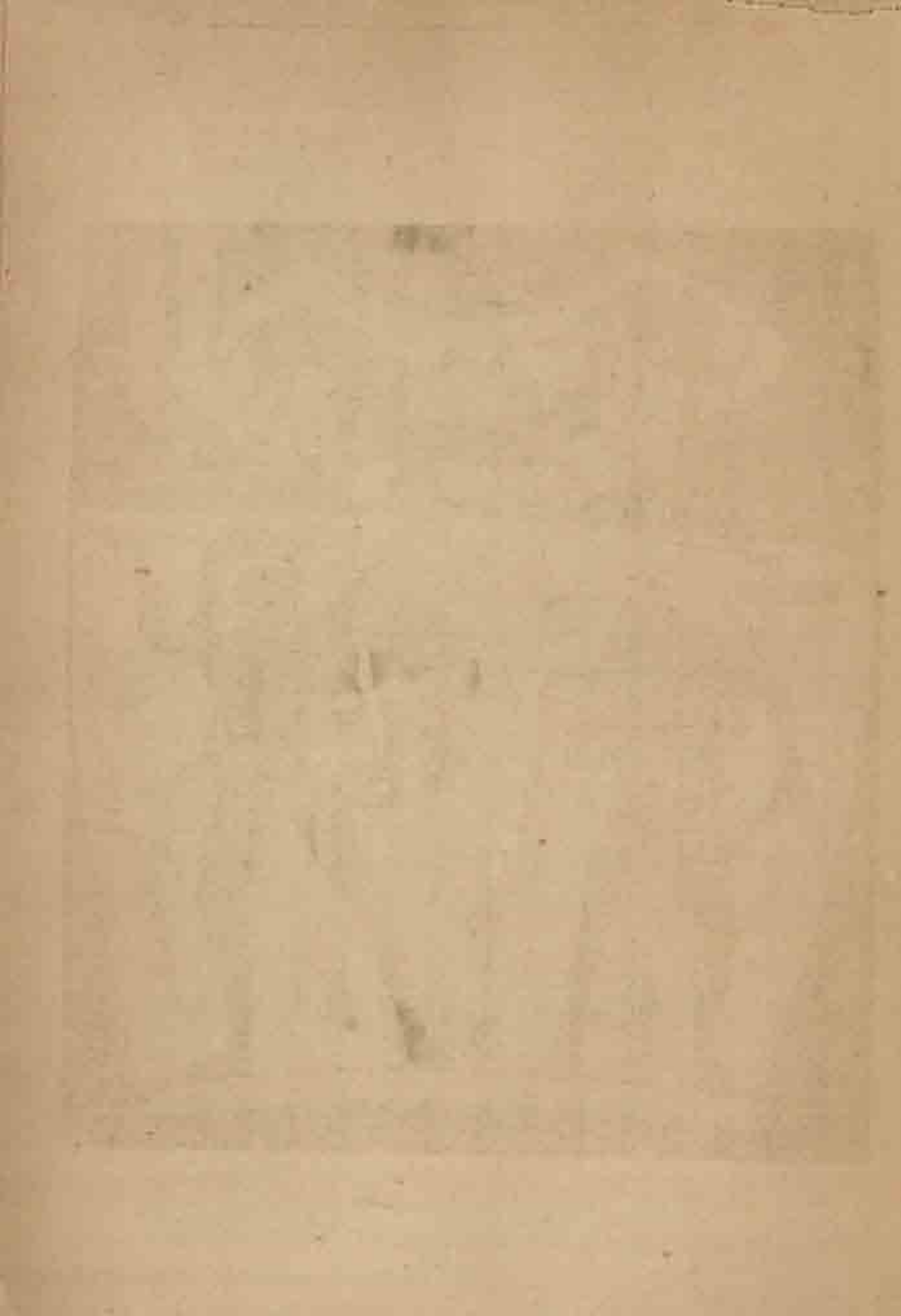
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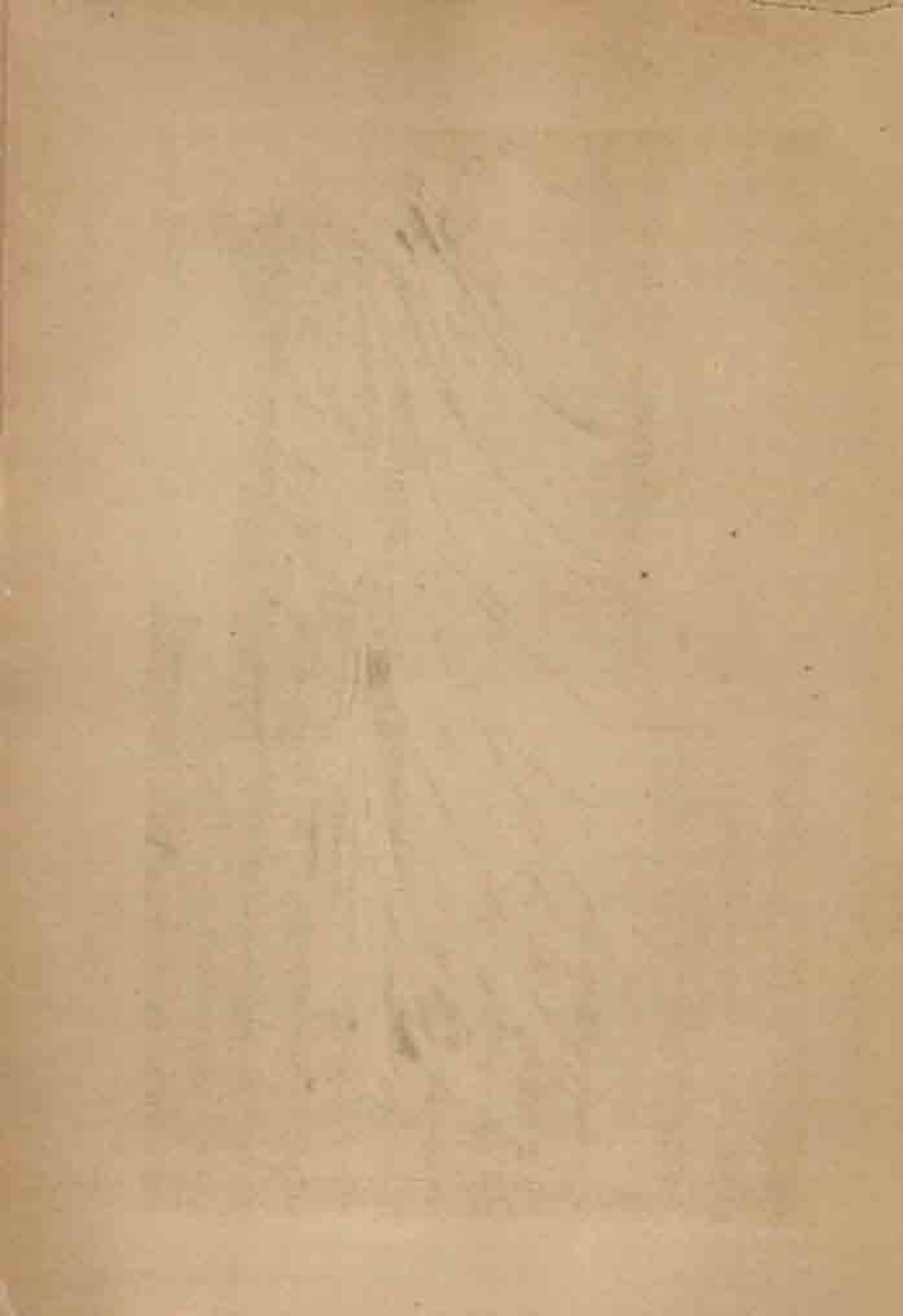
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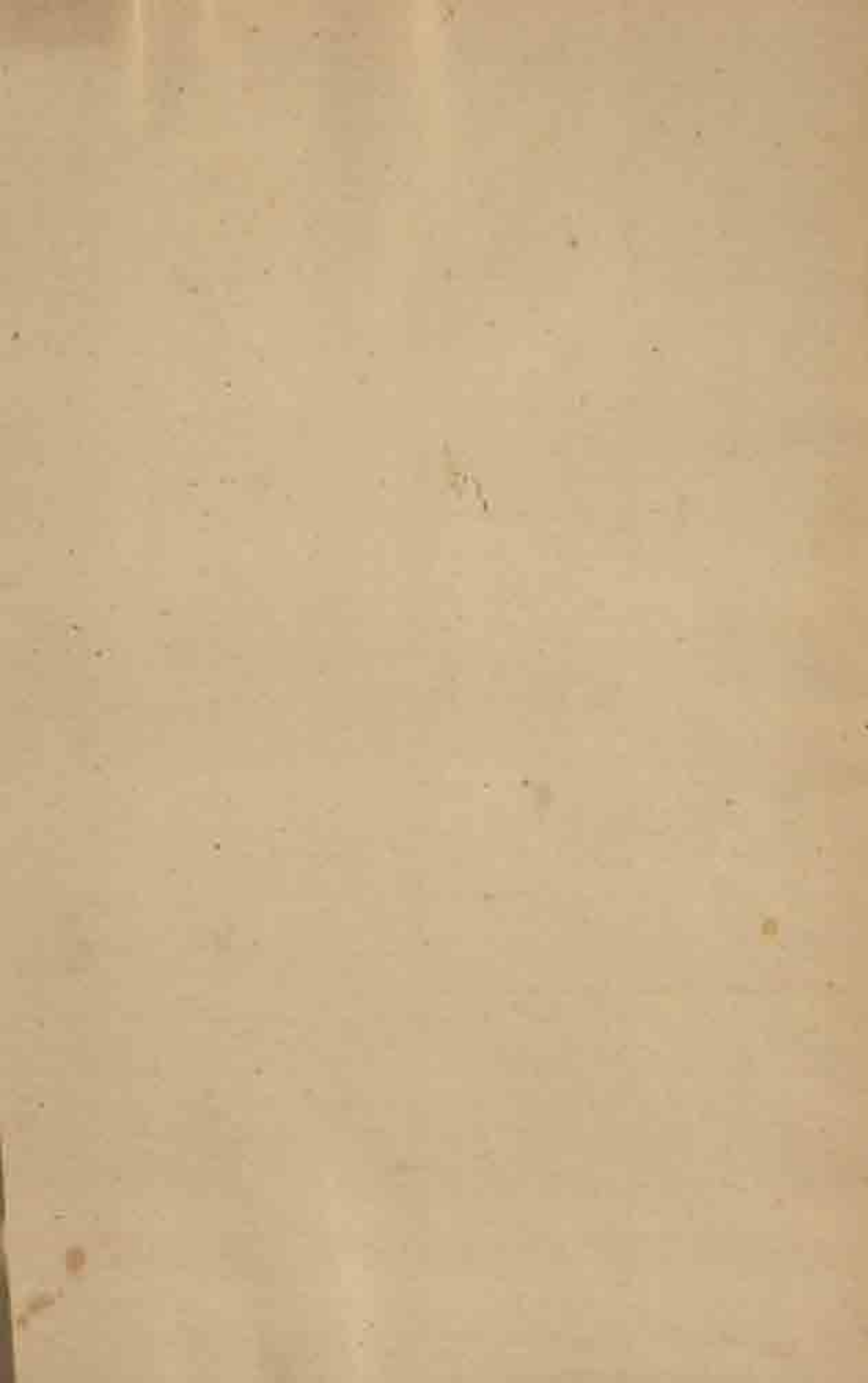


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