

# AMERICAN JOURNAL OF NUMISMATICS

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## LAMPSAKOS; THE GOLD STATERS, SILVER AND BRONZE COINAGES

BY AGNES BALDWIN



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PUBLISHED BY  
THE AMERICAN NUMISMATIC SOCIETY  
BROADWAY AT 156TH STREET  
NEW YORK

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# THE GOLD STATERS OF LAMPSAKOS

By AGNES BALDWIN

ATtribution OF THE ELECTRUM STATERS OF LAMPSAKOS

At the time of the publication of the writer's paper on "The Electrum Coinage of Lampsakos",<sup>1</sup> it was proposed to follow this up with a revised paper on the gold stater coinage, which had formed the subject of an earlier essay by the writer, appearing in the *Journal Internationale de Numismatique*,<sup>2</sup> 1902. The plates for this new publication of the beautiful gold staters have long been ready, but many causes have operated to delay it. In the meantime, since the issue of the monograph on the electrum staters, their attribution to Lampsakos has been strongly attacked by the late M. Svoronos in his work on the early Paionian coinages of the district which was later called Macedonia.<sup>3</sup> With his accustomed originality and breadth of vision, M. Svoronos has uncovered a whole new chapter in Greek numismatics. Besides re-attributing and assigning to definite mint-places and tribes many of the uncertain silver coins known vaguely as Thrako-Macedonian, he suggests a new home for many gold (electrum) issues previously attributed to Asia Minor. Most of these gold coins are anepigraphic and have always been classed as Uncertain of Asia Minor (*loc. cit.*, pl. xv, 17-27, pl. xvi, 1-27).<sup>4</sup> But now, besides removing from Asia Minor the very primitive electrum coins which bear chiefly geometrical or floral designs as types, M. Svoronos proposes to assign to Macedonia also the well-known electrum staters bearing the familiar types of Lampsakos and Chios, forepart of Pegasus and Sphinx.

There are probably few attributions of uninscribed electrum staters whose place is regarded as more securely established than the Chian and Lampsakene staters. In the writer's monograph on the electrum coins of Lampsakos, the sound basis for the attribution of the latter coins was there

<sup>1</sup> American Numismatic Society Monograph, No. 1, 1914, hereafter referred to as "Electrum Coinage."

<sup>2</sup> Abbreviated to J. I. N.

<sup>3</sup> *L'Hellénisme primitif de la Macédoine*, J. I. N. 1919.

<sup>4</sup> In addition to the instances of a northern provenance cited by M. Svoronos, the small find of archaic gold coins noted in the *Cat. H. P. Borrell*, 1852, should be cited. Types of Svoronos, pl. xvi, 1-3, a square in relief, pl. xvi, 10, raised square with crescents, were found in the vicinity of Saloniki. Other archaic gold coins from this find bear the types, rude Gorgon head, head of a horse and head of a fish, *Borrell*, 39-42.

set forth — the fact that the electrum staters bear the same civic device, the arms of the city, as the later gold staters, also uninscribed, a badge common to other cities of Mysia, and amply confirmed as the *parasēma* of the town by an inscription relating to Lampsakos and headed by a carved figure of the half-Pegasos<sup>1</sup>; the entirely palpable continuity of style of the uninscribed electrum and gold, and the bronze issues inscribed ΛΑΜΨΑ; and, finally, the very valuable evidence for the attribution of the gold and electrum staters — namely, the inscriptions which prove beyond doubt that Lampsakos struck staters in electrum and gold in the Fifth and Fourth Centuries B.C., respectively.<sup>2</sup> These inscriptions prove that Lampsakos had an electrum stater currency c. 450 B.C., and a gold stater currency, c. 350 B.C.; and, when there are at hand coins which exactly fit the requirements, it is difficult to imagine that any writer would have the courage to propose to separate the electrum issues from the gold. M. Svoronos admits the gold and yet will not allow the electrum. He proposes to assign all of the electrum staters, both those of Milesian weight, stater of 14.02 gr. (217 grains) with the palmette symbol (fig. 1), and those of Lampsakene weight, stater of 15.36 gr. (237 grains) with the vine wreath around the type (fig. 2), to Myrkinos in the Pangaian district.



Fig. 1

Fig. 2<sup>3</sup>

On account of the difference in weight standard and the difference in types, both obverse and reverse, it has long been considered doubtful whether the palmette staters belong to the mint of Lampsakos. They were excluded from the regular series in the writer's article on the electrum coinage, as it is difficult to fit them into the series and because they appear to belong rather with a group of electrum staters with varying obverses of uncertain mint but of homogeneous fabric, alloy, weight and incuse type, which Mr. P. Gardner and M. Jameson regard as the coinage of the Ionian Revolt.<sup>4</sup>

<sup>1</sup> Electrum Coinage, p. 12.

<sup>2</sup> Electrum Coinage, p. 10. Inscr. Gr., I, 301-311. The date of the earliest of these Accounts of the Epistatai of Athens has now been fixed as 447 B.C. (Woodward, Jour. Hell. Stud. 1914, p. 277). They contain mention of seventy Lampsakene and twenty-seven Kyzikene "gold", i.e. *electrum*, staters, since χρυσός is naturally used to describe electrum. Pure gold coins were not coined as early as this. The Boiotian inscription of 355-351 B.C. refers to the gold staters. Inscr. Gr., VII, 2418.

<sup>3</sup> This coin is the Pozzi specimen, Cat. Pozzi, pl. lxxvii, 2225. It is very close in style to Nos. 9-11 Electrum Coinage, Pl. I, and may be classed as No. 10<sup>a</sup> of Group I.

<sup>4</sup> Jour. Hell. Stud. 1911, p. 151 f., Rev. Num. 1911, p. 60 f., and Electrum Coinage, p. 24 f.

Although the Revolt theory seems to have met with rather wide acceptance, M. Svoronos points out the weak points of the hypothesis, and proceeds to assign all of the staters of this class to different mints of Paionia. It is not incumbent upon the writer to defend the Revolt theory, interesting as it is, and plausible, too, in many respects. That defense may safely be left to the originators of the theory. Our first concern is not with the palmette staters, which are very awkward to explain as products of the Lampsakene mint, but with the heavier staters which have long been regarded as constituting the regular issues of Lampsakos, the χρυσοῦ στατήρες Λαμψακηνοί of the Attic inscriptions.

It would seem that the special reason which led M. Svoronos to assign these staters to Paionia, is his interpretation of certain letters and monograms, which occur on these staters, as the initials of the names of tyrants or rulers. Having already in his first essay on the subject<sup>1</sup> developed his theory of the close political and commercial relations existing between Miletos, the leading city of Ionia, and the Pangaian district in the early Sixth Century B.C., and having thereafter evolved his theory of Ionian influence upon the art of the Paionian coinage through the agency of the tyrant, Histiaios of Miletos, M. Svoronos suddenly discovered the Lampsakene stater with the monogram  $\mathcal{R}$ .<sup>2</sup> It is only fair to state here that when M. Svoronos was writing his epoch-making work which will undoubtedly revolutionize many of our basic theories on the beginnings of coinage, he had not seen the writer's paper on the electrum coinage of Lampsakos. Otherwise, he might have hesitated to conclude that the monogram  $\mathcal{R}$  represented the initial letters of the name of Aristagoras of Miletos who was dynast of Myrkinos, situated at the foot of Mt. Pangaion, during the early part of the Fifth Century; for the occurrence of other letters and another monogram on these same staters, rather nullifies his conjecture that a particular one must represent a tyrant's name. One would be obliged to provide tyrant's names beginning with  $\Theta$ <sup>3</sup>, with  $\Gamma$ <sup>4</sup>, and with  $\mathcal{M}$  ( $\Delta E$ )<sup>5</sup>; and, also, to provide an historical background to account for their issuing electrum coinage in Paionia, as M. Svoronos has so persuasively and learnedly done in the case of Aristagoras.

<sup>1</sup> Num. de la Péonie, J. I. N. 1913, p. 193.

<sup>2</sup> Electrum Coinage, Pl. I, 5, on the neck of the horse and again in a square of the reverse. M. Svoronos speaks of this stater as unedited (*loc. cit.*, p. 238, No. 3), but the stater was published for the first time by the present writer to whom M. Jameson kindly sent a cast in 1913. This monogram on a stater in the Jameson Collection and other letters and a monogram on staters in the Brussels and London collections, hitherto unpublished, were first made known in the writer's Electrum Coinage.

<sup>3</sup> Electrum Coinage, Pl. I, 2.

<sup>4</sup> *Loc. cit.*, Pl. I, 4.

<sup>5</sup> *Loc. cit.*, Pl. I, 3.

As regards the attribution of the staters of Lampsakos with the letter Ξ below the horse,<sup>1</sup> to Boges, general of Xerxes, 485-479 B.C., this sounds distinctly like an afterthought—a sort of corollary to the Aristagoras theory. Furthermore, the Ξ staters are not of the same period as the earlier Lampsakene staters of c. 525-500 B.C., but are to be dated c. 450 B.C.<sup>2</sup> which is too late for the governorship of Boges. Again, that Boges as satrap of Myrkinos for Xerxes should sign his coinage with Ξ as the initial of the king's name, is very improbable. It is at least unparalleled elsewhere.

M. Svoronos even pushes his theory so far as to deny the suitability of the type, a half-Pegasos enclosed in a vine wreath, to Lampsakos. Pegasos myths and Pegasos and the vine are shown by him to be eminently at home in the Pangaian district. But we have good ancient testimony as to the renown of the Lampsakene vineyards. Strabo,<sup>3</sup> speaking of a neighboring town, says "For their country abounds with vines, as also the country on their confines, namely, the territory of the Pariani and of the Lampsaceni. It was for this reason that Xerxes assigned Lampsacus to Themistocles to supply him with wine"<sup>4</sup>. The coin types of Lampsakos also bear witness to the importance of Dionysiac cults there. Dionysos, bearded or youthful, occurs on the gold staters, and the Maenad head, an uncommon subject on Greek coins, is quite a distinctive feature on the coinage. Just as at Histiaia in Euboia which was called *πολυστάφυλος* "rich in grapes" by Homer<sup>5</sup>, the Maenad head wreathed with the vine is the principal type, so at Lampsakos the frequent occurrence of the Maenad head denotes that the vine was widely cultivated there. Thoukidides I, 138, says of Lampsakos, *ἔδοκει γὰρ πολυοινότατον τῶν τότε εἶναι*. Again, the cult of Dionysos-Priapos<sup>6</sup>, who is represented on the later coinage, on the tetradrachm series beginning c. 190 B.C. and on the Imperial issues, betokens a community whose chief product was the grape. As to Pegasos, this type, whatever determined its choice as *parasēma* of the city,<sup>7</sup> is so evidently Lampsakene (witness the later coinage), that we need not be disturbed by M. Svoronos' urgent arguments in favor of a Paionian habitat for Pegasos. Finally, the silver coinage of Lampsakos was struck on the same weight standard as

<sup>1</sup> Electrum Coinage, Pl. I, 12a-k.

<sup>2</sup> *Loc. cit.*, p. 13 f.

<sup>3</sup> Geogr., Bk. XIII, 12.

<sup>4</sup> So also Plutarch, Them. 29; Thouk. I, 138, and Athenaeus I, 29.

<sup>5</sup> Iliad II, 537.

<sup>6</sup> Athen. I, 54, *Τυμᾶται δὲ παρὰ Λαμψακηνοῖς ὁ Πρίαπος ὁ αὐτὸς ὡν τῷ Διονύσῳ*, "Priapos is worshipped by the Lampsakenes, being identical with Dionysos."

<sup>7</sup> According to Gruppe, Griech. Mythologie, I, p. 166, Pegasos, who in Hesiodic myth was begotten of Poseidon and Medusa at the source of Okeanos, is an image of the realm of Poseidon. As a symbol of the sea and commerce, Pegasos is an eminently suitable badge of a great sea-port and commercial center like Lampsakos.

the heavy weight electrum staters as is shown in the section dealing with these issues (see below).

Having now reestablished the traditional attribution of the heavy Pegasi to Lampsakos, let us consider the light-weight Pegasos staters. M. Svoronos suggests that the palmette stater (see above, fig. 1) were struck by Histiaios, tyrant of Miletos, in the town of Myrkinos on the Strymon at the time when this city belonged personally to him, 513-493 B.C.<sup>1</sup> In this case, a Paionian origin is based upon the general claim that gold coinage is bound to have been issued in a country of gold mines, and also upon the argument that the Pegasos myth is strongly localized in the country round Mt. Pangaion.

Now, just at the psychological moment there has come to our knowledge a stater of the palmette class, lacking, however the characteristic \* symbol, (fig. 1) as is also the case with the Vienna specimen.<sup>2</sup> This stater, fig. 3, recently acquired by Mr. E. T. Newell who kindly allows its



Fig. 3

publication here, is unique in bearing on the obverse two symbols common to the coinage assigned by M. Svoronos to Paionia. These are the symbols which M. Svoronos calls the Pangaian rose, ♣, below the horse, and a four-pointed star, ✦, to the left of the type.<sup>3</sup>

The style of the obverse of this stater is very close indeed to that of the half-Pegasos of the Vienna stater. In fact the same obverse die, altered later by the addition of the two symbols, may have been used in striking these staters, a point not quite demonstrable to a satisfactory degree on account of the worn condition of the obverse of the new coin. The reverses of both staters are at any rate unquestionably from the same die. As has been noted, they differ from the other Pegasos staters of this group in not bearing the palmette symbol. They are a shade earlier in style, and the smaller, deeper incuse also distinguishes them from the other issues (Elec-

<sup>1</sup> Histiaios' tenure of Myrkinos could not have been for long. Cf. P. N. Ure's remarks in the *Origin of Tyranny*, p. 61, "Just after the Persian conquest of Thraee and Paionia, Histiaeus of Miletus, one of the Persians king's Greek vassals, almost succeeded in securing from the Great King possession of Myrcinus, a mining centre in the district from which Peisistratus had got so much wealth. He was in fact granted the gift by Darius, who however, was persuaded by the far-sighted Megabazus to recall it."

<sup>2</sup> *Electrum Coinage*, Pl. II, 1.

<sup>3</sup> J. I. N. 1919, pl. i, 10, 11; pl. ii, 10, 11, 13-15, Derrones; pl. iii, 1, 2, 23, Laiaioi, etc.; pl. xvi, 28 32-34, 39, 43, etc. *Pierians of Mt. Pangaion*.

trum Coinage, Pl. II, 2-3f., and p. 30). Now as these two staters evidently belong to the same mint, and as the newly discovered piece bears symbols which M. Svoronos has shown to be distinctively Paionian, there would seem to be no alternative but to attribute them to a mint in the Paionian region—whether to Myrkinos or not, is uncertain with the evidence at present available. The date at which Myrkinos was held by Histiaios, according to M. Svoronos, 513-493 B.C. is appropriate for the style.

These two staters, however, are not the coins which M. Svoronos selected as examples of the coinage of Myrkinos under the tyranny of Histiaios.<sup>1</sup> The coins which he cites (*op. cit.*, p. 237, pl. xvii, 27) are those bearing the palmette (fig. 1). If these half-Pegasos staters which, according to the Revolt theory, are the Lampsakene issues of the Ionian Revolt coinage, are to be transferred to the Paionian region, all of the other electrum staters of the same fabric and weight belonging to the Revolt group, must be given the same origin, and M. Svoronos has found a Paionian mint for each type. This means the total abandonment of the Ionian League theory heretofore so generally accepted.

The discussion of the arguments which M. Svoronos brings to bear in his brilliant attack upon this theory (*op. cit.*, p. 211 f.) is not properly speaking a Lampsakene question, and need not detain us long. There can be no doubt that M. Svoronos has shown up with great skill the weak points of this theory. Whether, however, his new attributions constitute a better solution of the problem than the Revolt theory supplied, seems at present an open question. They are very daring and very ingenious, and after reading the counter-arguments one cannot help feeling one's confidence in the Revolt theory considerably shaken, even though this theory is so well supported by the provenance of certain specimens, namely those which occurred in the Vourla (Klazomenai) hoard.<sup>2</sup>

As we have given two of the Pegasos staters of the light-weight class to Paionia on the ground of symbols alone, it is but natural to investigate the palmette symbol which occurs on the remaining Pegasi. This symbol is rare on Greek coins, although so common in Greek architectural decoration and in vase-painting. A survey of the origin and evolution of this decorative motive in Greek art enables one to recognize as identical a number of variants on the coins which at first glance are quite dissimilar. On Greek pottery of Rhodos, Naukratis, Melos and other wares of the Ionian class, the motive occurs in a developed, fully Hellenized form. In Perrot and

<sup>1</sup> The Vienna stater (Sestini, *Stateri Antichi*, p. 62, No. 1) was first published in *Electrum Coinage*, Pl. II, 1, which had not been seen by M. Svoronos when he wrote his *Hellénisme primitif*, and the stater with the Paionian symbols first became known a few months after the appearance of his great work.

<sup>2</sup> *Rev. Num.* 1911, p. 60.

Chipiez's History of Art, IX, p. 452, it is stated that the first idea, i.e., the ultimate origin of the design, is to be found in the Assyrian palmette. This decorative design was derived from the conventionalization of the palm-tree, in the familiar tree-of-life designs (see Ward's Seal Cylinders, figs. 668-673). However, from the fact that the palmette appears in such intimate connection with the lotus forms (Perrot et Chipiez, IX, fig. 213, an inverted lotus-palmette combination), on the early Ionian pottery, the more advanced Ionian wares, on Corinthian vases (Perrot et Chipiez, IX, fig. 359, "un laeis de fleurs de lotus et de palmettes"), and then continuously in Greek architecture and vase-painting down to the latest period, one is more inclined, with Goodyear,<sup>1</sup> to seek the origin of the palmette motive in Cyprus where undoubtedly a form of purely local development was evolved under the influence of Egyptian capital-forms which were composed of the lotus, lily and papyrus motives.<sup>2</sup> Even in Mycenaean times, Dussaud shows (*op. cit.*, figs. 198, 202) the Egyptian fleur-de-lis with spirals was imitated on local Cypriote products. Early Cypriote coins struck before c. 480 B.C., bear the palmette motive, and the lotus with spirals, which are beyond doubt a survival from early Cypriote art.<sup>3</sup>

The palmette occurs on the following archaic coins: Derronian tribes of Paionia (Svoronos, *op. cit.*, pl. i, 10, 11; pl. ii, 1-4), in the interstices of the large triskeles which forms the reverse type; Derronians (Svoronos, *op. cit.*, pl. i, 12) below the ox-cart on the obverse; Crestonians of Paionia (*ibid.*, pl. xiv, 11, 12), a half-palmette which Svoronos (p. 118) calls *aphlaston ailé*, after Imhoof-Blumer, *Monn. gr.*, p. 105, No. 169, who recognized that this *symbole curieux* occurred also on the octodrachm of the Derronians, obverse, man in cart drawn by two oxen (Svoronos, p. 7, No. 7, "sous les boeufs une longue palme ou aplustre"); Mende, in Macedonia, (Cat. Naville IV, Geneva, 1922, pl. xviii, 438) under the Dionysiac ass of the obverse; Idalium, Cyprus (British Museum Catalogue, pl. v, 38) beneath the body and raised



Fig. 4

<sup>1</sup> Grammar of the Lotus, pl. xi, 1.

<sup>2</sup> Dussaud, *Les Civilisations Pre-helléniques*, p. 303 f.

<sup>3</sup> Idalium, B.M.C. Cyprus, pl. v, 3-8. Poulsen, *Der Orient und die frühgriechische Kunst*, p. 29, also assigns the same origin to the formal palmette device of Cypriote art, although he ascribes this art to the Phoenicians.

fore-paw of the Sphinx; and finally, the Pegasos electrum staters under discussion. Later in the Fifth Century are the following instances: Mende, 450-424 B.C., a rare tetradrachm type, recently known through the hoard of coins found at Mende, fig. 4, (Cat. Naville IV, pl. xviii, 442, also, Zeit. f. Num., xxxiv, pl. iii, 26) with a design of four palmettes in a square, on the reverse; Salamis and Paphos, Cyprus, 480-450 B.C., the "enclosed" palmette in a corner of the reverse, British Museum Catalogue, pl. x, 13 and pl. vii, 6-9)<sup>1</sup>; Thasos, 411-350 B.C. (Cat. Naville, vi, Bement Coll., pl. xxx, 860) a drachm with "enclosed" palmette on reverse; Gela, 466-413 B.C. in the exergue of the reverse (British Museum Catalogue, Sicily, p. 69, No. 36, vignette) a palmette in the center, with lateral half-palmettes, which help to explain the half-palmettes of the Crestonian and Derronian coins above cited; Metapontum, 466-413 B.C. (British Museum Catalogue, Italy, p. 249, No. 86, vignette), symbol, in field, of the freer type without the spirals, often called "honeysuckle pattern"; Corinth, 420-338 B.C. (British Museum Catalogue, Corinth, p. 15, pl. iv, 7-9) various designs with spirals.<sup>2</sup>

From the foregoing we may conclude that while the palmette symbol, so rare on coins, is found quite frequently in the Macedonian (Paionian) district at an early date as well as in Cyprus, which may be the locality where the art motive was first evolved, still there is no compelling reason for regarding this symbol on the Pegasos staters (and the stater with the cock, Electrum Coinage, Pl. II, 5, on which it is also found) as evidence of a northern mint. One might be tempted to speculate from its association with the triskeles, a solar symbol, on the Derronian pieces, where in one instance it alternates with the ☉, a Paionian sign for the sun (Svoronos, *ibid.*, pl. ii, 7) and in another instance occupies the same position on the type as a stellar design, an undeniable sun symbol (*op. cit.*, pl. ii, 5), that the palmette had in this locality, a symbolic solar meaning. This would also be appropriate for the Mende coins on which Dionysiac solar types are found,<sup>3</sup> and also for the horse and cock types of the electrum staters in question, which may also have a solar significance. However this is mere speculation, for apart from these coincidences we have no evidence.

<sup>1</sup> The B. M. C. Cyprus, states that the reverse type of Paphos is derived from that of Ialysos in Rhodes (B. M. C. Caria, pl. xxxv, 1-5) which is similar. But as the types of Ialysos are in no wise original (B. M. C. Caria, p. cl.) it would rather seem the other way about. The type, eagle's head with palmette in corner at Cyrene (Num. Chron. 1891, pl. 1-7), was imitated from the Cypriote coins where we know the palmette in this special form was at home.

<sup>2</sup> Archaic coins of Kyme in Aiolis, B. M. C. Troas, pl. xix, 5-7 exhibit a peculiar floral device in the incuse which may have its origin in the palmette-lotus chain design of Greek pottery.

<sup>3</sup> Compare M. Svoronos' interesting theories regarding the cult by Apollo-Dionysus-Helios in the Pangaian region, *loc. cit.*, p. 127 f. and p. 181 f.

## THE GOLD STATERS

PLATES I-IV

## SEQUENCE OF TYPES

Only three new types of Lampsakene gold staters have become known in the long interval since the publication of the writer's first paper on the subject in 1902. These are, namely, the stater with the head of a youthful Perseus (?), Pl. I, 5, which is in Paris.<sup>1</sup> Another example was seen in the Pozzi Collection some years ago, but this did not appear in the recent sale of Dr. Pozzi's coins. The second bears the figure of a kneeling archer in Oriental costume, Pl. I, 9, was acquired in 1895 by Herr Arthur Löbbecke of Braunschweig, and has since passed with his collection into the Berlin Cabinet. Through the courtesy of the late Dr. Dressel, the writer was permitted some years ago to describe this beautiful and remarkable new type.<sup>2</sup> The third new type is a stater bearing the head of a youthful Dionysos wreathed with ivy leaves and berries (see below, fig. 15), a recent acquisition of M. Jameson, who most generously has allowed it to be published here for the first time. The Perseus head and kneeling archer staters belong to the earliest group of the coinage, while the youthful Dionysos stater is one of the latest issues.

In the former paper on these staters, the coins with figure-types were described before those with head-types, since the series admittedly starts with two figure-types, Herakles strangling the serpents and Helle on the ram, the reverses of which show the winged half-horse *to the left* as on the Fifth Century electrum staters, Pl. I, 1, 2, and because the majority of the figure-types are earlier in style than the head-types.<sup>3</sup>

No attempt was made, however, to arrange the whole series with a uniform reverse type in chronological order. In the case of such a coinage lasting less than a century (c. 390-330 B.C. or as some writers have thought, 394-350 B.C.)<sup>4</sup>, it seemed hardly possible to discover differences of style sufficiently marked to enable one to determine the order of the issues. But in casting about for a more satisfactory arrangement, an intensive study of the details of the reverses, and of the sizes of flans and types, coupled with the study of the style of the obverses, has furnished the clue to the order of the issues. It is rather remarkable that there is only a single case

<sup>1</sup> First published by Babelon, *Traité II*<sup>2</sup>, No. 2547, pl. clxxi, 14.

<sup>2</sup> An Unedited Gold Stater of Lampsakos, *Zeit. f. Num.* xxxii, p. 1 f, pl. i, 1.

<sup>3</sup> The scheme of classification of the Lampsakene gold staters was published in 1915 in the article cited in Note 2. This article contains also the writer's view of the dates to be assigned to the gold stater series. Much of the argument that follows as to the chronological succession of the issues, and the date of the staters is matter repeated from that article, though not in the same form.

<sup>4</sup> Head, *Hist. Num.*<sup>2</sup>, p. 529. Wroth, *B. M. C. Mysia*, p. xx f.

where two different obverse types have been found to share a common reverse die. This case is the reverse die of the Paris stater of the Herakles and serpent type and the two staters bearing the Helle on the ram type, Pl. I, 2, 3, and 4. But it seems reasonable to hope that as new specimens of Lampsakene staters appear, more die connections will be found which will then serve as a sure guide to the order of the issues. The chronological scheme here outlined, while perhaps not infallible since it is based chiefly on the data afforded by the details of the reverses, is convincing enough when one follows step by step the evolution of the style of the Pegasos. Besides the evidence furnished by the style of the coins, size of their flans, and size of their types, there is also that presented by the two principal finds of Lampsakene staters the Asia Minor and Avola hoards; and the analysis of these finds entirely bears out the conclusions reached by the study of style.

The earliest issues which include both figure-types and head-types are those coins which have in general smaller size flans and types. Without intending to draw a hard and fast line between the groups, it may be said that the coins on Pl. I, Nos. 1-21, all fall within the earliest group. The second group of coins is characterized by a much more advanced type of Pegasos — the horse's head is better proportioned, a "ladder" design now appears on the right wing and also on the left wing, or what represents the left wing in an abbreviated scheme. The coins of this second group are in general of a medium size of flans and types as compared with the third and last group. They may be said to extend down to Pl. II, 27. It is difficult to say just where we consider the middle style to end for it merges so easily into the third style. However, the first coin of the middle group, the earliest of the Hermes head types (Pl. I, 22) is a connecting link between the earliest and the middle styles, for the "ladder" pattern is not yet worked out on the wings of the Pegasos of this coin. The second Hermes type shows the cross-hatching on the feathered portions of the wings which is usually found on all the succeeding coins and is only omitted when the style begins to degenerate, as it does most markedly at the end of the third group. This type, therefore, is a satisfactory starting point for the middle group.

The middle group shows a Pegasos whose head is in better proportion to the body than on coins of the earliest group. The style of the obverses is delicate and compact as on the coins of the first group. When we reach the third group, whose beginning is somewhat hard to define exactly but which may be said to start with Type 28 of Pl. II, we meet with a style which for breadth and nobility cannot be surpassed. The Zeus, Nike, Aktaion and Hekate types are of an incomparable dignity and beauty. The reverses

now reach the highest development which is to be seen in the splendid horses of the Zeus and Nike issues. From this type forward, the art of the reverses begins to decline. The carefully evolved, schematized treatment of the wings, with fine cross-hatching and "ladder" pattern, soon suffers at the hands of less conscientious artisans than those who were working to perfect the type. Carelessness in the striking appears also on the reverses (Pl. III, 12, 14, 16-18), while the obverse designs are still at the very acme of fine art. On the types following the Zeus Ammon (Pl. III, 23), there is a more marked decline in the reverse style — the last issue (Pl. III, 30-35), revealing a quite inferior Pegasus to that of the first coins of the whole series of staters, which though awkward are never negligent in style. The obverse types, Dionysos, Pl. III, 21 and Persephone (?), Pl. III, 30, are of a noticeably rough style.

In spite of the lack of die connections for the reverses of different obverse types, there can be no uncertainty about the order of the types on general lines, for there does exist such close similarity between the reverse dies of certain different obverses as to couple these issues as infallibly as identical dies would. For example, the Apollo head of Pl. I, 27, has a reverse die which resembles that of Pl. I, 26, so closely that it is hard at first sight to distinguish the two dies. The same may be said of the reverses of Pl. I, 9 and 10, in which the treatment of the details is in all respects alike. The reverse of Pl. I, 15, is like these two in the still rather large head and the treatment of the wings of the Pegasus, but it shows an advance over all of the preceding reverses in the treatment of the far wing of the horse, which now begins to appear as though separate from the body. The inner curve on the far wing which gives this effect of separation is seen from now on almost without exception. The reverses of Pl. I, 16 and 17, are too much alike to admit of any hesitation as to their being consecutive or closely consecutive issues. The reverses of the Herakles and Demeter types, Pl. I, 29 and 30, are almost but not quite identical, and are different from all other reverses in the rendering of the fore-legs. Then again there is a very noticeable similarity in style on the obverses of the coins which we have grouped together. The Maenad head of the early group, that specimen which is the most advanced in style, Pl. I, 20, has a close affinity of style with the Hermes and Apollo heads, Pl. I, 26 and 27. The Hera, Zeus and Nike heads, Pl. II, 30 and 31, and Pl. III, 10, the Aktaion and Hekate heads, Pl. III, 18 and 19, might be by the same artists.

Here and there one finds deviations from the usual reverse style. The Pegasus wing is treated quite independently in the second Dionysos-head type, Pl. II, 18, 19; it follows no tradition, and the Pegasus itself is unusually

large. The head of Dionysos, however, is small, and the type agrees very well in style with the satrapal head of the coins preceding it on the plate. This is a case where we might suppose that missing links would supply a set of dies that would couple up and give a more consecutive development. Yet reverses of individual style are found now and again throughout the whole series. An example is Pl. II, 28, where the horse's head is larger than usual in proportion — the wings also. Another instance is the coin with the "archaic" Athena head, Pl. III, 29; its reverse has no parallel on the coinage. The head which is directly copied from the coinage of Athens, in profile *to left*, however, is quite akin to the issues of 338-329 B.C. This would fall at the very close of the Lampsakene issues according to our dating, and the reverse may consequently be accounted for in the same way as those here classed as the latest issue, Pl. III, 30, showing a complete breaking away from the traditional scheme of the wings, of which signs are already manifested in some of the preceding types.

After the Nike type of Pl. III, 2, the Pegasos is never treated in the fine and carefully perfected style characteristic of the whole of the middle and of the first examples of the third group. There is just one coin, Pan-head, Pl. I, 21, which by reason of its small flan and the smaller size of its obverse and reverse types, may perhaps belong somewhat earlier than it has been placed. It might precede the facing Satyr head, Pl. I, 2, though it could hardly come earlier. Note the way in which on the earliest types, the feathered end of the near wing curls over toward the horse's head.

The following reverses selected from the three groups into which the staters fall, are representative of the evolution in style which gives the key to the chronological order of the issues. This evolution is exactly parallel to the stylistic development of the wing of the Sphinx in the transitional and later Fifth Century coins of Chios.



Fig. 5

Fig. 5, Helle on the ram (Pl. I, 3), exhibits a Pegasos of semi-archaic style. The reverse die is identical with that of the Herakles and serpents type (Pl. I, 2), and these are the earliest reverse dies, as the direction of the horse *to the left* and the kinship with the electrum staters indicate (type with  $\Xi$ , Electrum Coinage, Pl. I, 12a f.). By this we mean that the more naturalistic feathered form of the wing found on the archaic electrum staters is still retained.



Fig. 6



Fig. 7

Figs. 6 and 7, kneeling archer and Nike sacrificing a ram (Pl. I, 9 and 10), of strikingly similar style, exhibit some advance over the earlier types, but the wing behind the horse is not yet separated from the truncation of the body, and the feathered portions of the wings are still more or less naturalistic, as on the archaic electrum coins. The reverse type is now turned *to the right*, and this direction remains unchanged in all the succeeding gold issues, as well as on all other silver and bronze issues struck hereafter.



Fig. 8



Fig. 9

Fig. 8, Maenad head (Pl. I, 19) shows the beginning of the separation of the far wing from the body of the horse and the feathered parts of the wings conventionally schematized.

Fig. 9, Hermes' head (Pl. I, 25) marks the complete development of the schematic treatment of the wings, a sort of "ladder" pattern running down the middle of the right wing and finishing off the inside of the left wing, and fine cross-hatching appearing on the feathered portions of both wings.



Fig. 10



Fig. 11

Fig. 10, Zeus head (Pl. II, 22) shows the same details of treatment and a larger size of type and flan.

Fig. 11, Zeus with sceptre (Pl. III, 2) of still larger size of type and flan, exhibits the highest development of style in a finely proportioned vigorous Pegasos, of which several different dies exist.

The wing of the Sphinx on the coins of Chios shows a similar evolution from the archaic style, which also prevails through the transitional period, although this "modernization" is effected suddenly (in the tetradrachms of c. 440-420 B.C.) and not by degrees as in the Lampsakene coins.



Fig. 12



Fig. 13



Fig. 14

Fig. 12, Aktaion head (Pl. III, 14), Fig. 13, Kabeiros head (Pl. III, 26), and Fig. 14, Aphrodite (?) head (Pl. III, 33), illustrate the gradual decline in style which is most evident in the carelessly done reverse of the Kabeiros head — a beautiful type, and the sadly inferior style of the Aphrodite (?) staters.

Enough has been said in justification of our arrangement of the staters from the standpoint of style. It was mentioned earlier that the evidence of two hoards containing Lampsakene staters confirmed our arrangement. Sometime ago, Six<sup>1</sup>, taking the style of the reverses as a guide, had arranged the twenty types known to him in a chronological order which in many points corresponds with our own. Mr. Hill, of the British Museum, was once kind enough to give the writer a letter written to the late Mr. Wroth by Six, dated Amsterdam, May 18, 1892, in which the distinguished numismatist, to whom our science is indebted for so many of its most original and learned contributions,<sup>2</sup> outlined his idea of the grouping of the Lampsakene staters into two groups, according to the two finds. Löbbecke<sup>3</sup> also, and Greenwell,<sup>4</sup> in publishing these finds which were made about 1888 at Avola, near Syracuse, and in Asia Minor, probably in the Troad, made very just observations upon the differences of style shown by the coins in the finds. Of the latter hoard, Löbbecke wrote that all of the staters appeared to be later than those of the Avola hoard, the flan of the former being larger and flatter, and the incuse square almost disappearing — the workmanship in certain staters showing already that a decline in style had set in. Greenwell wrote of the facing Satyr head which came from the Avola find, "This fine stater of Lampsacus, of an earlier issue than some of those presently to be noticed,<sup>5</sup> formed part of a hoard lately found in Sicily." And, again, in discussing the Asia Minor find, he wrote, "Two of them appear to belong to the later issue of gold staters of Lampsacus, and probably do not date from a time earlier than that of Philip II of Macedon."

<sup>1</sup> Num. Chron. 1888, p. 111.

<sup>2</sup> It was Six who first called attention to the Boiotian inscription of the middle of the Fourth Century B.C., which mentions gold staters of Lampsakos (*Electrum Coinage*, p. 10), as this letter proves.

<sup>3</sup> *Zeit. f. Num.* 1890, p. 179.

<sup>4</sup> Num. Chron. 1890, p. 25.

<sup>5</sup> Namely, those from the Asia Minor hoard.

The Avola find<sup>1</sup> contained seven different types as follows<sup>2</sup>: a figure-type, Apollo seated (Pl. I, 6), and the head-types, Satyr facing (Pl. II, 2), Demeter r. (Pl. I, 15), Hermes l. (Pl. I, 22), Herakles l. (Pl. I, 29), Athena l. (Pl. II, 8) and Maenad l. with *sakkos* (Pl. II, 12). The Asia Minor find<sup>3</sup> contained these seven types: Athena l. (Pl. II, 6), Maenad head with *sakkos* (Pl. II, 10), Zeus with sceptre (Pl. III, 2), Aktaion l. (Pl. III, 14), Hekate l. (Pl. III, 19), Kabeiros l. (Pl. III, 25 or 27) and Aphrodite l. (Pl. III, 35).

The contents of these two hoards correspond roughly with the pronouncedly earlier and later styles noticeable in the coinage as may be rather easily discerned at first view, for the Avola hoard had none of the staters which are of the later style, while the Asia Minor hoard contained none of the earlier staters. The most important point for argument is that the two staters common to both hoards, the Athena and Maenad with *sakkos* types, belong to our middle group, so that, granted the early and late character of the two hoards respectively, it is most natural to find that the types of an intermediate group are *common to both hoards*.

If, therefore, we can date the Athena and Maenad types which seem to have been consecutive issues from their reverses, and according to style are the latest staters in the Avola hoard, we should give the date of these staters as the probable date of deposit. Now the find was reported as containing besides the Lampsakene staters, one hundred and fifty silver Pegasi of Corinth and her colonies, fourteen hundred-litra gold pieces of Syracuse, one gold stater of Abydos, and four Persian darics. Löbbecke assumed, quite logically enough from his information, that the date of deposit was c. 320 B.C., the limit furnished by the silver coins. We have it, however, on the suggestion of Sir Arthur Evans,<sup>4</sup> that the Avola find was in reality a composite one, made up of two separate finds which had been unearched in Sicily at about this same time. If the hoard was really made up of two separate finds — one composed of gold and one of silver coins, then the period represented by the coins in the gold hoard would extend from about

<sup>1</sup> Num. Chron. 1890, p. 25; Zeit. f. Num. 1890, p. 169 f.

<sup>2</sup> There were fourteen staters in the hoard but five of the coins were not seen by Löbbecke and two were duplicates of the seven above enumerated.

<sup>3</sup> Num. Chron. 1890, p. 26 f.; Zeit. f. Num., 1890, p. 178.

<sup>4</sup> Num. Chron. 1891, p. 297, note 22. "According to my own information more than one find has been discovered in the same Sicilian district within the last few years, and I have myself seen specimens of two hoards of very different composition, one apparently dating from the early part of the Fourth Century and the other from the beginning of the Third. The coins described by Herr Löbbecke seem to me to belong to two distinct hoards, one of early gold coins including besides the Syracusan, staters of Lampsakos and Abydos and a Persian daric; the other of the late silver coins, Pegasi, etc."

Dr. P. Orsi, in the latest account of this hoard, Atti e Mem., 1917, p. 7, note 1, states that the gold coins were contained in one clay vase, the silver in another, according to report, but agrees with Evans that this report may have been incorrect and that there were probably two separate and distinct finds.

413 B.C., the date of the Syracusan gold coins, to whatever date we should assign to the Athena and Maenad heads, the latest staters in the hoard according to the criteria of style.

It so happens that these two types are very closely allied by their reverses to the staters bearing a head of a Persian satrap (Pl. II, 15-17). This type follows in our scheme next but one<sup>1</sup> upon the aforesaid types. The Persian satrap type appears in three examples, all very rare and interesting coins. The specimen, Pl. II, 15, from the Hunterian collection in Glasgow, was long the only example known. Later on, the Paris cabinet acquired the stater, Pl. II, 16; and M. Jameson has the third specimen, Pl. II, 17. The Glasgow coin does not give any suggestion of being more than a typical head of a satrap, but the two newer examples show most decidedly that portraiture is here intended, for there is more expression in both these heads. This portrait can hardly be that of anyone else than Orontas, who was satrap of Mysia and Ionia, c. 362-345 B.C.<sup>2</sup> Orontas struck silver coins at Lampsakos bearing a head of Athena helmeted to the left, not dissimilar in style to the Athena head on the gold staters, and having on the reverse the Lampsakene arms, a fore-part of Pegasos and his name OPONTA.<sup>3</sup>

The occasion of the issue of these satrapal coins at Lampsakos is undoubtedly as Six first pointed out, and Babelon has further developed, the revolt of the satraps against Artaxerxes II Mnemon, c. 362 B.C. If Orontas issued the staters of Lampsakos with the portrait of himself on the occasion of the revolt against the Persian King, c. 362 B.C., then the staters with Athena and Maenad heads were issued just before this date, provided our sequence of types be correct.

A consideration of the style of the coins which belong to our third group will perhaps serve to strengthen this conclusion. Here we are wholly on that rather unstable and shifting basis of style. The third group of staters begins, according to our arrangement, almost immediately with the Hera and Zeus staters (Pl. II, 30 f.) which represent the highest attainment of art on Lampsakene staters. The Zeus head, particularly that which was clearly the earliest die, Pl. II, 31-35, is one of the most perfect creations

<sup>1</sup> A facing helmeted head of Athena, Pl. II, 14, intervenes.

<sup>2</sup> Babelon, *Traité II*<sup>2</sup>, p. 105 f, explains the gold issue as insurrectional, and thus accounts for the lack of any royal inscription or type. The head has been ascribed to Tissaphernes and Pharnabazos by Head, but in the *Hist. Num.*<sup>2</sup>, p. 597, this eminent authority agrees with Babelon's assignment to Orontas. The former satraps come too early in the Fourth Century for this Lampsakene stater which, according to our classification, was struck c. 360 B.C., and Spithridates, a third possibility inasmuch as we have his satrapal coins from our mint, comes too late, since his coins were probably struck under the authority of Darius III Codomannus when the latter was preparing to resist the invasion of Alexander.

<sup>3</sup> Babelon, *Traité II*<sup>2</sup>, pl. lxxxviii, 15.

of the die-sinker, a majestic yet genial type of Zeus head. The later dies (Pl. III, 3-7), excellent as they seem by themselves, are much harder and more expressionless than the first die, this being due to the fact that the type first created was merely copied over and over again. The heads of Nike, of Herakles as Omphale, of Aktaion and Hekate are all on the highest plane of excellence. These types are the culmination of the art of the series and, given the number of types which precede these staters and the admitted beginning of the coinage, c. 390 B.C., the date c. 350 B.C. would seem to suit the style of these staters and to harmonize with the inferences we have drawn from the study of the reverses. But, of course, the only soundly based date is that which we can infer from the stater which, as seems likely, bears the portrait head of Orontas. Then, if our order of issues is correct, the latest coins of the Avola hoard were struck just previous to 362 B.C., which furnishes us with an approximate date for the burial of this hoard.

The date of deposit of the Asia Minor hoard will depend upon the date which is chosen for the end of the Lampsakene issues since it contained examples of staters, which, according to our arrangement, are the latest of the series. The date given in the British Museum Catalogue for the lower limit of the stater coinage is "c. 350 B.C." This date according to the foregoing hypotheses would be much too early. Six and Babelon have supposed that the stater coinage of Lampsakos was not immediately ended by the appearance of Philip's staters, c. 359-336 B.C., but only when Alexander's staters had begun to flood the markets of Asia Minor. This view seems in itself more probable, and, it should be noted, is that accepted also for the period of cessation of the issues of electrum at Kyzikos.<sup>1</sup> Furthermore, there are two staters in the third group which *ex hypothesi* would be subsequent to c. 350 B.C., which bear types quite possibly referring to Alexander the Great. These are, namely, the stater with a youthful male head without attributes, Pl. IV, 22, and the Zeus Ammon head, Pl. III, 23, both unique coins in the Paris cabinet. The former has been called an Achilles head, but this is obviously a mere guess. The head is the only male head in the series which has no defining attribute to enable us to describe it as that of some deity. There is also a female head without attributes in the series which has been called that of the eponymous heroine of Lampsakos, who was called Lampsake. This is far from being an improbable suggestion since the local nymph is one of the commonest of all the Greek coin types. For the male head without attributes, we are at a loss for a name. It can scarcely be a personification like that of the founder,

<sup>1</sup> Cf. Die Elektron Prägung von Kyzikos by H. v. Fritze in *Nomisma* VII.

for in this case the reputed founder was a woman, and her grave was even shown at Lampsakos in Plutarch's day. Six once suggested that this head represented Alexander the Great. He considered that the Zeus Ammon type and the Maenad head with the flying hair, Pl. I, 32f., represented Alexander's reputed father whom he claimed as divine ancestor, and his mother, Olympias, about whose participation in the orgiastic rites of the Bacchic cult many stories were told. The interpretation of the Maenad head as that of Olympias may easily be dismissed as over-fanciful. Besides it is one of the early staters, not one of the later style. But it may be conceded that the reverse of the young male head without attributes, otherwise nameless, has a somewhat Alexandrine character; that its reverse type is of the same style as that of the Zeus Ammon stater, and that both belong to a period which we should regard as towards the end of the series. All this being so, there is some reason for thinking that the two types may refer to Alexander, the former being a sort of disguised portrait. These types may, as Six ingeniously imagined, have been chosen by the city to show its gratitude to Alexander for his forbearance in sparing the inhabitants in his victorious march into Asia Minor in 334 B.C.<sup>1</sup> If then these are types connected with Alexander and only three more types subsequent to these are known, we may assume that the coinage lasted down to c. 330 B.C. This dating harmonizes with the supposition that Orontas struck the satrapal portrait stater, and perhaps also the Athena head, Pl. II, 5-8, for this type would then fall into the exact middle of the period c. 390-330 B.C., and its style quite suits such a date.

The discussion of the date of the beginning of the coinage will be taken up in connection with the discussion of the first type, Herakles and the serpent — the type which gives us the data for determining when the coinage began.

A valuable test of the order of the Lampsakene issues as here proposed, is afforded by the opportunity to place an unpublished type in the series and to see whether the style of the reverse and the other criteria, style of obverse, size of type and flan, height of relief, are in accord. The Jameson stater, No. 38, fig. 15 (see *Cat. of Types*), a youthful Dionysos type, is very easily recognized as one of the latest issues from the style of both obverse and reverse. The Pegasos is done in the negligent style of the close of the series — a style which, at first glance, is suggestive of the earliest issues in the treatment of the wings, but which is soon seen to be not the early imperfect style but the debased style which followed the high perfection of the coins of the middle and third group. This negligent style

<sup>1</sup> Droysen, *Hist. de l'Hellénisme*, I, p. 189.

of Pegasus is found in the staters, Pl. III, 12 f, and the closest approximation to our stater is the reverse of Pl. III, 23, the Zeus Ammon type. This position in the series is entirely in harmony with the larger size of the obverse type and flan, and the broader style of the head. The summary treatment of the hair, the large size of the ivy leaves are on a par with these features of the bearded Dionysos head, Pl. III, 21. While the stater lacks the delicacy of the early Maenad heads, Pl. I, 19, 20, and of the female Satyr, Pl. III, 13, it is dignified and noble in expression, and like all of the Lampsakene types with the exception of the head copied from Athenian coinage Pl. III, 29, it has beauty and originality of style.

### CATALOGUE OF TYPES

1 Infant Herakles, nude, kneeling to r., strangling a serpent with each hand, r. arm raised, l. lowered; erepundia over l. shoulder and under r. arm; ground line.

℞ Forepart of a winged horse to l., rounded wings, feathered, l. raised, r. lowered; l. wing in three sections, the one joining the body plain, middle one dotted, outer one feathered; row of dots at termination of horse's body.

*a.* 18 x 14mm. 8.44 gr. Boston (Greenwell-Warren); I-*a*.<sup>1</sup> Plate I, 1

Cat. Ivanoff, No. 192 (S. W. & H., June, 1863); Brandis, Münz.-Mass. u. Gewichtswesen, p. 409; Greenwell, Num. Chron. 1880, p. 12, pl. i, 11; Gardner, Types of Greek Coins, p. 33, pl. xvi, 8; Regling, Sammlung Warren, No. 1002, pl. xxiii; Gardner, Gold Coinage of Asia, in the Proceedings of the British Academy, III, 1908, pl. ii, 9; Jour. Inter. de Num. (hereinafter abbreviated to J. I. N.) 1902, 1a, pl. i, 1.

*b.* 16mm. 8.43 gr. (pierced). Paris (Old Collection); II-*β*. Plate I, 2

Pellerin, Recueil, II, p. 51, pl. xlix, 22; Sestini, Lettere e Dissertazioni (Livorno, 1779) IV, p. 70, pl. v, 2; Eckhel, Doctrina Num. Vet. II, p. 456; Mionnet, Cat. d'Empreintes, p. 42, No. 827, and Descr. de Méd. II, p. 559, No. 284; Sestini, Stateri Antichi, p. 64, No. 13, pl. vi, 10; Waddington, Rev. Num. 1863, pl. x, 5; Brandis, *op. cit.*, p. 409; Babelon, Traité II<sup>2</sup>, No. 2529, pl. clxx, 28; J. I. N. 1902, No. Ib, pl. i, 2.

*a* and *b*, different obverse and reverse dies.

2 Helle, wearing chiton and himation, seated sidewise on a ram which advances to l. with raised fore-legs.

℞ Similar.

*a*.<sup>2</sup> 16mm. 8.41 gr. Berlin (Prokesch-Osten); I-*a*. Plate I, 3

Prokesch-Osten, Arch. Zeitung, 1849 (Denk. u. Forsch. No. 10, p. 97), pl. x, 2; Gerhard, *ibid.*, 1853 (D. u. F. No. 58, p. 116), pl. lviii, 9; Prok.-O., Inedita meiner Sammlung, 1854, No. 282, p. 50, pl. iv, 8; Brandis, *op. cit.*, p. 410; Zeit. f. Num. 1877, p. 5; J. I. N. 1902, 2a, pl. i, 3.

<sup>1</sup> The Roman and Greek numerals following the weight and present location of each coin indicate the obverse and reverse dies in serial numbering for *each* type, and their combinations.

<sup>2</sup> Example *a* was purchased in 1848 at Livadhia (Lebedeia, Boiotia), by Prokesch-Osten who describes another specimen (Arch. Zeit. 1849, p. 97) of the same weight but less well preserved, which he bought in Orchomenos and ceded to H. P. Borrell, in Smyrna. This second specimen is doubtless the de Luynes coin, *b*.

*b.* 16mm. 8.44 gr. Paris (de Luynes); II-*a.* Plate I, 4

Brandis, *op. cit.*, p. 410; Babelon, *Traité II*<sup>2</sup>, No. 2530, pl. clxx, 29; Cat. Borrell, No. 134 (S. & W., London, 1852); J. I. N. 1902, 2b, pl. i, 4.

*a* and *b*, different obverse dies but same reverse die. Reverse die of Type 2 identical with that of Type 1 *b*, the only case in the whole series where the same reverse die is combined with two different obverse dies.

3 Young male head, Perseus (?), helmeted l., hair falls in loose locks; visor of helmet ends in a volute ornament; above volute is a small wing; below the wing, a volute.

℞ Similar, horse to r., r. wing raised, l. lowered; middle section of r. wing widens out from a row of dots to an even row of feathers.

*a.* 16mm. 8.40 gr. Paris; unique.<sup>1</sup> Plate I, 5  
Babelon, *Traité II*<sup>2</sup>, No. 2547, pl. clxxi, 14. ("tête imberbe d'Atys").

4 Orpheus, wearing "Phrygian" cap, with flaps at back and side, talaric chiton girdled at waist, and himation thrown back from shoulders, seated to r. on rock; rests r. elbow on knee and supports chin with r. hand; on l. knee supports lyre from which hangs a strap; ground line.

℞ Similar, no row of dots at termination of horse's body.

*a.* 16mm. 8.40 gr. Berlin (Löbbecke); I-*a.* Plate I, 6

From the Avola Find. Löbbecke, *Zeit. f. Num.* 1890, p. 170, No. 9, pl. vi (x), 9; J. I. N. 1902, 4b, pl. i, 7.

*b.* 16mm. 8.43 gr. Paris (Waddington); II-*β.* Plate I, 7.

Babelon, *Rev. Num.* 1897, p. 319, No. 868, pl. vii, 12 = Inv. Wadd. pl. ii, 12, and *Traité II*<sup>2</sup>, No. 2532, pl. clxx, 31; J. I. N. 1902, 4a, pl. i, 6.

*a* and *b*, different obverse and reverse dies.

5 Thetis or a Nereid, semi-nude, limbs draped, hair long, seated to l. on dolphin to r., holding in r. hand knemides, and on l. arm, a shield (arms of Achilles?).

℞ Similar.

*a.* 16mm. 8.41 gr. Paris (Old Coll.); unique. Plate I, 8

Mionnet, *Cat d'Empreintes*, p. 42, No. 825; Sestini, *Lett. e Diss.* (Berlin, 1805), VII, p. 36, pl. iii, 6, and *Stateri Antichi*, p. 65, No. 16, pl. vi, 13; Mionnet, *Descr. de Méd.* II, p. 559, No. 285; Brandis, *op. cit.*, p. 410; Babelon, *Traité II*<sup>2</sup>, No. 2531, pl. clxx, 30; Imhoof-Blumer, *J. I. N.* 1908, p. 134, pl. viii, 44; J. I. N. 1902, 3a, pl. i, 5.

6 An archer kneeling to r. on r. knee, l. elbow resting on l. knee, holding in l. hand an upright bow, together with an arrow; his r. arm drawn back from the body hangs down with open palm; he wears a cap with loose flaps bound with a ribbon of which the ends are tied in a bow-knot; a long-sleeved chiton girdled at the waist; *anaxyrides*, and shoes turned up at the toe; over the chiton, he wears a close-fitting jacket of some padded material or leather, laced down the front, with short caps over the arms; ground line.

℞ Similar.

<sup>1</sup> Another example was once in the Pozzi Collection, but it was possibly not genuine. It does not appear in the Pozzi Sale Catalogue, 1920.

*a.* 16mm. 8.42 gr. Berlin (Löbbecke); unique. **Plate I, 9**

*J. I. N.* 1902, p. 8, and *Zeit. f. Num.* xxxii, pp. 1-14, pl. i, 1.

7 Nike, winged, semi-nude, with drapery about the legs, kneels l. on a ram seated to l.; with her l. hand she seizes l. horn of ram, and holds back its head, while in her r. hand, she holds a knife pointed at the ram's throat.

℞ Similar.

*a.* 16mm. 8.42 gr. London (formerly Sir H. Weber); unique. **Plate I, 10**

Greenwell, *Num. Chron.* 1885, p. 10, pl. i, 9; Babelon, *Traité II<sup>2</sup>*, No. 2534, pl. clxx, 33; Head, *Hist. Num.* p. 529, fig. 276; *J. I. N.* 1902, 6a, pl. i, 9.

The example in *Cat. Monn. gr. ant.*, No. 509, pl. xi (Rollin et Feuarent, Paris, May, 1910), weighing only 3.40 gr., was a forgery and withdrawn from the sale.

8 Head of a Satyr, facing, slightly to l., with straight hair brushed back from the forehead, and flowing beard cropped short between the long drooping moustache, and with pointed animal's ears.

℞ Similar.

*a.* 15mm. 8.41 gr. Berlin (Löbbecke); I-*a.* **Plate I, 11**

From the Avola Find. Löbbecke, *Zeit. f. Num.* 1890, p. 169, No. 3, pl. vi (x), 3; *J. I. N.* 1902, 32b, pl. iii, 16.

*b.* 15mm. 8.43 gr. Paris (Waddington); I-*β.* **Plate I, 12**

Babelon, *Rev. Num.* 1897, p. 318, No. 851, pl. vii, 9 = *Inv. Wadd.* pl. ii, 9, and *Traité II<sup>2</sup>*, No. 2561, pl. clxxii, 5; *J. I. N.* 1902, 32c, pl. iii, 17.

*c.* 16mm. 8.39 gr. Boston (Greenwell-Warren); II-*β.* **Plate I, 13**

From the Avola Find. Greenwell, *Num. Chron.* 1890, p. 25, pl. iii, 11; Regling, *Samml. Warren*, No. 1011, pl. xxiii; *J. I. N.* 1902, 32a, pl. iii, 15.

*d.* 16mm. 8.33 gr. Jameson, Paris; II-*β.* **Plate I, 14**

*Cat. Sandeman*, No. 236, pl. iv (S. W. & H., London, June, 1911); *Cat. Jameson*, No. 1444a, pl. xciv (Paris, 1913).

*a-d*, two obverse dies — *a* and *b*, *c* and *d* identical; two reverse dies — *b*, *c*, and *d*, identical.

9 Head of Demeter r., wearing corn wreath, hair rolled.

℞ Similar.

*a.* 15mm. 8.38 gr. Berlin (Löbbecke); I-*a.* **Plate I, 15**

From the Avola Find. Löbbecke, *Zeit. f. Num.* 1890, p. 169, No. 4, pl. vi (x), 4; *J. I. N.* 1902, 17b, pl. ii, 10.

*b.* 14mm. 8.42 gr. London; II-*β.* **Plate I, 16**

From the Avola Find. Wroth, *Num. Chron.* 1890, p. 324, No. 24, pl. xix, 14, and B. M. C. Mysia, No. 23, pl. xix, 1; Farnell, *Cults of the Greek States*, III, Coin Plate, 20; Babelon, *Traité II<sup>2</sup>*, No. 2545, pl. clxxi, 12; *Num. Chron.* 1891, p. 116; *J. I. N.* 1902, 17a, pl. ii, 9.

*a* and *b*, different obverse and reverse dies.

10 Head of Dionysus l., bearded, wearing ivy wreath with a bunch of ivy berries over the forehead.

℞ Similar.

*a.* 16mm. 8.41 gr. London (formerly Sir H. Weber); unique. **Plate I, 17**  
Greenwell, Num Chron. 1893, p. 85; Weber, Num. Chron. 1896, p. 23, No. 43, pl. ii, 19;  
Babelon, *Traité II*<sup>2</sup>, No. 2553; J. I. N. 1902, 24a, pl. iii, 1.

**11** Head of a Maenad l., hair rolled, loose locks falling on neck; wearing ivy wreath with berries, ear-ring with a single pendant, and necklace.

℞ Similar.

*a.* 17mm. 8.42 gr. Berlin (Fox); *I-a.* **Plate I, 18**  
Numismata Antiqua (Pembroke Coll.), 1746, pl. iv, 9; Sestini, *Stateri Antichi*, p. 63, No. 8, pl. vi, 6; Cat. Pembroke, No. 880 (Sotheby, London, July, 1848); Brandis, *op. cit.*, p. 410; Leake, Num. Hell. (As. Gr.) p. 72; Six, Num. Chron. 1888, p. 111, No. 9; Babelon, *Traité II*<sup>2</sup>, No. 2556, pl. clxxi, 24; J. I. N. 1902, 27a, pl. iii, 10.

*b.* 16mm. 8.45 gr. (Formerly Philipsen); *II-β.* **Plate I, 19**  
Cat. Philipsen, No. 1791, pl. xxi (Hirsch XXV, Munich, Nov. 1909); Cat. Monn. gr. ant. pl. xxix, 794 (Naville et Cie, Geneva, 1922).

*c.* 18mm. 8.38 gr. Jameson, Paris; *III-β.* **Plate I, 20**  
Found in Egypt. Babelon, *Traité II*<sup>2</sup>, No. 2556, pl. clxxi, 23; Cat. Jameson, No. 1438, pl. lxxiii, Paris, 1913. From the Avierino Coll. = (?) Dr. Eddé, Ras. Num. 1909, p. 55.

*a-c*, three obverse dies; two reverse dies — *b* and *c* identical.

**12** Head of young Pan l., beardless, with a goat's horn.

℞ Similar.

*a.* 16mm. 8.37 gr. Boston (Perkins); unique. **Plate I, 21**  
Found in Crete. Svoronos, J. I. N. 1899, p. 301, pl. 1A', 12; Cat. of Perkins Coll. pl. v, 428; Babelon, *Traité II*<sup>2</sup>, No. 2560, pl. clxxii, 4; J. I. N. 1902, 31a, pl. iii, 14.

**13** Head of young Hermes l., hair short, wearing flat petasos, without wings, on top of which, a button; band of petasos visible.

℞ Similar, but middle section of r. wing has now evolved into a "ladder pattern" which begins to be seen also on the lowered l. wing.<sup>1</sup>

*a.* 16mm. 8.45 gr. Berlin (Löbbecke); *I-a.* **Plate I, 22**  
From the Avola Find. Löbbecke, *Zeit. f. Num.* 1890, pl. vi (x), 7; J. I. N. 1902, 18b, pl. ii, 12.

*b.* 17mm. 8.55 gr. (Formerly O'Hagan); *II-β.* **Plate I, 23**  
Cat. O'Hagan, No. 535, pl. ix (S. W. & H., London, May, 1908).

*c.* 16mm. 8.38 gr. Jameson, Paris (formerly Duruflé); *III-γ.* **Plate I, 24**  
Cat. Jameson, No. 1436, pl. lxxiii (Paris, 1913).

*d.* 17mm. 8.45 gr. Paris (Waddington); *IV-γ.* **Plate I, 25**  
Babelon, *Rev. Num.* 1897, p. 318, No. 860, pl. vii, 4 = Inv. Wadd. pl. ii, 4, and *Traité II*<sup>2</sup>, No. 2546, pl. clxxi, 13; J. I. N. 1902, 18a, pl. ii, 11.

*e.* 18mm. 8.40 gr. Boston (Greenwell-Warren); *V-δ.* **Plate I, 26**  
Greenwell, Num. Chron. 1897, p. 258, pl. xi, 11; Regling, *Samm. Warren*, No. 1013, pl. xxiii; J. I. N. 1902, 18c.

*a-e*, five obverse dies; four reverse dies — *c* and *d* identical.

<sup>1</sup> The feathered end of the wing also from now on shows a fine cross-hatching visible first on types Nos. 11 and 12.

14 Head of Apollo l., hair rolled, wearing a laurel wreath, and a knotted bandelette, or fillet, which passes over his front hair, back of the ears, and hangs down on either side.

℞ Similar.

a. 17mm. 8.40 gr. Munich; I-a. Plate I, 27

Sestini, *Stateri Antichi*, p. 63, No. 9, pl. vi, 7; Mionnet, *Descr. de Méd. Sup. V*, p. 369, No. 544; Brandis, *op. cit.* p. 410; Six, *Num. Chron.* 1888, p. 111, No. 7, also p. 110, note 47; Babelon, *Traité II<sup>2</sup>*, No. 2543, pl. clxxi, 9; J. I. N. 1902, 15a, pl. ii, 6.

b. 18mm. 8.41 gr. Jameson, Paris (formerly Warren); II-β. Plate I, 28

Cat. Jameson, No. 1440, pl. lxxiii (Paris, 1913); Regling, *Samm. Warren*, No. 1010, pl. xxiii; Cat. Well-known Amateur (Warren), No. 99, pl. iii (S. W. & H., London, May, 1905); Babelon, *Traité II<sup>2</sup>*, No. 2543, pl. clxxi, 10.

a and b, different obverse and reverse dies.

15 Head of bearded Herakles l. in lion's scalp.

℞ Similar.

a. 15mm. 8.40 gr. Berlin (Löbbecke); unique. Plate I, 29

From the Avola Find. Löbbecke, *Zeit. f. Num.* 1890, p. 169, No. 6, pl. vi (x), 6; Babelon, *Traité II<sup>2</sup>*, No. 2557, pl. clxxii, 1; J. I. N. 1902, 28a, pl. iii, 11.

16 Head of Demeter l., wearing a corn wreath and veil, ear-ring with triple pendant, and necklace.

℞ Similar.

a. 17mm. 8.50 gr. Paris (Old Coll.); I-a. Plate I, 30

Cat. Wellenheim I, 4890 (Vienna, 1844); Six, *Num. Chron.* 1888, p. 111, No. 8, also 1894, p. 310; Babelon, *Traité II<sup>2</sup>*, No. 2544, pl. clxxi, 11; J. I. N. 1902, 16b, pl. ii, 8.

b.<sup>1</sup> 17mm. 5.29 gr. (plated). London; II-β. Plate I, 31

Wroth, *B. M. C.* No. 27, pl. xix, 5; J. I. N. 1902, 16a, pl. ii, 7.

a and b, different obverse and reverse dies.

17 Head of a Maenad thrown back, with flying hair, wearing ivy wreath, with berries over the forehead, ear-ring with triple pendant, and necklace; interwoven in her hair is a diadem, ends flying, sometimes fringed.

℞ Similar.

a. 16mm. 8.44 gr. Boston (Perkins, formerly Ashburnham); I-a. Plate I, 32

Cat. Ashburnham, No. 151, pl. iv (S. W. & H., London, May, 1895); Cat. of Perkins Coll. pl. v, 429; J. I. N. 1902, 25e.

b. 17mm. 8.46 gr. London; II-a. Plate I, 33

Head, Guide, p. 37, No. 15, pl. xviii, 15; B. M. C. Mysia, No. 29, pl. xix, 7; J. I. N. 1902, 25c, pl. iii, 6.

<sup>1</sup> The second example b, is a plated coin, which has been regarded by the British Museum authorities as an *ancient* forgery. Its appearance at first glance is not reassuring, and one's first impulse is to condemn it from its brassy look as a modern product. The obverse, however (note the *single-drop* ear-ring), looks like ancient work, and in the absence of any stigmata of a modern fabrication, it seems safe to consider it, with Wroth, as an ancient plated coin.

- c.* 17mm. 8.46 gr. (Formerly Caruso); II-β.  
Cat. Monn. gr. ant. (Duruflé), No. 508, pl. xii (R. et F., Paris, May, 1910); Cat. Collezione Caruso, No. 68, pl. ii (C. & E. Canessa, Naples, June, 1923).
- d.* 16mm. 8.49 gr. Jameson, Paris; III-γ. Plate I, 34  
Cat. Jameson, No. 1444, pl. lxxiv (Paris, 1913) = (?) Dr. Eddé, *Rass. Num.* 1909, p. 55.
- e.* 16mm. 8.46 gr. Cambridge (McClellan); III-δ. Plate I, 35
- f.* 16mm. 8.47 gr. Bement, Philadelphia; IV-δ.  
Cat. Gr., Röm. u. Byz. Münzen, No. 465, pl. xv (Hirsch, XXXIV, Munich, May, 1914);  
Cat. C. S. Bement Coll., pl. xvii, 256 (New York, 1921).
- g.* 16mm. 8.54 gr. Yakountchikoff, Petrograd (formerly Hoskier); V-δ.  
Cat. Hoskier, No. 371, pl. xiii (Hirsch XX, Munich, Nov. 1907 = Hirsch XVIII, No. 2440,  
Munich, 1907).
- h.* 16mm. 8.45 gr. —; V-ε.  
Cat. Hirsch XII, 1904, No. 230.
- i.* 16mm. 8.40 gr. (Formerly Pozzi); VI-δ.  
Cat. Monn. gr. ant., pl. lxxvii, 2229 (Naville et Cie, Geneva, 1920).
- j.* 16mm. 8.38 gr. —; VI-δ.  
Cat. Monn. gr. ant., pl. xxix, 792 (Naville et Cie, Geneva, 1922).
- k.* 16mm. 8.42 gr. (Formerly Consul Weber); VI-ε.
- l.* 16mm. — gr. In commerce (1914); VI-ς.
- m.* 16mm. 8.40 gr. —; VI-ζ.  
Cat. Monn. gr. ant., pl. xxix, 793 (Naville et Cie, Geneva, 1922).
- n.* 17mm. 8.43 gr. Berlin (Prokesch-Osten); VII-η. Plate II, 1  
Cat. Thomas, No. 1998 (Sotheby, London, 1844); Von Sallet, Königl. Münz-kabinet, 1877,  
p. 86, No. 212; J. I. N. 1902, 25d.
- o.* 17mm. 8.48 gr. Glasgow (Hunter); VIII-θ. Plate II, 2  
Combe, *Mus. Hunter*, p. 165, No. 2, pl. xxxi, 23; Mionnet, *Descr. de Méd.* II, p. 560, No.  
290; Sestini, *Stateri Antichi*, p. 63, No. 7, pl. vi, 5; Brandis, *op. cit.*, p. 410; Macdonald, *Hunter*  
*Coll.* II, p. 271, No. 4; J. I. N. 1902, 25f.
- p.* 17mm. 8.44 gr. Paris (Waddington); IX-ι. Plate II, 3  
Babelon, *Rev. Num.* 1897, p. 318, No. 862, pl. vii, 6 = *Inv. Wadd.*, pl. ii, 6, and *Traité II*<sup>2</sup>,  
No. 2554, pl. clxxi, 21; J. I. N. 1902, 25b, pl. iii, 5.
- q.* 18mm. 8.45 gr. Paris (de Luynes); IX-ι. Plate II, 4  
De Luynes, *Choix*, pl. ix, 18; Blanchet, *Monn. gr.*, pl. v, 5; Brandis, *op. cit.*, p. 409; Im-  
hoof-Blumer, *J. I. N.* 1908, p. 130, pl. viii, 35; J. I. N. 1902, 25a, pl. iii, 4.
- a-q* (seventeen specimens) nine obverse dies — *b* and *c*; *d* and *e*; *g* and *h*; *i-m*;  
*p* and *q*, identical. Ten reverse dies — *a* and *b*; *e-g*, *i, j*; *h, k*; *p, q*, identical.
- 18 Head of Athena l., wearing crested Athenian helmet with raised cheek-piece  
and scroll ornament; ear-ring with triple pendant, and necklace.
- ℞ Similar.
- a.* 18mm. 8.42 gr. Paris (Waddington); I-α. Plate II, 5  
Babelon, *Rev. Num.* 1897, p. 318, No. 858, pl. vii, 2 = *Inv. Wadd.*, pl. ii, 2, and *Traité II*<sup>2</sup>,  
No. 2540, pl. clxxi, 6; J. I. N. 1902, 12a, pl. ii, 1.

*b.* 17mm. 8.42 gr. Boston (Greenwell-Warren); II-*a*. Plate II, 6  
From the Asia Minor (Troad) Find. Greenwell, Num. Chron. 1890, p. 26, pl. iii, 12; Regling, Samm. Warren, No. 1008, pl. xxiii; J. I. N. 1902, 12b, pl. ii, 2.

*c.* 16mm. 8.37 gr. Glasgow (Hunter); III- $\beta$ . Plate II, 7  
Macdonald, Hunter. Coll. II, p. 271, No. 3, pl. xlviii, 3; J. I. N. 1902, 12d.

*d.* 17mm. 8.42 gr. Berlin (Löbbecke); IV-. Plate II, 8  
From the Avola Find. Löbbecke, Zeit. f. Num. 1890, p. 169, No. 5, pl. vi (x), 5; J. I. N. 1902, 12c, pl. ii, 3.

*a-d*, four obverse dies; two reverse dies—*a* and *b*, *c* and *d*, identical.

19 Head of a Maenad l., wearing a wreath composed of vine leaves and bunches of grapes, ear-ring with triple pendant, necklace and sphenone.

℞ Similar.

*a.* 16mm. 8.41 gr. Jameson, Paris; I-*a*. Plate II, 9  
Found in Egypt. Cat. Jameson, No. 1437, pl. lxxiii; Dr. Eddé, Rass. Num. 1909, p. 55.

*b.* 17mm. 8.42 gr. Boston (Greenwell-Warren); II- $\beta$ . Plate II, 10  
From the Asia Minor Find. Greenwell, Num. Chron. 1890, p. 26, pl. iii, 14; Regling, Samm. Warren, No. 1015, pl. xxiii; J. I. N. 1902, 26c, pl. iii, 8.

*c.* 17mm. 8.44 gr. Paris (Waddington); III- $\beta$ . Plate II, 11  
Babelon, Rev. Num. 1897, p. 318, No. 863, pl. vii, 7 = Inv. Wadd., pl. ii, 7, and *Traité II*<sup>2</sup>, No. 2555, pl. clxxi, 22; J. I. N. 1902, 26a.

*d.* 16mm. 8.45 gr. Berlin (Löbbecke); IV- $\gamma$ . Plate II, 12  
From the Avola Find. Löbbecke, Zeit. f. Num. 1890, p. 170, No. 8, pl. vi (x), 8; J. I. N. 1902, 26d, pl. iii, 9.

*e.* 18mm. 8.40 gr. Berlin (Imhoof-Blumer); V- $\gamma$ . Plate II, 13  
Imhoof-Blumer, J. I. N. 1908, p. 130, pl. viii, 34; J. I. N. 1902, 26b, pl. iii, 7.

*a-e*, five obverse dies; three reverse dies—*b* and *c*, *d* and *e*, identical.<sup>1</sup>

20 Head of Athena, facing three-quarters to r., wearing triple-crested helmet, round ear-ring, and necklace.

℞ Similar.

*a.* 16mm. 8.42 gr. Paris (Waddington); unique. Plate II, 14

Num. Chron. 1894, p. 310; Babelon, Rev. Num. 1897, p. 318, No. 859, pl. vii, 3 = Inv. Wadd., pl. ii, 3, and *Traité II*<sup>2</sup>, No. 2541, pl. clxxi, 7; J. I. N. 1902, 18a, pl. ii, 4.

21 Head of the Persian satrap, Orontes, l., bearded, wearing tiara with loose, untied flaps.

℞ Similar.

*a.* 17mm. 8.43 gr. Glasgow (Hunter); I-*a*. Plate II, 15

Combe, Mus. Hunter, p. 165, No. 1, pl. xxxi, 22; Sestini, Lett. e Diss. IV (Livorno, 1779), p. 69, No. 1, and *Stateri Antichi*, p. 63, No. 5, pl. vi, 4; Mionnet, Descr. de Méd. II, p. 560, No. 289; Leake, Num. Hell. (As. Gr.), p. 148; De Koehne, Mémoires, pl. xii, 36; Rev. Num. 1861, p. 16, pl. ii, 3; Num. Zeit. 1871, p. 425; Macdonald, Hunter. Coll. II, p. 271, No. 2, pl. xlviii, 2; P. Gardner, Gold Coinage of Asia, Proc. of Brit. Academy, 1908, pl. ii, 12; J. I. N. 1902, 34a, pl. iii, 21.

<sup>1</sup> The reverse dies *c* and *d* have become interchanged in setting up the casts.

*b.* 17mm. 8.43 gr. Paris ; II- $\beta$ . Plate II, 16  
Babelon, *Traité II*<sup>2</sup>, No. 2563, pl. clxxii, 7.

*c.* 16mm. 8.34 gr. Jameson, Paris ; III- $\gamma$ . Plate II, 17  
Cat. Jameson, No. 1443a, pl. xcv (Paris, 1913).

*a-c*, different obverse and reverse dies.

22 Head of Dionysus l., bearded, wearing ivy wreath with a bunch of ivy berries over the forehead.

$\mathcal{R}$  Similar; middle section of r. wing feathered as on types 3-12 and 32 ff.

*a.* 17mm. 8.30 gr. Paris (Waddington) ; I-*a*. Plate II, 18

Babelon, *Rev. Num.* 1897, p. 318, No. 861, pl. vii, 5 = *Inv. Wadd.*, pl. ii, 5, and *Traité II*<sup>2</sup>, No. 2553, pl. clxxi, 20; *J. I. N.* 1902, 24c, pl. iii, 3.

*b.* 18mm. 8.30 gr. Jameson, Paris (formerly Duruflé) ; I-*a*. Plate II, 19  
Cat. Jameson, No. 1443, pl. lxxiii (Paris, 1913).

*a* and *b*, same obverse and reverse dies.

23 Head of Helios l., hair in loose locks, on a radiate disk.

$\mathcal{R}$  Similar.

*a.* 16mm. 8.43 gr. Jameson, Paris ; I-*a*. Plate II, 20

Found in Egypt. Cat. Jameson, No. 1435, pl. lxxii (Paris, 1913). From the Avierino Coll. = (?) Dr. Eddé, *Rass. Num.* 1909, p. 56.

*b.* 17mm. 8.43 gr. Paris (Waddington) ; II-*a*. Plate II, 21

Head, *Hist. Num.*, p. 530, fig. 281; *Six, Num. Chron.* 1888, p. 111, No. 5; Babelon, *Rev. Num.* 1897, p. 319, No. 857, pl. vii, 11 = *Inv. Wadd.*, pl. ii, 11, and *Traité II*<sup>2</sup>, No. 2551, pl. clxxi, 18; *J. I. N.* 1902, 22a, pl. ii, 21.

*a* and *b*, different obverse, but same reverse dies.

24 Bearded head of Zeus l., wearing laurel wreath.

$\mathcal{R}$  Similar.

*a.* 18mm. 8.43 gr. Jameson, Paris ; I-*a*. Plate II, 22

From the Avola Find. Cat. Gr. Münzen, No. 617 (Hirsch XVI, Munich, 1906); Cat. Jameson, No. 1438, pl. lxxiii (Paris, 1913).

*b.* 18mm. — gr. In commerce ; II-*a*. Plate II, 23

Head, *Hist. Num.*, p. 530, fig. 279 (from an electrotype in the Brit. Mus.); *J. I. N.* 1902, 8b, pl. i, 12.

*c.* 17mm. 8.45 gr. Paris (de Luynes) ; III-*a*. Plate II, 24

De Luynes, *Choix*, pl. x, 17; Blanchet, *Monn. gr.*, pl. v, 6; Brandis, *op. cit.*, p. 410; Babelon, *Traité II*<sup>2</sup>, No. 2536, pl. clxxi, 2; *J. I. N.* 1902, 8c, pl. i, 13.

*d.* 18mm. 8.40 gr. In commerce (1902) ; IV- $\beta$ .

*J. I. N.* 1902, 8a, pl. ii, 11.

*a-d*, four obverse dies ; two reverse dies — *a-c*, identical.

25 Ge, wearing girdled chiton, and himation, rising l. from the earth, holding in r. hand three ears of corn ; behind her, two ears of corn and vine bearing two bunches of grapes ; she wears corn wreath (?) ; ground line.

$\mathcal{R}$  Similar.

*a.* 17mm. 8.37 gr. London (Payne-Knight); I-*a.* Plate II, 25

Payne-Knight, *Nummi Veteres*, p. 130, No. 1; Millingen, *Anc. Greek Coins*, p. 69, No. 1, pl. v, 7; Mionnet, *Descr. de Méd.*, Supp. V, p. 371, No. 556; Head, *Guide*, p. 37, No. 16, pl. xviii, 16, and *Hist. Num.*, p. 529, fig. 277; B. M. C. Mysia, No. 26, pl. xix, 4; Gardner, *Types*, p. 174, pl. x, 25; Babelon, *Traité II<sup>2</sup>*, No. 2533, pl. clxx, 32; Gardner, *Gold Coinage of Asia*, Proc. Brit. Academy, 1908, pl. ii, 11; J. I. N. 1902, 7a, pl. i, 10.

*b.* 17mm. 8.37 gr. (Formerly Sir H. Weber, London); I-*a.* Plate II, 26  
J. I. N. 1902, 7b.

*a* and *b*, same obverse and reverse dies.

26 Nike, winged, semi-nude, kneeling r. before a trophy; in l. hand, nail; in r. hand, a hammer with which she is about to attach a helmet to trophy; her hair is gathered up into a knot on crown of her head; she wears necklace.

℞ Similar.

*a.* 18mm. 8.43 gr. London (Bank of England Coll. ex H. P. Borrell); unique. Plate II, 27

Found in Egypt. Cf. B. M. C. Mysia, p. 82, note; Borrell, *Num. Chron.* 1843, p. 155; Brandis, *op. cit.*, p. 410; Head, *Guide*, p. 37, pl. xviii, 19; Gardner, *Types*, p. 173, pl. x, 24; Head, *Hist. Num.*, p. 529, fig. 278; B. M. C. Mysia, No. 31, pl. xix, 9; Babelon, *Traité II<sup>2</sup>*, No. 2535, pl. clxxi, 1; J. I. N. 1902, 5a, pl. i, 8.

27 Female head, the nymph Lampsaké (?) l., wearing ear-ring with triple pendant, and necklace; hair rolled; linear circle.

℞ Similar.

*a.* 17mm. 8.40 gr. Paris (Old Coll.); I-*a.* Plate II, 28

Pellerin, *Recueil II*, p. 51, pl. xlix, 2; Sestini, *Lett. e Diss.* (Livorno, 1779), IV, p. 69; Mionnet, *Cat. d'Empreintes*, p. 42, No. 826, and *Descr. de Méd.* II, p. 560, No. 286; Sestini, *Stateri Antichi*, p. 64, No. 10, pl. vi, 8; Brandis, *op. cit.*, p. 410; Six, *Num. Chron.* 1888, p. 111, No. 6; Babelon, *Traité II<sup>2</sup>*, No. 2565, pl. clxxii, 9; J. I. N. 1902, 36a, pl. iii, 23.

*b.* 18mm. 8.32 gr. London (formerly Sir H. Weber); I-*a.* Plate II, 29  
J. I. N. 1902, 36b.

*a* and *b*, identical obverse and reverse dies.

28 Head of Hera l., wearing stephane decorated with a palmette, and necklace.

℞ Similar.

*a.* 18mm. 8.42 gr. London (formerly Sir H. Weber); unique. Plate II, 30

Weber, *Num. Chron.* 1896, p. 23, pl. ii, 18; Babelon, *Traité II<sup>2</sup>*, No. 2538, pl. clxxi, 4; J. I. N. 1902, 10a, pl. i, 19.

29 Head of Zeus l., bearded, hair long, wearing laurel wreath; behind neck, *sceptre* (not *thunderbolt*).

℞ Similar.

*a.* 19mm. 8.41 gr. Boston (Perkins); I-*a.*

Cat. of Perkins Coll., pl. v, 426; J. I. N. 1902, 9j.

*b.* 18mm. 8.45 gr. London; I-*β.* Plate II, 31

From the Asia Minor Find. Wroth, *Num. Chron.* 1889, p. 257, pl. xii, 12; B. M. C. Mysia, No. 28, pl. xix, 6; Journ. Hell. Studies, 1897, p. 85, pl. ii, 12; J. I. N. 1902, 9b, pl. i, 15.

- c.* 19mm. 8.42 gr. Brussels (du Chastel); I-β. Plate II, 32  
J. I. N. 1902, 9i.
- d.* 18mm. 8.41 gr. London (formerly Sir H. Weber); I-β. Plate II, 33  
J. I. N. 1902, 9o.
- e.* 17mm. 8.35 gr. (Formerly Late Collector); I-β.  
Cat. Late Collector, No. 325, pl. vii (S. W. & H., London, May, 1900); J. I. N. 1902, 9m.
- f.* 18mm. 8.41 gr. Munich; I-γ. Plate II, 34  
Riggauer, Mitt. der bayer Num. Gesellschaft, 1901, p. 142, pl. v, 3; J. I. N. 1902, 9g.
- g.* 18mm. 8.41 gr. Boston (Perkins); I-γ. Plate II, 35  
Cat. of Perkins Coll., No. 427; J. I. N. 1902, 9k.
- h.* 18mm. 8.42 gr. Newell, New York; I-γ.
- i.* 18mm. 8.42 gr. Yakountchikoff, Petrograd; I-γ. Plate III, 1  
J. I. N. 1902, 9n.
- j.* 18mm. — gr. (Formerly Duruflé); I-γ.  
Cat. Monn. gr. ant., No. 507, pl. xii (R. et F., Paris, May, 1910).
- k.* 19mm. 8.46 gr. Warren Coll. (Lewes); I-γ.  
Regling, Samm. Warren, No. 1005, pl. xxiii.
- l.* 18mm. 8.44 gr. (Formerly Pozzi); I-γ.  
Monn. gr. ant., pl. lxxvii, 2239 (Naville et Cie, Geneva, 1920).
- m.* 18mm. 8.40 gr. Berlin (Löbbecke); I-δ. Plate III, 2  
From the Asia Minor Find. Löbbecke, Zeit. f. Num. 1890, pp. 8, 178, pl. i, 11; J. I. N. 1902, 9d, pl. i, 17.
- n.* 19mm. 8.47 gr. (Formerly Warren); I-δ.  
Regling, Samm. Warren, No. 1004, pl. xxiii; Cat. Well-Known Amateur, Warren, No. 97, pl. iii (S. W. & H., London, May, 1905).
- o.* 17mm. 8.43 gr. Paris (Old Coll.); I-δ.  
J. I. N. 1902, 9c, pl. i, 16.
- p.* 18mm. 8.39 gr. New York (Metropolitan Mus., Ward); I-ε.  
Hill, Cat. of Ward Coll., p. 100, pl. xv, 611; J. I. N. 1902, 9f.
- q.* 18mm. — gr. I-ε.  
Cat. Engel-Gros, pl. iii, 57 (Paris, 1921).
- r.* 18mm. 8.42 gr. (Formerly O'Hagan); I-ε.  
Cat. O'Hagan, No. 534, pl. ix (S. W. & H., London, May, 1908).
- s.* 17mm. 8.45 gr. (Formerly Philipsen); II-ε.  
Cat. Philipsen, No. 1790, pl. xxi (Hirsch XV, Munich, Nov. 1909); J. I. N. 1902, 9h, pl. i, 18.
- t.* 17mm. 8.40 gr. (Formerly Consul Weber); II-ε.  
Cat. Weber, No. 2449, pl. xxxiv (Hirsch XXI, Munich, Nov. 1908); J. I. N. 1902, 9e.
- u.* 17mm. 8.50 gr. (Formerly Hoskier); II-ε.  
Cat. Hoskier, No. 370, pl. xiii (Hirsch XX, Munich, Nov. 1907, ex Hirsch XVI, 1906, No. 616).
- v.* 19mm. 8.47 gr. Paris (Waddington); III-ε. Plate III, 3  
Babelon, Rev. Num. 1897, p. 318, No. 857, pl. vii, 1 = Inv. Wadd., pl. iii, and Traité II<sup>2</sup>, No. 2537, pl. clxxi, 3; J. I. N. 1902, 9a, pl. i, 14.
- w.* 18mm. 8.45 gr. (Formerly Fürst Ch. v. A.); III-ε. Plate III, 4

Cat. Gr. Münzen, No. 539, pl. xvi (Egger, Vienna, Jan. 1908); Cat. Röm. u. Gr. Münzen, No. 3056, pl. 28 (Merzbacher, Munich, Nov. 1909).

*x.* 19mm. 8.45 gr. Jameson, Paris (formerly Duruflé); IV- $\varsigma$ . Plate III, 5  
Cat. Jameson, No. 1442, pl. lxxiii (Paris, 1913).

*y.* 19mm. 8.41 gr. Cambridge (McClellan, formerly Montagu); IV- $\varsigma$ .  
Plate III, 6

Cat. Montagu, First Part, No. 520, pl. vii (S. W. & H., London, March, 1896); J. I. N. 1902, 9p.

*z.* 17mm. 8.45 gr. (Formerly de Molthein); IV- $\varsigma$ .

Cat. W. de Molthein, No. 1884, pl. xiv (R. et F., Paris, 1895); Cat. Prowe, No. 1242, pl. viii (Egger, Vienna, Nov. 1904); J. I. N. 1902, 9q.

*aa.* 18mm. — gr. (Formerly Collection H. H.); IV- $\varsigma$ .

Cat. Monn. d'or antiques, pl. i, 34 (C. Platt, Paris, 1922).

*bb.* 19mm. 8.42 gr. (Formerly Warren)<sup>1</sup>; IV- $\varsigma$ .

Regling, Samm. Warren, No. 1003, pl. xxiii; Cat. American Artist and well-known Amateur, No. 51 (S. W. & H., London, 1910).

*cc.* 18mm. 8.43 gr. Bement, Philadelphia (formerly Allatini); IV- $\varsigma$ .

Cat. C. S. Bement Coll., pl. xvii, 255 (New York, 1921).

*dd.* 17mm. 8.56 gr. Petrograd (Hermitage); V- $\zeta$ . Plate III, 7

*a-dd* (thirty specimens), five obverse dies — *a-r*; *s-u*; *v, w*; *x-cc*, identical; seven reverse dies — *b-e*; *f-l*; *m-o*; *p-w*; *x-cc*.

30 Head of Nike l., wearing wreath of myrtle (?); hair rolled; small wing springs from her neck.

R Similar.

*a.* 18mm. 8.45 gr. Yakountchikoff, Petrograd; I-*a*. Plate III, 8  
J. I. N. 1902, 35c.

*b.* 17mm. 8.36 gr. Paris (de Luynes); II- $\beta$ . Plate III, 9  
Brandis, *op. cit.*, p. 410; Six, Num. Chron. 1888, p. 111, No. 16; Babelon, *Traité II*<sup>2</sup>, No. 2552, pl. clxxi, 19; J. I. N. 1902, 23a, pl. ii, 22.

*c.* 17mm. 8.42 gr. ———; III- $\gamma$ .

Cat. Monn. gr. ant., pl. xxix, 791 (Naville et Cie, Geneva, 1922).

*d.* 17mm. 8.45 gr. London; III- $\gamma$ . Plate III, 10

Wroth, Num. Chron. 1894, p. 10, pl. i, 11; Jour. Hell. Studies, 1897, p. 85, pl. ii, 14; J. I. N. 1902, 23b, pl. ii, 23.

*e.* 17mm. 8.38 gr. Jameson, Paris (formerly Duruflé); III- $\gamma$ <sup>2</sup> Plate III, 11

Cat. Jameson, No. 1441, pl. lxxiii (Paris, 1913).

*a-e*, three different obverse dies — *b* and *c*; *d* and *e*, identical. Three different reverse dies — *c-e*, identical.

<sup>1</sup> The stater, formerly of the Warren Collection, No. 1006 (19mm. 8.43 gr.), has not been seen by the author in cast or photograph, and it is therefore uncertain whether or not this is identical with any of the above thirty examples.

<sup>2</sup> The left background of the obverse die has been cut away to make room for an inscription which appears on the coin in front of the head of Nike. The reverse die also has lightly impressed countermarks below and in front of the Pegasos. The inscription appears to be in Cypriote characters, but seems indecipherable.

31 Head of Herakles, as Omphale, bearded; hair rolled, wearing stephane; behind neck, a club.

℞ Similar.

*a.* 18mm. 8.37 gr. Boston (Greenwell-Warren); unique. Plate III, 12  
Greenwell, Num. Chron. 1893, p. 84, pl. vii, 7; Regling, Samm. Warren, No. 1017, pl. xxiii; Babelon, *Traité II*<sup>2</sup>, no. 2558, pl. clxxii, 2; J. I. N. 1902, 29a, pl. iii, 12.

32 Head of a female Satyr l., hair long, several stray locks over forehead and cheek, with pointed goat's ear; she wears an ivy wreath with bunch of ivy leaves over forehead; ear-ring with single pendant, and necklace.

℞ Similar, but the middle section of r. wing is no longer of "ladder pattern", first seen in Types 13ff., but reverts to style of earlier Types, Nos. 3ff., a narrow feathered section.

*a.* 18mm. 8.32 gr. London; unique. Plate III, 13  
Knight, Num. Vet., p. 131 (B), 6; Head, Guide, p. 37, pl. xviii, 18; Head, Hist. Num., p. 530, fig. 282; Six, Num. Chron. 1888, p. 111, No. 18; B. M. C. Mysia, No. 24, pl. xix, 2; Babelon, *Traité II*<sup>2</sup>, No. 2559, pl. clxxii, 13; J. I. N. 1902, 30a, pl. iii, 13.

33 Head of Aktaion, beardless, hair short, curly, with stag's horn.

℞ Similar.

*a.* 18mm. 8.39 gr. (Formerly Warren); I-*a*.  
Cat. Late Collector, No. 326, pl. vii (S. W. & H., London, May, 1900); Regling, Samm. Warren, No. 1019, pl. xxiii; Cat. American Artist and well-known Amateur, pl. ii, 50 (S. W. & H., London); J. I. N. 1902, 33d.

*b.* 18mm. 8.45 gr. London; I-*β*. Plate III, 15  
Wroth, Num. Chron. 1893, p. 9, pl. i, 16; Jour. Hell. Studies, 1897, p. 85, pl. ii, 13; J. I. N. 1902, 33a, pl. iii, 18.

*c.* 20mm. 8.44 gr. Boston (Greenwell-Warren); I-*β*. Plate III, 16  
Regling, Samm. Warren, No. 1018, pl. xxiii.

*d.* 18mm. 8.38 gr. (Formerly Pozzi); I-*β*.  
Cat. Moun. gr. ant., No. 2230, pl. lxxvii (Naville et Cie., Geneva, 1920).

*e.* 18mm. 8.46 gr. Paris (Old Coll.); II-*γ*.<sup>1</sup> Plate III, 17  
Babelon, *Traité II*<sup>2</sup>, No. 2562, pl. clxxii, 6; J. I. N. 1902, 33b, pl. iii, 19.

*f.* 17mm. 8.45 gr. Jameson, Paris (formerly Duruflé); II-*γ*.<sup>1</sup> Plate III, 18  
Cat. Jameson, No. 1434, pl. lxxiii (Paris, 1913); Ann. de la Num. franç., XIV, 1890, Procès-Verbeaux, p. 21.

*g.* 17mm. 8.35 gr. (Formerly Fürst Ch. v. A.); II-*γ*.  
Cat. Gr. Münzen, No. 540, pl. xvi (Egger, Vienna, Jan. 1908).

*h.* 18mm. 8.40 gr. Berlin (Löbbecke); II-*γ*. Plate III, 14

<sup>1</sup> This Aktaion stater probably was not from the Avola (near Syracuse) hoard as M. Hoffman conjectured at the meeting of the Soc. Franç. de Num., when M. Duruflé presented the coin before this body, for this type was not mentioned by either of the two collectors who saw the coins in this hoard (see the reports of Löbbecke and Greenwell in the discussion of hoards preceding the Catalogue of Types). It was more probably from the Troad hoard which was found shortly before the Avola hoard.

From the Asia Minor Find. Löbbecke, *Zeit. f. Num.* 1890, pp. 8, 178, pl. 12; Von Sallet and Regling, *Die Antiken Münzen*, pl. 33; *J. I. N.* 1902, 33c, pl. iii, 20.

*a-h*, two obverse dies — *a-d*; *e-h*, identical; three reverse dies, *b-d*; *e-h*, identical.

34 Head of Hekate l., hair rolled at back and gathered up into a knot on top of the head; she wears laurel wreath, ear-ring with single pendant, and necklace; behind neck, a flaming torch.

℞ Similar.

*a.* 18mm. 8.40 gr. Boston (Greenwell-Warren); I-*a.* Plate III, 19

From the Asia Minor Find. Greenwell, *Num. Chron.* 1890, p. 26, pl. iii, 13; Regling, *Samm. Warren*, No. 1012, pl. xxiii; *J. I. N.* 1902, 20a.

*b.* 18mm. 8.39 gr. London (formerly Sir H. Weber<sup>1</sup>); I-*a.* Plate III, 20

Babelon, *Traité II*<sup>2</sup>, No. 2549, pl. clxxi, 16; *J. I. N.* 1902, 20b, pl. ii, 17.

*a* and *b*, same obverse and reverse dies.

35 Head of Dionysos l., bearded, wearing ivy wreath with bunches of ivy berries over the forehead.

℞ Similar.

*a.* 17mm. 8.36 gr. Boston (Greenwell-Warren); unique. Plate III, 21

Greenwell, *Num. Chron.* 1893, p. 85, pl. vii, 8; Regling, *Samm. Warren*, No. 1014, pl. xxiii; *J. I. N.* 1902, 24b, pl. iii, 2.

36 Youthful head l., beardless, hair short.

℞ Similar.

*a.* 17mm. 8.40 gr. Paris (Old Coll.); unique. Plate III, 22

Sestini, *Stateri Antichi*, p. 64, No. 11, pl. vi, 9; Mionnet, *Sup. V.*, p. 371, No. 558, pl. lxxv, 3; Brandis, *op. cit.*, p. 410; Six, *Num. Chron.* 1888, p. 111, No. 20; Babelon, *Traité II*<sup>2</sup>, No. 2564, pl. clxxii, 8; *J. I. N.* 1902, 35a, pl. iii, 22.

37 Head of Zeus Ammon, bearded, facing, slightly to l., wearing ram's horns.

℞ Similar.

*a.* 17mm. 8.30 gr. Paris (de Luynes); unique. Plate III, 23

Sestini, *Lett. e Diss. IV* (Livorno, 1779), p. 69 ("ex. Mus. Ainslie"), and *Stateri Antichi*, p. 63, No. 6; Millingen, *Anc. Coins*, p. 69, No. 2, pl. v, 8, "ex. Lord Northwick"; Mionnet, *Sup. V.*, p. 371, No. 557; *Cat. Northwick*, No. 963 (S. & W., Dec. 1859); Brandis, *op. cit.*, p. 410; Babelon, *Traité II*<sup>2</sup>, No. 2539, pl. clxxi, 5; *J. I. N.* 1902, 11a, pl. i, 20.

38 Head of youthful Dionysos, l. with long hair wreathed with ivy, and a bunch of ivy berries over the forehead.<sup>2</sup> Fig. 15.



Fig. 15

<sup>1</sup> The Weber coin is the one figured in *J. I. N.* 1902, pl. ii, 17, not the example in the Boston Museum, formerly Greenwell-Warren.

<sup>2</sup> This subject is new in the series, although Maenad and Dionysos heads are found in each of the distinctive styles of the coinage. The absence of ear-ring and necklace (what might appear to be a beaded necklace on the truncation of the neck is really the curling end of the front hair),

℞ Similar.

*a.* 18mm. 8.41 gr. Jameson, Paris; unique.

From the Avierino collection (?), said to have been found in Egypt.

**39** Head of the elder Kabeiros l., bearded; wearing laureate pilos.

℞ Similar.

*a.* 17mm. 8.37 gr. London (Payne-Knight); I-*a.*

Plate III, 24

Sestini. Lett. e Diss. IV (Livorno, 1779), p. 69, pl. i, 2, and *Stateri Antichi*, p. 62, No. 4, pl. vi, 3; Mionnet, Sup. V, p. 369, No. 543; Payne-Knight, *Nummi Veteres*, p. 130, No. 2; Leake, *Num. Hell. (As. Gr.)*, p. 72; Brandis, *op. cit.*, p. 410; Head, *Guide*, p. 37, pl. xviii, 17, and *Hist. Num.*, p. 530, fig. 280; B. M. C. Mysia, No. 25, pl. xix, 3; J. I. N. 1902, 21c, pl. ii, 20.

*b.* 20mm. 8.38 gr. Boston (Greenwell-Warren); II- $\beta$ .

Plate III, 25

From Asia Minor Find (?), cf. *Num. Chron.* 1890, p. 26; Regling, *Samm. Warren*, No. 1016, pl. xxiii; J. I. N. 1902, 21a, pl. ii, 18.

*c.* 17mm. 8.33 gr. Paris (Waddington); II- $\gamma$ .

Plate III, 26

Babelon, *Rev. Num.* 1897, p. 319, No. 866, pl. vii, 10 = *Inv. Wadd.*, pl. ii, 10, and *Traité II*<sup>2</sup>, No. 2550, pl. clxxi, 17; J. I. N. 1902, 21b, pl. ii, 19.

*d.* 19mm. 8.47 gr. New York, Metropolitan Mus. (Ward); II- $\gamma$ . Plate III, 27

From Asia Minor Find (?), cf. *Num. Chron.* 1890, p. 26; Hill, *Cat. Ward*, No. 612, pl. xv; J. I. N. 1902, 21d.

*e.* 18mm. 8.45 gr. London (formerly Sir H. Weber); II- $\gamma$ .

Plate III, 28

J. I. N. 1902, 21e.

*a-e*, two different obverse dies—*b-e*, identical; and three reverse dies, *c-e*, identical.<sup>1</sup>

**40** Head of Athena l., wearing crested Athenian helmet ornamented with three olive leaves and scroll, round ear-ring, and necklace.

℞ Similar.

*a.* 18mm. 8.40 gr. Boston (Greenwell-Warren); unique.<sup>2</sup> Plate III, 29

Greenwell, *Num. Chron.* 1893, p. 85, pl. vii, 9; Regling, *Samm. Warren*, No. 1009, pl. xxiii; Babelon, *Traité II*<sup>2</sup>, No. 2542, pl. clxxi, 8; Gardner, *Gold Coinage of Asia*, *Proc. of Brit. Acad. emy*, 1908, pl. ii, 10; J. I. N. 1902, 14a, pl. ii, 5.

**41** Head of Aphrodite (?) l., wearing wreath of lotus (?), sphenone, and ear-ring with single pendant.

℞ Similar.

*a.* 17mm. 8.42 gr. London; I-*a.*

Plate III, 30

Wroth, B. M. C. Mysia, No. 30, pl. xix, 8; J. I. N. 1902, 19c.

*b.* 18mm. 8.41 gr. Paris (Waddington); I-*a.*

Plate III, 31

Babelon, *Rev. Num.* 1897, p. 318, No. 864, pl. vii, 8 = *Inv. Wadd.*, pl. ii, 8; J. I. N. 1902, 19e, pl. ii, 16.

*c.* 17mm. 8.39 gr. Paris (de Luynes); I-*a.*

Babelon, *Traité II*<sup>2</sup>, No. 2548, pl. clxxi, 5; J. I. N. 1902, 19d, pl. ii, 15.

and the strength of the features are in favor of considering the head as the youthful and more effeminate Dionysos, rather than a Maenad.

<sup>1</sup> For the obverses, this is certain; the reverses are too indistinct to be certain, but *c*, *d* and *e* appear to be identical.

<sup>2</sup> A second example has recently been seen in the market at Constantinople.

- d.* 18mm. 8.40 gr. Jameson, Paris; I- $\beta$ . Plate III, 32  
 Cat. O'Hagan, No. 536, pl. ix (S. W. & H., London, May, 1908); Cat. Jameson, No. 1445, pl. lxiii (Paris, 1913).
- e.* 18mm. 8.45 gr. Berlin (Imhoof-Blumer); II- $\beta$ . Plate III, 33  
 J. I. N. 1902, 19a, pl. ii, 13.
- f.* 17mm. 8.41 gr. Boston (Perkins); II- $\beta$ .  
 Cat. of Perkins Coll., pl. v, 430; J. I. N. 1902, 19f.
- g.* 18mm. 8.41 gr. Bement, Philadelphia (formerly Sir H. Weber, London);  
 II- $\beta$ . Plate III, 34  
 J. I. N. 1902, 19g; Cat. C. S. Bement Coll., pl. vii, 257 (New York, 1921).
- h.* 18mm. 8.45 gr. McClean, Cambridge (formerly Greenwell-Warren); II- $\beta$ .  
Plate III, 35  
 From the Asia Minor Find. Greenwell, Num. Chron. 1890, p. 27, pl. iii, 15; Regling, Samm. Warren, No. 1007, pl. xxiii; Cat. Well-Known Amateur (Warren), No. 98, pl. iii (S. W. & H., London, May, 1905); J. I. N. 1902, 19b, pl. ii, 14.
- a-h*, two different obverse dies, *a-d*, *e-h*, identical; two different reverse dies, *a-c*, *d-h*, identical.

#### THE DIES AND THEIR SEQUENCE

As remarked above under the description of Type 2, there is only one case of connecting reverse dies between the changing obverses. But as has been shown in discussing the sequence of types, we find reverses so nearly identical that they serve about as well for determining the general sequence of the series as though they were identical. There are a number of unique types and several which are represented by only two examples, and these may as well be mentioned first, and then we may turn our attention to the sequence of examples of the same type where there are more than two examples known. The unique staters are the following: Perseus head, Pl. I, 5; Thetis on dolphin, Pl. I, 8; Persian archer, Pl. I, 9; Nike sacrificing ram, Pl. I, 10; Dionysos head (small size type and flan), Pl. I, 17; Pan head, Pl. I, 21; Herakles head, Pl. I, 29; Athena head facing, Pl. II, 14; Nike erecting trophy, Pl. II, 27; Hera head, Pl. II, 30; head of Herakles as Omphale, Pl. III, 12; head of a female satyr, Pl. III, 13; Dionysos head (large size type and flan), Pl. III, 21; young male head, Pl. III, 22; Zeus Ammon head, Pl. III, 23; head of youthful Dionysos, fig. 15.

Those types of which there are only two examples known are: Herakles and serpents, Pl. I, 1, 2; Helle on ram, Pl. I, 3, 4; Apollo seated, Pl. I, 6, 7; Demeter head r., Pl. I, 15, 16; Apollo head, Pl. I, 27, 28; Demeter head veiled l., Pl. I, 30, 31; Dionysos head (medium size type and flan), Pl. II, 18, 19; Helios head, Pl. II, 20, 21; Ge rising from earth, Pl. II, 25, 26; Lampsake (?) head, Pl. II, 28, 29; Hekate head, Pl. III, 19, 20; Athena head

copied from the Athenian coins, Pl. III, 29.<sup>1</sup> When dealing with types known from two examples only, there is naturally very little ground on which to base inferences as to the order of issue of the different examples. Still in some cases there is a difference in style when the dies are markedly different, which gives us a clue to the order of issue. For example, in the first instance, that of Herakles strangling the serpents, the Paris coin, Pl. I, 2, has the connecting reverse die with the Helle on ram type, Pl. I, 3, and that fact settles the order of the two obverse dies of Type 1. The reverse of the Boston example, Pl. I, 1, has an earlier appearance in itself. The obverses of Helle on the ram (with identical reverse) are very close indeed. On the Berlin coin, Pl. I, 3, Helle is bending over further than on the Paris example, Pl. I, 4. The two examples of Apollo seated are also too similar in style to allow any inference as to their order, and the reverses are nearly identical. The same may be said of the Demeter head r., Pl. I, 15, 16; but the reverse of Pl. I, 16, is closer to that of Type 10, Dionysos head, Pl. I, 17, and hence is placed second. The Apollo heads, Pl. I, 27, 28, are of just slightly different obverse and reverse dies; the Jameson example, Pl. I, 28, may be more developed, and the reverse of the Munich coin, Pl. I, 27, is very closely allied with the preceding Hermes head, Pl. I, 26. The two coins with a Demeter head (veiled), Pl. I, 30, 31, are almost alike on the obverse; the reverse of the Paris coin is close to that of the Herakles head type placed just before it. This latter type (unique) seems to fit well in this position, the wings of the Pegasus having the ladder pattern first developed under the Hermes head type, and the head of Pegasus being larger than on the types placed before it, as it is on those that follow. If the Herakles head is correctly placed in the sequence of types, the Paris example of Demeter veiled belongs just following. The two Dionysos heads, Pl. II, 18, 19, are from the same pair of dies. The reverse die is of individual style, but as the obverse bears a head of medium size, and as the reverse though different, still has a general resemblance to those of the preceding and following types with rather disproportioned head on the Pegasus, and larger wing, the type is placed here. The two Helios head types, Pl. II, 20, 21, are of identical reverse dies, but the obverses seem to be two different dies of which the Jameson coin, Pl. II, 20, seems earlier. The Ge types, Pl. II, 25, 26, are from the same dies; the reverse is peculiar in that the truncation of the Pegasus has the lower corner rounded off. The coins of the Lampsake(?) head type, Pl. II, 28, 29, are from a single pair of dies. The reverse die is crude by comparison with the preceding ones, in that it is too large for the flan, and awkward in design. It seems certainly earlier

<sup>1</sup> The second example was not seen by the writer, and hence cannot be considered here.

than the fine dies of the following Zeus head type. There are other examples of a badly proportioned Pegasos on coins of the Middle period, e.g., Dionysos and Helios types, Pl. II, 18-21. The Hekate head staters, Pl. III, 19, 20, are from the same dies. The obverse is of very fine style resembling closely the Aktaion head, and the reverse has the same declining style that first makes its appearance in the Herakles as Omphale, Pl. III, 12, and following staters, and which according to our chronological scheme, sets in just after the Zeus and Nike types of this same plate.

The types represented by three or more examples afford an opportunity for an arrangement of the different dies in order. In the group of four coins with head of a Satyr facing, Pl. I, 11-14, the last three have a common die. The first coin, Pl. I, 11, has a reverse die which is more like that of the earlier types; compare Pl. I, 10 for example. Hence the obverse die I was probably made before II. The Maenad heads of Type 10, Pl. I, 18-20, are from different obverse dies, but the reverse dies of the second and third examples are identical. As the obverse die of the first coin is much less refined (note the heavy ear-ring and more animal expression of the mouth and eye, and compare the Dionysos type just preceding), and the reverse also is less advanced than those of the other two coins, it may be presumed to be the earliest. Between the other two coins, Nos. 19 and 20 of Pl. I, there is little to choose, except that No. 19 is closer to No. 18. The Hermes head staters, Pl. I, 22-26, are of different obverse dies and their order is determined chiefly by the style of the reverses. The reverses of the first two, Nos. 22, 23 on the plate, are more primitive looking than the following. The reverses of Nos. 24 and 25 are identical. The sequence of style seems very clearly to be in accordance with our arrangement on the plate. Of course No. 23 may have come before No. 22, but No. 26 is surely the latest of the five staters as its reverse is barely distinguishable from that of the following Apollo type, Pl. I, 27. The staters bearing the head of a Maenad with flying locks, rank second in the list of types with most numerous examples of which the Zeus with scepter, Type 29, is the first. These two types, according to the extant specimens, are those of which there were the largest issues; seventeen specimens of the Maenad type and thirty of the Zeus type being known. The obverse dies of the Maenad type number nine, and the reverse dies, ten.<sup>1</sup>

<sup>1</sup> While the reverse dies of the seventeen known specimens number ten, only one more than the total number of obverse dies known, yet an examination of their coupling proves the oft repeated observation that more reverses were needed in striking than obverses, as a general rule. For obverse die II is combined with two reverses  $\alpha$  and  $\beta$ ; die III with  $\gamma$  and  $\delta$ . It is true that reverse die  $\delta$  is found with III, IV, V and VI, but it was not in good condition at any time, having already cracked before being used with III. When it was used in combination with V, the crack was very bad, and a new reverse die  $\epsilon$  was made to

When we compare the Boston and London examples Pl. I, 32, 33, with the Paris coins Pl. II, 3, 4 (same dies), the line of development is seen to be parallel to that of the Maenad heads of Type 11, Pl. I, 18-20, that is, from a head with more animal character in the expression to a more humanized head. The head on the Paris coins is the finest of all the coins with this head, and is one of the most beautiful Maenad heads on Greek coins. The reverses of these staters have dies very similar to those of the Athena and Maenad heads, placed after them on the plate. The Glasgow specimen, Pl. II, 2, approaches the Paris coins most nearly in the style of both obverse and reverse. The coins intervening between the earliest, Pl. I, 32, and latest, Pl. II, 2-4, all appear to show a line of ascending development which reaches its culmination in the fine style of the coins, Pl. II, 2-4. The Athena head staters Pl. II, 5-8, have different obverse dies, and two reverse dies, Nos. 5 and 6, and Nos. 7 and 8 of Pl. II, identical. Their sequence is probably as here given because of the affinity of the reverse die of Nos. 5 and 6 for that of the latest Maenad head, Pl. II, 4; and that of No. 8 for the die of the Maenad with hair in a saccos, Pl. II, 9, which it greatly resembles. This latter Maenad type appears on dies hard to distinguish from one another.

The order of issue of the three satrapal heads, Pl. II, 15-17, is likewise determined by the reverse dies, for No. 15 has a die of closely similar style to the type of Athena facing, Pl. II, 14, after which it is placed, and the dies of Nos. 16 and 17 are developments of the die of No. 15, and are rather like the die of Nos. 18 and 19 of this plate. Furthermore the first obverse die, No. 15, has more of the typical, and the two following obverses, Nos. 16 and 17, look more like real portraits. The dies of Type 24, Pl. II, 22-24, do not afford any data for placing them satisfactorily in a series. The reverse die  $\beta$  bears a great deal of resemblance to the reverse die of Type 26. Hence it might be the last of the four reverse dies of Type 24. But Type 26, Nike and trophy, might be placed just before Type 24, and 24d be the first of the Zeus heads. The heads themselves are all on about the same level of style, though the coin on Pl. II, 24, may perhaps seem earlier than the others.

The Zeus with scepter, Type 29, Pl. II, 31—Pl. III, 7, has the most numerous examples in the whole coinage — thirty or more; and the order of the various obverse dies which are five in number is not difficult to determine. This arises from the fact that we have among the obverses one die

go with V. The old die  $\delta$  was, however, used again with a new obverse VI. With VI there were used reverse dies  $\delta$ ,  $\epsilon$ ,  $\zeta$ , four to one obverse. Thus, although in this small group of coins of the same type, the total number of reverses is not greatly in excess of the total number of obverses, the fact that the reverse dies wore out more quickly is evident.

which is a most perfect die, artistically one of the finest representations of a Zeus head on this scale among Greek coins, and four others which do not approach it in perfection of style. Now, that the evolution of the obverse types is as here arranged, from the most delicately beautiful style of die I in a descending scale to the hard and dry style of die IV,<sup>1</sup> is apparent from the very obviously declining tendency in the development of the reverses. The Pegasos of these Zeus staters has now reached the point of highest artistic and technical perfection, all parts of the body being in harmonious proportion. Note the size of the horse's head, the drawing of the forelegs and the fine rendering of the minute details of the wings of reverse dies  $\alpha$  and  $\beta$ . The dies  $\gamma$ — $\epsilon$  show a progressive decline of art. There is the same loss of expression and carelessness in details (note the horse's mane) that from now on begins to be apparent in the series at large. Again the difference in style observable in obverse dies I-II as compared with the succeeding dies is of a kind which is clearly due to copying. Note the finesse of the rendering of the lock of hair which falls loose from the occiput of the head in dies I, II, and the less skilful copying of this lock in dies III, IV. Observe also how the back of the hair sags down in dies III, IV, and the less profound expression of the eye.<sup>2</sup>

The dies of the Nike head, Type 30, Pl. III, 8-11, however, do not show any signs of progressive decline due to copying although two of them are distinctly inferior to the third, Pl. III, 10, 11. In this case the evolution of the obverse dies seems to be in an ascending scale up to the remarkably fine die, Pl. III, 10, 11. The other dies seem to be leading up to this one, for there are no details repeated in the manner of the careless copyist. Besides these reasons, there is also the fact that the style of Type 31, Herakles as Omphale, Pl. III, 12, is as close as could be possible to the Nike head of die III. The similar rendering of the turned-up hair and the deep-set eye, and of the hair over the forehead—in short, the whole treatment of the hair—are the points to be noticed. The Pegasos of this Herakles type is of a style which is decidedly inferior to those of the preceding Hera, Zeus and Nike types. From now on the horse is never engraved in the fine style which is characteristic of our middle and early third groups. The "ladder"

<sup>1</sup>We omit from our discussion here die V, the Petrograd specimen, Pl. III, 7, which is peculiar and unlike the other dies; its reverse, too, is also quite different from the other reverse dies.

<sup>2</sup>As in the case of the Maenad head, Type 17, the disparity in the number of obverse and reverse dies is not as great as might be expected. But the coupling of the dies gives the true answer to the question of the relative durability of obverse and reverse dies. For die I was coupled with five reverses  $\alpha$ — $\epsilon$ , and there are eighteen examples of staters bearing this obverse die—more than half of the known specimens of the Zeus with scepter type, which of course explains why so many reverse dies coupled with I are known. With a sufficiently large number of examples of a given obverse die, there will regularly be found two or more reverses which were used in combination with it.

pattern is dropped altogether after this Herakles type; there is a reversion to the earliest style of our first period; careless striking, and lack of expression in the horse's head are the rule. The obverse dies of the Aktaion head, Pl. III, 14-18, are very similar in character; in fact, they are scarcely to be separated as varying dies, the sole difference lying in the treatment of the eye — the Berlin stater, No. 14, may be the same die as Nos. 17 and 18. If it is die II, as seems probable, though the cast is so poor as to make certainty impossible, then there are two obverse dies, of which the one designated I is the finer. This die seems likely to be the first one cut, from the fact that it is coupled with reverse die  $\alpha$ , an unquestionably finer die than  $\beta$  or  $\gamma$ , and probably the earliest, since the difference in style can only be described as a decline.

The Kabeiros head stater, Pl. III, 24-28, has two obverse dies only, and of these, No. 24 is probably earlier; the reverse of this stater is of better style than those of the other coins of this type. The last type, Aphrodite(?) head, Pl. III, 30-35, has but two obverse dies I and II, and reverse dies  $\alpha$  and  $\beta$ . The connecting link which occurs in the middle of the series, No. 32, dies I- $\beta$ , indicates the sequence of the issues as die  $\beta$  is most plainly more debased than  $\alpha$ . It is the last of the series and is vastly inferior to the fine dies of the Zeus and Nike types, and in fact to any of the preceding reverse dies.

#### CHRONOLOGY OF THE STATERS

The generally accepted date for the beginning of the issue of Lampsakene gold staters is c. 394 B.C. According to style, the staters do undoubtedly begin in the early part of the Fourth Century B.C. and they continue down to the middle or third quarter of this century. The reason for dating the commencement of the issues c. 394 B.C. is that the stater universally admitted to be the earliest type Pl. I, 1, 2, Herakles strangling the serpents, is copied from the type of the so-called Alliance Coinage of Asia Minor which was assigned by Waddington (Rev. Num. 1863, p. 223) to this date. This coinage issued by Rhodos, Ephesos, Knidos, Iasos and Samos bears a common obverse type, the infant Herakles strangling two serpents, accompanied by the inscription  $\xi\Upsilon\text{N}$ , the first letters of  $\xi\Upsilon\text{NMAXIA}$ ,  $\sigma\upsilon\mu\mu\alpha\chi\acute{\iota}\alpha$ , "Alliance," and varying reverse badges of the respective mints, Pl. IV, 8, Samos; 9, Ephesos; 10, Knidos. The coins are silver tridrachms of Rhodian weight.

Waddington formulated the interesting theory that the *Symmachia* was a political alliance made by certain powerful coast towns, Ionian and

Carian, directly after the Athenian general, Konon, had liberated these towns from Spartan control through his naval victory off Knidos, 394 B.C. This league was of an ephemeral nature because in 391, as Xenophon informs us (*Hellenica*, IV, 8; 17, 22, 23), Ephesos, Samos and Knidos went over again to Sparta. It is not mentioned by ancient historians, but since Waddington wrote, a new member of the supposed anti-Spartan *Symnachia* has become known through the discovery of the unique tridrachm of Byzantion published by Dr. Regling (*Zeit. f. Num.* 1905, p. 207f.) This coin, Dr. Regling argues, cannot have been struck before 389 B.C., for Byzantion was until that year still under the oligarchical rule of Sparta, and only when democracy was re-established there, after Thrasybulos' expedition in 389, would the Alliance type which is clearly emblematic of political liberty, be appropriate.<sup>1</sup> One is forced then to assume that Byzantion came into the confederation five years after its formation in 389 B.C., which would be quite extraordinary in view of the defection of three out of the five original members, Ephesos, Samos and Knidos, which, according to Xenophon, become partisans of Sparta in 391 B.C. The historians Beloch<sup>2</sup> and Meyer<sup>3</sup> have always preferred the date 387 B.C. for the issue of the Alliance coins with  $\Sigma\Upsilon\text{N}$  and the Herakles and serpents type,<sup>4</sup> as they do not accept the theory of an anti-Spartan movement on the part of these towns of Asia Minor as a consequence of the battle of Knidos. This date is the year of the Peace of Antalkidas, when all of the Greek cities, except Klazomenai, were surrendered unconditionally to Artaxerxes II Mnemon, King of Persia. The existence of the coin of Byzantion, at any rate, seems to make Waddington's theory of an anti-Spartan confederation immediately after the battle of Knidos no longer tenable.

Whatever the opinion of historians may ultimately be in regard to the date of the Alliance issues, the Lampsakene stater which borrowed the Alliance type cannot be placed any earlier than 389 B.C. for the reason that it is copied with utmost fidelity of detail from the Byzantian tridrachm. The axis of inclination of the kneeling Herakles, the coils of the serpents, position of the arms, all indicate that the Byzantian coin served as a model

<sup>1</sup> A singular coincidence is the choice of Herakles as infant, strangling serpents, for the reverse of the *Libertas Americana* Medal, 1791, designed by Benjamin Franklin, to represent the victories of the infant Republic of the United States at Yorktown and Saratoga.

<sup>2</sup> *Gr. Gesch.*, 2nd ed., 1922, III, p. 95.      <sup>3</sup> *Gesch. des Alterthums*, V, p. 308, 310.

<sup>4</sup> Holm, *History of Greece*, III, ch. iii, note 11, discusses Waddington's theory at length, concluding that the cities of Asia Minor would not be in a position to form a defensive league after the King's peace, and further suggests that if a later date were sought, we might assume the time of the Second Athenian Confederacy, 377, which was anti-Spartan. He was, of course, not cognizant of the Byzantian tridrachm with  $\Sigma\Upsilon\text{N}$ . Bury, *History of Greece*, p. 553, accepts the date 387 B.C.

for the Lampsakene die-engraver. Moreover, this coin would most naturally be the type which was copied at Lampsakos.

The commencement of the issue of gold staters at this period, c. 387 B.C., rather upsets the theory that the Persian king reserved for himself the right to issue gold coin. This question on which numismatists today are divided is one which is not to be decided by any reference to statements in ancient historians, for we have no evidence of this sort for or against it. M. Babelon (*Traité II*,<sup>2</sup> *Introd.*) holds that the Persian kings never interfered in the slightest degree with the issuing of coins by the subject Greek cities. Mr. Gardner maintains the theory that the exclusive right to issue gold was jealously guarded by the Persian kings, and that all gold coinages struck by Greek cities under Persian rule are instances of special privilege. This in the case of Lampsakos seems rather absurd. The Lampsakene gold staters, begun probably around 387 B.C. as we have shown, ought surely to have been suppressed by a monarch jealous of his royal right to issue gold. Lampsakos issued electrum, as did Kyzikos, in the Fifth Century, before Persian control was ended by the struggles at Marathon and Salamis; and similarly in the Fourth Century both of these mints had a coinage in gold (or electrum). There does not seem to be any logic in assuming that the Persian kings would not permit the issue of coinage in electrum or gold by the cities over which they had sovereignty, after the conquest of Lydia in 546 B.C., and then explaining all the instances where such coinage did exist, as, for example, at Chios, Kyzikos, Lampsakos, as exceptions. These mints certainly struck electrum staters between 550 and 500 B.C. Why were they especially privileged? As for gold issues, there are known only the very scanty issues of staters at Ephesos, Rhodos, Klazomenai and Abydos which were all probably earlier than the period of Persian control, 387 B.C.; Abydos struck one type Pl. IV, 23, which appears on one of the earliest Lampsakene staters, Pl. IV, 24, and is probably the prototype of the latter. But in none of the above cases can we prove the existence of a series of issues begun before 387 B.C. and coming to an abrupt end at this date. If this were the case, there would be more ground for the argument that coinage in gold was not permitted by the Persian king.

The Lampsakene stater coinage begins with a type copied from the Alliance silver coins, and this scarcely looks as though there were any lack of freedom in the choice of type. The weight standard, moreover, is identical with that of the Persian darics. Hence we can only conclude that the Lampsakene staters were issued without any interference or hindrance as to the choice of metal, weight or type. As M. Babelon says emphatically, "*La lampsacéne était créée pour lutter contre le darique.*"

## THE WEIGHT STANDARD

The recorded weights of the staters here catalogued show that they range from 8.30 to 8.56 grams. The tabulated weights of 132 specimens are as follows:

Grams	Specimens	Grams	Specimens	Grams	Specimens
8.30	3	8.40	17	8.46	4
8.32	2	8.41	15	8.47	3
8.33	2	8.42	17	8.48	1
8.34	1	8.43	12	8.49	1
8.35	2	8.44	7	8.50	3
8.36	2	8.45	19	8.54	1
8.37	7			8.55	1
8.38	6			8.56	1
8.39	5				
Total coins = 30		Total coins = 87		Total coins = 15	
Total 132					

More than half of the specimens weigh from 8.40 to 8.45 gr.; a little over one-ninth weigh more than 8.45 gr., and a little under one-quarter weigh less than 8.40. As we should expect, there are more coins slightly under weight than there are coins of excessive weight. The norm must be somewhere between 8.40 and 8.45 gr. This is about the same result reached by Dr. Regling in his analysis of the average weight of the daric which he found was c. 8.40 gr.<sup>1</sup> There are forty-nine coins within the range 8.40-8.42 gr. as against thirty-eight within the range 8.43-8.45. The generally accepted norm of 8.415 gr. for the Lampsakene stater whose weight is based on the Persian daric is amply confirmed by this analysis.

These are the staters, which, of pure gold and full Persic weight, were struck around 387 B.C. to compete as a circulating medium with the darics which had already for a century past been the chief stater currency of the ancient world.

Naturally the coinage of an autonomous Greek city, and that too not one of the most prominent, was not very abundant as compared with that of a great nation. Less than one hundred and fifty examples of these beautiful staters have come down to us, and this is a very small number in comparison with the number of darics which have survived from ancient times, as many as three hundred having once been found in a single deposit, near Mt. Athos. Still the inscription relating to the sums contributed by the allies of Boeotia in the Sacred War (see above, p. 2, note 2) helps us to realize that the Lampsakene stater coinage was of considerable importance as a circulating medium, for it mentions sums of five hundred and of eighty-four gold staters of Lampsakos, I. G. VII, 2418, ll. 10, 11, *Βυζάντιοι χρυσία*

<sup>1</sup> Klio, 1914, p. 91 f.

Λαμψακανῶ σ[ατεΐρας] ὀγδοεῖκοντα πέτταρας, ἀργυρίῳ Ἄτ[τικῶ δρα]χμὰς δεκαεξ  
 “Byzantion (contributed) eighty-four Lampsakene gold staters, sixteen  
 Attic silver drachms”; and ll. 20, 21, Βυσζάντιοι [συνεβάλ]ουθο ἄλλως πεντα-  
 κατίως στατεΐρα[ς χρυσ]ίως Λαμψακανός . . . , “Byzantion contributed further  
 five hundred gold staters of Lampsakos.”

The date when the Lampsakene staters ceased to be issued is given in the British Museum Catalogue as c. 350 B.C. It is noted, however, in the introduction to this catalogue (p. xxvi) that Six supposed the coinage to have ceased about 330 B.C. This view of Six seems the more probable as the staters would naturally not cease abruptly with the introduction of a new stater coinage, that of Philip II, but only came to a gradual end when Alexander's gold staters had begun to be very abundant in the markets of Asia Minor. Six's reason for suggesting the later date was his interpretation of three of the Lampsakene types as relating to Alexander. The Zeus Ammon head, Pl. III, 23, the Maenad head, Pl. I, 32, and the youthful beardless head, Pl. III, 22, he took as a group struck at the same time in honor of Alexander; Zeus Ammon, as the divine parent claimed by the hero; the Maenad, as Alexander's real mother in the guise of a Maenad, recalling the orgiastic worship in which Olympias was reported to indulge; and the young male head as Alexander himself in the character of the hero Achilles.

Most of these interpretations seem fanciful, for, to begin with, the Maenad type is only one of many Maenad heads that appear on the coinage, and was not issued at the end of the series but rather in the second group, considerably before 350 B.C. The Zeus Ammon type falls into the third and last group of the coinage according to the evidence of its reverse, and the same may be said of the young heroic head. Now this latter is without attributes and cannot be identified as a divine head. There is one other case similar to it in this respect, namely, the female head, Pl. II, 28, 29, which has been called conjecturally, Lampsake, the eponymous heroine of the city. Of her we read in Plutarch and this is a fair conjecture. But there is no name to be found for the young male head. Can it possibly be that the head was intended as a heroic head meant to embody Alexander's likeness? The suggestion which grows out of Six's interpretation does not seem entirely improbable — the head has a somewhat Alexandrine character, and occurring as it does at about the date when Alexander was submissively received by the inhabitants of Lampsakos, it may not be out of the way to regard the choice of the two types, Pl. III, 22 23, as selected out of compliment to Alexander who spared the city when it gracefully submitted to his invasion in 334 B.C.

A retrospective glance at the publication of the various types of staters gives an idea of the frequency with which new specimens and types have come to light. The earliest stater known appears to be the Maenad head (Type 11), Berlin (Fox) example. In 1763-70, two more types, Herakles and serpents, and Lampsake were published, followed in 1782 by the Persian satrap and Maenad with diadem (Type 17) types. In 1817 Sestini was able to list ten types in his *Stateri Antichi*. Gradually during the last century additions to the types became known, being published one or two at a time. New types appeared occasionally in finds, seven each in the two finds at Avola and in the Troad about 1890. A possible third find reported as occurring near Alexandria in Egypt in 1908 brought to light several staters of types already known. In the *J. I. N.* 1902, the writer gave a list of thirty-six types, and since then only the Perseus head, the Kneeling Archer and youthful Dionysos types have been made known, bringing the number up to thirty-nine. But as a result of the re-arrangement of the staters in three groups, it becomes clear that the three Dionysos heads which were formerly listed as one type are not merely three different dies employed for a single issue, but are rather three chronologically separate issues belonging respectively to the earlier style, the Weber coin, Pl. I, 17, the intermediate style, the Paris and Jameson coins, Pl. II, 18, 19, and the later style, the Boston coin, Pl. III, 21. These three heads furnish an apt illustration of the same subject treated according to the three variations of style discernible in the coinage. By classifying them as separate types, we gain two more, and arrive at forty-one as our total number.

Of these forty-one types, sixteen are unique. Those types of which the most numerous specimens are known are, the Maenad with flying hair, Type 17, and Zeus with scepter, Type 29; there being seventeen examples of the former, and thirty of the latter here catalogued. It may be chance which has brought down to us so many more of the Zeus with scepter types, but it seems reasonable to infer in this case, and doubtless in the other also, that there were larger issues of these particular types than of the others.

Only two instances of struck forgeries of these staters in gold have come to the writer's attention, the Nike on ram type, *Cat. Duruflé*, May, 1910, No. 509, an obvious case, and the female Satyr type seen in commerce a number of years ago, of which the obverse flan was concave, and the hair of the head unskillfully executed giving the back hair a sagging appearance.

## COMMENT ON THE TYPES

Type 1, Herakles kneeling to the right and strangling two serpents, Pl. IV, 6, 7, was copied from the Alliance coinage of Byzantion, Rhodos, Samos, Pl. IV, 8, Iasos, Knidos, Pl. IV, 10, and Ephesos, Pl. IV, 9, which in turn was borrowed from the coinage of Thebes, Pl. IV, 1-4. The type first occurred on the Theban staters of 446-426 B.C. (British Museum Catalogue, Central Greece, pl. xii, 7) where it appears with other Heraklean subjects, and was used apparently in a symbolical sense as typifying the struggle for freedom from external domination. On later Theban staters and on the pale gold issues of 426-387 B.C., Pl. IV, 3, 4, the type was again used. On one of the latter pieces, Pl. IV, 4, the infant Herakles is no longer represented as seated and facing, but kneeling (type to r.) as on the Alliance pieces, and wrestling with the serpents in the same fashion as on these latter coins. The hekte of Kyzikos, Pl. IV, 5, may have been an intermediary in the transmission of the type, though not necessarily, as its type is in the facing pose seen in the Theban gold coin, Pl. IV, 3.

Incidentally the study of the Alliance issues of Knidos brings out some interesting points of chronology through the comparison of the heads of Aphrodite Euploia which occur on the reverses. The head of the goddess, distinguished as Euploia by the symbol, a prow, on the Alliance issues, Pl. IV, 10-12, appears to be earlier in style than the same head on the tetradrachm series, Pl. IV, 13, where it occurs as obverse type combined with the lion's head reverse. The tetradrachms, however, are dated earlier in Head's *Hist. Num.*<sup>2</sup>, p. 615, and in the British Museum Catalogue *Caria*. The prow symbol was not first placed beside the head on the tetradrachm, for it occurs on a drachm, Pl. IV, 14, of the transitional style. The only point against the order here suggested is the fact that the ethnic in full ΚΝΙΔΙΩΝ occurs on the Alliance issues, Pl. IV, 10, whereas on the tetradrachms the short form ΚΝΙ is used. This may have been the determining reason for placing the tetradrachms before the Alliance issues. But there is an example of an Alliance coin with ΚΝΙ, Pl. IV, 11, and the evidence of style is very strong. Knidos, according to Head, adopted the Rhodian weight standard on which the tetradrachms are struck, about 400 B.C., following the example of Rhodos. But under Rhodos, *Hist. Num.*<sup>2</sup>, p. 638, the arrangement of the issues is at variance with this statement. After the initial silver coinage of 408-404 B.C., is placed the Alliance coinage (of c. 394 B.C., according to the theory). Then there follows the gold stater coinage, and next the tetradrachms of Rhodian weight, 400-333 B.C. This places the introduction of the Rhodian standard

at Rhodos *after* the Alliance issues; or, if the Alliance pieces are regarded as Rhodian tridrachms, as coincident with the Alliance issues. The style, at any rate, of the Knidian tetradrachms seems to give sufficient reason for placing them quite a little later than the Alliance coins. Also, at Ephesos and Samos, the tetradrachms of Rhodian weight, parallel to the Rhodian tetradrachms and bearing magistrates' names in full as at Rhodos, begin *after* the Alliance issues.

Type 2, Helle on the ram, is a rare subject on Greek coins. The myth of Phrixos and Helle, the children of Athamas who were about to be sacrificed by their father to Zeus Laphystios in pursuance of an oracle, and were rescued by their mother Nephele who sent the ram with the golden fleece, was localized at Lampsakos, as is shown by an imperial coin type with Phrixos and Helle (Zeit. f. Num., VII, p. 25). Athamas was said to have founded Halus in Thessaly whose coins show Phrixos or Helle on the ram.

Type 3, youthful head in a winged helmet, is also unusual. A stater of Kyzikos of early style has a similar subject but there is no resemblance to the Lampsakene type. M. Babelon has called this head "Atys", but from the circumstance that the helmet on one piece seems to have terminated in a griffin's head, now mostly off the flan, the head seems reasonably to be identified as a very youthful Perseus.

Type 4, Orpheus, in Phrygian cap and long garments, seated on a rock in a musing attitude and holding his lyre, was first published by Löbbecke (Zeit. f. Num. 1890, p. 170) and thus designated because of the Phrygian cap which is clearly indicated on the coin. The type is earlier than the type of Apollo seated on the omphalos struck in 346 B.C. by the Amphictyonic Council at Delphi. On the Lampsakene coin, the seat, partly covered by the mantle thrown back, is a rock,<sup>1</sup> not the omphalos,<sup>2</sup> and there is no laurel branch. Orpheus is represented as seated on a rock and playing the lyre on a coin of Traianopolis in Thrace (Head, Hist. Num.<sup>2</sup>, p. 288). The musing attitude, however, reminds one of the Delphic stater. Still the Phrygian cap and the absence of any Apolline attributes inclines one to consider the figure as Orpheus rather than Apollo.

Type 5, Thetis on a dolphin, was probably copied from the Kyzikene stater c. 450-400 B.C. of somewhat similar type, Pl. IV, 15, 16. On this latter piece the Nereid or Thetis holds a wreath and shield, while on our stater she holds greaves and a shield. This type was long ago identified as Thetis, the sea-goddess, bearing the arms of her son Achilles. However, on coin types representing Thetis at Larissa Kremaste in Thessaly (Head,

<sup>1</sup> Apollo on a rock with lyre is a Sikyonian type. Head, Hist. Num.<sup>2</sup>, p. 410.

Hist. Num.,<sup>2</sup> p. 300) and of Pyrrhus, King of Epirus, (*ibid.*, p. 323), Thetis is riding on a hippocamp. On the former coin, the shield is inscribed  $\overline{AX}$  and there is therefore no doubt regarding the interpretation. On our coin, however, the sea-nymph rides a dolphin, and there is no evidence of local cult to support the interpretation as in Thessaly, the home of Achilles.

Type 6, a kneeling archer in Oriental dress, should be compared for pose and action with the kneeling nude Apollo on the stater of Kyzikos, Pl. IV, 17, 18, dating c. 450-400 B.C., of earlier style, as the pose of the bent right leg indicates. On the Lampsakene stater the kneeling position is admirably done although it would be interesting to know just how the artist succeeded with the left foot now off the flan, as the left leg seems stretched almost too far in advance. A similar pose is found on Sikyonian coins, Apollo and Artemis, Pl. IV, 19, 21, and at Orchomenos in Arcadia and Chersonesos, Artemis, Pl. IV, 20, 22. On the silver coins of Sikyon, the figures hold an arrow with the bow in the left hand; and on the Paris specimen of the Kyzikene stater, Apollo holds an arrow also which is not visible on other examples. On the Lampsakene stater the shaft of an arrow is visible above the archer's left hand, held horizontally. Whether Artemis on the bronze coins of Orchomenos and Chersonesos is also holding an arrow in the left is not clear, and some specimens have been described as showing the arrow on the ground which Artemis is about to lift with her right hand. The figures therefore are best described as about to shoot, and not as watching the effect of an arrow which has just been discharged, as with British Museum Catalogue Mysia (p. 26, No. 64, note) on the Kyzikene stater.

Type 7, Nike sacrificing a ram, is a copy of the gold stater of Abydos (British Museum Catalogue Troas, pl. xl) which is slightly earlier, 411-387 B.C., and much inferior in style. The subject is a familiar sculpturesque motive with the bull as the animal of sacrifice.

The facing Satyr's head of Type 8, is probably not connected with the facing Satyr head on gold staters of Pantikapaion as the head is so differently treated on the latter, the neck in profile to the left and the head in three-quarters view.

Type 9, the Demeter head, is an exquisite gem-like piece of work, and may of course equally well be designated as Persephone since a veiled Demeter occurs soon after on the coinage.

Type 10, the head of Dionysos, should be compared with the two later heads, Types, 22, 35 (Pl. II, 18 and III, 21). Its style is quite superior to the rather coarse work of the latest head and to the more formal rendering of the middle type.

Type 11, the Maenad heads, like the Dionysos head just preceding, are

noteworthy for their successful rendering of the animal expression on a human head.

Type 12, the small Pan head and the Hermes head, Type 13, call for no special comment. The latter Pl. IV, 26, is probably copied from the Kyzikene stater, Pl. IV, 25.

Type 14, the Apollo head with fillets is an unusual type. When the Munich specimen, Pl. I, 27, alone was in existence, the head was variously described as Aphrodite (the laurel wreath being supposed to be myrtle, and the fillets, a string of pearls woven in the hair), as Demeter, and sometimes as Apollo. The Boston specimen, Pl. I, 28, makes it clear that the head is not feminine and that it is a bandelette of wool terminating in a triple fringe which is woven in the hair.

The next two types, Herakles in the lion's scalp and Demeter veiled, Types 15 and 16, need not be noted particularly.

Type 17, the Maenad with flying hair, is of great originality and very interesting to study in its artistic development which culminates in the beautiful Paris staters, Pl. II, 3, 4. The heads on all the different dies are full of spirit and expressive of the Maenad in flight.

Type 18, the Athena head, and the facing Athena head of Type 20, are well done though perfectly conventional renderings.

Type 19, Maenad head in a sakkos and wearing a wreath of grapes, is entirely human in expression and it therefore seems most fitting that it should come after the other Mænad heads.

Type 21, the bearded head in a satrapal tiara, was formerly identified as Pharnabazos who struck coins at Kyzikos in 410 B.C., but M. Babelon, following Six, has more persuasively identified the head as that of Orontas, satrap of Mysia and Ionia, c. 362-345 B.C. Bronze coins bearing the name of this satrap,<sup>1</sup> showing a head resembling somewhat the head on the Lampsakene stater, but very small, and silver coins with the name of Orontas and the Lampsakene arms, forepart of Pegasos as reverse type, were struck at Lampsakos. The latter piece<sup>2</sup> has for obverse type a helmeted Athena very like the head on the Lampsakene staters, Pl. II, 5-8. These staters, according to our chronological arrangement, appear to belong to the very same period as the satrapal staters. The date of issue of these interesting portrait staters is, therefore, c. 362 B.C., when Orontas was in revolt against Artaxerxes II Mnemon, king of Persia, on which occasion the other coins of Orontas were struck at Lampsakos.<sup>3</sup>

<sup>1</sup> Babelon, *Traité*<sup>1</sup>, pl. lxxxviii, 19, 20.

<sup>2</sup> B. M. C. Ionia, pl. xxxi, 8.

<sup>3</sup> Babelon, *Traité* II<sup>2</sup>, p. 105 f. Head, *Hist. Num.*,<sup>2</sup> p. 597.

Type 23, the head of Helios on a radiate disk, is a type which is also found on a silver drachm of Megiste, Pl. IV, 27, 28, an island off Caria, of the Fourth Century B.C. The type is unusual, but of course it is quite certain that the Carian coin is later. The Lampsakene head, moreover, is an improvement on the other piece for the rays begin properly at the rim of the disk.

Type 25, the figure of Ge, rising from the earth, seems likely to have been modelled upon a corresponding figure on a Kyzikene stater, Pl. IV, 29, 30. The pose of Ge, or Gaia, on the Kyzikene stater is the same as on the Lampsakene; her mantle falls over the left arm similarly, and on both staters she bears the same fruits of the earth, corn and grapes though differently disposed. On the Lampsakene coin, the head of the earth goddess is thrown back which accentuates the impression of rising from the ground, as does also the ground line which is uneven and not like an exergual line.

Type 28, the Hera head, is so close to the corresponding Kyzikene head that here again we seem to have a case of copying. In both the above instances the Kyzikene staters are anterior to 400 B.C.

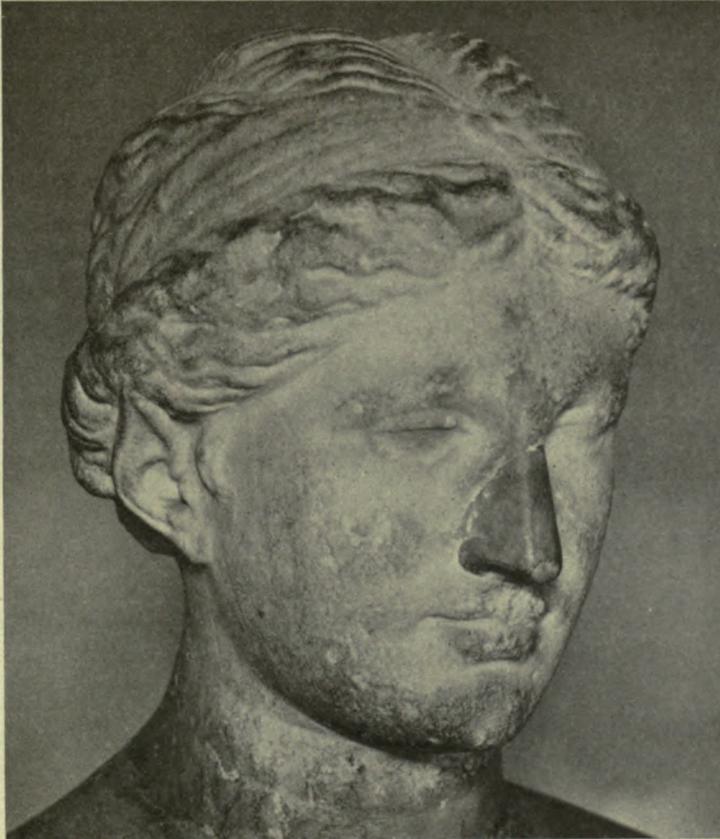
Types 29-32, Zeus with *scepter*, Nike head, Herakles as Omphale and female Satyr, represent the four highest developments of the art of the Lampsakene staters. The symbol behind the Zeus head, Type 29, is not a thunderbolt as it has always been called, but a scepter, the shaft of which is visible below the beard, Pl. II, 34, Pl. III, 4. The seated Zeus on coins of Alexander the Great, and of the kings of Syria and the seated Baal on coins of Cilicia, show this type of scepter which terminates in a lotiform ornament.

The identification of the bearded head wearing a stephane and with a club behind the neck, Type 31, was made by Head. M. Švoronos was formerly inclined to consider it a Pan head, from the appearance of the front locks which resemble upright horns; the symbol behind the head would then have to be a pedum. But the latter looks more like a club and the stephane is unexplained and quite anomalous on a head of Pan. The back hair, too, is turned up in feminine fashion; compare the heads of Hera, Pl. II, 30, of Nike, Pl. III, 10, and of Hekate, Pl. III, 19. The appearance of horns is probably accidental, and Head's brilliant identification stands. Furthermore, the Omphale legend of Herakles, of Lydian origin, according to which Herakles underwent a voluntary servitude, donning female attire as an atonement for homicide, seems to have been localized at Lampsakos since there exists an imperial coin type (Macdonald, Hunter. Cat. pl. xlvi, 5) of Herakles and Omphale, Pl. X, 11.

The Nike head, Type 30, has been called an Eros (J. H. S., 1897, p. 85) on account of the wreath which seems to be certainly of myrtle. The

coin from which the identification was made is the British Museum specimen, Pl. III, 10, but although this die has a somewhat masculine cast, the other dies, Pl. III, 8, 9, would never suggest that the head was anything but feminine.

The head of a female Satyr, Type 32, with pointed ear and ivy wreath is a most beautiful type, and the subject is exceedingly rare. One can hardly call it a Maenad head, for Maenads on the Greek vases and on coins do not have pointed ears. In fact the pointed ear on a female head is most unusual in Greek art. There are a few instances of a Satyresse catalogued in Reinach's *Répertoire*, but in none of these is it possible to detect the presence of the pointed ear. Several years ago, however, the writer while wandering through the Musée du Louvre in search of some such evidence, was rewarded by the discovery of a Fourth Century female bust in Pentelic



marble, of which the ears are pointed goat's ears (W. Froehner, *Sculpture antique du Musée national du Louvre*, Paris, 1878, p. 285, No. 286). The nose and the bust associated with this head are restored, but the head

itself is antique.<sup>1</sup> The sculpture is not a perfect parallel to our coin for it is a purely human type, whereas the coin shows an ivy-wreathed and dishevelled female Satyr, characterized as female by the ear-ring and necklace. But the subject is so rare in Greek art that we are fortunate to be able to find it on a marble of the same period as our stater.

Type 33, the head of Aktaion, is also a rare one in Greek art. It, too, occurs on a Kyzikene stater of the period 450-400 B.C. but there is no resemblance of style between the two staters.

Type 38, the young and beardless Dionysos, is of special interest as a fine example of a Fourth Century rendering of the subject. At Maroneia in Thrace, the youthful Dionysos type occurs on coins struck previously to 400 B.C. (Head, *Hist. Num.*,<sup>2</sup> p. 250), and this is one of the earliest instances of the type on coins. A beautiful head on the coins of Lamia in Thessaly of the period 400-344 B.C. (cf. the coin in the Pozzi Collection, pl. xl, 1205) is very close to our Lampsakene stater in style. The head has the same rather full, soft chin, and the hair and wreath are done in about the same manner, though the gold stater is immeasurably superior to the Lamian piece. At Kyzikos also on staters of the Fourth Century, the ivy-crowned young Dionysos head occurs (Babelon, *Traité*, pl. clxxiii, 22). The hair, however, is not orderly but dishevelled, and the type seems earlier than the Lampsakene head.

Type 39, the bearded Kabeiros head, is again a copy of a Kyzikene prototype, Pl. IV, 33, 34, the latter dating c. 400-350 B.C. This head was formerly described as Odysseus or Hephaistos on account of the conical pilos which is also worn by Odysseus on the coins of Ithake and by Hephaistos on coins of Methana in Argolis. However, since von Fritze has discussed the cult of the Kabeiroi at Birytis and Kebren in Troas (*Zeit. f. Num.* xxiv, p. 105 f), and has shown the existence of a young (beardless) Kabeiros and an elder (bearded) Kabeiros at Kyzikos, the present designation has been generally accepted.

Type 40, the Athena head, is copied from the coinage of Athens. An Athenian tetradrachm (British Museum Catalogue Attica, pl. v, 6) which is closest in style to our Lampsakene stater, Pl. IV, 35, 36, dates about 350-300 B.C. The head is done in the pseudo-archaic manner of the Fourth-Century Athenian issues and it at first glance looks most out of place among the other Lampsakene types. It is executed, moreover, in the copyist spirit, and lacks style and beauty altogether.

<sup>1</sup> Froehner, *loc. cit.*, "Satyre Femelle. Buste. Les oreilles de chevre et deux touffes de poil qu'on remarque sur la figure de cette femme la caractérisent comme Satyre femelle (Fauna Satyra): représentation très rare et très intéressante. (Le nez et le buste sont modernes. La lèvre supérieure a souffert.) Marble pentélique. Musée Campana. Hauteur totale 0.52."

The head of Type 41 is done in a curiously rough style. It is impossible to say what goddess is here represented, for the wreath which passes over the sakkos and hair is unidentifiable. On the earlier die I, there is a small bud at the base of the flower, but this is not seen on the later die II. Also, on die I, in place of the flower there is a leaf to the right of the ear and on the sakkos, which might pass as a lotus leaf. This leaf is replaced by a flower on the second die. If the wreath is a lotus, the head is doubtless that of Aphrodite who was associated with this plant on coins of Cilicia (Aphrodisias and Nagidos, *Head, Hist. Num.*,<sup>2</sup> p. 718, 726) and Cyprus (Idalium, *loc. cit.*, p. 739). If the wreath is not a lotus, it is difficult to see what else it may be.

As evidence of cult, the Lampsakene stater types as a whole are not of special value, since they do not represent the chief deities of local prominence as usual. The distinctive badges of this mint are first, the fore-part of Pegasos found on the earliest coins in electrum and silver, and second, the janiform female head found on the silver from 500 B.C. on. The gold staters bear constantly varying obverse types drawn from the whole Greek Pantheon, while the arms of the city occupies the reverse. This is comparable to the choice of types on the electrum issues at Kyzikos where the badge proper is relegated to the position of adjunct symbol, and all sorts of animal and figure types are used for the obverses. Many of these latter are types which are found earlier on other coinages and hence, it may be inferred, were suggested by those coinages, and borrowed, if not precisely copied. At Lampsakos there are cases of obverse types copied directly from other coinages, as already shown, or inspired by them. One would have to eliminate therefore these copied or inspired types in reaching any conclusions as to the principal deities worshipped at Lampsakos.

Of the higher Olympic gods, Zeus and Athena seem to occupy an important position. A Zeus head occurs as two different types, Pl. II, 22, and 31 and in the latter his head is entirely original in the matter of the scepter which is the adjunct symbol. Athena has three types, Pl. II, 5, 14, and Pl. III, 29, the last, however, being an imitated type. Still Athena's head occupies the reverse of the majority of the silver issues Pls. V, VI, and her head is the obverse type chosen by the satrap Orontas for his Lampsakene issues (*British Museum Catalogue Ionia*, pl. xxxi, 8). Orontas also placed the head of Zeus on one of his Lampsakene coins (*Babelon, Perses Achémén.* pl. ix, 12). From the above facts it seems fair to infer that these deities were in particular known at Lampsakos. The later bronze coinage, Pl. IX, 19-24, also employs the Zeus type.

Demeter is found on three types, Pl. I, 15, a corn-wreathed head, Pl. I, 30, a wreathed and veiled head, and Pl. II, 25, a figure rising from

the ground, and on a bronze coin, Pl. IX, 35. The figure type seems to have been suggested by the Kyzikene stater, Pl. IV, 29, to be sure, but the triple occurrence of Demeter on the gold coins seems to warrant the conclusion that her cult was prominent at Lampsakos. No other Olympic deities are especially conspicuous on these staters, though Apollo, Hermes and Dionysos are found. Apollo occurs on the Fourth Century silver, Pl. VI, 36-39, and on later bronze, and hence his cult seems probable. The later coinage of Lampsakos, however, discloses what was one of the chief cults of the city, namely, that of Dionysos-Priapos. On the large flat tetradrachms struck after the battle of Magnesia in 190 B.C., Pl. VIII, 1-6, when Lampsakos received its autonomy from Rome, an ivy-crowned and horned head occupies the obverse. On the latest bronze coins this head recurs again, Pl. X, 2-7, and the figure of Priapos is found on Imperial coins, Pl. X, 8, 17, 19. Priapos is an hypostasis of Dionysos, as noted earlier. He wears the wreath of ivy leaves with berries, has ram's horns which betoken his animal nature as a fertility god. This characteristic is most prominent on the Imperial issues.

## THE SILVER AND BRONZE COINAGES OF LAMPSAKOS

It was the writer's original plan to issue a separate article on the silver and bronze coinages of Lampsakos thus completing the studies already presented on the Lampsakene electrum and gold staters. Impressions had already been gathered from the collections of London, Paris, Cambridge and Glasgow, and the plates were prepared when word was received from Dr. Gaebler in August, 1922, that he was about to publish a manuscript on the silver coins of Lampsakos left by the late Dr. von Fritze. It was then decided to append the plates to the present article on the gold staters and restrict the text mainly to a brief summary of the chronological order of the issues.

The whole publication was, however, retarded in the autumn of 1922 by the writer's more extended researches in the field of the Alexandrine and Lysimachian issues at Lampsakos, and subsequently by a complete cessation of numismatic work, due to the agreeable but all-absorbing task of serving on the Publication Committee of the Exhibition of American Sculpture held by the National Sculpture Society on the grounds of the Numismatic and the adjoining Museums. Since taking up again the task of completing a much-postponed publication, the paper by Dr. Gaebler on the silver coins has come out in *Nomisma*, XII, 1923. It is accompanied by two plates which do not duplicate but rather complement Pls. V and VI here given, since so many examples have been drawn by Dr. Gaebler from Berlin, Copenhagen, Brussels and other foreign museums, not included in these plates. The dates assigned to the autonomous silver issues and the arrangement of the same are practically identical in the two articles, but Dr. Gaebler's views as to the dates of certain issues, notably, the second group of the Janiform head series, and the Alexandrine tetradrachms diverge considerably from those that the writer had formed, and in these two viewpoints will be found a fruitful topic for discussion. The writer wishes to express to Dr. Gaebler her appreciation of his kindness in forwarding a copy of his paper so promptly and of his careful review of her paper on the electrum staters (*Numismatisches Literatur-Blatt*, 1921, No. 216-217, p. 1798).

## SILVER

## THE HALF-PEGASOS TYPES

c. 510 B.C. or earlier

I. Forepart of Pegasos to l. or r. Rev. Quadripartite incuse square. Pl. V, 1-7.  
Denominations: didrachms, tetrobols and diobols.

## THE JANIFORM HEAD TYPES

Group A. c. 500-470 B.C.

I. Archaic Janiform female head with round ear-ring, necklace and diadem. Rev. Athena head in Corinthian helmet l. within a square incuse. Pl. V, 8-17.

Denominations: tetrobol Pl. V, 8; drachms, Pl. V, 9-13; obols, Pl. V, 14-16, and tritemorion, Pl. V, 17.

Rev. details: 15, olive wreath on helmet; 16, wheel, countermark on helmet; 17, olive spray in field.

II. Similar head, more advanced style; border of dots. Rev. Similar. Pl. V, 18-27.

Denominations: drachms, Pl. V, 18-23, and obols, Pl. V, 24-27.

Rev. details in lower r. field: 18, olive spray; 19,  $\chi$ ; 20, amphora; 22, caduceus; 25,  $\Xi$ ; 26,  $\text{f}$ ; rev. details on helmet: 18, serpent; 19, 25, 26, olive wreath.

Group B. c. 400-300 B.C.

I. Archaistic Janiform head with round ear-ring and diadem. Rev.  $\Lambda\text{AM}$ ,  $\Lambda\text{AMY}$ ,  $\Lambda\text{AMYA}$  Athena head in Corinthian helmet r. in circular incuse. Pl. VI, 1-21.

Denominations: tetrobols and diobols (Pl. VI, 1, triobol). Dr. Gaebler publishes also a drachm, Nomisma XII, Pl. II, 1; an obol, Pl. 2; and a tritemorion, Pl. II, 3.

Obv. details: 1, border of dots; 11, dolphin to l. on neck; 12-14, dolphin to r. on neck; 15,  $\Theta\text{EO}$ ; 16,  $\text{I}\Delta\text{O}$ ; 17, 18,  $\text{KPI}$  on neck; 21, later style with drop ear-ring.

Rev. details on helmet: 5, 17, 18, olive wreath; rev. details in field: 9, ivy leaf; 10, serpent; 17, 18, kantharos; 19, fly.

II. Similar head, not archaistic. Rev.  $\Lambda\text{AM}$ ; helmet usually crested. Pl. VI, 22-32.

Denomination: tetrobols.

Obv. details: 22, pendant ear-ring and necklace.

Rev. details: 23-25, half-Pegasos on helmet; 28-32, serpent on helmet; 31, star in field; 32, grapes in field.

III. Head of Athena in crested Corinthian helmet r. Rev.  $\Lambda\text{AM}$  Forepart of Pegasos r.; below, ear of corn. Pl. VI, 33-35.

Denomination: tetrobols.

IV. Apollo head r. Rev.  $\Lambda\text{AM}$  Half-Pegasos r. Pl. VI, 36-39.

Denomination: diobols.

Rev. symbols: 36, dolphin; 37, mouse; 38, bee; 39, helmet.

V. Zeus head r. Rev.  $\Lambda\text{AM}$  Half-Pegasos r. Pl. VI, 40.

## THE HALF-PEGASOS TYPES

The silver coinage of the half-Pegasos types is very scanty and rather difficult of attribution. Two coins in the Paris collection, *Traité*, pl. xiv, 13 and 17, should not be given to this mint on account of the style of the obverse and reverse. The half-horse of No. 13 of the *Traité* is very similar to that of coins assigned by Svoronos (*L'Hellénisme primitif de la Macédoine*, pl. xiv, 16 and 17) to the Crestonians of primitive Paionia, while the incuse squares of both Nos. 13 and 16 of the *Traité* also resemble the Paionian coins (Svoronos, pl. xiv, 16 and 17.) The small coin No. 15 of the *Traité*, the same as No. 7 of our Plate V which has three globules around the half-horse, is uncertain, and No. 17 of the *Traité*, with the Satyr's head in the incuse is certainly not Lampsakene. The London coin, British Museum Catalogue Mysia, pl. xviii, 6, similar to a piece in the Cambridge collection, may not belong to our mint, as the incuse is of a different design.

The other coins of Pl. V from the Paris and London collections, and Pl. V, 1, from the Newell collection are all surely of Lampsakos with the possible exception of Pl. V, 7, as above indicated. They represent three different denominations, the didrachm, Pl. V, 4, 5, the tetrobol, Pl. V, 1-3, and the diobol, Pl. V, 6, of the same standard which was applied to the striking of the contemporary electrum coinage, which is called by Babelon, "Phocæic reduced." Dr. Gaebler separates the half-Pegasos issues into two groups, an earlier, comprising all the smaller denominations which he calls diobols and obols (but which are really tetrobols and diobols),<sup>1</sup> of the local Lampsakene electrum standard, and a later issue, including the larger denomination, the two didrachms, Pl. V, 4, 5 (Gaebler, Group I, No. 10) of which nine examples are known, and a small unique piece in Berlin (Gaebler, Group I, No. 11) which he regards as struck on the Milesian standard, which is the same as that of the electrum staters of Lampsakos with the palmette symbol, the supposed Ionian Revolt staters. These staters have been discussed earlier in this paper, and reasons given for questioning the Ionian Revolt theory. Stylistically, at least, the didrachms appear to the writer as more closely allied to the undoubted electrum staters of Lampsakos, note particularly the stater figured on Pl. I, 11, of the *Electrum Coinage*.<sup>2</sup> In general there seems to be no cogent reason for assuming

<sup>1</sup> Compare Babelon's table of weights for the Lampsakene electrum standard as applied to silver in the *Traité* II,<sup>1</sup> p. 343, which is as follows: tetradrachm (electrum stater), 15.36 gr.; didrachm, 7.68 gr.; drachm, 3.84 gr.; tetrobol, 2.65 gr.; diobol, 1.28 gr. There is evidently a miscalculation on Dr. Gaebler's part when he writes (*Nomisma XII*, p. 4) of a diobol of c. 2.57 and an obol of c. 1.28 gr. The writer fully agrees however with Dr. Gaebler's deduction that this silver coinage follows the same standard as the local Lampsakene electrum "Phocæic reduced," and not the Milesian as given on p. 19 of *Electrum Coinage*.

<sup>2</sup> A detail, but an important one, is the fact that these didrachms show a rather larger middle section of the near wing of the Pegasos, a characteristic of the regular Lampsakene staters of the archaic period.

a change of monetary standard for the didrachm issues, although it must be admitted that the nine examples known are all under weight — on the theory that they belong to the usual Lampsakene standard. The Lampsakene standard would require a didrachm of 7.68 gr. while the Milesian didrachm would call for one weighing 7.07 gr., both of which weights exceed those of the extant examples (see Gaebler, *loc. cit.*, p. 5) which range from 6.95 to 6.66 gr. But the reason underlying the assumption of a change of standard is entirely bound up with the attribution to Lampsakos of the electrum stater coinage of the palmette class. If the Ionian Revolt theory is proved to be correct, then these didrachms may be the subsidiary silver coinage which goes with the electrum coinage, and the difference in style between these didrachms and the Revolt staters may be accounted for by the hypothesis that the silver pieces were struck in the home mint and the electrum staters issued at the common mint of the League of Ionian cities which joined in the Revolt.

## THE JANIFORM HEAD TYPES

## Group A. c. 500-470 B.C.

The Janiform head series began to be issued about 500 B.C. The closest parallel to these double heads on which the hair is rendered in rows of dotted lines on the crown and in pearl-like strands falling straight over the forehead is to be found in the Arethusa head on the early tetradrachms of Syracuse (British Museum Catalogue Sicily, p. 146, No. 4; Head, Coinage of Syracuse, pl. i, 3; Babelon, *Traité*, pl. lxxiv, 7). These latter coins, it is true, are always given to the period 485 B.C. by our chief authorities (British Museum Catalogue Sicily, p. 146; Head, *Coinage of Syracuse*, p. 7, and *Hist. Num.*,<sup>2</sup> p. 172; A. Evans, *Contributions to Sicilian Numismatics*, *Num. Chron.*, 1894, p. 197f; Babelon, *Traité II*,<sup>1</sup> p. 1519-20).<sup>1</sup> But even a cursory study of the archaic coinage of Syracuse will suffice to throw doubt upon this date long accepted as definitely established. The first objection to it lies in the consideration that there would be far too brief an interval then remaining between these very archaic issues and the Demareteion, c. 479 B.C.,<sup>2</sup> which breaks forever and finally with archaic tradition in the treatment of the hair and eyes. And, in support of this theoretical inference as to the length of time required for the development in style from the archaic tetradrachms of the type shown in British Museum Catalogue Sicily, p. 146, No. 4, to the Demareteion type, there is extant a very abundant series of archaic tetradrachms in numerous varieties illustrating every shade of progress from the early archaic to the transitional style, and these numerous issues constitute the main practical proof of the longer interval which must have intervened. It is impossible to crowd all these different types of heads into the space of some six years. In order to surmount this difficulty, it has been proposed to place these too-abundant issues which are at once felt to be superfluous for the short period to which they have

<sup>1</sup> This universally accepted date is based solely on R. S. Poole's conjecture (published in an article entitled, "On the use of the coins of Camarina, etc.," *Transactions of the Royal Society of Literature*, X, pt. 3) that the Victory figure was first placed over the quadriga of the obverse type of the earliest Syracusan tetradrachms by Gelon, tyrant of Syracuse, 485-478 B.C. in commemoration of his four-horse chariot victory won at Olympia in 488 B.C.

<sup>2</sup> Evans, *loc. cit.*, assumed 488 B.C., the date of Gelon's Olympic victory, to be the date of issue of the earliest Syracusan coins with the Victory figure, but Gelon was not master of Syracuse until 485 B.C. Hence the interval between the earliest tetradrachms supposedly issued by Gelon and the Demareteion would be only six years instead of ten as stated by Evans (see Holm, *Geschichte Siciliens*, III, p. 570).

been given, in the period immediately *after* the Demareteion.<sup>1</sup> Not all of our numismatic authorities, however, have adopted Evans' conclusions in their entirety, although Babelon has arranged the archaic Syracusan coinage according to this scheme in his *Traité*, pls. lxxiv-lxxv, thereby placing even tetradrachms with  $\varphi$  in the ethnic *after* 480 B.C.<sup>2</sup> In the British Museum Catalogue Sicily, Head's Coinage of Syracuse and Du Chastel's Syracuse (all written before Evans expressed these views) and in the Jameson Catalogue, a recent work, these archaic tetradrachms are correctly arranged as *preceding* the Demareteion, but the series is always dated as commencing in 485 B.C.

Certain writers, Gardner, *Num. Chron.*, 1876, p. 7, and Headlam, *op. cit.*, 1908, p. 9, have found an additional reason for supporting the Gelonian date by pointing out that the obverses of the early coins of Leontini and Gela bear the same type as that of Syracuse, a quadriga crowned by Nike, and that this can only be accounted for by the assumption that these pieces were issued when the three cities were under the same dynastic control which could only have been under Gelon.

According to Gardner, Gelon introduced the quadriga type on the coins of Leontini and Gela after his victory in 488, and subsequently, after 485, on the coins of Syracuse. Headlam regards the quadriga on the coinages of these three cities as simultaneously introduced after 485 B.C. Either theory calls for a coinage in the three cities about contemporaneous. Without entering too deeply into the intricacies of this question, the writer believes that it can be shown that the quadriga types of both Gela and Syracuse are considerably more ancient than those of Leontini, that it

<sup>1</sup> Evans, *loc. cit.*, p. 199, originated this theory that the tetradrachms which form an overwhelming proportion of the early currency of Syracuse, which, he admits, seem at first sight much more archaic than the Demareteion (Du Chastel, *Syracuse*, pl. i, 5 f, and pl. ii, 13-22) were a wholesale coinage struck after 480 B.C. from the booty won by the victory of Himera, on such a vast scale that second-rate die-cutters must have been employed, resulting in a "wholesale artistic debasement" of the coinage; so that what at first sight appears more archaic, in this case is simply rude. This argument is a patent case of special pleading to solve what would be undoubtedly a first-class numismatic puzzle, an attempt to date the earliest Victory tetradrachms in 485 B.C. and then to connect the Demareteion as the next issue in sequence, and squeeze all the remaining archaic coinage into the same general period as the Demareteion. It has not been refuted hitherto, so far as the writer is aware, and has been reflected in later writings, as Headlam, *Some Notes on Sicilian Coins*, *Num. Chron.*, 1908, p. 10 f. This latter article, too, labors under the theory of the Gelonian origin of the Victory type on the obverse. It was only a chance detail, the occurrence of the fine circular line around the Arethusa head of the Demareteion which led Evans to connect the latter so closely with the early tetradrachms on which this circle also occurs, and which Evans correctly derived from the circular inset of the incuse reverse (Head, *Coinage of Syracuse*, pl. i). The Demareteion artist happened to revive this archaic detail, but of course it does not follow that the Demareteion is an issue consecutive upon the earliest types.

<sup>2</sup> On p. 1533 of the *Traité II*,<sup>1</sup> Babelon remarks that some of the archaic tetradrachms which he has placed after the Demareteion are anterior to it, but that in general they are almost contemporaneous with it.

would be very difficult to select the coins which Gelon is supposed to have had struck in these cities at about the same time. If, however, a type borrowed from Syracuse had appeared on the coinage of either or both of the other two cities of apparently contemporaneous style in both or all three cases, and of Gelon's period, we might assume this as evidence of Gelonian control which is a matter of historical record for these three mints. Such an example of Gelonian influence may be found in the case of a tetradrachm of Leontini which does bear a peculiarly Syracusan type, the Arethusa head, otherwise foreign to the usual quadriga and lion's head types (Babelon, *Traité*, pl. lxii, 9; British Museum Catalogue Sicily, No. 9). If now we search in the Syracusan series for the type most nearly corresponding to this coin of Leontini, we shall discover just which coins of Syracuse may properly be regarded as belonging to Gelon's period, for it is the most natural inference in the world to account for the intrusion of a Syracusan coin type at Leontini at this period as due to Gelonian influence. A coin which is generally similar is that shown on Babelon's, pl. lxxv, 12, although it may be somewhat earlier than the tetradrachm of Leontini, as the hair over the forehead is still represented by dotted lines. Somewhat closer is a tetradrachm formerly in the Sandeman Collection, No. 297, with the hair executed in fine wavy lines. The head on both these coins of Syracuse is rather small for the flan, as is the case at Leontini, and, in the sequence of types as worked out by Babelon and others, these Syracusan pieces belong quite well along in the series. Hence, if the whole group of archaic tetradrachms be placed in the period preceding the Demareteion as the writer contends is correct, these types with the small head would be not far antecedent to the Demareteion types. They therefore could easily fall within the period of Gelon, 485-478 B.C. This parallelism helps to strengthen our argument, for it throws back the earliest tetradrachms with the Victory figure, which the writer maintains cannot be Gelon's coinage, to a date at least a decade previous, as a detailed study of the sequence of the abundant archaic issues will demonstrate.

The chariot type alone without the Victory floating above it which occurs on the first Syracusan coins of the period of the landed aristocracy, the Geomori, of the latter Sixth Century must have been selected as an agonistic coin type by the rulers who patronized the sport before the days of Gelon I, and there is no reason why the Victory figure could not have been introduced previous to this tyrant. Anaxilas, tyrant of Rhegium, placed a biga without the Victory figure on his coins to record his Olympic victory with the mule team (Babelon, *Traité* II,<sup>1</sup> p. 1470, pl. lxxi, 13). That Gelon introduced the Victory figure into the type is in absolute dis-

accord with the numismatic facts, as has been shown, since there would then be on the one hand a period of more than fifteen years between the first issues of Syracuse, quadriga and incuse type, and the supposed Gelonian issues of 485 B.C., with the scantiest possible coinage extant to fill in this gap, while as stated for the interval between 485 B.C. and 479 B.C. when the Demareteion was struck, there would be a superabundance of coins which cannot be condensed into this short period. The conclusion is inevitable that the Victory figure types began about 500-495 B.C. where numismatists, if guided only by style, would naturally have placed them.<sup>1</sup>

The writer has dealt elsewhere (*Electrum Coinage*, p. 22) with Babelon's theory that the Janiform head types commenced to be struck at Lampsakos during the period 513-511 B.C. at about which time the same type makes its appearance on a trihemiobol of Athens (*Babelon, Traité II<sup>1</sup>*, p. 151f). This theory that an alliance between Hippias, tyrant of Athens and Hippoklos, tyrant of Lampsakos,<sup>2</sup> is indicated by the contemporaneous issue of coins with a similar type, supposedly borrowed by Athens from Lampsakos, is upset by the fact that at Lampsakos there is no coinage with the Janiform head type as archaic in style as that of the Athenian piece bearing this head, and that the Lampsakene silver coinage of this period is the half-Pegasos coinage (Pl. V, 1-7) which was struck as the "small change" of the electrum stater issues.

Turning now to the Janiform head types of more developed style, Pl. V, 18-27, there is shown a marked relaxation from the strict severity of the earlier coins, Pl. V, 8-17 which we have just dated in the decade 500-490 B.C. The coins on Pl. V, 18-19, exhibit the same stage of development as the Athenian tetradrachms of the style following immediately upon that of the dekadrachms (*British Museum Catalogue Attica*, pl. iii, Class a). The expression of the head (or heads) is milder, the front hair is rendered by wavy bands that suggest the Athenian coinage. Unfortunately we have to wrestle here again with the dating problem as our authorities are at variance as to the date of issue of the dekadrachms. Dr. Gaebler (*Nomisma VII*, p. 10) uses the coins of Athens as a term of comparison for these issues of Lampsakos, and the writer entirely concurs with his view of the parallelism in style between the Lampsakene issues of more advanced style Pl. V, 18-19, and the archaic Athenian tetradrachms of the usual type with the olive leaves and palmette or scroll device on

<sup>1</sup> Note Babelon's independent dating of the non-Victory figure coinage as *before* 500 B.C., while all other authorities have dated the coinage as starting in 500 B.C.

<sup>2</sup> P. N. Ure, *The Origin of Tyranny*, p. 63, note 7, cites this theory as numismatic evidence of Hippias' personal ties with the tyrant of Lampsakos. Under *b* his note should be amended to read "Athens, *obv.* type of Lampsakos, *rev.* Athena head."

the helmet issued just after the dekadrachms. But his argument that the Athenian dekadrachms were not struck before 480 B.C. is a view with which we do not agree. The dekadrachms are of such strong archaic style that it would seem incongruous to associate them with the Syracusan dekadrachms, the Demareteia, for which we have a positive date founded on historical evidence. Dr. Gaebler points out forcibly the strong evidence afforded by a group of archaic Athenian tetradrachms, none of which are published in the British Museum Catalogue nor in Babelon's *Traité* (Gaebler, *op. cit.*, pl. i, 34-37; Svoronos, *Trésor des Monnaies d'Athènes*, pl. 8, 1-6) which antedate the dekadrachms of Athens, as the dotted hair over the forehead, the more primitive eye and profile convincingly prove, and which nevertheless show the olive leaves on the helmet. If this latter decoration contains a reference to the victory at Marathon, as has generally been thought in regard to the dekadrachms, then these very rare early tetradrachms of Athens were struck soon after the victory of 490 B.C. Dr. Gaebler concludes that since the battle of Marathon is commemorated by these tetradrachms, the dekadrachms which are certainly of later style must have been struck to commemorate Salamis. Of course it is only an inference that the olive leaves were placed on Athena's helmet to commemorate one or the other of the two great victories. The olive is not the laurel of victory, and is part of Athena's personal symbolism like the owl and olive which had previously been on the coins. Still, of course, the change or rather modification of type would seem to require an explanation in terms of an historical event. But granted that the battle of Marathon is celebrated by the early tetradrachms with the olive leaves which we may assume to represent a wreath of victory, there would then be a gap of ten years between these early tetradrachms and the dekadrachms for which there are no coins at all during a period which is elsewhere as at Syracuse, characterized by abundant coinage showing a steady progression from archaic to transitional style.

In support of the date 490 B.C. as opposed to 480 B.C., the find of 100 tetradrachms of Athens, said to be "of the early style" in company with 300 darics in the canal of Mt. Athos, supposed to have been deposited by Xerxes at the time of his invasion of Greece (Gardner, *History of Ancient Coinage*, p. 162; Gaebler, *op. cit.*, p. 10, note 3), has been invoked. It is pointed out that in this find there was at least one Athenian tetradrachm with the olive leaves on the helmet, and this fact has been regarded as lending support to the date 490 B.C.<sup>1</sup> But this coin is a late tetradrachm of the "Athenian imitation" style, probably a Fourth Century Indian imita-

<sup>1</sup> Babelon, *Traité II*, p. 766.

tion as would plainly appear from the drawing of the coin in Beulé's *Monnaies d'Athènes*, p. 44, as well as from Beulé's description of the piece on p. 71. What the other tetradrachms looked like is not known, but there is no reason whatever not to infer that they were coins of the ordinary "olive wreath" type (British Museum Catalogue Attica, pl. iii, 2 f), since the phrase describing them as "of the early style," while vague, pretty certainly indicates this well-known type. But the one coin upon which so many writers base their proof is of no value at all, since, as Beulé showed, it could not possibly have been in the hoard. So also the debate over the presence of one tetradrachm of the "olive wreath" type in the Akropolis hoard of 1886, supposed to have been buried about 480 B.C., a coin which has been both refused and claimed as rightfully belonging to the original hoard, is of no significance, though Svoronos, a champion of the date 480 B.C. for the first appearance of the olive on the helmet, has stated that the coin showed no traces of fire as did the remainder of the hoard, and hence probably did not belong to it. According to our dating, such a type might perfectly well have figured in the hoard, for it seems inconceivable that Athens should be issuing coins genuinely archaic in style, like the dekadrachms and succeeding tetradrachms *after* 480 B.C., thus lagging so far behind Syracuse, and that there should be the long interval between the coins of Marathon and those of Salamis, a ten year period for which there is no coinage.

The dekadrachms are of course most reasonably brought into connection with a great victory, and if this, according to our thinking, is rather the Marathonian than the Salaminian, the early tetradrachms bearing the olive and sometimes the scroll, which are noticeably more archaic than the dekadrachms, may have no reference whatever to Marathon.

The archaic Janiform types at Lampsakos are therefore to be dated as follows: Coins of Severe Archaic Style, Pl. V, 8-17, 500-490 B.C.; coins of Strong Archaic Style, Pl. V, 18, 19, c. 490 B.C.; coins of Modified Archaic Style, Pl. V, 20-27, later than 490 B.C. — possibly as late as 470.

### THE JANIFORM HEAD TYPES

#### Group B. 400-330 B.C.

The coins of the class shown on Pl. VI, 1-32, *obv.* Janiform head, *rev.* Athena head in Corinthian helmet, are dated by Head, Babelon and Wroth (British Museum Catalogue Mysia) in the Fourth Century, 394-330 B.C. Dr. Gaebler, however, would assign the beginning of this series to the first half of the Fifth Century. Starting with the premise that the silver coins

on which the old chief badge of Lampsakos, the winged half-horse is introduced anew, Pl. VI, 33-35, must be later than the gold stater coinage, c. 387 B.C., whose reverses bear the ancient city-arms of the electrum coinage as a constant reverse device, Dr. Gaebler assumes that the Janiform head — Athena series, Pl. VI, 1-32 ended in 387 B.C. He then works backward over the group, Pl. VI, 1-32, and taking political events into consideration arrives at the date 470 for the commencement of the Janiform head — Athena group (Gaebler's Group III). This chronological scheme would place our coins, Pl. VI, 1-3, in the period 464 B.C., date of Themistocles' overlordship of the city which Dr. Gaebler indicates was merely nominal, the city having actually entered the Delian League at that date, passing thus from Persian to Athenian possession. The coins which are then assigned to a still earlier date than 464 are three rare pieces not here represented (Gaebler, pl. ii, 1-3) which are given to 470-464 B.C. They bear no ethnic on the reverse, and are stylistically the forerunners of the series<sup>1</sup> shown on our Pl. VI.

The implied inference in Dr. Gaebler's chronological scheme is that once the half-horse badge became the regular city emblem again on the gold coinage, c. 387 B.C. (but considerably later on the silver, Pl. VI, 33-35), the Janiform head-Athena types were discontinued. In support of this, he points to a single coin, Athena head with *Attic* helmet and half-Pegasos types (*op. cit.*, Pl. ii, 35) of fine Fourth-Century style, comparable to that of the gold staters before 350 B.C., which may with probability be referred to the years, 365-355 B.C. This coin does not bear any inscription, but its Lampsakene reverse indicates its connection with our mint. It appears nevertheless to belong with the other satrapal silver and bronze coins of Orontas, satrap of Mysia, 362 B.C. It has no affinity whatsoever with the Athena head—half-Pegasos coins, Pl. VI, 33-35, which are much later in style. These latter pieces, as we hope to show, were not struck until after 330 B.C. Dr. Gaebler places them as late as 300 B.C. On Dr. Gaebler's showing there would be but scanty silver issues from the Lampsakene mint during the period when the gold staters were issued, only the Athena head triobol struck under Orontas, just mentioned. But does the style of the coins shown on Pl. VI, 1-32, warrant our placing them all before 387 B.C. and the earliest before the middle of the Fifth Century?

The Janiform heads on the coins, Pl. VI, 1-21, are consciously archaistic in the retention of the archaic style of treatment of the hair, but the Athena heads were surely executed in the period of advanced art of the Fourth Century. The most obvious types with which to compare these reverses are the Athena heads on the coins of Corinth and the result of this collocation is to demonstrate that the Lampsakene coins, in spite of the deliberate

<sup>1</sup> See further the Addendum on p. 77.

archaism of their obverses, are really most closely akin to the Corinthian staters of the period, 400-338 B.C. The style of the Athena heads of the coins figured on Pl. VI, 1 f. would seem to make it impossible to place the beginning of our series as early as 460 B.C., the date of the severe early fine style represented by the Corinthian coins shown in Oman's paper on the Fifth-Century Coins of Corinth (*Corolla Numismatica*, pl. xi, 2, 3). Furthermore, the later issues of the Janiform head-Athena group on which the helmet of Athena is crested and bears various symbols, chiefly the coiled serpent, Pl. VI, 28-32, which Dr. Gaebler places between 405 and 387 B.C., seem to the writer most palpably later than 387 B.C. They are not so very far removed from the coins on which the helmeted Athena head becomes the obverse type. Now, the type of crest which appears on these latter coins with Athena-head obverse and half-Pegasos reverse, Pl. VI, 33-35, is that characteristic of the staters of Alexander the Great. We note that a similar comparison has been made by Dr. Lederer in his paper, *Ein Goldstater Alexanders des Grossen* (*Zeit. f. Num.*, xxxiii, Sonderabdruck. Nachträge.), "Der Athenakopf dieser letzteren Münzen scheint mir aber dem Stile nach bereits der Zeit Alexanders des Grossen anzugehören und von seinen Goldstateren beeinflusst, wie so manche Münzen anderer griechischen Städte." The particular pieces to which Dr. Lederer here refers, Pl. VI, 28-32, may perhaps be influenced by the type of Alexander's gold staters, but it seems extremely probable that the peculiarly Alexandrine type of helmet on the coins immediately following, Pl. VI, 33-35, was imitated from the staters of Alexander. The Apollo heads, Pl. VI, 36-39, are very likely to have been suggested by the small gold and silver coins of Philip II, 359-336 B.C., as Dr. Gaebler suggests (*op. cit.*, p. 28), and antedate the issues shown on Pl. VI, 33-35.

Adramytion and Iolla in Mysia issued bronze coins with a reverse type, forepart of Pegasos, beneath which an ear of corn to the right (*Antike Münzen Mysiens*, pl. i, 1, and pl. x, 12-14). These are dated by von Fritze about the middle of the Fourth Century, and this type has apparently been copied at Lampsakos on the Athena-head-half-Pegasos coins, Pl. VI, 33-35, which we should be inclined to date towards the end of the Fourth Century. Dr. Gaebler dates these pieces about 300 B.C. at the earliest, and since, as he points out, they are over-struck on flans of the preceding Janiform head types, it would seem most reasonable to connect them with the earlier series rather closely; although the style of both obverse and reverse is decidedly inferior to that of the latest examples of the Janiform head group. This is all the more reason why the Janiform head-Athena types should not be considered as ceasing in 387 B.C., but should be brought well down below that date. Dr. Gaebler while placing the types with obverse,

Athena head in Corinthian helmet, about 300 B.C., regards the Apollo head coinage as earlier. Both types he considers, as does the writer, to be influenced by the types of Alexander's and Philip's coins. The half-Pegasi of the Apollo head coins are unquestionably better in style than those of the Athena head coins, and they are consequently considerably earlier than the latter.

In conclusion, then, on grounds of style, only a few of the Janiform-Athena head coins of the new style can be dated in the Fifth Century, and the mint of Lampsakos must be assumed to have been almost quiescent during the period c. 470-400 B.C. On the other hand, the Fourth Century witnessed a fairly abundant and continuous series of issues with native types down to about 330 B.C., the approximate date of the introduction of Alexandrine coinage at Lampsakos. The Athena head coins, Pl. VI, 33-35, were doubtless struck after the Alexandrine types had been introduced.

## ALEXANDRINE COINAGE

First Series, c. 330-302 B.C.

Staters, tetradrachms and drachms

The Lampsakene gold stater coinage had ceased at about 330 B.C., and most of the silver issues, as we have seen, came to an end at the same time.<sup>1</sup> When Alexander crossed the Hellespont in 334, Lampsakos was spared from destruction through the personal intervention of Anaximenes, one of her citizens, who persuaded Alexander to be merciful (Droysen, *Hist. de l'hellénisme*, I, p. 139). Shortly after 330 B.C. Lampsakos began the issue of staters, tetradrachms and drachms of Alexandrine types.<sup>2</sup> Many of these coins lack the half-Pegasos mint-mark, but have been attributed to Lampsakos on other grounds.<sup>3</sup> Only coins of later date, Müller's Class VI, of the style of his Nos. 915-917, bearing the Lampsakene mint-mark, will be here treated in detail. When the half-horse is employed on the drachms of the earlier Fourth Century staters, it would seem to be a specially chosen

<sup>1</sup> Exceptional silver issues of much later date are the coins figured on Pl. IX, 32, 33, which are discussed below with the bronze coinage.

<sup>2</sup> Dr. Gaebler (*op. cit.*, p. 29) has attributed a selection of staters and drachms bearing the half-Pegasos symbol from the list of Müller (*Num. d'Alexandre le Grand*, Nos. 602-619, *Incerti Macedoniae*, etc.) to Lampsakos in the Fourth Century. Müller's Nos. 912-913, drachms with the monograms **M** and **M** which Müller placed in his Class VI, belong among the earlier issues. Müller had already suggested that Nos. 615-619 might probably belong to Lampsakos (*Num. d'Alexandre*, p. 196 and 235).

<sup>3</sup> In *Numismatic Notes and Monographs*, No. 21, *Alexander Hoards II*, Demanhur, Mr. E. T. Newell has attributed tetradrachms to Lampsakos. He has also assigned a large number of other Alexandrine issues to this mint during the Fourth Century, though this material has not yet been published by him. Mr. Newell has most generously placed this material at the writer's disposal, and the brief sketch of the Fourth Century issues here given owes much to his assistance.

emblem of a particular moneyer rather than a true mint-mark. For it is



Fig. 16

found only occasionally, and is not universally used on this series. In fig. 16, there is shown a drachm of the type of Müller, No. 913 (Num. d' Alexandre) bearing the half-Pegasos, and the monogram  $\Lambda\Lambda$  under the throne. This monogram has been interpreted by Müller (*op. cit.*, p. 235) as containing the initial letters of the ethnic  $\Lambda\Lambda\text{M}$ . But since this is found also in the variant  $\Lambda\Lambda$ , and since it alternates with other Greek letters and symbols on the reverses of the drachms, it probably should be regarded as a private mark. These drachms were struck about 330-302 B.C., and are considerably earlier in style than the Alexandrine coinage consisting of gold staters and silver tetradrachms which regularly bear the mint-mark of the city, which will be discussed below. From about 330 B.C. to 302 B.C., when Lysimachos gained control of the city, Lampsakos probably continued to issue Alexandrine coinage more or less uninterruptedly. This coinage was a regal coinage begun by Alexander and continued after his death.

## ALEXANDRINE COINAGE OF LYSIMACHOS

302-281 B.C.

Staters and drachms

Lysimachos at first struck drachms at Lampsakos with the types and name of Alexander, bearing his own personal emblem, the fore-part of a lion beneath the half-Pegasos, Pl. VII, 1, ( $\Gamma\text{OP}$ , under the throne, Rome, Museo delle Terme). This issue would most naturally be placed in the early period of his tenure of Lampsakos, perhaps in 302 B.C., when he first gained the city (Niese, *Geschichte der Griechischen und Makedonischen Staaten*, I, p. 342) or after the battle of Ipsos in 301 B.C. when Lampsakos was definitely allotted to Lysimachos (*ibid.*, p. 352). The name of Alexander still continues to be used on this drachm although Lysimachos had adopted the royal title some years previously, i.e., 306 B.C. Drachms of Alexandrine types but with  $\text{BA}\Sigma\text{I}\Lambda\text{E}\Omega\Sigma$   $\Lambda\text{Y}\Sigma\text{I}\text{M}\text{A}\text{X}\text{OY}$  and the badge of Lampsakos together with Lysimachos' own personal badge, Pl. VII, 2 (Müller, *Die Münzen des Königs Lysimachus*, No. 24) have the symbol, a torch, beneath the throne, and the inscription  $\Lambda\text{Y}\Sigma\text{I}\text{M}\text{A}\text{X}\text{OY}$  below and upside down (r. to l.). A stater in the British Museum, Pl. VII, 3, bearing the mint-mark

of Lampsakos, the half-lion symbol of Lysimachos, and the subsidiary symbol, torch, belongs with this drachm. Certain drachms with the half-lion symbol and the inscription  $\Lambda\Upsilon\Xi\text{IMAXOY}$  similarly arranged, below and upside down, but without the Lampsakene emblem seem also to belong here (Amer. Num. Society, with monogram  $\boxtimes$  above the half-lion; Newell Collection, with dolphin in similar position=Müller, No. 25). A drachm of the Warren Collection (Regling, Sammlung Warren, 511=Müller, No. 23) is like the coin here shown, Pl. VII, 2, but lacks the torch beneath the throne. This torch symbol which is a third adjunct symbol on an Alexandrine tetradrachm surely of Lampsakos, Pl. VII, 8, and the peculiar placing of the inscription make it probable that the drachms cited above which *lack* the mint-symbol are nevertheless Lampsakene. If the drachm with monogram  $\boxtimes$  above the half-lion, cited above (Amer. Num. Soc.) belongs to our mint, so may also a gold stater of Lysimachos with these two adjunct signs (Newell Collection). All of the drachms with the name of Lysimachos appear somewhat later than the one struck in Alexander's name. The above drachms and the gold stater are the only coins which we can at present assign to Lampsakos under Lysimachos. A tetradrachm bearing Lysimachian types, horned Alexander head and seated Athena, appears to have the fore-part of a winged animal in the left field, Pl. VIII, 7 (British Museum) but the symbol is partly off the flan, and quite uncertain, and the far wing of Pegasos which is regularly visible on the true Lampsakene half-Pegasos is here lacking. Moreover, the obverse is from the same die as a tetradrachm belonging to a long series of Lysimachian tetradrachms bearing the same monogram as seen on our reverse, which were probably issued at Lysimachia in Thrace. There is therefore no evidence of any tetradrachm coinage of Lysimachos at Lampsakos bearing Lysimachos' own types.<sup>1</sup>

## ALEXANDRINE COINAGE

Second Series, 280-250 B.C.

Staters and tetradrachms, municipal issues

After the death of Lysimachos in 281 B.C., Antiochos I (281-261 B.C.) ruled the whole coast of Asia Minor, with the exception of the Pergamene kingdom, from Kyzikos to Miletos (Niese, *loc. cit.*, II, p. 85), and also Troas and the Hellespontine region. There is a tetradrachm of Antiochos

<sup>1</sup> In the catalogue, Die Münzensammlung des Stiftes Schotten in Wien, 1920, a tetradrachm of Lysimachian types, p. 164, No. 1803, having the forepart of Pegasos in the exergue is attributed to Lampsakos. We cannot judge without seeing a reproduction of the coin, but the Lampsakene symbol does not appear in the exergue on other types of Lysimachos or Alexander from our mint.

II, 261-246 B.C., or Antiochos Hierax (not Antiochos I, as Müller wrote, *Die Münzen des Königs Lysimachus*, p. 16, note 26) which has been cited as bearing the mint-mark of Lampsakos, Pl. VIII, 8 (Babelon, *Rois de Syrie*, No. 197). This tetradrachm however, has as principal symbol in the left field, a long burning torch which is usually interpreted as the mint-mark of Kyzikos, to which Babelon assigns the coin (*Rois de Syrie*, p. 27, and p. lvi; on p. lvi Babelon mentions the half-Pegasos of Lampsakos as occurring as a mint-symbol of this city on the coinage of Antiochos II but the coin shown on Pl. VIII, 8, is the only one known to the writer which bears the half-Pegasos). But as this would constitute the only case of the occurrence of the mint-mark of Lampsakos on the coins of the Seleucid Kings, it would be very dubious evidence of the issue of Seleucid tetradrachms at our mint.

There can be little doubt, however, that Lampsakos was subject to the early Seleucid rulers, for in 240 B.C., as the result of the struggle between Seleukos II (246-226 B.C.) and Antiochos Hierax, Lampsakos was obliged to seek the protection which Seleukos II alone could not provide from Attalos I of Pergamon (241-197 B.C.) and afterwards remained faithful to this king (Niese, *loc. cit.*, II, 158 and 391). Subsequently when Attalos died in 197 B.C., Antiochos III demanded the return of Lampsakos to a condition of dependence and subjection to tribute as previously under Seleucid rule (Niese, *loc. cit.*, II, p. 642). But Lampsakos resisted and won her independence finally by the help of the Romans after the battle of Magnesia, 190 B.C. (Niese, *loc. cit.*, p. 669, 680, 690 and 739). The status of Lampsakos under the Seleucid monarchs up to the time of Attalos I, seems to have varied considerably. At all events, as we hope to be able to prove, Lampsakos issued a local Alexandrine coinage during the first half of the Third Century.

Müller mentions three tetradrachms of Alexandrine types bearing the mint mark of Lampsakos, Nos. 915-917, which are here represented as follows: Pl. VII, 9 and 10 with  $\kappa$  beneath the throne=M. 917 (British Museum and Dr. W. Giesecke Coll. from the same pair of dies); Pl. VII, 11, with  $\mathfrak{B}$  beneath the throne=M. 915 (Paris Coll.); Pl. VII, 13, with  $\Delta$  beneath the throne=M. 916 (P. Saroglos, Athens). All of these tetradrachms have the same monogram  $\mathfrak{E}$  above the half-Pegasos, with a variation of  $\mathfrak{E}$  in the tetradrachm signed  $\mathfrak{B}$  under the throne. This same monogram or its variation occurs also on the gold staters here figured, Pl. VII, 4-6. From the position of this monogram on the coins, and its occurrence on gold and silver alike, we may designate it the primary monogram. Two of the gold staters, Pl. VII, 5, 6 bearing the primary monogram— $\mathfrak{E}$ , bear secondary monograms,  $\kappa$  and  $\mathfrak{A}$ , similar to those found on the tetra-

drachms, Pl. VII, 9-11. Again, a gold stater, Pl. VII, 4, and a silver tetradrachm, Pl. VII, 8, having the same primary monogram and the half-Pegasos, bear the same secondary symbol, a torch, which has already been found on the Alexandrine coinage of Lysimachos, Pl. VII, 2.

The three gold staters here shown, Pl. VII, 4-6, are the only known issues in gold of the mint of Lampsakos during this period. They are all from the Anadol hoard (q.v. below). As far as we can judge from the account written in Russian<sup>1</sup> of this hoard, there were perhaps eight examples in the find, and there may have been more varieties than we are able to show here. The majority and perhaps all of the tetradrachms here published have not hitherto been figured. Four of these are varieties not described by Müller: Pl. VII, 7, 8, 12, 14. Pl. VII, 11, is from the British Museum, and has another variety of the primary monogram or symbol. Pl. VII, 8, is from Mr. Newell's collection with secondary symbol, torch; Pl. VII, 12, is from the Museo delle Terme, Rome, with secondary letter A beneath the throne; Pl. VII, 14, is a coin from Mr. Newell's collection, *without* the primary monogram, bearing a thyrsos and a new monogram  $\text{E}$ , both above the mint symbol. The tetradrachms, Pl. VII, 8-12, bear the primary monogram, and are of closely similar style. No. 7 is somewhat earlier than this group. Nos. 13 and 14 are closer in style to the central group than No. 7, but just a degree later.

It would appear then that the above staters and tetradrachms, all of which, except No. 14 of Pl. VII, bear the same primary monogram  $\text{E}$  or its variants, are about contemporaneous, and we are able to assign them to the first half of the Third Century B.C. from the evidence of the Anadol hoard in which these staters were found. This hoard (E. Pridik, *Bulletin de la Com. Impér. Arch.*, 1920) was composed of gold staters of an unknown total of which 979 were received at the Hermitage, Petrograd. Of this number there were 11 staters of Philip II, 694 staters of Alexander, 21 of Philip III, 250 of Lysimachos, 2 of Demetrios Poliorketes, and 1 of Seleukos I. Since the latest coins in the hoard are the stater of Seleukos I, 306-281 B.C., and those of Demetrios, 306-283 B.C., and the staters of Lysimachos (royal coinage), 306-281 B.C., the date of burial could not have been earlier than 306 B.C. But our concern is to try to ascertain the latest date at which the hoard could have been deposited. Now, as the staters of Lysimachos (306-281 B.C.) to judge from the plates, were all in mint state, the hoard can scarcely have been deposited so very many years *later* than 281 B.C.

<sup>1</sup> A brief abstract in English of the account of the Anadol hoard was made for Mr. Newell to whom the writer is indebted for free access to his collection of Alexandrine issues of Lampsakos.

unless a more intensive study of Lysimachus' coins should prove that some of the Lysimachian staters in this hoard are posthumous issues. A more careful study of this hoard from this point of view with access to the coins themselves would doubtless yield a more exact date. Therefore, the staters shown on Pl. VII, 4-6 (Pridik, *op. cit.*, pl. x, 420 and 426) would have to be assigned to a period ranging from c. 280 B.C. to 250 B.C., the very latest date to which we should be inclined to bring down the possible burial of the hoard. The tetradrachms which, as we have shown, bear similar monograms, and are closely united *inter se* by stylistic similarity, should consequently be given to the same period.

The period to which Dr. Gaebler (*op. cit.*, p. 32) assigns the Alexandrine tetradrachms noted by Müller (*loc. cit.*, Nos. 915-917) is 190-175 B.C., when he assumes that Lampsakos, now a completely free and autonomous state after the defeat of Antiochos at Magnesia in 190 B.C. began to celebrate her freedom by the issue of silver coins of large denomination. But, while it is true that the Battle of Magnesia marks an epoch in the political history of Asia Minor which finds its numismatic expression in the revival of the long popular coin types of the Alexandrine tetradrachms issued by the newly freed cities of Ionia (British Museum Catalogue Ionia, p. xlvi), and also probably of northern Asia Minor, these Second Century issues are no stylistic parallel for the Lampsakene Alexanders. One need only compare the coins illustrated by Head in *Coins of the Ancients*, pls. 36 and 48, to draw the obvious conclusion that our Lampsakene Alexanders belong to Head's Period V, c. 280-190 B.C., rather than to his Period VI, c. 190-100 B.C.

Having now reached the determination of the broad limits of the period within which, on grounds of style alone the Alexandrine coinage of Lampsakos must have been issued, let us examine some of the Third Century coinages bearing similar types with a view to limiting our Lampsakene Alexanders within narrower dates. The Alexandrine types of Antiochos I Soter, 281-261 B.C., issued early in his reign (Babelon, *Rois de Syrie*, pl. iv, 3 and 4) are manifestly more akin to the posthumous Alexandrine issues of 323-307 B.C. than to our coinage. An Alexandrine coinage commencing in the latter part of the Fourth Century and continuing through the Third Century would be an ideal term of comparison, and such a one fortunately is available in the coinage struck at the mint of Arados. Happily we are aided here by the fact that the latter half of the series is dated coinage, and therefore such comparisons as we may be able to make, will have a greatly increased value. The Aradian Alexanders are not illustrated in any one work in a continuous series as fully as one could wish for our present

purpose, but from the plates of Rouvier's monograph, *Num. des villes de la Phénicie* (J. I. N., 1900), we may very quickly select those coins most closely resembling our Lampsakene issues. On pl. Z<sup>1</sup>, Nos. 1 and 2 are figured two Alexandrine issues which, according to Rouvier's and Hill's dating, fall within the period c. 260-240 B.C. The first (*op. cit.*, pl. Z<sup>1</sup>, 1) which Rouvier dates between 259-240 B.C., and Hill, between 261-243 B.C., is no earlier and no later in style than our tetradrachms which bear the primary monogram  $\Sigma$  (and variants), Pl. VII, 7-13; while the second Aradian piece (*op. cit.*, pl. Z<sup>1</sup>, 2) which bears the date "year 19" of the Aradian era commencing in 259 B.C. and was consequently struck in 241-240 B.C., is nearer in style to the tetradrachm of Lampsakos lacking the primary monogram, which seems to be the latest issue among the existing Alexanders from our mint. While of course we shall not push our argument so far as to maintain that our Lampsakenes commenced in 260 and ended in 240, we are certainly justified in deducing that they fall approximately within the period 280-250 B.C.

The Third Century issue of Alexandrine staters and tetradrachms of Sinope<sup>1</sup> is another series with which we may compare our Lampsakene coinage of the same denominations. The style of the Sinopean coins, is, however, peculiar to the locality of the Black Sea, so that the comparison of styles is rendered more difficult. On the whole, the style of the Sinopean Alexanders would seem somewhat later than the Lampsakene. But examples of staters of both mints occurred in the Anadol hoard so that the coinages cannot be very far apart.

The tetradrachms attributed to Kyzikos in the Third Century (Head, *Coins of the Ancients*, pl. xxxvi, 1) are about contemporaneous in style with the Lampsakene tetradrachms. This Mysian city (a near neighbor of Lampsakos, both belonging in this period to the province of Hellespontine Phrygia) first appears as an independent community in 218 B.C., but had probably obtained full autonomy much earlier under Antiochos II (Niese, *op. cit.*, p. 135). Now, considering the numismatic evidence in full, that derived from the dated Third Century coins of Arados, and that derived from the analysis of the Anadol hoard, we are most naturally led to the conclusion that Lampsakos also was a free city during the reign of Antiochos II, 261-246 B.C. Niese considers that Antiochos II, pressed by the political situation, must have granted the Ionian coast cities their autonomy, and states that Miletos, Smyrna and Erythrai are definitely known to have won autonomy from Antiochos II. Autonomy does not mean necessarily freedom from tribute, and Lampsakos may have possessed this semi-

<sup>1</sup> Newell, *The Alexandrine Coinage of Sinope*, *Amer. Journ. Num.*, LII (1918).

autonomy, which it seems probable Kyzikos and many other powerful cities of Asia Minor had obtained from the Seleucid king.

To this period then, we should tentatively assign these autonomous issues of the city of Lampsakos. They are but the continuation after an interval of the Fourth Century Alexandrine coinage and the Lysimachian issues. They form a very compact group not divisible into series, and hence we cannot (with the material extant) postulate a very long period of issue. The only really obscure point is the political status of the city with relation to the empire of the Seleucids, but from the scanty sources at our command, the inferences we have made seem allowable. The only other possible period, politically considered, when Lampsakos would have been able to strike a sovereign coinage is when she came under the protection of Attalos I of Pergamon, 240-197 B.C., but there is no other evidence which we can bring forward to support a thesis that Lampsakos became an autonomous city-state under Attalid protection; and, as we have seen, the numismatic evidence is all in favor of our placing the coinage before rather than after 250 B.C. The tetradrachms show a considerable laxity of style as compared with the drachms of Lysimachos from our mint, so that we are more inclined to date their issue under Antiochos II than under Antiochos I.

The autonomy which Lampsakos enjoyed was probably not very complete nor of long duration, so much we may conclude from the character of the issues. Also, as we already have stated, under Seleukos II (246-226 B.C.), we find Lampsakos obliged to appeal for protection to Attalos in 240 B.C. which would seem to indicate the precarious nature of her independent position.

### SILVER TETRADRACHMS

After 190 B.C., autonomous issues

The issue of small silver of local types at Lampsakos practically ceased as was shown above about 330 B.C. During the last quarter of the Fourth Century and the early Third Century, the coinage consisted of (1) posthumous Alexandrine types bearing only occasionally the Lampsakene mint-mark (regal) and (2) of Alexandrine types bearing the personal emblem of Lysimachos (regal). Before the middle of the Third Century Lampsakos began the issue of Alexandrine coinage invariably bearing the badge of the city (autonomous).

The political fortunes of Lampsakos after the death of Alexander in 323 B.C. can only be traced by following that of the province of Phrygia on the Hellespont in which it was located. This former Persian satrapy was given to Arrhabaios after the meeting of the Diadochi at Triparadeisos in

321 B.C. Two years later the satrapy was given to Antigonos who in 315 gave it to his nephew, Ptolemy. In 309-308 this Ptolemy was poisoned by Ptolemy I, of Egypt and the satrapy given to Phoinix (governor for Ptolemy I), but soon it returned to Antigonos' side. In 302 came the attacks of the Allied Successors against Antigonos as a result of which after the decisive contest at Ipsos in 301, Lysimachos and Seleukos I were victorious, whence followed the assignment of the satrapy to Lysimachos. The city of Lampsakos had already surrendered in 302 to Lysimachos' forces. After Lysimachos' death in 281, we have to assume that Lampsakos was subject to Antiochos I, 281-261, although we know no Seleucid coinage struck at this mint during his rule. Under Antiochos II, 261-246, were probably issued the autonomous coins shown on Pl. VII. It would seem probable that Lampsakos did not maintain complete autonomy under Seleukos II, 246-226, for as we have seen in 240 B.C. she appears to have been under Seleucid rule, and after that date until 190, the city was allied with the Pergamene dynasty. When Antiochos III (222-187 B.C.) came into conflict with Attalos I (241-197 B.C.) in the year 218, Lampsakos renewed her pledge of loyalty to the Attalid monarchy, and later on was rewarded by Eumenes (197-159 B.C.) who maintained and defended her independence against the attacks of Antiochos III. After the final defeat of the Seleucid monarch in 190 B.C., and the conclusion of peace in 188 B.C., the city was recognized as definitely free and autonomous, having no dependence whatever upon the now powerful Pergamene monarchy.

At this time began the issue of the Priapos tetradrachms. This series, Pl. VIII, 1-6, begins with a tetradrachm of fairly good style and extended over a period of some ten decades. The earliest style is that of the tetradrachms, Nos. 1 and 2, as the finer treatment of the Priapos head indicates. The coarser rendering of the head, the heavier beading and later character of the inscription of No. 3 would seem to warrant placing this piece after Nos. 4-6. On the other hand, the style of the Apollo figure of the reverse is quite superior to that of the Apollo of Nos. 4-6. Still the Priapos head of No. 3 is so closely akin to that of No. 6, and the inscription of such decidedly later character, that the correct order of the issues is probably 1, 2, 4-6, 3. This arrangement is supported also by the use of the same monogram on the coin of Sokrates, No. 3, as on the issues of Promethion, Nos. 5-6. Hence the order of issue by mint-officials would be: Demetrios, son of Demetrios, Nos. 1 and 2; Ephesios, son of Theodoros, No. 4; Promethion, son of Lampon, Nos. 5 and 6; Sokrates, son of Theophanes, No. 3.

## II BRONZE

## A. Fourth and Third Centuries B.C.

This series begins with the Janiform head and Pegasus types, Pl. IX, 1-3, parallel in style with the silver issues of the same types shown on Pl. VI, 22-32, and may therefore be dated about 350 B.C. There follows next a series, Pl. IX, 4-8, with a head which has been called Nike, with a query, in the British Museum Catalogue Mysia. The earliest of these heads, Pl. IX, 4, 5, are akin in style to the heads of the Nike and Hekate of the gold staters, Pl. III, 8-10, and 19-20, which were placed after 350 B.C. The small heads on the coins, Pl. IX, 9-11, with laurel wreath, upturned hair and a small horn over the forehead, may represent a river-nymph or Io (Num. Chron., 1917, p. 11), a rare representation in Greek art. It may be noted that the hair is treated identically on these and the so-called Nike heads just preceding them, with the hair gathered in a top knot from which fly curly ends, as on the Hekate head of the gold staters. The Athena heads, Pl. IX, 12 and 13, the Zeus or Poseidon (?) heads, Pl. IX, 19-24, are late issues of the Third Century, as may easily be judged from their style.

## B. Second Century B.C. and Later.

The coins of the latest date before the Imperial Coinage are the Apollo head, Pl. X, 1, surely of the Second Century, and the Priapos heads, Pl. X, 2-5, all with ΛΑΜΥΑΚΗΝΩΝ on the reverse. The two Priapos heads, Pl. X, 6 and 7, with the kantharos reverse and split inscription ΛΑΜ (*obv.*) ΥΑ (*rev.*) are the crudest appearing of all these heads, and are therefore placed at the end of the autonomous series. In fig. 17, is shown a coin

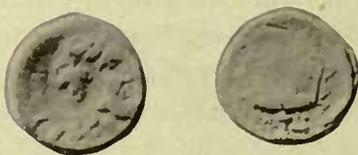


Fig. 17

which recently came into the writer's possession through the kindness of Miss Isabel F. Dodd of Constantinople College. It is said to have been found near Smyrna. The obverse is counter-marked with a bunch of grapes in round depression; the reverse bears the inscription ΛΑΜΥΑ, a monogram and half-Pegasus symbol (cf. Mionnet II, p. 562, No. 313).

## IMPERIAL COINAGE

### AUGUSTUS TO GALLIENUS

#### AUGUSTUS.

- 1  $\text{C}\epsilon\text{BACTOY}$  Laureate head of Augustus, to r. Rev.  $\text{\AA}\text{AMYAK}$  Priapos standing l., r. hand raised. Plate X, 8
- 2 [ $\text{C}\epsilon\text{BACTOY}$ ]  $\text{\AA}\text{AMYAKH}$  Similar. Rev.  $\text{I}\epsilon\text{PA CYNK}\text{\AA}\text{HTOC}$  Head of Senate r. (cf. Mionnet II, p. 563, No. 319). Plate X, 9
- 3  $\text{KAI}\xi\text{AP }\xi\text{EB[A]}$  Bare head of Augustus to r. Rev.  $\text{\AA}\text{AM-}\gamma\text{\AA}$  Bust of Priapos r. Plate X, 10

#### TRAJAN.

- 4 B. M. C. 80. Rev. Statue of Priapos on basis to l.

#### MARCUS AURELIUS.

- 5 B. M. C. 81. Rev. Type of No. 20.
- 6  $\text{AVT KA-ANT}\Omega\text{NIN}$  Bare head of Marcus Aurelius, bearded to r. Rev.  $\text{\AA}\text{AMYAKHN}\Omega\text{N}$  Herakles, bearded and wearing chiton, standing to r., holding in r. hand a lion's skin which he is about to throw over the shoulders of Omphale who is standing half-draped, seen from the rear, with club (?) in her r. hand. Plate X, 11

#### FAUSTINA JR.

- 7 B. M. C. 82. Type of No. 10.

#### LUCIUS VERUS.

- 8  $\text{\AA}\text{OV AVP[HAIOC]}$  Bust of Lucius Verus laureate and draped r. Rev.  $\text{\AA}\text{AMYAK-HN}\Omega\text{N}$  Bust of Lucilla draped to r. Plate X, 12

#### COMMODUS.

- 9 B. M. C. 83. Rev. Nike to l. with wreath and palm.
- 10 [ $\text{AV}\text{\AA}?$ ]  $\text{KO-MMO}\Delta\text{OC}$  Bust of Commodus, slightly bearded to r. wearing cuirass and paludamentum. Rev.  $\text{\AA}\text{ANY-AKH-N}\Omega\text{N}$  Half-Pegasos r. in form of a sea-horse. Plate X, 13

#### SEPTIMIUS SEVERUS.

- 11 B. M. C. 84. Rev. Type of No. 3.
- 12 B. M. C. 85. Rev. Type of No. 20.

#### JULIA DOMNA.

- 13  $\text{IOV}\Delta[\text{OMNA}]-\text{C}\epsilon\text{BACT}$  Bust r. Rev.  $\text{\AA}\text{AN-}\gamma\text{\AA-KHN}\Omega\text{N}$  Similar to No. 10. Plate X, 14

#### CARACALLA.

- 14 [ $\text{AVT}$ ]  $\text{MAVPH-ANT}\Omega\text{NIN}$  Bust of Caracalla to r., laureate, wearing cuirass and paludamentum. Rev.  $\text{\AA}\text{ANYA-KHN}\Omega\text{N}$  Bust of Priapos draped and wearing taenia to r. Plate X, 15
- 15 B. M. C. 86. Rev. Kybele seated l. holding patera; before her, a lion.
- 16 B. M. C. 87. Rev. Homonoia standing near lighted altar, holding patera and cornucopiae.

## GETA.

17 AV[... ]OC CEΠTΓETAC Bust of Geta r., laureate, wearing cuirass and paludamentum. Rev. ΛANY-A-KHNΩN Similar to No. 10. **Plate X, 16**

## SEVERUS ALEXANDER.

18 Carlsruhe. Zeit. f. Num. VII, p. 25, No. 2, pl. i, 15. Rev. [EΠI CT] TPPEIMOY ΛAMYAK-HNΩN. Phrixos on ram; below, Helle lying on waves.

## PHILIP I.

19 B. M. C. 88. Rev. Priapos within hexastyle temple.

## TREBONIANUS GALLUS.

20 AVTKOIBTPΓAλλOC Bust of Trebonianus Gallus to r., laureate, wearing cuirass and paludamentum. Rev. ΛANYAKHN-Ω-[N] EΠICTPCOC-CIOV Statue of Priapos on basis l., holding in r. hand, kantharos over lighted altar, and thyrsos in l. **Plate X, 17**

21 B. M. C. 89, 90. Rev. Athena holding Nike in r., standing l., resting l. hand on shield. ΛANYA-KH-NΩ-N EΠICTPEVT-VXIOVN, EΠICTPCOC-CIOV

## VALERIANUS I.

22 B. M. C. 91. Rev. Type similar to No. 21, but EΠIΔA-Φ-NO-V.

## GALLIENUS.

23 AVTOΓ-ΑΛΛIΗNO-C Similar to No. 20. Rev. ΛANYAKHN-ΩN Similar to No. 20. **Plate X, 19**

24 AVKTTAΓAΛΛIΗNO[C] Similar. Rev. [ΛAN]-YAKHNΩ[N] Abundantia (?) standing facing, holding rudder in r., cornucopia in l. **Plate X, 20**

## ALLIANCE COIN OF LAMPSAKOS AND PHOKAIA

## COMMODUS.

25 AVTOKMAV-PKOMMOΔOC Similar. Rev. EΠICTPA MO-CCXA BNE The city-goddess of Phokaia on l., turreted and leaning l. arm on spear, clasping r. hand of city-goddess of Lampsakos helmeted and resting l. hand on shield; between two, ΩMONOI[A] in three lines; in exergue, ΦΩKAIΕΩN ΛAMYA (cf. Mionnet II, p. 565, No. 330 where the proper name ΦΩKAIΕΩN is read IOVAIΕΩN). **Plate X, 18**

ADDENDA

(cf. p. 63, note 1).

1. Of these unique pieces without the ethnic, the drachm (Gaebler, *op. cit.*, pl. ii, 1) seems certainly to be transitional in style, and the three coins (*ibid.*, pl. ii, 1-3) therefore may be regarded as sporadic issues of the Fifth Century. However, this does not affect our main contention that the coins of our Group B are to be placed at about the beginning of the Fourth Century, and that their "archaism" is not a retention such as occurs in the transitional period, but a deliberate revival of the next Century. Compare further Dr. Regling's remarks on the chronology in his review of Dr. Gaebler's paper (*Zeit. f. Num.*, xxxiv, p. 373). This writer would assign the extremely scarce issues (Gaebler, pl. ii, 2, 3) to 464-454; the coins that seem rightly to head the series of "obols" and "diobols" (*ibid.*, pl. ii, 4, 5 = our Pl. VI, 2, 3) to 454-415. In the period 405-387, Gaebler's third subdivision, he would include not only the "diobols" (*ibid.*, pl. ii, 26-34 = our Pl. VI, 22-32) but also part of the "obols," while the great majority of the "obols," he would place between 387 and 365. The smaller denominations, he suggests, probably began earlier than the larger pieces, were continued contemporaneously with these latter, and survived them. This is an interesting point of view, and it may be noted that the coins on our Pl. VI, 19 and 30 would easily pass as contemporaneous issues, as their reverses indicate. The distinction in style, Dr. Regling thinks, may have been maintained as a method of distinguishing the two denominations.

(cf. Catalogue of Types, No. 17c).

2. The Maenad head, No. 17e, formerly Caruso, was sold again in Sotheby's Cat. "A Russian Nobleman", June, 1924, No. 176, and is now in the Newell Collection.





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BRONZE COINAGE, FOURTH TO SECOND CENTURY B. C.



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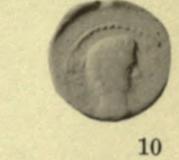
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