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MUSEUM:OF FINE:ARTS BOSTON **

FUIDE TO THE CATHARINE PAGE PERKINS COLLECTION OF GREEK AND ROMAN COINS





GUIDE TO THE CATHARINE PAGE PERKINS COLLECTION OF GREEK AND ROMAN COINS

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PREFACE.

THE Catharine Page Perkins collection of Greek and Roman coins represents a portion of the purchases which have been made for the Classical Department of the Museum with the munificent bequest of the lady in whose memory it is named. It consists of 609 specimens, which were acquired in three lots, in 1895, 1897, and 1900 respec-The formation of each of these lots was the work of several years on the part of a devoted friend of the Museum, who has had unusual opportunities for securing choice examples, and who has constantly kept before himself the highest standard of excellence as the test for the acceptance of each coin that was to come into our collection. As a result the collection, though small, is of remarkably high quality, for both the beauty and the brilliant preservation of its individual specimens, some of which are exceedingly rare, and a few are probably unique. As evidence of the estimation in which certain of them are held by connoisseurs, it may be of interest to state that one coin now in this collection was sold at a London auction a few years ago for over \$1500, and another, at a different sale, brought over \$900. Figures like these show that the formation of a collection of first-rate Greek coins is no longer a simple or inexpensive matter; yet it is to be hoped that in time our Museum may possess specimens of all the more beautiful Greek types, as they form one of the most

exquisite and instructive branches of Greek art, — an inspiration alike to the artist, the designer, and the student.

In view of the importance of the study of numismatics, and the limited opportunities for a knowledge of it which are offered to the majority of those whom the Museum is intended to benefit, the Trustees have desired to issue a popular handbook as a companion to the Perkins collection; and this Guide has therefore been prepared by an expert on the subject, whose name is withheld at his request. The author wishes me to say that his statements "make no claim to originality; where they are accurate, they are derived from many writers, whose opinions will be easily recognized by those who are acquainted with works on numismatics, though for the sake of simplicity specific references to authorities are omitted in the text."

In spite of this disclaimer, however, I think that both those who are familiar with the study, and those who approach it with the desire for information, will agree as to the skilful manner in which a difficult task has been accomplished, and will appreciate this addition to the educational work done by the Museum. For fuller information students may be referred to Barclay V. Head's Historia Numorum, Percy Gardner's Types of Greek Coins, and G. F. Hill's Handbook of Greek and Roman Coins, Appendix V of which contains an exhaustive bibliography.

For the benefit of specialists, the summarized description of the collection which appeared in the twenty-sixth Annual Report of the Trustees is reprinted in the latter part of the book. The plates at the end were made from photographs taken directly from the coins themselves, not through the medium of plaster casts.

EDWARD ROBINSON,
DIRECTOR OF THE MUSEUM.

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INTRODUCTION.

The study of Greek numismatics is an important branch of Greek archaeology and aesthetics. Notwithstanding the fact that coin collections have been popular Modern since the sixteenth century, — Petrarch, indeed, Authorwas a collector in the fourteenth century, — the systematic study of Greek coins is the growth of little more than a hundred years: We owe our knowledge largely to the labors of Eckhel (1792), Mionnet, Leake, Lenormant, Waddington, Mommsen, Imhoof-Blumer, Babelon, Gardner, and Head.

Greek coins are important for the help they afford in tracing the political, municipal, and commercial history of the ancient world; they also throw light on Greek society, religion, mythology, philology, iconography, chronology, and geography; and they that have been termed "the grammar of Greek Art." Greek coins are further original works of art and not copies, and many of them take rank among the finest examples of ancient art. Their designs are characterized by

² For instance, coin types often call attention to the existence of local cults, and help to define them. The same divinity was sometimes differently regarded in various places: for instance, the Artemis worshipped at Syracuse and the Artemis of Ephesos embodied diverse ideas, and their dissimilar forms on the coins bear witness to the dis-

tinction.

¹ It is interesting that this great English scholar and traveler, convinced of "the great importance of a systematic collection of Greek coins to the study of every branch of literature connected with the Greek language," wished that his collections should be deposited in a place "habitually frequented by persons likely to consult them." His will directed that his collection should be offered at a low valuation to the Universities of Cambridge or Oxford in England, and in the event of refusal to the "Harvard University at Cambridge, Massachusetts." He died in 1860. The collection was accepted by Cambridge, England.

largeness of conception and treatment, and grandeur of effect in spite of the limited space at the artist's command. They exhibit the directness of subject, the simplicity and repose of larger monuments of Greek art; and although rarely the work of important artists, generally in fact of mediocre ones, they reflect in a vivid way the Greek appreciation of life. The richness of imagination of the Greek artist is illustrated by them with particular effect. He was never at a loss for a subject, but when compelled by tradition to reproduce a well-known type, for instance, Persephone at Syracuse, or Apollo elsewhere, he is seen to repeat the same figure or head again and again, ever with some happy and telling variation. The number of types is legion: coins were regarded as the badge of freedom, and so general was the sense of independence that no town was too small to issue them.

The origin of coinage was a late event in the history of mankind. The Egyptian, Assyrian, and Mycenaean civilizations had conducted their commerce without Origin of coins, and Greek life was already highly organized before the invention was made. Unnumbered years of experience lay behind the discovery. The earliest stage was simple barter: and this gave place to the employment of objects of food, use, or adornment for purposes of trading, for instance, stone implements, fish, shells (cf. the American wampum), amber, and the like; and for larger transactions cattle and slaves. Gold and other metals, when discovered, were employed at first rather as objects of personal ornament, and from their use in this fashion came to supersede the earlier non-metallic currencies in the exchange for commodities.2 For this purpose the metals

¹ It has been suggested that the objects of amber in the Buffum Collection, exhibited in Case E in the Wood Carving Room of the Museum, especially the necklaces and the string of roughly cut beads,

are early forms of money.

² A gold ring of very early date in the Museum collection is the exact equivalent in weight of two gold staters. The probability is that long before coins had been struck, the precious metals were fashioned in this way into simple jewelry of definite weights, according to the current standards, to be employed for personal adornment or for money, as circumstances might require. The step from this to a perfect coin was a short one.

had to be weighed; and systems of weights and measures were developed long before coinage was known. Indeed, the relation in value of different metals to one another was perfectly understood; and definite ratios had been fixed long before any coin was struck; in fact the system of bimetallism actually preceded coinage. At the time when coinage was introduced, the weight of the standard piece of metal, the *stater* (or *shekel*¹), in any given city or state, was as clearly determined as is the weight of the dollar to-day; only instead of counting a number, there being no coins, it was necessary to weigh a mass of metal to arrive at the desired sum of minae and talents.² Coinage was

1 The weight of the gold stater was almost constant, while that of the silver varied much in different states. Since the mina and talent were multiples of the stater, it will be understood that the value of a talent of silver in one town might be very different from that of a

talent of silver in another.

It may be explained that the talent was not a coin, but a weight. The scale was very simple, — fifty shekels or staters equalled one mina, and sixty minae equalled one talent. Thus a talent of gold in Athens represented three thousand gold staters of the same kind as No. 317; or a mina of silver at Aegina was equivalent to fifty Aeginetan staters similar to 322 (Pl. IV). An instance will make the explanation clearer. Pliny (N. H. xxxv, 92) relates that Apelles received twenty talents of gold for his portrait of Alexander the Great.

20 talents = 20×60 minae = 1200 minae. 1200 minae = 1200×50 staters = 60,000 staters.

The picture therefore cost 60,000 gold staters or Alexanders, No. 154. This amount, it may be added, making allowance for the purity of the Greek metal and the alloy of modern coins, is equivalent to \$348,000 of gold. Pliny adds that this vast sum was paid to Apelles by weight, and not by number, in the same way that bankers nowadays use the balance for large payments.

balance for large payments.

Pliny again (N. H. xxxiv, 55) states that the original bronze statue of the Diadumenos by Polykleitos, of the type of cast No. 102 cost a

hundred talents, i. e. of silver.

100 talents = 100×60 minae = 6000 minae. 6000 minae = 6000×50 staters = 300,000 staters.

If Pliny spoke of Attic talents, the statue cost the equivalent of \$134,000 of gold. If he spoke of Aeginetan talents, and Polykleitos being a Peloponnesian was accustomed to the Aeginetan scale, the sum paid was considerably more, nearly \$200,000, for the Aeginetan scale was nearly half as high again as the Attic (vide p. 9).

The mina is familiar from the story of the writing on the wall in Daniel, v, 25, where Mene, Mene, Tekel, Upharsin, means simply, a

but the end of the process that began with barter, and it is easy to appreciate the immediate cause of its employment. The process of weighing must have been slow and inconvenient. "Only those who have gone through the weary process of cutting up and weighing out lumps of silver, disputing over the scale, and asserting the quality of the metal, can appreciate our feelings of satisfaction at again being able to make purchases in coin." The invention of coinage, consisting simply in the stamping by some authority of a mark on small pieces of metal to show that they were of a certain quality and weight, was therefore a

simple device to overcome an obstacle to trade.

The earliest coins of which we know were neither of gold, nor of silver, but of electrum, an alloy of the two metals. The Earli- Electrum, or white gold as it was also called, est Coins. was found in a natural state, and was regarded, in the earliest days at least, as a distinct metal. The most primitive of these electrum coins were struck possibly by Gyges, king of Lydia, 716-652 B. C.,2 and bore no decoration more elaborate than a simple striated surface, No. 454 (Pl. V). Gold coins were not struck until the following century, and were certainly not common until the time of Kroesos, king of Lydia, 561-546 B. C. Transactions in gold were no doubt general before this date, and must have been effected by means of rings or bars of metal weighed in the manner employed before the introduction of coinage. Silver was coined soon after electrum; the earliest silver coins were issued in the early part of the seventh century, in towns and islands of Asia Minor, Chios, No. 492; in the islands of the Aegean, Delos, No. 396,

mina, a mina, a shekel, and the parts of a shekel. The literal meaning would have been clear to those present; Daniel interpreted it in a mystic manner.

1 Quoted by Professor Ridgeway in *Origin of Currency*, p. 296, from *River of Golden Sand*, by Captain Gill, ii, p. 78.

² An interesting coincidence is presented by the fact that coinage was introduced into China at the same time, namely, between the years 675 and 670 B. C. The weights adopted for Chinese coins also coincide with those employed by the Greeks. The civilization of China and that of Greece appear, therefore, in some measure to share a common history. There is no evidence yet available to explain this fact.

and Naxos, No. 397; and in the island of Aegina lying off the coast of Attica to the south of Salamis, No. 322 (Pl. IV). These coins are uninscribed: their origin is

attributed or determined by their types alone.

The earliest coins bore a design on the obverse ("head") side alone; the reverse ("tail") side showed simply the impression of the punch by means of which the Decoracoin was hammered into the obverse die — Orton of reskii, No. 92 (Pl. II), Aegina, No. 325 (Pl. IV). Next, the reverse "type" is enclosed in a hollow ("incuse") square, Lydia, No. 537 (Pl. V), until finally the incuse square disappears altogether, leaving its memory in the slight sinking that always distinguishes the reverse of a Greek coin from the obverse. See Nos. 12, 157. The development may be well traced in the coins of Thebes, Nos. 261, 265 (Pl. IV), 268.

Artistically, coins are most nearly related to bas-relief work in marble,2 and the problem the Greek coin engraver had to solve was much the same as that pre- Artistic sented to the sculptor of relief work, to keep his Problem of Greek surface flat while producing the effect of work "in Coins, the round." The octadrachm of the Orreskii, No. and their 92 (Pl. II), and the tetradrachms of Akanthos, e.g. Minting. No. 126 (Pl. II), are fine instances of earlier attempts in this direction. When the technical mastery was attained, artists became bolder, and a number of bodies in different planes, for instance the quadriga of the dekadrachm of Evaenetos, No. 85 (Pl. II), were represented without diffi-

¹ Copper coins are not known earlier than the end of the fifth century B. C. Thenceforward they are numerous. Copper coins struck in towns of Greece and Asia Minor during the Roman Empire, of the Greek Imperial Series, are many and interesting, but are rarely attractive. Copper coins are not illustrated in the Museum collection.

² It is certain that gem-cutters were often employed to prepare coin dies. None the less, coin-engraving was not intimately related to the engraving of seals. The matrix of a seal was a hard stone that could be cut more minutely than the metal die for a coin. Beyond this, the seal was produced in a non-reflective material, wax or lead, instead of the brilliant metal of a coin, and the considerations of light were therefore distinct. The gem-engraver, finally, was not conditioned by the necessity of keeping his work in low relief; it will be found that gem relief is usually much higher than that of coins.

culty. Even a more difficult task was attempted, to present faces in three-quarter view while preserving the flatness of the relief; see the tetradrachm of Amphipolis, No. 139, and the tetradrachm of Klazomenae, No. 460 (Pl. V), the artist relying on a subtle arrangement of light and line to produce the effect. Similar faces are found on the Frieze of the Parthenon, and the idea probably arose from that work. Representations of this nature were works of the better artists, and for the most part are of great rarity. The method was abandoned after use for about three quarters of a century (425-350 B. C.), either by reason of the difficulty of achievement, or the liability of the face to suffer from use. The coin artist had further to consider how to adjust his subject to the shape of the field, and in mastering this difficulty Greek artists excelled. They were equally successful in filling a circle, a square, or an oblong; cf. Naxos, No. 51 (Pl. I), Thebes, No. 265 (Pl. IV), Kyzikos, No. 415 (Pl. V). Complete mastery of coin engraving was general about the end of the fourth century, and is illustrated in the coinage of Alexander, No. 159 (Pl. II), and the magnificent tetradrachms of Lysimachos, Nos. 206-210 (Pl. III).

The work of the Greek artist stopped with the engraving of the die. The minting processes, consisting of the pre-paration of the "blanks," and the actual stamping seem to have been effected generally by inferior workmen. coins, the dekadrachms of Syracuse for example, are well struck, but most coins are irregular, and many of them exhibit unpardonable imperfections in the eyes of those accustomed to the products of modern mints. For instance, the obverse of No. 537, figured in Pl. V, was struck from a die worn almost beyond recognition. That the Greek artist possessed consummate technical skill is proved by all that remains of his work. The processes employed by him in marble work, and in the treatment of metals, glass, terra-cotta, hard stones, and other materials have never been surpassed. It causes surprise therefore that Greek coins should have suffered from a purely mechanical defect. The explanation is that skilled workmen and skilled handicraft were despised by the aristocratic citizens

of Greece as beneath their regard. The artist would not perform the work of an artisan. The artisans, in consequence, were usually slaves or foreigners, devoid of technical ability, and they executed the minting work as is seen carelessly and ignorantly. There can be no doubt that a Greek artist could have performed the labor irreproachably, had not his genius revolted from a task that he thought unworthy of him as a gentleman. Roman coins were struck far better.

The following is a list of the principal names of Greek

coins : -

JIII J								Names and Relative
Dala Jaraha								Values of Greek Coins.
Dekadrachn	n.	•	•	•	•	•	•	10 drachms
								(No. 85, Pl. II)
Tetradrachn	n.							4 drachms
								(No. 299, Pl. IV)
Didrachm .								2 drachms
								(No. 53 Pl. I)
Drachm .								6 obols (No. 304)
Pentobol.								5 obols
Tetrobol.								4 obols (No. 359)
Triobol, or	hen	nidr	ach	m				3 obols (No. 318)
Diobol .								2 obols (No. 333)
Trihemiobo							Ť	11 obols
Obol		:					•	(No. 309)
						•		
Tritemorion			•		•			3 obol (No. 314)
Hemiobol								1 obol (No. 311)
Trihemiteta	rter	nori	ion					a obol
Tetartemori	on.							i obol
Hemitetarte					Ĭ.	Ĭ.	•	k obol
TTOILL COURT CO				•	•	•	•	g 000.

All these coins, it will be seen, are based on the drachm and its sixth part, the obol, of which they are multiples or fractions.

The term stater gives some trouble. It means literally a weight, and probably at first denoted a piece of gold weighing 130 or 135 grains; for gold was the first metal weighed, and it is thought that the original standard gold weight was 130 or 135 grains.¹ Even when coins

¹ The most probable theory is that the ox was the earliest universal

were general, the term, originally adopted for gold, was probably confined at first to that metal, and exclusively to gold coins of 130-135 grains. For instance, the gold coin No. 532, weighing 130 grains, was called the stater of Kroesos. Only later was the term employed to include silver coins, and then only those of this particular weight. In this way the Athenian silver didrachm, No. 302, weighing 135 grains, the unit of the Athenian coin system, came to be called the Athenian stater, and No. 329 of the same weight, the unit at Corinth, was called the Corinthian stater. Finally the term was extended to embrace the unit, of whatever weight, in other systems, e. g. Aeginetan stater, No. 325, or Kyzikene stater, No. 413, weighing 195 and 250 grains respectively. The word thus had a specific sense, indicating a coin, first of gold and then of gold or silver, weighing 130-135 grains, and a second, more comprehensive signification, namely, coin unit. Using the word in its extended meaning, the dollar might be called the American stater, for it is the coin unit of America. or, similarly, the franc might be called the French stater. The word stater is used in both senses by modern numismatists.1

Just as it was seen in note I on page 3 that the mina and talent varied in accordance with the stater, so the weight of each of the above mentioned coins—from the dekadrachm to the hemitetartemorion, depended on that of its stater; and, consequently, in two towns where the

unit of value, and when gold was first employed, 130 grains of the metal were treated as equal in value to an ox. In this way the ox as the standard of valuation was superseded in time by a piece of gold

weighing 130 grains.

The gold unit of value has remained about 130 grains to this day. The aureus of Imperial Rome weighed 124 grains, while the solidus of Constantine, acknowledged as the standard for Europe under its name becant until the fall of Byzantium in the fifteenth century, weighed 70 grains—rather more than half the Greek stater. The English noble weighed 136 grains, and this was the parent of the British sovereign (123 grains) and the American half-eagle. The five-dollar gold piece to-day weighs 129 grains, and is thus within a grain of the weight of the gold unit fixed more than three thousand years ago.

¹ The confusion the word has caused to lexicographers may be appreciated by reading the note on the term in the Century Dictionary.

coin standards differed, coins bearing the same names were different in weight and consequently in value. This fact is apt to cause a little confusion. It is difficult at first to realize, for instance, that at Aegina and Athens, two states within sight of each other, the Aeginetan drachm weighed one and a half times as much as the Attic drachm. An analogy existed in the United States when the dollar and trade dollar, two distinct coins bearing the same name, were coined at the same time, and a similar difference exists to-day between the American cent and the French cent or centime.

The origin and development of coin standards are of first importance to the numismatist and metrologist, but have little interest for the student of art, and are not dealt

with here.

ITALY AND SICILY.

The coins are arranged in geographical order, going from north to south, and from west to east. The order is the following: — Italy; Sicily; Macedonia, Thrace, and the Mainland of Greece; the Greek Islands; Asia Minor; Syria; the North Coast of Africa. This arrangement is simple, and is sanctioned by tradition, but is open to the two objections that it treats the colonies of Greece before their parent cities, and it places the earliest coins of all, — those of Asia Minor at the end of the system instead of at the beginning.

ITALY and Sicily have been called the America of Greece. Numerous Greek colonies were spread along the coasts, and these issued many of the most beautiful Greek coins. The earliest coins of these Greek cities were those issued by the Achaean colonies in Magna Graecia (Southern Italy) early in the sixth century. This series is ill represented in this collection, but Sybaris, No. 19, is an instance. The coin is a thin silver plate showing the same type on both sides, in relief on the obverse and sunk on the reverse, as if to imitate a repoussé metal disk. This fabric lasted into the fifth century.

Sicilian coinage was not general until the end of the sixth century. The types at first were simple, as is seen at Zankle, No. 45, Naxos, No. 50, Selinus, No. 55, — but by degrees they were elaborated in accordance with a fine taste that is peculiarly Sicilian, — Himera, No. 40, Syra-

cuse, No. 62.

The greatest impulse given to coin-engraving in the West came from Athens, where art had been developed to a high degree under Perikles; and this was first felt at the Athenian colony of Thurii about 443 B. C. In that year the town was established under the protection of Athens, and it is thought that among the colonists may have been included artists who had worked for Pheidias. Their influence is supposed to have spread rapidly, and by the close of the century many of the most magnificent Greek coins had appeared from these western mints. Direct Attic influence may be traced in two of the coins of this

collection; No. 35, Terina (Pl. I), recalling the style of the Niké Balustrade (see casts, Nos. 491-497); and No. 28, Croton (Pl. I), which seems to reproduce the "Theseus" of the Parthenon (cast 410 C). The art also of representing faces in three-quarter view is supposed to have been derived directly from the Frieze of the Parthenon. Introduced into Italy it was developed to perfection in the wonderful creations of an unknown artist at Pandosia, No. 32 (Pl. I), and Kimon at Syracuse, No. 68 (Pl. I). The art of these Greek towns in Italy and Sicily may be recognized by a particular elegance of conception and extraordinary minuteness of execution, resulting occasionally in hardness when, as it seems, gem-engravers were employed to cut coindies, and used special methods more applicable to hard stones than to malleable substances, such as silver, — as, for example, Herakleia, No. 15, Croton, No. 30, Syracuse, No. 76. A certain elaborate picturesque quality, due partly to this peculiarity, is general in Italy and Sicily, but is never found in coins issued in Greece. (See Tarentum. No. 13, Velia, No. 23, etc.)

The history of Sicily is more interesting and better known than that of Greek Italy; and many of its incidents, from the early struggle with Carthage down to its submission to Rome, may be traced in the coins and illustrated

by them.

ITALY.

8-14. Tarentum (the Greek Taras), the modern Ta-

ranto, Colony of Sparta.

Taras, the son of Poseidon, according to the ancient story, crossed the ocean on a dolphin and founded Tarentum. Historically, the foundation dated from 708 B. C., and was due to the Spartan Phalanthos at the head of the Partheniae, or illegitimate sons who were born at Sparta during the Messenian War. In the course of time, the myth of Taras was transferred to Phalanthos, and it was related of him that he had been saved from shipwreck by a dolphin. This story is constantly represented on Tarentine coins. See Nos. 8 and 12.

As constant a type is a horseman, No. 13, probably Taras or Phalanthos, represented in connection with games held in honor of local divinities and heroes. These types, the boy on the dolphin and the horseman, were continued at Tarentum for a period of two and a half centuries, from 450 to 200 B. C.

On Nos. 9 and 14, Taras holds a Niké, symbolical of victory, and a trident, the symbol of his father Poseidon, in reference, perhaps, to Tarentum's position of command

of the Tarentine Sea.

15. Herakleia, on the Tarentine Gulf, half-way between Tarentum and Thurii, was founded by these two towns conjointly, in 432 B. C. In the fourth century it became a meeting-place for all the Italiotes, and was consequently of importance: many beautiful coins were issued there. On this coin is represented a head of Athena in crested helmet. On the helmet is seen a representation of Scylla hurling a stone, a subject suited to an Italian town. This terrible monster that dwelt between Italy and Sicily is shown as half woman and half fish, with dogs springing from her waist. In the field of the coin

ITALY.

may be seen a strigil,—the implement used by athletes for scraping their bodies after exercise in the palaestra (cf. the specimen in bronze in the Museum collection). It is placed here probably as a magistrate's symbol; that is to say, the sign of the magistrate responsible for the striking of the coin,—perhaps his signet. The elaboration of the work on this head of Athena suggests the hand of a gemengraver.

19. Sybaris, Achaean Colony on the Gulf of Tarentum.

This was the largest, richest, and most magnificent city of the Greek world in the sixth century. Its inhabitants, grown rich from the profits of the trade in Eastern goods carried hither from Miletos in Ionia, lived in magnificence: their luxury is proverbial. The town was built on the Krathis, and the bull may typify this river. The bull's head is turned back, possibly to fit the figure better to the coin. Compare an early Greek gem (red jasper) in the Museum for the same peculiarity.

20-22. Thurii, Athenian Colony.

Sybaris was destroyed in 510 B. C. Thurii was founded on the same site, 443 B. C., by the Athenians. The head of Athena, No. 20, with its crested, olive-crowned helmet, was chosen for the symbol, as on Athenian coins, Nos. 293, 295, but is here treated without archaism. The bull on the reverse, No. 21 (Pl. I), is the old sign of Sybaris, No. 19, now shown rushing $(\theta o \acute{\nu} \rho \iota o s)$ in allusion perhaps to the new name of the town. It may also, with the fish in the exergue, symbolize the river Krathis. The fish is a mullet which lives in brackish water. No. 21 is among the finest examples of this beautiful coin.

28-30. Croton, Achaean Colony, situated at the southern point of the Gulf of Tarentum.

This town was famous for its philosopher Pythagoras, and for its successes in the Olympic games. "To win numerous victories of this kind at the Hellenic games, in contests in which success depended upon skilful and judicious training of the athlete, which implies the exist-

ence of intelligence and leisure, the whole bent of the community must have been aristocratic." *Holm.* This aristocratic feeling is certainly exhibited in the coins, Nos. 28–30. The ruling divinities at Croton were Apollo, Hera of the Lakinian promontory, and Herakles, who had once sojourned at Croton and was regarded as an Achaean hero and even as the founder of the town; and these are all represented.

28 (Pl. I.) Youthful Herakles lying on a rock, holding a wine-cup. The pose resembles that of the "Theseus" of the Parthenon (see Parthenon Room, No. 410, Fig. E, East Pediment). Perhaps it is a "memory-sketch" of that work.

29. The head of Hera Lakinia wearing a diadem. "The Lacinian Hera, if a coin could be found unworn in surface, would be very noble; her hair is thrown free because she is the goddess of the cape of storms, though in her temple, there, the wind never moved the ashes on the altar. (Livy XXIV, 3.)"—Ruskin.

It is possible that the head was copied from a statue of the goddess in the temple at Croton. This was the most famous sanctuary in Italy, and its festivals, together with the Lakinian games, formed the common point of assem-

blage for all Italiote Greeks, in the fifth century.

30. Head of Apollo crowned with laurel.

These three coins, Nos. 28-30, are almost unworn in surface. They date probably from before the end of the fifth century.

32 (Pl. I.) Pandosia, probably colonized from Croton.

Head of Hera Lakinia. Compare No. 29. Probably the work of the artist of No. 21. His full name has not been preserved, as he signed the initial letters Ph only.

"The beautiful stater is one of the most exquisite productions of any Greek mint." *Head.* The issue of this famous coin may have been small; only four other examples are known; three are in national collections, the fourth is in a private collection in England.

33. Rhegium (the Greek Rhegion).

Head of Apollo, in the style of the artist Kratesippos. Rhegium was a colony of Chalkis in Euboea, founded in accordance with the directions of the Delphic oracle, and the original colonists were under the especial patronage of Apollo. Apollo was patron god of colonies and newly founded cities, and his oracle was often consulted before such undertakings were entered upon. Representations of him on coins are often due to this aspect of his divinity, as for instance at Croton, No. 30, and Syracuse, No. 71.

34-35. Terina, colonized from Croton.

35 (Pl. I.) Niké (Victory) seated, holding an olive spray. This graceful and beautiful figure is among the finest creations of Greek coin-engraving. It is probably the work of the artist of the Pandosia stater, No. 32 (Pl. I). Compare the gem-like fineness of this coin with the similar but more sculpturesque and broadly treated coin of Elis, No. 355.

37-38. Agrigentum (the Greek Akragas, the modern Girgenti). Colony of Gela.

37 (Pl. I.) This coin is very famous. It represents two eagles on a hare: one is about to tear the prey, while the other raises its head to shriek. The subject is grandly conceived, and simply executed. A similar scene is described in the *Agamemnon* of Aeschylus (born 525 B. C.), line 115, where he speaks of two eagles:—

"The black sort, and the sort that's white behind,—
Appearing . . .
In right sky-regions, visible far and wide,—
Devouring a hare-creature, great with young."

Translated by Browning.

The eagle is a constant sign of Akragas: another symbol is the crab, referring either to the position of Akragas near the coast, or typifying the river Akragas that flowed past the town. One may be seen, for instance, on the reverse of the next coin, No. 38, beneath the chariot.

40, 41. Himera, Colony from Chalkis in Euboea.

A nymph sacrifices at an altar. The satyr enjoying a bath symbolizes the hot springs for which the town was famous. The satyr is rendered smaller than the nymph, as if to show that he is in the background of the composition. Greek relief work at this date did not attempt to show figures in different and unconnected planes. The subject, therefore, is treated rather pictorially than plastically, in a way that is most exceptional with Greek coins.

42-44. Leontini, Chalkidian Colony from Naxos, lying between Catana and Syracuse.

On one side of these coins is seen the head of Apollo crowned with laurel, and on the other the head of a lion

surrounded by four grains of corn. These types are thought to refer to Apollo as sun-god, — the lion being a symbol of the sun; and the corn grains would indicate him especially as protector of the harvest. The explanation is probable, for Leontini owed its prosperity to the extreme fertility of the land, which was renowned in all ages for its extraordinary richness. At the same time, the lion's head may have been chosen in punning allusion to the name of the town ($\Lambda \epsilon \omega \nu$ and $\Lambda \epsilon o \nu \tau \bar{\nu} \nu \omega$).

The fatal Athenian expedition against Syracuse in 415 B. C. started at the instance of Leontini.

45. Zankle (modern Messina), Colony from Chalkis in Euboea.

The name is of Sikel origin and means sickle. The dolphin symbolizes the sea, while the raised semicircle represents the line of land forming the harbor, from the sickle-like shape of which the town received its name.

46-49. Messana, the later name of Zankle, recolonized from Samos and Miletos.

This type of coin was due to Anaxilas of Rhegium. The mule-car as a type, No. 47, originated with the victory won by his mule-car at Olympia. The dolphins in the exergue indicate the sea. Whether the hare, No. 46, was meant to commemorate his introduction of the animal into Sicily, as Aristotle relates, or as a symbol of the god Pan, as modern numismatists assert, is debated. Harecoursing was the fox-hunting of the Greeks, and is often represented on their vases. On No. 48 is a small head of Pan.

50-53. Naxos, Colony from Chalkis in Euboea; probably also from the island of Naxos: the earliest colony in Sicily (near the modern Taormina).

As in the island of Naxos, No. 397, its coin types are related to Dionysos and wine-drinking. Nos. 50 and 52 show the head of Dionysos, the god of wine. The reverse, No. 51 (Pl. I), is a famous representation of a

satyr with horse's ears and tail, holding a wine-cup in his hand. The knowledge of anatomy displayed by the artist, together with the bold foreshortening of the right leg, and the adjustment of the figure to the space at his command are remarkable, more especially if, as is believed, the coin dates from before the time of Pheidias. The satyr was intimately connected with the worship of Dionysos, indulging in wine and every form of sensual pleasure. A later representation, No. 53 (Pl. I), of the same subject, the work of an artist Prokles, dating from the closing years of the fifth century, is a masterpiece of coin-engraving. The satyr is seen in much the same position as the previous one, but in addition is shown a terminal bust of Dionysos, and beside it the thyrsos or staff of the god with its pine cone at the top. On the opposite side of the representation grows an ivy plant, another attribute of this divinity. The whole composition here, as on the coins of Himera, is exceptional for work in relief. The head on No. 52 (cf. Pl. I, 51) bears a remarkable resemblance to the head of Dionysos, cast No. 137. That type has been ascribed to the artist Pythagoras of Rhegium.

55. Selinus, Colony from Megara in Sicily and Megara in Greece.

The wild parsley, selinon (σέλινον), grew and grows still in great luxuriance at Selinus, and gave its name to the town. The leaf is shown on this coin. From this plant were made the crowns for the victors at the Nemean games and the Isthmian games at Corinth. The Corinthian Timoleon turned to advantage his knowledge of this fact before his glorious battle against the Carthaginians at the Krimisos near Selinus in 339 B.C. His Sicilian troops had met a number of mules laden with this plant, and regarded the fact as a bad augury, for they associated parsley with its use in Sicily for adorning tombs. Timoleon told them it was the wreath of victory, and at his instance they crowned their heads with it.

56-85. Syracuse, Colony of Corinth.

Syracuse was the richest and most populous city of

ancient Greece. It began to coin money about 500 B. C., and during a period of three hundred years issued a continuous series of coins unrivalled for variety and beauty by those of any other town. The gradual development of the art of coining in a single state is best illustrated by these coins. The Museum possesses a few of them, and the examples exhibited show, especially in the elaboration of the hair, the gradual evolution of the series from archaism, Nos. 56-61, through the period of full splendor, Nos. 62-69, and freedom, Nos. 72-79, to weakness and decline, Nos. 80-82. The head on the coins, Nos. 56-65, represents the nymph Arethusa, who fled beneath the water from Greece to Sicily, and sprang up at Syracuse as a fresh-water fountain beside the sea; and the dolphins symbolize the sea.

68 (Pl. I.) Head of Arethusa, with the dolphins playing among her tresses. "The fountain Arethusa is represented by a female head, full face, whose flowing locks suggest, though they do not directly imitate, the bubbling action of the fresh-water spring which rises in the sea, here typified by the dolphins which sport round the head of the Nymph."—Sir C. T. Newton.

This wonderful and famous head was the result of a gradual evolution; an earlier suggestion of the same idea is seen in Phistelia, No. 7. In turn it was copied on other coins: for instance, in Greece, at Larissa, Nos. 218, 221; and even in Asia, Tarsos, No. 550. It was the

greatest work of the artist Kimon.

83-85 (Pl. II, 85.) Dekadrachms by Evaenetos. His signature may be seen on one coin, No. 83, beneath the head. Date about 406 B. C.

"Le temps passe. Tout meurt. Le marbre même s'use. Agrigente n'est plus qu'une ombre, et Syracuse Dort sous le bleu linceul de son ciel indulgent; Et seul le dur métal que l'amour fit docile Garde encore en sa fleur, aux médailles d'argent, L'immortelle beauté des vierges de Sicile." 1

¹ Quoted by Mr. G. F. Hill in the Preface to his Handbook of Greek and Roman Coins, 1899.

The head is that of Persephone, daughter of Demeter: in her hair is a sprig of wild barley. The curve of the upper lip is characteristic of Evaenetos. On the reverse, No. 84 (f. Pl. II, 85), is a victorious quadriga with Niké crowning the charioteer. Beneath is some armor, probably the prize for the race. It seems probable that these dekadrachms were issued yearly in connection with the Assinaria, or games held to celebrate the Syracusan victory over the Athenians at the river Assinaros in 413 B. C.¹

"Weiter, als diese Münzen, kann der menschliche Begriff nicht gehen." Winckelmann.

"Evainetos est le plus grand de tous dans la branche qu'il a cultivée. Il est comme le Phidias de la gravure en monnaies. Regardez pendant quelque temps une pièce gravée par lui, et bientôt vous oublierez les dimensions exiguës de l'objet que vous tenez à la main; vous croirez avoir sous les yeux quelque fragment détaché des frises du Parthénon."

Lenormant.

"To the sublime perfection of these coins no work of man of a similar description has hitherto even approached."

Payne Knight.

"The dekadrachm that is signed by Evaenetos is the chef d'œuvre of the art of coin engraving."

Head.

¹ An interesting proof of the fame enjoyed by these coins in antiquity is afforded by the vase exhibited in a neighboring case. This is a plain, black-glazed earthenware kylix decorated only by a medalion in the centre. Careful attention shows this to be a reproduction of one of the dekadrachms of Evaenetos. An impression of a dekadrachm was made in some material, and by pressing clay into this mould, a copy of the coin was obtained. The rim of this reproduction was cut away to fit it for its place; and in the process, the lower part of the signature of the artist was sacrificed: the upper half of the abbreviated name is still visible beneath the dolphin that is under the neck of Persephone (cf. the similar abbreviation on No. 83). The reduction of the size of the coin is emphasized by the natural shrinking of the clay in the process of manufacture. The kylix seems from its shape, and especially its twisted handles, to have been made in imitation of a bronze, vessel, and it may be noticed that the artist has endeavored, by the use of a silver colored glaze, to give the medallion the appearance of a silver coin.

The vase was made probably at Capua, not far from Naples; and is therefore of Italian fabric, and not Sicilian. Its date must be placed some time in the fourth century B. C.; not many years later, it

is probable, than the issue of the coin.

69-73. 344-317 B. C. Timoleon had been sent from Corinth to free Syracuse and other towns in Sicily of their tyrants. He accomplished his task and resigned his leadership in 339 B. C. The coins struck in this period referred to these events. Zeus $\partial \omega \partial \partial \rho \partial \omega$ (the *liberator*) was a divinity first worshipped at Syracuse when the tyrant Thrasyboulos had been banished in the preceding century; and the Zeus head, on coin No. 73, recalled this deliverance. The beautiful electrum coin, No. 69, with the head of Artemis $\Sigma \omega r \omega \rho a$ (the saviour), was a tribute to Artemis, the earliest patron goddess of Syracuse; while the Apollo, whose head is on No. 71, is Apollo $\partial \rho \chi \eta \gamma \varepsilon \tau \eta s$ (the chief leader), the protector of the original Greek settlers. The Corinthian type with the head of Athena (compare No. 70 with Corinth, No. 338) is a mark of political attachment between Syracuse and the mother city.

No. 76 is a coin struck 310-305 B. C. by Agathokles, tyrant and king of Syracuse, about the time of his African expedition. The graceful and charming head represents Persephone. It is a more beautiful type than the head on his earlier coin, No. 75, copied from the Evaenetos type, No. 83. His earlier coin was struck 317-310 B. C.

No. 79 is a portrait of Philistis, wife of Hieron II, king at Syracuse 275-216 B. C. Hieron's modesty was famous: he put his own portrait on his coins but rarely, while coins bearing his wife's head are not very rare. Nothing is known of her history or character, but her portrait is one of the finest on coins. She wears the royal diadem and a veil, much in the same way as is seen on the contemporary Ptolemaic portraits (f. the Berenike head, No. 565). In fact, the similarity of treatment has suggested to historians the existence of political relations between Syracuse and Egypt at this date. In the field of the coin is a lighted torch, either a magistrate's symbol or

¹ It seems therefore certain that the merit of these coins as works of art was recognized by contemporary Greeks, and that their popularity justified their employment, in a distinctly exceptional manner, as decoration for household pottery.

a mint mark. The skill shown by this portrait is in contrast to the reverse, with Niké driving a chariot: the feebleness of the latter may be realized by comparing the biga on No. 80—the reverse of a smaller coin of Philistis—with the quadriga on the dekadrachm, No. 84.

GREECE.

MACEDON AND THRACE.

THE coins of MACEDON and THRACE are distinguished by great breadth and massiveness of treatment, distinct characterization, and sense of decorative fitness: they are sculpturesque when compared with the gem-like productions of Italy and Sicily. There is a certain difference in the style between the Apollo of the Chalkidian League, No. 132 (Pl. II), and the Apollo of Rhegium, No. 33, that may readily be distinguished; and it is easy to appreciate the vigor and richness of the full-faced coins of Aenos, No. 185 (Pl. III), and Amphipolis, No. 139, after the sweetness of the tetradrachm of Kimon, No. 68 (Pl. I). For typical North Greek coins, notice particularly Orreskii, No. 92 (Pl. II); Getas, King of Edoni, No. 121 (Pl. II); Archelaos I, No. 147; Aenos, No. 182 (Pl. III). drachms of the Orreskii and Edoni (tribes whose existence is known from coins alone) are very rare. The artist represents simply a warrior with two oxen (cf. the Vaphio cup electrotype in the Museum), and is very successful in arranging his subject to fill the space at his disposal. These northern Greek coins were developed at an earlier date than those farther south, probably because the country was rich in consequence of the valuable silver mines situated in these districts.

97-113. Neapolis.

This town may have been founded by the Athenian tyrant Peisistratos during his banishment 550-540 B. C. Probably Peisistratos went there from Eretria in Euboea, and took with him Eretrian colonists. The type of the Gorgon's head would connect the city both with Eretria and Athens; for the Gorgon head is found on Eretrian

coins, Nos. 272, 273, and was a symbol of Athena.¹ Athena had changed the Gorgon's hair into snakes, and when Perseus slew the monster, she wore the Gorgon's head on her aegis. Doubtless the idea of the Gorgon was something terrible, associated with primitive notions of the moon and thunder clouds.

"Sometimes they put themselves to their wits'-end to draw an ugly thing,—the Medusa's head, for instance,—but they can't do it, not they, because nothing frightens them. . . . Pensiveness; amazement; often deepest grief and desolation, all these, but terror never. Everlasting calm in the presence of all fate; and joy such as they

could win — in beauty at perfect rest." (Ruskin.)

At first these coins bear no reverse type; but later, the head of Aphrodite is introduced, No. 103. — Many of these coins were found together, and are of similar denominations: nevertheless it may be seen that no two of them are identical. The dies are similar, but not exactly alike. The fact is interesting, as it shows that it is probable that in a Greek mint many dies were employed at the same time for the production of a single issue of coins; and further, that the dies were not multiplied by mechanical means as nowadays is the case, but each was engraved by the artist.

122-130 (Pl. II, 126, 130). Akanthos.

Lion attacking a bull. Herodotos (VII, 125) tells us that lions, and wild bulls with large horns, existed near Akanthos at the time that Xerxes marched through the country in 480 B.C. The coins corroborate the statement. No. 126 is a rare and beautiful variety, with a lioness instead of the lion attacking the bull.

131, 132. Chalkidiké.

The Chalkidian league was founded in 392 B.C. It consisted of Olynthos and neighboring towns that had banded themselves together with common rights and laws. After a time the league employed force to compel other

¹ For similar heads in sculpture, see casts Nos. 19 and 27 (from Selinus), in the Archaic Greek room of the Museum.

cities to join it; and Akanthos and Apollonia thus coerced applied to Sparta. Sparta suppressed the league in 379 B. C., but coins were still issued by it until Philip of Macedon abolished it by destroying Olynthos utterly, 349 B. C. Demosthenes' Olynthiac orations were made in favor of the league, and against Philip; but the help sent by the Athenians in consequence of these appeals arrived too late.

The coins of the league are famous for their beauty. No. 132 (Pl. II) is a perfect specimen. The head is that of Apollo crowned with laurel, and is similar to that on Philip's own gold stater, No. 151 (Pl. II).

139. Amphipolis.

Amphipolis, colonized by Athens in 437 B. C., was a town of first-rate importance, both from its commanding strategic position, and because it was close to the gold and silver mines of Macedonia. It was taken by the Spartans in 424 B. C., and was never recovered by the Athenians.

The coins of Amphipolis are worthy of its pre-eminence. The head of Apollo is famous as the most beautiful type on the coins of North Greece. The face, in three-quarter view, shows the influence of Attic art of the time of Pheidias.

148-152. Philip of Macedon was always anxious to emphasize his Greek origin and tendencies, and this sentiment is reflected in his coinage. On his tetradrachm, No. 148, is the head of the Zeus of Olympia: Philip had won races with horses at the Olympic games. On his gold staters, Nos. 150, 151 (Pl. II), is the head of Apollo of Delphi: Philip presided over the Pythian games at Delphi in 346 B. C. The victorious chariot on the reverse of the gold stater, No. 152, also refers to some success at the games. The gold stater, No. 151 (Pl. II), is exceptionally perfect: the beautiful head of Apollo resembles that on the silver tetradrachm of the Chalkidian league, No. 132 (Pl. II).

The standards according to which Greek silver coins

were struck depended, in great measure at all events, on the relative value of silver and gold. In Philip's time gold was cheap: the gold mines near Amphipolis were in his possession, and Persian gold coins (darics) were plentiful in Greece, while gold was being produced from mines in Thrace. It is probable therefore that gold was only ten times more valuable than silver, and that Philip's coins were minted on this basis. Philip's gold staters, Nos. 150-152, were each equivalent to six of his silver tetradrachms, No. 148.

The gold coinage of Philip proved popular. His staters were known as *Philips*, while later his son's staters were called *Alexanders*; in the same way that in later days people have spoken of the *jacobus*; carolus, louis d'or, and napoleon. These "Philips" continued to be struck after his death, and the type was carried by the Gauls to the West, where a barbarous imitation of it was used for the earliest coins of Britain. In Greece, his gold must have proved a formidable rival to the electrum staters of

Kyzikos and the Persian darics.

153-164. Alexander the Great, reigned 336-323

Alexander's coin system was introduced after he had started on his expedition to the East in 334 B. C., and the types refer to the Pan-hellenic nature of his undertaking. On leaving Europe and on landing in Asia, he sacrificed to Zeus, Athena, and Herakles, three supporters of the Greeks in the Trojan war; and these three appear on his coins. Herakles was also the mythic ancestor of the Macedonian monarchs; his head occurs on earlier coins of the dynasty, and an additional reason therefore existed for his choice. The silver coins bear a head of Herakles on the obverse, No. 156, and a seated Zeus with his eagle on the reverse, No. 157 (cf. Pl. II, 159): the gold staters, "Alexanders," have a head of Athena on the obverse, No. 154, and a Niké on the reverse, No. 155, in token of victory. Alexander's family claimed descent from Herakles, while Alexander was fond of appearing dressed as the demi-god himself: it is therefore possible

that the head of Herakles on the silver coins was intended to suggest the features of the monarch; in which case it would be the earliest regal portrait on a true Greek coin. Compare for the likeness the copy of the so-called "Alexander" sarcophagus in the Museum, where Alexander is shown in the battle scene wearing a lion-skin. After his death, portrait coins are common.

Alexander maintained the bimetallic ratio of ten to one between gold and silver adopted by his father Philip. Five of his tetradrachms were equivalent to a gold stater.¹

Alexander's coins are found in great numbers struck at various mints in his kingdom, from Greece in the West to India in the East. Their issue continued long after his death. The tetradrachm, No. 159 (Pl. II), was certainly not struck in his lifetime. The title King appears on these coins for the first time; it was not employed, it is thought, on the coins struck during Alexander's lifetime. The smaller varieties, Nos. 160–164, except the drachma, No. 161, are rare. The gold double-stater, No. 153, is a rare coin also, and the example shown is exceptionally well preserved.

167-171. Demetrios Poliorketes.

We see the head of Demetrios "the besieger" on the obverse, and a statue of Poseidon on the reverse, No. 170 (cf. Pl. III, 169). Demetrios was famous for his beauty, which was too subtle for reproduction by sculptor or painter. He was brave, prodigal, chivalrous, a knight errant and inventor, combining in his nature the man of action with the man of pleasure, resembling in this respect Dionysos chiefly of all the gods. He is here represented as Dionysos, the bull's horn in his hair being an attribute of that divinity. The reverse type, No. 170, reproduces a statue of Poseidon, god of the sea, resting his foot on a rock, — possibly the Poseidon Isthmios, a work of Lysippos, erected at Corinth; and the choice shows that Demetrios was proud of his success as an admiral. He won for his father Antigonos a great sea-fight against Ptolemy the

¹ The gold stater was equal to six of Philip's tetradrachms. Alexander's tetradrachms contained more silver than those of his father.

Great, 306 B. C. The battle is commemorated also in the famous Niké of Samothrake in the Louvre (cast No. 759, in the Museum at head of staircase).

172-173. Antigonos Gonatas (Son of Demetrios).

172. Head of Poseidon bound with a wreath of seaweed, — the face is that of a benevolent old man; his hair seems matted with salt water. The type probably refers to a naval victory of Antigonos.

173. Head of Pan, with goat's horns, in the centre of a Macedonian shield (called Macedonian from its use in the famous Macedonian phalanx: it was light and small). Antigonos defeated the Gauls in 277 B. C. at Lysimachia. Probably this coin, referring to the victory, recalls the panic (τὸ πανικόν) with which the enemy was seized. The God Pan had similarly assisted the Greeks at Marathon.

174-175. Philip ∇.

174. Head of Perseus wearing a winged helmet ending in an eagle's head, — the helmet of Hades, given him by the nymphs to render him invisible. Behind him is the harpa or sword with which he beheaded the Medusa. Philip's son was named Perseus, and probably it is his head that is here represented in the guise of his mythical namesake, and not his father's.

175. Philip V, portrait.

Philip began life with every promise — once he was "the darling of all Greece," possessed of a quick understanding, retentive memory, winning grace of manner, royal dignity, authority, besides exhibiting ability and courage as a general. He ended life, however, as a gloomy and suspicious tyrant. He abandoned his enmity towards Rome after his defeat by Flamininus at Kynoskephalae, and became her unwilling ally.

176. Perseus, son and successor of Philip V.

Miserliness and passion for intrigue were the chief characteristics of this monarch. On occasions of difficulty, he was despondent and pusillanimous. He was defeated at Pydna by Aemilius Paulus, taken prisoner to Rome, and led in his conqueror's triumph. With him the Macedonian

kingdom came to an end.

Perseus was defeated in 168 B. C., and the right of coinage, which was at first conceded to the Macedonians,—they issued, for instance, No. 177 (head of Artemis on the Macedonian shield),—was finally exercised by the Romans, Nos. 180 and 181, where we see a Roman reminiscence of No. 206, and realize the complete decadence of the coinengraving art.

182-185. Aenos, a town on the south coast of Thrace.

On the obverse is a head of Hermes in a tightly fitting felt or leather cap. It will be noticed that on No. 182 (Pl. III) the hair is worn long and plaited: this fashion was abandoned in the second half of the fifth century; the hair is shorter on No. 185 (Pl. III). Hermes may appear on the coins of Aenos in his aspect as patron of trade.

183. Reverse: — Goat (cf. Pl. III, 182), a symbol probably of local importance.

The broad and fine style of these coins is remarkable. The full face, No. 185, is among the most successful of Greek coins in high relief. The designs are wonderfully adapted to the space of the coins, while the simplicity that marks the subject of the earlier type is expressed also in the style. The coin possesses all the charm attaching to a work of art on the border line between immaturity and development.

194-199. Thasos.

The progress of coin-engraving may be well observed in the coins of Thasos, the capital of the large island of the same name off the coast of Thrace. The wealth of the Greek settlers was due partly to the rich mines there and on the neighboring mainland, and to a trade in the famous Thasian wine. Both sources of wealth affected the coins, for they are numerous, in accordance with the wealth of the city, and in addition bear types relating to the worship of Dionysos, the god of wine. On No. 194 is seen an archaic representation of a satyr carrying off a nymph, the coin dating from the sixth century; and the subject is repeated on Nos. 195 and 196, but here in the free style of the middle of the fifth century. These two coins were struck when Thasos was subject to Athens, between its capture by Kimon in 463 B. C., and its revolt in 411 B. C., and were influenced by Attic art. The way in which the perfectly free design is adapted to the circular space is very skilful. The later coins, Nos. 197 and 198, date not far from the end of the fifth century. On one side is the head of Dionysos, and on the other Herakles shooting: the treatment is of the broadest and most powerful style, more easily appreciated in the larger varieties of the coin, which are not represented in this collection. These are small examples of the Greek coining art at its most developed point. It has been said of the ivy wreath on the head of Dionysos, No. 198, that so naturally is it treated it seems to be growing.1 The remaining coin, No. 199, shows the decline. It was struck in the second century B. C., when Thasos had passed into the hands of the Romans. The head is a late type of Dionysos.

204-212. Lysimachos, King of Thrace.

In the partition of Alexander's empire on his death in 323 B. C., Thrace was allotted to his general Lysimachos. Lysimachos placed on his coins the head of Alexander the Great, his former chief, the culminating point of Greek civilization in achievement, character, and person. Alexander, on visiting the temple of Ammon in Egypt, had been accepted by the oracle as a son of the god. The coins, Nos. 206-210 (Pl. III, 207), represent him with the attributes of divinity, the ram's horn being the symbol of the Libyan god. The coin portrait of him is the most authentic and beautiful that we possess. He was but thirty-two years of age when he died, though the coin shows him as somewhat younger. The reverse, No. 205 (cf. Pl. III, 207), shows a seated Athena holding a Niké who crowns the sovereign's name. This type may be recognized in the Britannia on English pennies.

¹ Ruskin.

MAINLAND OF GREECE.

Larissa and Melitaea.

The fertile plains of Thessaly were good for rearing cattle and horses. It was at Pherae that Apollo tended the flocks of Admetos. Thessalian horsemen were the best in all Greece, and Thessalian youths were famous for taming bulls and horses. These animals are seen represented on the coins of Larissa and Melitaea. The didrachm of Melitaea, No. 223 (Pl. III), shows a bull grazing. The animal is treated simply, but with wonderful vitality. This is the only example of the coin known to exist. The Thessalian game of bull-catching (ταυροκαθάψια) is illustrated on Nos. 215 (Pl. III) and 217; a youth is seen engaged in throwing a bull to the ground by catching his horns and entangling his legs. Horses are seen on many coins, for instance, No. 216; No. 219, horse feeding; and No. 220, mare and foal. These designs are marked by truth to nature, variety, and great skill in the artist's treatment of subjects in relief.

218, 221. The head of the nymph Larissa on the obverse of these coins is derived from the Arethusa head by Kimon, No. 68.

214. Kierion.

Kierion had once been called Arne after a nymph of that name. She is here seen playing at knuckle-bones. Scenes suggested by daily life occur but seldom on Greek coins. A better representation of this subject is to be seen on a beautiful gold ring of about the same date in the Museum collection.

227. Pharsalos (Pl. III).

Pharsalos, one of the most important cities of Thessaly, was the scene of the great victory of Caesar over Pompey. In the fifth century it was an ally of Athens, and the head of Athena on its beautiful coinage seems to be influenced

by Attic art. The type recalls the Athena head on the coinage of Thurii, while the winged griffins on the helmet are doubtless derived from the somewhat similar winged horses that adorned the helmet of the Pheidian statue of the Parthenon.

229, 230. Pherae.

Jason, tyrant of Pherae (d. 370 B. C.), had united all Thessaly under his sway, but no coins are known to have been issued by him. His famous successor, Alexander of Pherae, is represented by a magnificent didrachm, No. 230 (Pl. III.). Alexander's reign lasted only from 369 to 357 B. C., and the coin is dated therefore within a few years. This rare coin represents the myrtle-crowned head of Artemis, worshipped at Pherae as Hekate, the moon goddess, with rites connecting her with witchcraft and magic. Her symbol, the torch, may be seen in the background. The head is in high relief, and is remarkable alike for grandeur of the design and perfection of execution. It counts among the first of Greek coins, and must be the work of a considerable artist.

The earlier coin of Pherae, No. 229, also shows the Thessalian horse, while behind is seen a stream of water gushing from a lion's head, in a manner similar to the fountain at Himera, Nos. 40, 41. This is the famous fountain of Hypereia that sprang from the rocks close to

Pherae.

231. Alexander, King of Epeiros, 342-330 B. C.

This monarch owed his throne to Philip of Macedon. Philip married Alexander's sister; and it was at the marriage between Philip's daughter Cleopatra and Alexander that Philip was murdered, in 335 B. C. In the following year Alexander made an expedition to Italy to help the Tarentines against the Lucanians and Bruttians. His nephew, Alexander the Great, started on his famous expedition to the East in the same year. Neither monarch returned to his kingdom. Alexander was killed at Pandosia in 330 B. C. at the age of thirty-two, while his namesake died at Babylon in 323 B. C. The head on his coin

is that of Zeus of Dodona in Epeiros, where was the famous oracle of the god. The wreath is of oak leaves, for the oak was sacred to him. The style resembles that of the Zeus head on the contemporary gold coin of Syracuse, No. 73, and may be derived from this type. This rare and fine coin of Alexander was probably struck in Epeiros, though possibly it was issued by him in Italy.

232. Epeirote Republic.

The successors of Alexander reigned until 238 B. C., when some form of republican government was established in Epeiros that lasted until the defeat of Perseus of Macedon by Rome. The coins still bear the head of Zeus of Dodona, but beside it is seen the head of Dione. They were worshipped in association at Dodona, where Dione was regarded as the wife of Zeus, and mother by him of Aphrodite. She is represented here wearing a laurel wreath, a crown, and a veil. The representation of husband and wife together in this manner was employed about this time also on Ptolemaic coins in Egypt. In a similar manner, at a still later date, the heads of the twin brothers Castor and Pollux are shown together on the coin of Tripolis in Phoenicia, No. 560.

241-246. Opus in Locris.

Nos. 243 and 245 are of the finest style. The obverse, No. 241 (cf. Pl. III, 243), is derived from No. 85 (Pl. II) and represents Persephone. The reverse, No. 243 (Pl. III), shows the Locrian hero Ajax, the son of Oïleus, charging with his sword; his spear lies on the ground. The representation of a winged griffin may be noticed within the shield. It is probable that the Greeks decorated their shields in this manner in actual life, executing the designs by means of painting or weaving. A figure very similar to the Ajax is seen on a relief from the Mausoleum. (Cast No. 509.)

No. 242 is an ancient forgery. Another instance is No. 222. These coins are of copper, plated with silver. Imi-

tations of gold and silver coins were freely circulated in ancient Greece. They were issued chiefly by the responsible officials themselves, and not by coiners. Often they were well made and difficult to detect. Coins that were suspected were occasionally cut, e. g. No. 123, as a test of genuineness.

251, 252. Delphi (Pl. III).

These coins were issued by the Amphictyonic League, and are among the rarest and most prized of all Greek coins. On one side, No. 251, is seen the head of Demeter of Anthela, veiled and crowned with barley. Compare the marble head of the Demeter of Knidos (Cast No. 145). On the reverse, No. 252, is the Pythian Apollo at Delphi, his lyre at his side, seated on the omphalos or centre of the world. The tripod in the background is his symbol, and indicates his shrine.

For ten years the Phocians had dispossessed the Amphictyonic League, holding Delphi and coining money there: No. 250, with the head of Apollo, is one of the coins

thus issued by them.

These larger coins were probably issued B. C. 346, when Philip of Macedon defeated the Phocians in the Sacred War and reëstablished the Amphictyonic League. Their variety suggests that they were struck on this occasion alone. Perhaps the colossal statue of Apollo, erected at Delphi with the money penalty exacted from the Phocians at this time, is reproduced on the reverse.

253-269. Boeotia.

From the earliest times, the towns of Boeotia produced a federal coinage with the Boeotian shield, No. 253, on the obverse as the common symbol. Each town put a distinct mark on the reverse; for instance, Mykalessos, a thunderbolt, No. 254; Orchomenos, a vase, No. 257.

The three staters of Thebes, Nos. 263-265, illustrate events in the life of Herakles. The hero was born at Thebes, and was held in particular honor there. On No. 263 and No. 265 (Pl. IV) he is represented stringing his bow; bending or seated, he holds it between his legs for

this purpose. On No. 264 he is shown carrying off the Delphic tripod of Apollo. Herakles had slain his own children in a fit of madness, and applied to the oracle at Delphi to learn how he should expiate his offence. He was at first refused a reply, and in his anger carried off the tripod of the god. He is here shown holding the tripod aloft and raising his club to strike the god. These three coins date from before the time of Pheidias, and their style is not yet free. They are remarkable for the care of the design and accuracy of the modelling, the animation and vigor of the work, and the inimitable truth to nature that they exhibit. They are three typical examples of Greek appreciation of life at this time, and are among the most beautiful of all Greek coins.

276, 277. Histiaea, lying on the northern coast of Euboea.

It was famous for its grapes from the earliest times, and was always a city of importance. Its wealth is attested by the number of its coins, which are usually small. The coins shown are beautiful examples of common types. On the earlier coin, No. 276, is seen a bull, the constant emblem of Euboean coins, cf. No. 275, while the grapevine of Histiaea is in the background. On the later coin, No. 277, the nymph Histiaea is seen seated on the stern of a ship grasping with one hand a mast for supporting a trophy. The composition of the coin, the rendering of the body of the nymph, and the gem-like fineness of her garment are all admirable. The type may refer to some naval victory, but the occasion is quite unknown.

278-320. Athens. An era is marked in the history of coinage by the appearance of money at Athens. Now for the first time an inscription consisting of the initial letters of the people's name A⊕E appeared on the reverse in order to indicate the origin of the coin.¹ This invention was adopted henceforth universally. Besides this, the

¹ Not to mention exceptional inscriptions in other states, the single initial at Corinth may claim priority by a few years. The Athenian inscription was far more conspicuous than the Corinthian.

oldest Athenian coins present for the first time the combination of a human head on the obverse of a coin with an emblem on the reverse. Elsewhere only animals or inanimate objects had been chosen as the main types, while as a rule the incuse patterns on the reverse sides had remained undecorated. This earliest attempt was simple and grotesque; yet, owing to certain influences, all succeeding Athenian coins were affected by this primitive beginning. It thus happens that in beauty Athenian coins seem not to correspond with the artistic importance of

the city.

The patron goddess of Athens was Athena, and the coin types referred to her, and continued to refer to her throughout the history of Athenian coinage, - that is, for more than seven hundred years. According to one of the most popular legends of Athens, Athena and Poseidon contended for supremacy over the city. The contest took place on the Akropolis, the other divinities acting as judges. Poseidon struck his trident into the rock, and produced a salt spring, symbolic of the power of Athens on the sea. Athena, striking her spear into the ground, produced an olive tree, the emblem of one of the most valuable products of the soil of Attica. Then the gods awarded the victory to her, and hence not only was the head of Athena adopted as the principal type of the coins of the city, but there was always the reminder of this contest in the little sprig of the sacred olive tree that appears in one corner of the reverse. The head is represented in a crested Athenian helmet, No. 279. On the other side, No. 280, appears the owl, the earliest of all Athena's symbols. The coins were nicknamed "maidens" from the head of the virgin goddess ($\pi \alpha \rho \theta \acute{\epsilon} \nu o s$), or "owls" from the reverse type, just as the Aeginetic staters Nos. 324, 325, were called "tortoises," and the Corinthian staters Nos. 329, 334, "colts," from the representations they

Great differences of opinion exist about the dating of Athenian coins. References to them in ancient literature are indefinite and contradictory, while the maintenance of an unchanging type has made it difficult to apply the test of style. Every date, therefore, must be considered at best only approximate. It seems probable that the earliest Athenian coins here exhibited were struck in the time of Solon, *Archon* 594-593 B. C. Such would be Nos. 278, 279. They are rude in conception and the work is rough; but by degrees they grow finer, always retaining their archaic style, and eventually are of great excellence, Nos. 285 (Pl. IV), 287. These two coins bring us down to the time after Peisistratos, when we know that Hippias (527-510 B. C.) introduced some changes in the coinage.

After the victories of Salamis and Plataea (480-470 B. C.), Athens under Themistokles was foremost in culture. trade, fashion, and wealth; politically and socially the chief position in the world was assured to her. changes in her art accompanied these events, and it is probable that the series of coins, Nos. 293-311 (Pl. IV, 299), was begun now. The intention seems to have been to keep sight of the earlier type as much as possible, simplifying it if anything conformably to a spirit of opposition to Eastern elaboration; thus, for instance, the hair is no longer treated in curls, but is parted simply and crosses the forehead in wavy lines.1 The olive leaves appearing on the helmet represent a crown of victory, and betoken the late Athenian successes.2 The type is severe, and still shows the eye in full front, with the head in profile, and the mouth shows the "archaic smile." type, once created, was preserved unchanged through the age of Perikles down to the close of the fifth century, and perhaps later; even the strange clumsiness was not abandoned, by which was employed a head larger than the size of the coin would accommodate (cf. Nos. 279 and 297). This conventionality of treatment was due partly to religious scruples and the desire to preserve the record of the victory over the Persians, maybe, but more especially

² Henceforth, too, a small crescent accompanies the owl on the

reverse. It may be seen behind the owl on Pl. IV, 299.

¹ A similar change appears in marbles and vases of this date. Compare the "Mourning Athena," cast No. 87, and the heads of Athena and Eos on the large red-figured krater in the Museum representing scenes from the Trojan war.

to the fact that the Athenian coinage was the staple silver currency employed in the trade of the Aegean and Asia Minor, and it was feared this advantage might be lost, were the well-known types or styles of the coinage changed.

The beauty of Athenian coins is not generally recognized, but it will be seen that in coins such as Nos. 299 (Pl. IV) and 295, the artists, in spite of the conditions imposed upon them, produced heads unequalled for softness, delicacy of sentiment, and breadth of treatment in the whole series of Greek coins.

The smaller coins are also interesting. The archaic drachms, Nos. 288, 289, and the later didrachms, Nos. 302, 303, are rarely found. The *obol*, Nos. 290, 309, etc., was the coin that was placed in the mouths of the dead to

pay their fare across the Styx.1

The later coins of Athens are feeble and untidy in style, such are Nos. 312, 313; the series began before the middle of the fourth century. The mint, having to coin vast amounts of money for the commercial and military needs of the state, seems to have paid less attention to the beauty of the work than had formerly been the case. It produced a wretched imitation of the earlier coins, inferior in every way, except that the eye was represented in profile. That such coins should have been struck at Athens at a time when elsewhere the finest work was being created is indeed a remarkable fact.

The gold coin, No. 317, of this style is rare. Gold was coined at Athens only in moments of great necessity, and this coin dates probably either from the time of Chaeroneia in 339-8 B. C., when Athens at the instance of Demosthenes was preparing to resist Philip of Macedon, or from 295 B. C., when withstanding the siege of Demetrios Poliorketes. It is probable that a portion at least of the golden treasure of the Parthenon was melted down and

converted into coin on these two occasions.

No. 319 is a specimen of the series of coins, begun in

¹ A custom preserved even into Christian times. A survival of it exists at the present time in the island of Lesbos, where a small terracotta cross is placed on the lips of the deceased, the moment before the body is lowered into the grave.

220 B. C., that lasted till the capture of Athens in 86 B. C. The type chosen for the head of Athena is interesting as being that of the famous statue of the goddess made by

Pheidias for her temple on the Akropolis.

The purchasing value of some of these coins at Athens at the close of the fifth century is as follows: an ox cost over 50 drachms, No. 305, or two gold staters, No. 317. Aristophanes, 414 B. C., tells us that sparrows sold seven for the obol. While the Parthenon was building, artisans received a drachm a day, and ordinary laborers were paid about three obols, No. 309, — that is, half a drachm. The cost of living was proportionately low at the time, though it rose considerably in the next hundred years.

322-328. Aegina, an island in the Saronic Gulf between Attica and Argolis.

The earliest coins of Aegina were struck in the first half of the seventh century. There exists distinct authority ¹ for saying that Pheidon, king of Argos, was the first to strike them. The coins of Aegina, it is true, were among the earliest silver coins to appear anywhere, — certainly the first in European Greece; nevertheless the probable date of Pheidon in the eighth century excludes the possibility, according to the present extent of knowledge, that he established a mint at any place. It is possible that Aeginetan coins were struck according to a ratio between silver and gold introduced by Pheidon, but otherwise it seems difficult to connect him with the matter at all.

Aeginetan coins must have circulated as the chief currency in the Peloponnesos as late as the beginning of the fifth century, and at Athens until Solon introduced his coinage in 593 B. C. They were thus famous in antiquity, and from their symbol received the popular name of "tor-

toises" (χελώναι).

The tortoise represented on them is of two kinds: the earlier coins exhibiting the sea-turtle, with flappers, Nos. 322-324 (Pl. IV, 322); while the later show the land-turtle, with feet, Nos. 325 (Pl. IV), 328. The meaning of

¹ The chief authorities are mentioned by Head, *Historia Numorum*, p. 331.

the symbol is not very clear. The tortoise is ordinarily connected with Aphrodite, but this goddess was not particularly associated with the island, and the explanation fails. Another explanation connects the animal with a supposed primitive trade in tortoise shells for use as drinking vessels. It is suggested that many coin types, such as the tunny fish at Kyzikos (Nos. 413-424), and representations relating to wine at Naxos, were derived from the fact that the primitive units of barter were a tunny fish, a measure of wine, or the shell of a tortoise, as the case might be in these particular localities. For the present the question remains unsettled.

The reverse of these coins, No. 326 (cf. Pl. IV, 325), is characteristic of Aegina. It is probable that the design was arrived at accidentally: it seems impossible to regard it as a representation of the under side of the tortoise.

Aegina struck few coins later than the end of the fifth

century B. C.

329-347. Corinth.

Coins were issued at Corinth earlier than at Athens. probably before the close of the seventh century. The trade of the city was chiefly towards the west, as far as Italy and Sicily. The types of her coins related to the myth of Bellerophon. Bellerophon, grandson of Sisyphos, king of Corinth, assisted by Athena, tamed the winged horse Pegasos, offspring of the Gorgon. This exploit was performed near the spring of Peirene at Corinth. Pegasos is the obverse type on the coins, Nos. 332, 336, 339, and from him they won the name of "colts" $(\pi \hat{\omega} \lambda \alpha)$ as a popular term. On the reverse is the head of the goddess. Nos. 335, 338. Mounted on Pegasos, Bellerophon slew the Chimaera, a monster composed of lion, goat, and dragon, - well illustrated on coins of Sikyon, No. 352. On No. 344, the hero is seen on the obverse of the coin slaving the Chimaera, which appears on the reverse, No. 345, the action being divided between the two sides in a way that is very rare on Greek coins.1 On the later coins are stamped

¹ Pistrucci's famous design of St. George and the dragon for the British crown-piece, since adopted for the sovereign, seems to have been derived partly from this coin and partly from the Tarentum series with the rider lancing.

beautiful heads of Aphrodite, the great divinity of Corinth, Nos. 340, 342, 343. Beneath the Pegasos is seen the letter koppa, corresponding to the modern Q, the initial of the Corinthians' name.

The coinage of Corinth was plentiful, and its types were copied not only in her numerous colonies, as for example Leukas, Nos. 234-236, but even at Syracuse long after it had become independent of its mother city, No. 70.

368-391. Arkadia.

The "tortoises" of Aegina, No. 322 (Pl. IV), formed the chief currency in the Peloponnesos in the sixth century. Peloponnesian coins proper were struck at few towns and were of small size, as was natural in an uncommercial district where silver was rare, and of these perhaps the most interesting are the beautifully executed hemidrachms struck in Arkadia from the end of the sixth century onward. They are plentiful, and exhibit many variations, especially in the treatment of the hair; see Nos. 373, 375, and 377. We learn from their inscriptions that they must have been struck for a federation of Arkadian towns, and they present the only evidence of its existence. On one side is seen Zeus seated, on the other the head of Artemis.

Pausanias' victory over the Persians at Plataea in 479 B.C. was due chiefly to the efforts of his own Spartan troops and those from Tegea, an Arkadian town. Neither of these towns had coins of its own at that date, but probably they used those of the Arkadian federation. It has been suggested, therefore, that the appearance of the crown of olive on the head of Artemis, No. 374, commemorates the part taken by these Peloponnesians in the victory, just as the olive crown appearing on coins of Athens at the same time recorded the victory for the Athenians. See p. 37. The eye, it will be noticed, is rendered throughout as though the head were facing the spectator, — another peculiarity shared with Athenian coins. Nos. 379 and

¹ The incorrect representation of the eye in marble reliefs is found in important work — for instance, the Eleusinian Relief, cast No. 96 — as late as the middle of the fifth century B. C.

380 are two of the earliest among Greek coins presenting a head in three-quarter view, and must date from the end

of the period.

This series of coins seems to have lasted until the time of the battle of Mantineia, 418 B. C., when Sparta established her supremacy in Arkadia. Between this date and 371 B. C. few important coins were struck. In this collection, the small coins of Pheneos, Nos. 384 and 385, belong in this interval. On one side is presented a head of Hermes as a boy, with his felt hat (petasos) slung at the back of the head, and a ram, a symbol of the god, on the reverse. The boy's face is beautifully portrayed. The obol of Stymphalos, No. 388, is also of this date. The bird's head refers to the legend of Herakles and the terrible flock of Stymphalian birds destroyed by him in the performance of one of his labors.

The battle of Leuktra, 371 B. C., was followed by the restoration of Arkadian independence. A second federal coinage was now struck at the new capital, Megalopolis, bearing on the obverse the head of Zeus, No. 381, and on the reverse the Arkadian god Pan. At the same time, or a little later, after the second battle of Mantineia, 362 B. C., many Arkadian towns proceeded to issue coins with local types, Pheneos, Nos. 386 (Pl. IV), 387, among others. The head of Demeter, No. 386, is derived from the Persephone head on No. 85. The representation on the reverse, No. 387, is taken from an Arkadian story. Arkas was the ancestor of the Arkadians. While he was yet a child, his mother Kallisto was slain by Artemis, whereupon Zeus, his father, handed him to Hermes to bear to a place of safety. Hermes is seen here with the boy on his arm fulfilling his mission. The representation is somewhat similar to that of the Hermes of Olympia (cast No. 516). Head's criticism of the coins of the best period may truly be applied to these coins: "The types are characterized by intensity of action, perfect symmetry of proportion, elegance of composition, finish of execution, and richness of ornamentation."

Two other Arkadian coins with local representations may be mentioned, — Kleitor, No. 382, where the autonomy

of the town is symbolized by the horse running free, in Greece a constant emblem of liberty; and Nos. 390, 391, Thelpusa, with an interesting Arkadian legend. Demeter, whose head is on the obverse of the coin No. 390, was beloved by Poseidon, and to escape him changed herself into a mare. The god thereupon outwitted her by becoming in turn a horse, and begot the wonderful horse Arion. This horse is shown on No. 391, and the inscription above is his name.

GREEK ISLANDS.

395. Iulis, a town of the island of Keos.

The head is that of Aristaios, an interesting divinity worshipped in Keos as a form of Zeus. Aristaios had been educated by the Muses, and from them had learned buttermaking, bee-keeping, and the culture of olives. He knew many other useful arts as well, and had been particularly kind to Keos. He had been called there on account of the pest due to the heat of Sirius the dog-star, and had mitigated this by inventing the trade-winds. The reverse of this coin shows a bee; on other varieties is seen the dog-star.

ASIA.

ASIA MINOR.

In accordance with the traditional geographical arrangement of coin collections, the coinage of Asia Minor is dealt with later than that of Greece proper, or that of the western colonies in Italy and Sicily. Yet this method has disadvantages. Coinage was invented in Asia Minor, perhaps at Sardes in Lydia, and only subsequently was transmitted to the Greek world by means of the Greek traders living along the neighboring coast of Ionia. For many years, therefore, the chief coins of the ancient world were those of electrum issued by various Greek towns in Asia Minor, and historically these coins should be They are often quite primitive considered first of all. in design, and only conjecturally assigned to individual Such coins are rare: they are represented in this collection by the following: No. 456, primitive head of a lion, - coin broken; No. 457, fore part of a ram; No. 458, lion's head, - probably a Lydian coin; and No. 459, fore part of a winged boar, — possibly struck at Klazomenae.

The Asiatic Greeks then, as now, lived chiefly along the coast of Asia Minor, and the art of the Greek towns was affected by the traditions of the great nations lying further inland. Towards the north, in Mysia, Troas, and Ionia, the towns themselves were Greek; but in many parts of the south, in Lykia, Pamphylia, and Cilicia, for instance, the Greeks were mere settlers and traders in foreign lands, where the language was strange to them no less than were the customs. So far as the coinage was concerned, it was Greek in general character, and for that reason is treated as Greek by numismatists; but strictly, coins such as No. 551, with an Aramaic inscription, and No. 537 (Pl. V), with a Lykian inscription, are not Greek:

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artistically, it is true, they are Greek; ethnologically, they are foreign. These coins are apt illustrations of the collision and fusion of the Greek and the barbarian.

The art of the coins of Asia Minor is, speaking generally, more decorative than that of Greece proper. Instead of gods or their attributes, the early coins represent animal and vegetable types. The calves at Lesbos, No. 443, and the skin of the lion's head at Samos, Nos. 494, 495, are instances of animal forms; while the winged pig, No. 459, and the Sphinx at Chios, Nos. 492, 493, show the popularity of mythical animals. A flower is shown on No. 485, a coin of Erythrae, and fig leaves are

seen at Idyma, No. 501, and Kameiros, No. 520.

Asiatic coins, especially those of Ionia, at a later date are distinguished by great softness. If the representations of Apollo at Klazomenae, No. 460 (Pl. V), and Amphipolis, No. 139, are compared; or Apollo at Miletos, No. 488 (Pl. V), and the head on the coins of the Chalkidian League, No. 132 (Pl. II); or Apollo of Kolophon, No. 476 (Pl. V), and the similar representation at Dikaea, No. 193 (Pl. III), the greater severity of the coins of the European mainland will be recognized. The conception, too, of Kora on the Kyzikene tetradrachm, No. 425 (Pl. IV), although of an earlier date, is far less austere, for instance, than the analogous representation at Pheneos, No. 386 (Pl. IV).

398 (Pl. IV), 399. Mithradates of Pontus, the Great.

Mithradates was Persian by blood but Greek at heart. This "Greek sultan," as he has been described, was physically a giant and athlete, and in every way one of the most noticeable of men. He was endowed with extraordinary intellectual powers, — orator, linguist, patron of literature and art, collector, philosopher, accomplished surgeon and physician, — his antidotes ("Mithridatia") are still famous. He was successful both as admiral and general, and with indomitable courage and tiger-like ferocity fought the Romans for forty years. These coins are dated. They were struck when he was thirty-five and fifty-eight years

old, but represent him far younger: they recall Alexander on the tetradrachms of Lysimachos, No. 210, and probably by intention, for Mithradates admired Alexander fervently. Some of his qualities, including possibly a slight tendency to madness, may be traced in the portraits, though unfortunately coin-engraving was no longer able to do full justice to so versatile a character. His long hair was trained to hide a wound on his forehead. The ribbon that is seen is the regal diadem.

These remarkable coins have been called the last master-

pieces of Greek coinage.

413-425. Kyzikos.

Kyzikos, situated on the Sea of Marmora, and enjoying a wide trade both east and west, was one of the most important mints of Asia Minor. It is famous for its staters of electrum, — an alloy of silver and gold in about equal proportions. More than one hundred and fifty varying types of these coins are known: the badge of the city, the tunny fish, appears on all, though only in a subordinate position.

Ten different types are shown here: -

No. 413. Sphinx; No. 414, the smaller coin is a hekte,

- that is, the sixth part of the stater.

No. 415 (Pl. IV). Lion biting a sword. He holds the blade in his mouth, and presses his paws against the handle and point.

No. 416. Man kneeling, holding the tunny. No. 417. Triton or Dagon (compare No. 559).

No. 418. Head of youth (perhaps Kyzikos, the mythical

founder of the town).

No. 419 (Pl. IV). Warrior (Hoplite) about to start in a race, or preparing to jump. The figure is standing on a base, and reproduces a statue.

No. 420. Bull's head.

No. 421. Head of Atys, with its sixth, No. 422.

No. 423. Apollo shooting.

No. 424 (Pl. IV). Helios (Sun) with his horses.

The reverse of these coins bears no representation.

The silver tetradrachm, No. 425 (Pl. IV), shows a very

beautiful head of Kora or Persephone,—the maiden daughter of Demeter,—of exquisite workmanship. It may be compared with the head of Hegeso on the famous marble Athenian grave monument of which a cast is in the Museum (No. 462). Kora Soteira (Saviour) had received Kyzikos from Zeus. She was worshipped there apart from her mother Demeter, but was represented with her mother's attributes. Thus, in addition to the corn wreath that distinguished her at Syracuse, Pl. II, 85, and Lokri, Pl. III, 243, she wears here the veil of the bride or matron, a symbol associated not with Kora, but with Demeter, on the coin of Delphi, Pl. III, 251, for instance.

426-431. Lampsakos, on the Hellespont (Dardanelles), not far from Kyzikos.

These gold staters, perhaps the most beautiful issued during the fifty or sixty years of the fourth century preceding the expedition of Alexander, 334 B. c., are remarkable always for their delicacy of design and accuracy of execution. They bear the sign of the city, — the fore part of a winged horse, No. 427 (cf. Pl. V, 426), on the reverse, and a changing type on the obverse. The Museum possesses four out of the thirty known varieties of this wonderful series. These are:—

No. 426 (Pl. V). Head of Zeus; his thunderbolt is seen

behind the head.

No. 428 (Pl. V). Head of Pan (the god of flocks) with

a horn growing from his forehead.

No. 429 (Pl. V). Head of a Maenad, crowned with a wreath of ivy, — a plant sacred to Dionysos: she is represented in a Dionysiac frenzy; and her hair flies loose behind her.

No. 430 (Pl. V). Head of a Nymph with hair bound with a wreath of flowers. The flower represented is not determined.

The staters of Kyzikos and Lampsakos are counted among the rarest of Greek coins. In connection with them, it is interesting to know that in 400 B. c., when Xenophon was at Lampsakos and in need of money, he sold a favorite horse for 50 darics, equal to 50 of these

gold staters. This was equivalent to more than a year's pay as a general. He drew only four darics a month, or four times more than an ordinary soldier. No doubt, on active service he had other means of replenishing his exchequer. The story illustrates the relative cost of labor and commodities at this time.

No. 436. After the defeat of Philip V of Macedon at Kynoskephalae in 197 B. C., and Antiochos III of Syria at Magnesia in 190 B. C., the Romans restored the right of coinage to many towns. These towns proceeded to issue tetradrachms of a peculiar, flat, spread fabric, of one weight, and bearing usually rather conventional heads of deities. Instances of these coins in this collection are the following:—

No. 436. Kyme, — the Amazon Kyme, foundress of the

city.

No. 434. Ilion, - Athena.

No. 530. Rhodes, with types of Alexander's tetra-drachms. Cf. No. 157.

No. 544. Side, - Athena.

No. 225. Oetaei in Thessaly, — lion's head with spear in the mouth, — the symbol originally employed on these coins in the fourth century. See No. 224. Thessaly was "liberated" by the Romans after the defeat of Philip V of Macedon, in 197 B. C.

No. 319. Athens, — Athena. This series began earlier, about 220 B. C., in correspondence with the friendly rela-

tions that existed between Athens and Rome.

Similar coins struck at Maroneia and Thasos, Nos. 192, 199, with heads of Dionysos are of a somewhat later date. Artistically, these coins are the final effort of Greek silver coinage. The decline of coining, it may be noticed, was a decline in the choice of subject, in the artist's perception and treatment of it, in his technique, and in the purity of the silver.

437-453. Lesbos.

In the island of Lesbos (the modern Mytilene) were struck a greater number of small electrum coins, — hektae they are called, being the sixth parts of the stater. Many

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of these minute works of art are of extraordinary vigor. See, for instance:—

No. 439. Head of the Gorgon.

Nos. 441-442. Ram's head: beneath, a cock.

No. 446. Head of satyr with goat's ears.

The Ionian town of Phokaea issued similar coins in conjunction with Lesbos. The Phokaean sixths are the rarer, and may be distinguished by a small seal (phoca, $\phi\omega\kappa\eta$) the sign of the city, — placed on the coins, in punning allusion to its name.

No. 491 bears a Herakles head in a lion-skin, with his

club behind.

460-474. Klazomenae.

The name of this town is said to be derived from the shrieking swans, Nos. 461, 463, that inhabited the neighboring marshes ($\kappa\lambda\acute{a}\zeta\epsilon\nu\nu$, to shriek). The swan is also an attribute of Apollo, and his head is represented on the obverse, No. 460 (Pl. V).

"This nobler Apollo of Ionian Greece in which the incisions are softened into a harmony like that of Cor-

reggio's painting." - Ruskin.

The coins, — tetradrachms, Nos. 460, 461, drachms, Nos. 462-468 (Pl. V, 465), and hemidrachms, Nos. 469-474, are seldom found, and the magnificent gold stater, No. 464 (Pl. V), is one of the rarest of all coins. A distinguished numismatist says of the specimen in the British Museum: —

"The Apollo of Clazomene is one of the highest efforts of Greek Art. The treatment is extremely simple; the hair is very pictorial; there is no ornament; the expression is melancholy in the eyes, haughty in the mouth. Here a very high degree of beauty is reached with an absence of softness or trick." — Poole. The artists have succeeded in imparting a special sweetness to many of these faces, especially Nos. 462, 465, 469; and their success in representing the head in three-quarter view testifies to a skill that was the culminating point of a long tradition. These must be among the latest coins which present the face in this manner.

475, 476. Kolophon.

Apollo was worshipped at Kolophon, and it is his head that appears on these two coins. The change in style from the small head with the large features of the fifth century to the large head with the small features of the fourth century may be noticed. The style and execution of No. 476 (Pl. V) are beautiful, if somewhat hard, while the excellence of the striking and state of preservation of the coin are remarkable.

477-482. Ephesos.

This town was famous for its worship of Artemis ("Diana of the Ephesians"), and the symbols on the coins are connected with her. The high priest of her temple was called the King Bee; and the bee, Nos. 477, 481, is the most characteristic mark of Ephesian coins. The goddess herself was born at Ephesos with her brother Apollo, according to the Ephesian story, and the sacred palm tree beneath which their mother rested is shown on the coin, No. 479. The remaining symbol, the stag, No. 482, distinguishes Artemis as patroness of hunting.

488-490. Miletos.

The earliest coins of Miletos have symbols connected with the worship of the sun, — the lion and a star or sun, just as may be seen nowadays on the arms of Persia. Apollo was the god of the sun, and appears on the later coins of the city: he was worshipped at the very famous shrine of Didyma, close to the city. His head occurs on No. 488, while on the reverse, No. 489 (Pl. V), is the lion looking back at the star. These two tetradrachms are very rare: only three other examples are known to exist.

506-513. Dynasts of Caria.

Caria was ruled from the beginning of the fourth century until the coming of Alexander, in 334 B. C., by members of a Carian family, the Hecatomnids, holding power nominally as satraps of the Great King of Persia. Coins of three members of this family, the brothers Mausolos, Hidrieus, and Pixodaros, are exhibited here. The types

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are the head of Apollo on the obverse, No. 506, — a somewhat flat repetition of the Rhodian head, No. 524, and the statue-type of Zeus of Labranda with the double axe, the *labrys*, on the reverse, No. 507. The well-known portrait statue of Mausolos from his Mausoleum, cast No. 548, seems reminiscent of the figure on the reverse of his coins.

No. 512 shows a more ornate head of Apollo.

515-519. Kos, an island off Caria.

The commercial prosperity of Kos in the fourth century is shown by the magnificent tetradrachms issued there with the head of Herakles on the obverse, Nos. 515 (Pl. V), 516. The reverse, No. 517, is very typical of a Greek coin. At the top is seen the name of the people of Kos: beneath is its symbol, the crab; beneath again is the club, — a sign of the tutelary divinity Herakles, while at the bottom is the name of the magistrate responsible for the issue of the coin.

521-531. Rhodes, an island off Caria.

Rhodos, the daughter of Poseidon and Amphitrite, gave her name to the island. Helios (the sun) loved Rhodos, and the names of their grandchildren were given to three of the cities of the island. These were Kameiros, Ialysos, and Lindos. The story of this love arose to account for the sun-worship at Rhodes, where the land was sacred to Helios down to a late date. The coins were struck at the city of Rhodes, founded about 408 B. C. by the three towns mentioned above. The Doric character of the inhabitants, combined with the Asiatic luxury of the neighboring coast, produced an art that reflected the earnestness and splendor of the Rhodians. The coins also are a witness of these influences.

The types on Rhodian coins were constant throughout: on the obverse was the head of Helios, Nos. 521, 524 (Pl. V), and on the reverse the single rose of the country, Nos. 523 (cf. Pl. V, 524), in allusion to the name of the town ($\dot{\rho}\dot{\rho}\delta\delta\nu$ = rose). The brilliancy of the sun is happily suggested by No. 526. The rose flourishes in Rhodes to this

day. At first, the head of Helios resembles Apollo, No. 524, the god of the sun, while later it is more like Alexander the Great, No. 526. After the famous siege by Demetrios Poliorketes in 303 B. C., the Colossus of Rhodes was erected from the proceeds of his engines of war, being finished in 292 or 290 B. C.; and it may be the head of this statue, the work of Chares of Lindos, that is reproduced on the later coins, both full face, Nos. 525-528, and in profile, No. 531.

532. Lydia.

The earliest money struck by Lydian kings was electrum, but the form of these early electrum coins is quite uncertain. It has been conjectured that the two coins, Nos. 454 (Pl. V), 455, are in this class; and more lately Dr. Head has ascribed the small coin with a lion's head surmounted by a pellet, No. 458, to these monarchs, and probably would regard Nos. 454, 455, as early Ionian coins. Too few coins remain, in any case, of these early issues to enable numismatists to decide the question. Kroesos, the famous Lydian king, 561-546 B. C., abandoned the coinage of electrum, owing, perhaps, to the constant variations in the amount of gold in its composition, and the consequent discredit and depreciation of electrum coins in the markets, and substituted silver and gold in its place. No. 532 is one of his gold staters. The lion and bull may be symbolical of the sun and moon, or the lion may be simply the oriental sign of sovereignty.

This Lydian gold was employed in the trade of Asia Minor in the second half of the sixth century B. C., until Lydia succumbed to Persia, and the coin was replaced by

the Persian daric.

533-540. Lykia.

Lykia became part of the Persian empire after the fall of Kroesos in the sixth century, and was governed by satraps, save for a few years of vassalage to Athens, until the time of Alexander the Great. No. 535 shows the head of one of these satraps, Khäräi, in three-quarter view, wearing the Persian tiara, and No. 537 (Pl. V) is

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an exceptional stater of another, Khäriga, showing Athena seated, with her weapons and owl. These rare coins were struck in the second half of the fifth century, when Lykia's recent subjection to Athens had ended. The coin of Khäriga shows Attic influence.

On No. 538 is the fore part of the winged horse Pegasos. It was in Lykia that Bellerophon, mounted on

Pegasos, slew the Chimaera.

541, 542. Aspendos, a Greek town in Pamphylia.

Most of the coins of Aspendos are of a barbarous style; No. 541 (Pl. V), is an exception. On the obverse are two youths wrestling in a manner still obtaining in that part of Asia Minor. On the reverse, No. 542, is a slinger. It is known that mercenaries were hired from Aspendos; possibly the slingers were famous, and appear on the coins for that reason. Another suggested explanation is that the type was a pun between $\Lambda \sigma \pi \epsilon \nu \delta \sigma s$ and $\sigma \phi \epsilon \nu \delta \sigma \gamma m = a$ sling.

SYRIA.

SELEUKOS, the youngest of the generals of Alexander, possessed himself of Syria after Alexander's death, and founded the Seleukid dynasty. These Syrian monarchs reigned at Antioch for two and a half centuries. A long series of interesting portraits of them exists on their coins, and of these the Museum possesses a few examples, Nos.

553-557-

The peculiar border round some of these coins, Nos. 555, 556, 557, 558, 560, 561, is composed of a knotted woollen fillet similar to that which may be seen in the representation of Cupid and Psyche on the Marlborough cameo in the Museum collection. It is a dedicatory emblem, and as such is found on the heads of animals destined for sacrifice, for example, at Eretria, No. 275. A network composed of these fillets is seen covering the omphalos of Apollo at Delphi, both on the Amphictyonic stater, No. 252, and on the cast, No. 92A, in the Museum. It has been suggested that the appearance of the fillet on these Eastern coins may have reference to the relationship between the Seleukid kings of Syria and Apollo, derived from the claim of Seleukos to be the son of that god.

553. Antiochos I. Son of Seleukos.

Seleukos exhibited great affection for his son, for not only did he allow him to marry one of his own wives, Stratonike, daughter of Demetrios, No. 167, when Antiochos was love-sick for her, but he gave him as marriage portion a part of his kingdom. The beautiful gold stater, No. 553, with Antiochos' portrait, was struck probably somewhere in this kingdom to the east of the Euphrates. Little is known of Antiochos or his character: most histories relating to him are lost.

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554. Antiochos III. The Great.

He made war against the Romans in Greece; and being driven out, was defeated finally at the battle of Magnesia in Ionia, in 190 B. C. This event, as seen above, had a great effect on Greek coinage, for all the towns subject to him in Asia Minor recovered their autonomy.

557 (Pl. V). Tigranes.

This conceited and untrustworthy yet enterprising individual was king of Armenia, and for a while of Syria. He was son-in-law of Mithradates the Great, No. 398, and was his ally against Rome. He had not that champion's courage, however, and exhibited abject humiliation in misfortune: he played Mithradates false, and finally was himself defeated and driven from Syria by Lucullus, 69 B. C. He was the typical shifty, overbearing, weak Armenian. With him, the Syrian monarchy, begun by Seleukos, came to an end. He died a firm friend of Rome.

The relatively high merit of this coin of Tigranes is due, perhaps, to his wife, who inherited her father's admiration for Greek culture, and encouraged the arts. Tigranes wears the Armenian tiara,—a variation of the Persian tiara seen on No. 549. His forehead is bound

with the regal diadem.

558. Seleukia. The port of Antioch in Syria.

This town gained its freedom from Syrian rule in 108 B. C., and issued silver coins. The turreted mural crown indicates that the head is the Tyche ($\tau \acute{\nu} \chi \eta$, fortuna) or protecting divinity of the town. This method of representing a town has been made familiar to us in modern times by Pradier's statue of Strasbourg at Paris.

561. Mithradates I of Parthia, 174-136 B. C.

The tribes of Parthia under Arsakes revolted from the Seleukids in the middle of the third century B. C., and the vast territories to the east of the Euphrates were lost to the Macedonian kingdom of Syria. The coinage of Parthia is barbaric, but this coin of Mithradates is an excep-



tion. Mithradates was a brave, just, and upright monarch, free from pride or luxury,—a great conqueror and administrator too: he introduced into Parthia the best laws and customs obtaining among the people he conquered. On his coins is engraved the title "Philhellene," and it is probable that he succeeded in winning the esteem of his Greek subjects. This coin, of Greek fabric, may have been struck in his honor at some town where much of the population was Greek. The band round the hair is the royal diadem.

AFRICA.

EGYPT.

562-564. Ptolemy I.

Alexander the Great died in 323 B. c. Thereupon his empire passed nominally to his half-brother, Aridaeos, surnamed Philip, conjointly with Alexander's son by Roxana, Alexander IV, born shortly after his father's death. Philip was half-witted; and Alexander being but an infant, the real power was vested in the viceroys appointed to govern the different provinces. Egypt was

chosen by Ptolemy.

Ptolemy was one of the generals of Alexander the Great, and his devoted adherent. His origin was said to be low, yet one account makes him half-brother to Alexander. Withdrawing into Egypt immediately on his sovereign's death, he there founded the Ptolemaic dynasty. He was brave, energetic, and reliable, well educated, — he wrote the history of Alexander the Great, — shrewd, and a ruler of judgment. His family held the throne for nearly three hundred years, thanks in great measure to his admirable

foresight.

The coins of Ptolemy illustrate the changes in his fortune. The first coins bore the title of Philip Aridaeos. They were similar to No. 165, struck in Philip's name at Babylon. Philip was murdered in 317 B. C. Ptolemy thereupon struck coins in the name of Alexander IV, bearing the head of Alexander the Great in the elephant's skin, No. 562. Alexander IV was murdered in 311 B. C. After his death, it is conjectured that Ptolemy struck coins similar to the preceding type, but in a somewhat different style, No. 563, until the year 306, when he was declared king of Egypt. Ptolemy's own head, No. 564, appears after 306, and is continued on Ptolemaic coins

down to Roman times. This gold coin with his portrait

was struck in his reign, or the succeeding one.

The elephant's skin on Nos. 562, 563, refers to Alexander's expedition to India. Beneath the skin may be noticed the horn of Ammon as on No. 206. Round the forehead is the royal diadem, and round the neck the aegis, an attribute of Zeus.

565. Berenike II, daughter of Magas, king of Kyrene, was a woman of resolution. At the age of fifteen she was bride elect of Demetrios the Fair, son of Demetrios Poliorketes, No. 169, and murdered him on discovering that he carried on an intrigue with her mother. Berenike then married Ptolemy III (Evergetes), and is chiefly famous in connection with the dedication of a lock of her hair in a temple, in commemoration of his safe return from an expedition. The lock of hair was lost; but was discovered by the court astronomer as a new constellation in the sky, called to this day coma Berenices. The story forms the subject of an ode of Catullus, translated by him from the Greek of Kallimachos. Berenike was eventually

566. Cleopatra, daughter of Ptolemy Auletes.

murdered by her son Ptolemy IV (Philopator).1

This coin represents the famous mistress of Cæsar and Antony. "Her portrait is that of a woman of intellect and charm, not of beauty. A broad head with wavy hair, an aquiline nose, large deep-set eyes, and a full, eloquent mouth, is supported by a long, slender throat." *Poole.*

"The contact of her presence, if you lived with her, was irresistible, the attraction of her person, joined with the charm of her conversation, and the character that attended all she said and did, was something bewitching. It was a pleasure merely to hear the sound of her voice, with which, like an instrument of many strings, she could pass from one language to another." Plutarch (Clough).

She spoke Aethiopian, Troglodyte, Hebrew, Arabic,

¹ No coin of this monarch is in the Catherine Page Perkins Collection, but the Museum possesses a portrait head of him among its ancient marbles.

Syriac, Medic, and Parthian, besides, of course, Greek. Her features, her tastes and accomplishments suggest a Semitic strain in her blood. She was twenty-seven years of age when this coin was struck.

CARTHAGE.

567-570. The interest of Punic coins is increased by the fact that they are almost the only memorial of the The second Carthaginian invasion of Carthaginians. Sicily was made at the end of the fifth century, and from that time onward the Carthaginians struck coins both in Sicily, Nos. 86-91, and at home, Nos. 567-570. This Semitic coinage was the work of Greek artists, and the types were Greek types; but the work, at first fine, became flat and uninteresting: the large gold six-drachm piece, No. 569, is a typical example of the later class. This head is a tasteless copy of the Arethusa type, No. 85, altogether lacking in life and freedom. It has served in turn as model for the obverse of the coins of three French republics. Better copies are seen on the earlier examples, Nos. 86 and 88. No. or is a copy of the Alexandrine type, No. 156.

The horse on these coins, Nos. 87, 568, is probably a symbol of the sun (Baal); see 2 Kings, xxiii, 11, "And he (Josiah) took away the horses that the kings of Judah had given to the sun." The palm tree (\$\phi\omegai\chi\omegai\tau\$ = phoenix) refers to the Phoenician origin of the Carthaginians. There was a myth that the Tyrians, on digging the foundations of Carthage, found a horse's head beneath a palm tree. Doubtless the type on No. 89 recalled this story.

ROMAN COINS.

THE earliest coins in this collection having to do with Rome are Nos. 2 and 3. These were issued in the fourth century B. C. at Capua, in Campania. Capua at that time fell under the Roman dominion, but was allowed home rule, and struck coins. The style is Greek; the subjects - Romulus and Remus suckled by the wolf (cf. cast of the Wolf of the Capitol, No. 557) and the head of Roma - are Roman. No. 31 also illustrates an incident in the history of Rome, during the Pyrrhic wars. Locri in Bruttium constantly changed hands from Pyrrhus to Rome in the period between 280 and 275 B.C. This coin was struck at Locri at a time when Rome was in power, and shows πίστις (fides, good faith) crowning Rome in assurance of the promised faithfulness of the Locrians. This seated figure became the conventional representation of Rome of later art. The allegorical character of the subject is essentially Roman, but here again the work is Greek.

Rome had no silver coinage of her own until a few years later, 268 B. C., just before the First Punic War; at a time, that is, when Greek coin-engraving had passed its highest point and was far on the downward path. The earliest issues showed Castor and Pollux — "the great twin brethren" (probably copied from the Greek coin, No. 25), and the name of the city, No. 577. A later series, the so-called "family" coins, starting some thirty-five years afterwards, was distinguished by representations of people or events relating to the family history of the magistrate responsible for their issue. Such are Nos. 579-581. It will be seen at once that, as compared with Greek coins, the artistic style of these is feeble. They are found in over-

whelming numbers.

Contemporary portraits began with Julius Caesar, and were the rule henceforward: the Imperial series is, indeed, a vast portrait gallery of Emperors and their families. The

few specimens, Nos. 582-609, serve to give an idea of the style of these coins.

Imperial coins occur¹ in the three metals: the *aurcus* of gold, No. 585; the *denarius* of silver, No. 584²; and the sestertius, No. 586, and smaller divisions of bronze.⁸

The work of these coins was probably done by Greek artists, but the art is Roman art, and quite distinct from that of Greek coins. Mechanically, they are better than Greek coins: greater attention was paid to the processes of minting; but artistically they are inferior. They are marked by dulness and monotony of style, maintaining throughout a period of over two hundred years a certain uniform excellence of quality which avoids mediocrity, but never reaches real distinction. This weary sameness would be still more irksome were it not for the variety of beautiful and attractive, if fortuitous, colours that distinguish all ancient copper coins.

The portraits are accurate, as may be proved by comparing them with the casts in the Bust Room of the Museum; and they are well executed in a methodical spirit, but without the freedom, vitality, or variety of Greek portraits. The head of Augustus, No. 585 (Pl. V), is particularly fine (compare the portrait bust from the Despuig collection in the Museum); and the heads of Galba, No. 593, Maximinus I, No. 607, and Gordianus III, No. 608, are remarkable and characteristic. It will be noticed that the head no longer occupies the whole of the obverse as on Greek regal money, but shares the space with an inscription, as is still the fashion with modern coins.

The reverses also are Roman in spirit, and show either some allegorical personification or mythological device, No. 586, or record some actual historical scene treated pic-

¹ Some of these coins have been placed sidewise in the case in order that the light may strike the heads from the top and not from the side.

² The "penny" given to the laborers in the vineyard, Matt. xxii. 19, with the image and superscription of Caesar, was the denarius of Tiberius, the successor of Augustus.

⁸ The largest bronze coins are spoken of by numismatists as "first brass," the smaller ones as "second brass," and "third brass."

torially, - a method that is typically Roman: for instance,

No. 588, where Caligula is seen sacrificing.

Such are Roman coins. They are a product of the characteristic order and system of the Roman Empire; and they reflect its essentially practical, truthful, and business-like qualities. They have a further interest for us in that they, and not Greek coins, inspired the medallists of the Renaissance; and in this way they have influenced all modern coinage.

BRIEF DESCRIPTION OF THE COINS

IN THE

CATHARINE PAGE PERKINS COLLECTION

Reprinted from the Twenty-sixth Annual Report of the Trustees of the Museum.

ITALY.

Campania. — CALES. Bronze coin of the period after 268
B. C., with a head of Athena on the obverse; and a cock, with a star behind it, on the reverse.

CAPUA. Two Romano-Campanian didrachms. One of the period 338-318: obv., head of young Herakles; rev., wolf and twins, Romano in exergue. The other after 318: obv., head of Roma in Phrygian helmet; rev., Niké binding wreath to palm branch.

CUMAE. Didrachm, of the period 480-423. Obv., female head to r.; rev., mussel-shell and barley-

corn.

NEAPOLIS. Bronze coin of about 340. Obv., head of Apollo to l.; rev., Campanian bull to r., crowned by

flying Niké.

Phistelia. Two didrachms of the period 420-400. Each with head of Hera on obv., and Campanian bull, with *Fistlus*, in Oscan letters, on rev.

Calabria. — TARENTUM. Didrachm, 500-473. Obv., Taras on dolphin to r., a cuttle-fish in his r. hand; rev., sea-horse to r., cockle-shell below.

Gold drachma, 400-330. Obv., head of a goddess to l., a dolphin under the chin; rev., Taras

on dolphin to l., wearing chlamys, and holding a Nike and a trident.

Didrachm, about 300. Obv., head of a goddess to l.; rev., nude rider crowning horse, dolphin below, thunderbolt in field.

Didrachm, 302-281. Obv., nude horseman riding to 1., holding shield, NIKO∆AMO≤; rev., Taras riding dolphin to r., carrying a bunch of grapes and a distaff; in field a cock.

Diobol, about 300. Obv., head of Athena to r.;

rev., Herakles grappling with lion to r.

Didrachm, 235-228. Obv., armed horseman riding to l., EENOKPATH≤; rev., Taras riding dolphin to l., carrying trident; waves and cuttle-fish below.

Didrachm, 235-228. Obv., armed horseman galloping to r., holding a Niké, who crowns him, KAA∧IKPATH≤; rev., Taras-riding dolphin to l., carrying a trident and a Niké who crowns him.

Lucania. — HERAKLEIA. Didrachm, 350-280. Obv., head of Athena, a Scylla on her helmet, and a strigil below her chin; rev., Herakles leaning on his club, and crowned by a Niké; symbol, a small jug.

METAPONTUM. Two staters of the period 400-350. One has on obv. a female head to l., with fillet and leaves; the other a youthful head with ram's horns. Both have the ear of wheat on rev.

Stater, 350-330. Obv., head of Leukippos helmeted, with lion's head for symbol; rev., the ear of wheat.

Sybaris. Stater of the sixth century, with the bull on the obv. and the same type incuse on the rev.

Thurium. Stater of the period 420-390, and another of the period 390-350, each with the head of Athena on the obv. and the bull on the rev. On the former the helmet of Athena is wreathed with olive, on the latter it is decorated with a figure of Scylla, Pl. I, 21.

Velia. Didrachm, 400-268. Obv., head of Athena

ITALY.

67

to l., helmet decorated with Pegasos and olive

wreath; rev., lion seizing upon a stag.

Didrachm, signed by Philistion. Obv., head of Athena to l., the helmet decorated with a Niké driving a quadriga, a horseman on the neck-piece, and the signature on the band of the crest; rev., lion crunching a sword-blade; a Niké flying to l. above, carrying a taenia.

Bruttium. — Bruttii. Octobol? (86.1 grs.), 282-203. Obv., busts of the Dioskouroi; rev., Dioskouroi mounted, each carrying a palm branch; symbol, a club.

Tetrobol? (36.33 grs.), same period. Obv., head of Athena; rev., eagle standing with wings

raised; symbol, a torch.

Tetrobol? (34.38 grs.), same period. Obv., head of Apollo; symbol, a lyre; rev., Artemis standing, holding arrow and torch, a hound at her

feet; symbol, a star.

CROTON. Two staters, late fifth century. First: obv., head of Hera Lakinia, her stephanos adorned with palmettes; rev., young Herakles seated on a rock, his bow lying on the ground, Pl. I, 28. Second: obv., Hera Lakinia as above, her stephanos adorned with a palmette between the fore parts of two griffins; rev., Herakles as above, his bow and quiver in the field above him.

Stater, about 400. Obv., head of Apollo; rev.,

infant Herakles strangling two serpents.

LOCRI EPIZEPHYRII. Stater, 280-268. Obv., head of Zeus; rev., Pistis (Fides) crowning Roma, names inscribed.

Pandosia. Stater, about 400. Obv., head of Hera Lakinia with stephanos; rev., Pan the hunter seated on a rock, his dog lying at his side. (This is the specimen from the Carfrae sale, No. 34.) Pl. I, 32.

RHEGIUM. Tetradrachm, 415-387. Obv., lion's head

facing; rev., head of Apollo laureate.

TERINA. Stater, 440-400. Obv., head of Terina, with

artist's initial $- \Lambda - on$ the kerchief; rev., Terina seated on a cippus, holding a phialé, and crowned by a small Niké.

Stater, 400-388. Obv., head of Terina, sphendoné decorated with a meander; rev., Niké seated, holding an olive spray, Pl. I, 35.

SICILY.

AGRIGENTUM. Gold twenty-litra piece, 415-406. Obv., crab; rev., eagle slaying a serpent; mark of value, two dots.

Tetradrachm, 415-406. Obv., two eagles devouring a hare; rev., quadriga with Niké crowning the charioteer; in exergue a crab.

Tetradrachm, same period. Obv., like preceding; rev., a crab above, and Scylla moving to l., below. (This is the splendid specimen formerly in the Ashburnham collection, sale No. 30.) Pl. I, 37.

HERAKLEIA MINOA. Tetradrachm, after 409. Obv., head of Persephone with dolphins; rev., quadriga to r., Niké above.

HIMERA. Two tetradrachms of the period 472-415. Each with a victorious quadriga on the obv., and the nymph Himera standing on the rev.; with a small satyr bathing in a fountain in the background. On one the satyr stands to r., receiving the water on his breast, on the other he stands full-front, the water striking him on the left shoulder. The latter has a barleycorn as symbol.

LEONTINI. Two tetradrachms of the period 466-422. Each with the semi-archaic head of Apollo laureate on the obv., and the lion's head surrounded by four barleycorns on rev. Another, of about the year 425, with the same types in more developed style.

Messana (including Zankle) — Zankle, before 493.

Drachma with dolphin within a sickle on obv., and

scallop-shell in incuse of nine sections on rev.

Two tetradrachms of the period 480-420. First:

SICILY. 69

obv., male charioteer driving pair of mules which are crowned by Niké, laurel twig in exergue; rev., hare leaping to r., dolphin below. Second: similar, except that chariot is driven by Messana, and two dolphins in exergue. Another, of 420-396. Obv., like the second; rev., like the others, with a head of Pan below the hare.

Bronze coin, 345-282. Obv., head of Poseidon to l.; rev., ornamented trident, with a dolphin on

either side.

Naxos. Drachma, 6th century. Obv., head of Dionysos to l.; rev., bunch of grapes between two leaves.

Tetradrachm, 461-415. Obv., head of Dionysos to r.; rev., nude Silenos seated on the ground, hold-

ing a wine-cup, Pl. I, 51.

Drachma of the same period, with same types.

Didrachm, 415-403. Obv., head of Apollo, leaf and berry in field; rev., nude Silenos seated on the ground, holding wine-cup and thyrsos; in the field a herma. (Design of Prokles, but not signed. Bunbury sale, No. 364.) Pl. I, 53.

SEGESTA. Didrachm, 480-415. Obv., head of Segesta, hair rolled up behind; rev., hound walking to r.,

scenting; behind, three barley-stalks.

SELINUS. Didrachm, before 466. Obv., wild celery leaf, dot on either side of stem; rev., incuse square of ten divisions.

Syracuse. Drachma, 485-478. Obv., female head to r.;

rev., young horseman riding to r.

Didrachm, same period. Obv., female head, surrounded by three dolphins; rev., bearded horseman,

leading a second horse.

Eight tetradrachms, ranging in date from 485 to 415, illustrating the gradual progress in the rendering of the profile head of Persephone surrounded by dolphins; the victorious quadriga on the reverse.

Tetradrachm, 412-406. Obv., head of Niké (?) to r., surrounded by dolphins; rev., Persephone driving quadriga, and crowned by Niké, who bears wreath and aplustre. Ear of barley in exergue. (By Evarchidas?) Pl. I, 67.

Tetradrachm by Kimon. Obv., head of Arethusa, almost full-front to l., surrounded by dolphins (signature on diadem); rev., victorious quadriga, signature

on exergue line, Pl. I, 68.

Three dekadrachms by Evaenetos, with the famous head of Persephone surrounded by dolphins. One is signed; another, though without a signature, is an exceptionally brilliant example of this coin, Pl. II, 85.

Litra, signed by Evaenetos. Obv., female head to l., wearing sphendoné and diadem, signature on latter. Symbol, a barleycorn. Rev., cuttle-fish with

webbed feelers.

Four electrum coins of 344-317. First, 100 litrae: obv., head of Apollo, with lyre behind it; rev., head of Artemis, hair fastened in a roll behind, quiver at neck and lyre in field. Second and third, 50 litrae: with head of Apollo on obv. (symbols, bow and pileus respectively), and tripod on rev. Fourth, 30 litrae: obv., head of Zeus; rev., Pegasos, with three dots below.

Silver stater of same period. Obv., head of Athena

to r.: rev., Pegasos to 1.

Two staters of Agathokles, 310-305. First: obv., head of Athena to r., helmet uncrested and undecorated; rev., Pegasos leaping to l., star above. Second: obv., the helmet crested and decorated with a griffin; rev., Pegasos, triskelis between his legs.

Two tetradrachms of Agathokles. First: obv., head of Persephone surrounded by three dolphins; rev., quadriga with triskelis above. Second: obv., head of Persephone to r., with hair hanging loose; rev., Niké,

erecting a trophy, symbol, a triskelis.

Hieron II, 275-216. Gold coin (67.6 grs.). Obv., head of Persephone, cornucopia as symbol; rev., biga

galloping to r.

Philistis, 275-216. 16 litrae, silver. Obv., head of Philistis veiled, with torch as symbol; rev., quadriga driven by Niké. The same, 5 litrae, with same types, except that the chariot is a biga.

Period 215-212. 16 litrae; obv., head of Zeus; rev., quadriga driven by Niké. 12 litrae; obv., head of Athena, Pegasos on her helmet; rev., Artemis shooting to l., her dog running in same direction.

(Bunbury sale, No. 501.)

Siculo-Punic, 393-310. Small gold coin (14.22 grs.), with date palm on the obv. and horse's head on the rev. Five tetradrachms, four with obv. head of Persephone in style of Evaenetos, surrounded by dolphins, one with head of Herakles in lion-skin. Of the revs., two are unbridled horses prancing; three, horse's heads, with a date palm in the background.

MACEDON.

A. Towns and Districts.

AENEIA. Tetrobol, 500-424. Obv., archaic head of Aeneas, bearded; rev., quadripartite mill-sail square, incuse.

Diobol, of same period and with same types.

AKANTHOS. Five tetradrachms of the period 500-424, four of them with the familiar type of the lion devouring a bull, one with a lioness instead of a lion, the style of which shows that it belongs among the later coins of the period, Pl. II, 126.

Obol of same period. Obv., head and neck of a

lion facing.

Two tetrobols of period after 424. Obv., fore part of kneeling bull, one with a bay twig for symbol, the other with the letters TE. Rev., quadripartite square.

Tetradrachm of same period. Obv., lion leaping upon a bull and biting him on the back; rev., quadripartite square within a raised square on which is the inscription, the whole in an incuse square, Pl. II, 130.

Amphipolis. Tetradrachm, 424-358. Obv., fine head of Apollo; rev., race-torch within a square border bear-

ing the inscription; symbol, tripod.

BISALTAE? Drachma (63.7 grs.) of about 500. Obv.,

nude warrior standing to r. at the side of a horse, and carrying two spears; rev., quadripartite incuse

square.

Tetrobol of Mosses, king of the Bisaltae (500-480?). Obv., similar to preceding, but the warrior wears a short chlamys; rev., incuse square, within which a smaller, quadripartite square and the inscription $MO \le E\Omega$.

CHALKIDIAN LEAGUE. See Olynthos.

EDONI. Octadrachm of Getas, king about 500. Obv., a man carrying two spears to r., between two oxen; rev., king's inscription in a square surrounding a quadripartite square, Pl. II, 121.

CION. Two obols? (13.92 and 13.60 grs.) of the fifth century. Obv., goose standing with head turned back, symbol, a lizard. On one an H, on the other Θ .

Rev., quadripartite incuse square.

LETE. Stater of about 500. Obv., nude satyr seizing a nymph by the waist; rev., incuse square divided

diagonally.

MACEDON. The kings of Macedon and Macedon under the Romans follow the geographical list of the district.

Mende. Three tetrobols of the period 424-358. First: obv., Silenos reclining upon the back of an ass, and holding a wine-cup; rev., large amphora and inscription MINDAH. Second: obv., Silenos stands to r., at the further side of an ass; rev., within an incuse square, MENDAION and a crow. Third: obv., head of young Dionysos crowned with ivy; rev., MENDAION and an amphora.

NEAPOLIS. Silver coin of the period before 500 B. C., 118.2 grs. (\frac{2}{3} Babylonic stater? — apparently unpublished). Obv., very archaic Gorgon's head; rev.,

roughly divided quadripartite square, incuse.

Three staters of the period 500-411, with the Gorgon's head on obv., and mill-sail square on rev.

Drachma of same period, and with same devices.

Three drachmas of the period 411-350, with the Gorgon's head on obv., and head of Aphrodite wear-

ing wreath and necklace, surrounded by the letters

NEO∏, on rev.

Nine hemidrachms of the same period, with the same types, except that the hair of Aphrodite is bound by a cord, not wreathed. On five of them she wears a necklace, and on four not. (One of the latter has the letters NEO running down at r., instead of

the four letters in the corners.)

OLYNTHOS. Two tetradrachms of the Chalkidian League. First: obv., the fine head of Apollo, laureate, to l.; rev., the large lyre and inscription. Second: obv., the more effeminate head of Apollo, laureate, to r.; rev., like the preceding, with EΠΙ ΑΡΙ≤ΤΩΝΟ≤ below, Pl. II, 132.

Orreskii. Two octadrachms of the period before 480.

Obv., a man carrying two spears between two oxen

to r.; rev., shallow incuse square, Pl. II, 92.

Two staters of same period. Obv., centaur kneeling, carrying a nymph in his arms; rev., mill-sail

square, incuse.

PAEONIA. Two tetradrachms of Patraos, king 340-315. Obv., head of Apollo (?), laureate, to r.; rev., horseman spearing a prostrate foe.

Tetradrachm of Audoleon, king 315-286. Obv., head of Athena Parthenos, almost full-front; rev.,

horse walking to r., with loose rein.

POTIDAEA. Tetradrachm, 500-480. Obv., Poseidon Hippios riding to r., carrying a trident; rev., incuse square, quartered diagonally.

B. KINGS OF MACEDON.

ALEXANDER I (?). Tetrobol. Horseman wearing petasos and chlamys, and carrying two spears; rev., head and paw of a lion to r. No inscription on either side.

Tetradrachm. Obv., like above; rev., goat's head and small inverted caduceus in a square within an incura square. No inscriptions

incuse square. No inscriptions.

Perdikkas II (?). Tetrobol. Obv., like preceding, but

style later, and rider wears high boots; rev., fore part of a lion to r. in incuse square. Above, a caduceus to r. No inscriptions.

Another. Obv., unbridled horse prancing to r.; rev., TEPAIK and crested helmet in a linear square,

within an incuse square.

ARCHELAOS I. Silver stater. Obv., youth's head to r., bound with a fillet; rev., APXEAAO and bridled horse with rein trailing.

PHILIP II. Tetradrachm. Obv., head of Zeus, laureate; rev., \$\Philat\ITTOY, boy with palm branch riding a horse with a fillet around its head. Symbol, thunderbolt.

Triobol. Obv., filleted head of Apollo to r.; rev., name, and boy with palm branch riding a horse to l.

Monogram below.

Three gold staters, from different dies. Obv., head of Apollo or Ares, laureate, to r.; rev., name and biga. Symbols, on two the head of a trident; on

third a thunderbolt, Pl. II, 151.

ALEXANDER III (the Great). Gold distater. Obv., head of Athena in three-crested Corinthian helmet, on which is a serpent; rev., AAEEANAPOY, Niké holding a wreath and trophy-stand. Symbol, a thunderbolt.

Two gold staters. Types of both like the preceding, one with AAEEANAPOY and a monogram; the other with AΛΕΞΑΝΔΡΟΥ ΒΑ<ΙΛΕΩ<, a monogram in a

wreath, and another in the field.

Four tetradrachms. Obv. on all, head of Herakles in lion-skin; rev., I, AAEEANAPOY, Zeus with eagle and sceptre on a throne with a back; symbol, a Boeotian shield; II, BA≤IΛΕΩ≤ AΛΕΞΑΝΔΡΟΥ, throne without back, monogram (Mallos?) in field; III, ΑΛΕΞΑΝΔΡΟΥ, throne with back, two monograms in field; IV, AAEEANAPOY, throne with back, bunch of grapes and monogram in field, Pl. II, 159.

Didrachm (128.63 grs.). Types as in tetradrachms; on rev., AAEAEANAPOY and a monogram.

Drachma. Types as above; on rev., $AAE \equiv AN-\Delta POY BA \leq IAE\Omega \leq (latter in exergue)$, \leq and monogram.

Hemidrachm (32.53 grs.). Types and details like

the preceding.

Obol (10.51 grs.). Like the preceding, inscription

incomplete. Under the throne, O.

Hemiobol (4.98 grs.). Obv. like the preceding; rev., $A\Lambda E \equiv AN\Delta$, club, bow, and quiver. Above, Φ M.

Philip Aridaeos, 323-316. Tetradrachm like those of Alexander, with the inscriptions BA≤IΛEΩ≤ ΦΙΛΙΠ-

ΠΟΥ, M, and ΛΥ on the rev.

ALEXANDER IV OR V. Tetradrachm with types and inscription like those of Alexander the Great, but of coarser execution. Under the throne on rev., AP (monogram), and symbol a caduceus. (Montagu

sale, No. 779.)

DEMETRIOS POLIORKETES. Five tetradrachms with the head of Demetrios horned and filleted. On the rev. of two, Poseidon seated, holding trident and aplustre (one has a helmet as symbol); on the other three he is standing, with one foot on a rock. Various monograms, Pl. III, 169.

ANTIGONOS GONATAS OR DOSON. Tetradrachm. Obv., head of Poseidon to r., wreathed with a sea plant; rev., Apollo seated upon a prow, on which is the

king's inscription. Monogram below.

Another; obv., head of Pan on a shield; rev., archaistic Athena brandishing shield and thunder-

bolt. In field, helmet, and monogram.

PHILIP V. Tetradrachm. Obv., head of Perseus on a shield, wearing winged cap with griffin's head at top, his sword at his shoulder. Rev., king's inscription and club in an oak wreath. Three monograms. (Carfrae sale, No. 118.)

Drachma. Obv., filleted head of Philip; rev., inscription, club and three monograms, in an oak

wreath, below which a thunderbolt.

Perseus. Drachma. Obv., filleted head of Perseus; rev., inscription, club and three monograms, in an oak wreath, below which a star.

C. MACEDON UNDER THE ROMANS.

Three tetradrachms. I, 158-146: obv., head of Artemis in a shield; rev., MAKEΔONΩN ΠΡΩΤΗ≤, club, and three monograms, in an oak wreath, below which a thunderbolt. II, after 146; obv., like preceding; rev., MAKΕΔΟΝΩΝ, LEG, club, and monogram, in an oak wreath. III, before 89; obv., MAKΕΔΟΝΩΝ and head of Alexander; rev., AESIΛΛΑ≤ Q, club, money-chest and seat in laurel wreath.

Two tetrobols of the period of semi-independence under Philip V., 185-168. I, obv., Macedonian shield with club in centre; rev., MAKEΔONΩN and helmet. Symbol, aplustre. II, obv., wheel on a Macedonian shield; rev., prow of ship, on which BOTTEATΩN.

THRACE, THASOS AND THE NORTH.

AENOS. Three tetradrachms of the period 450-400, with the head of Hermes of severe style on the obv., and goat on the rev. One of them has as symbols on the rev., a herma of Hermes standing on a throne (on the back of which hangs a wreath), and a caduceus, Pl. III, 182.

Tetradrachm, 400-350. Obv., head of Hermes of fine style; rev., goat; symbols, barleycorn and bunch

of grapes, Pl. III, 185.

BYZANTIUM. Drachma, 400-350. Obv., bull walking to l. on a dolphin; above, BY (with Byzantian B); rev., mill-sail square, incuse.

DIKAEA. Tetrobol, 480-450. Obv., head with hair rolled up behind; rev., bull's head to r., Pl. III, 193.

MARONEIA. Didrachm, 500-450. Obv., fore part of horse

springing to l., POFO . . . ETTAPX; rev., quad-

ripartite square, incuse.

Drachma, same period. Obv., type as above, inscription effaced; rev., four-pointed star over rosette, in incuse square.

Hemidrachm, same period. Obv. as above, no in-

scription; rev., quadripartite square.

Didrachm, 450-400. Obv. as above; rev., quadripartite square, surrounded by inscription, in incuse square.

Stater, 400-350. Obv., horse prancing to l., with loose rein; rev., grape-vine in a square surrounded by the inscription ETII XOPHFO; symbol, a fly.

Triobol of same period. Obv., fore part of horse,

EYIT; rev., bunch of grapes, MA.

Tetradrachm, after 146. Obv., ivy-wreathed head of Dionysos; rev., Dionysos Soter, standing, holding two narthex stalks and a bunch of grapes. Inscriptions and monogram.

MESEMBRIA. Diobol, 450-350. Obv., crested helmet facing; rev., META between the four spokes of a

radiate wheel.

Pantikapaeon. Didrachm, third century. Obv., ivywreathed head of young Dionysos to r.; rev., inscription and bunch of grapes in ivy wreath, monogram above.

PERINTHOS. Hemidrachm (35.2 grs.), about 310? Obv., head of Demeter to l., grain of wheat below; rev., fore parts of two horses joined back to back, TE below.

THASOS. Stater, 550-465. Obv., Silenos carrying a nymph

in his arms; rev., quadripartite incuse square.

Two drachmas, 465-411. Designs as above, but more advanced style: on one the Silenos kneels to

front, his head turned to r.

Two drachmas, 411-350. Obv., head of bearded Dionysos (one with, one without border); rev., Herakles shooting to r. on one knee. Symbol on one, fly or cicada; on the other, head of a river god or Pan.

Tetradrachm, after 146. Obv., head of young Dionysos, with ivy wreath and fillet; rev., Herakles Soter, standing, club in r. hand, lion-skin over l. arm.

arm

THRACE, LYSIMACHOS, King of. Two gold staters. Obv., head of deified Alexander; rev., Athena seated, holding a Niké. On one, BY, a monogram, trident and two dolphins; on the other a monogram, bee (?) and cornucopia.

Five tetradrachms, with types as above; symbols on rev., I, two monograms; II, trophy (?), crescent and monogram, Pl. III, 207; III, crescent and monogram; IV, caduceus and monogram; V, eagle. One

has a K under the head of Alexander.

Didrachm. Types as above; on rev., a bee and F.A.

Drachma. Obv., youthful head to r.; horseman galloping to r., AY above, ear of wheat and fore part of lion below.

GREECE PROPER.

A. NORTHERN GREECE.

ACHAEA PHTHIOTIS. Drachma, fourth century. Obv., head of a nymph; rev., Athena charging to r. (on the inside of her shield are reliefs representing a battle). Symbol, bunch of grapes; no traces of inscription.

CORCYRA. Didrachm, 229-48. Obv., head of young Dionysos; rev., Pegasos galloping to r., and two

monograms; one that of Corcyra.

EPEIROS. Silver stater of Alexander, son of Neoptolemos (342-326). Obv., head of Zeus wreathed with oak; rev., king's inscription, thunderbolt and eagle's head as symbol.

Victoriatus of the Epirote Republic, 238-168. Obv., heads of Zeus and Dione; rev., ΑΠΕΙΡΩΤΑΝ and

thunderbolt in oak wreath.

The following are in Thessaly: -

Kierion. Trihemiobol, 400-344. Obv., head of Zeus; rev., the nymph Arne playing knuckle-bones.

LARISSA. Three drachmas of the period 430-400. Obv., youth restraining a bull; rev., bridled horse galloping

to r., Pl. III, 215.

Four drachmas of the period 400-344. Obv., head of Larissa in imitation of Kimon's head of Arethusa on Syracusan coins; rev., I and II, horse grazing; III, mare and foal; IV, youth standing by a horse.

Plated drachma (ancient counterfeit), of same

period. Obv. as above; rev., grazing horse.

MELITAEA. Drachma, about 410. Obv., head of Zeus wreathed with olive; rev., bull grazing; symbol, sprig of oak leaves with acorn, Pl. III, 223.

OETAEI. Hemidrachm, 400-344. Obv., head of a lion with a spear in its mouth; rev., young Herakles standing, holding club across both arms.

Silver coin of 196-146. Types similar to preceding, but Herakles rests on his club. (Reduced Attic

didrachm? — 117.67 grs.)

PERRHAEBI. Trihemiobol, 480-400. Horseman in petasos and chlamys, carrying two spears; rev., female seated,

holding a helmet with both hands.

PHARSALOS. Drachma, 400-344. Obv., head of Athena in a winged Attic helmet; rev., young horseman carrying a knotted stick over his shoulder, Pl. III, 227.

Hemidrachm, of same period. Obv., head of Athena in Attic helmet, with ear-pieces turned up;

rev., horse's head.

PHERAE. Drachma, 480-450. Obv., youth restraining a bull; rev., horse galloping to r., rein dragging. Upper 1. corner, a fountain from which water is pouring.

(Photiades Pasha sale, 1890, No. 161.)

Silver stater of Alexander of Pherae (369-357). Obv., head of Hekate or Artemis; rev., AAEEAN-ΔPOY, mounted warrior galloping to r. Double axe under the horse and on its flank. (Montagu sale, No. 312.) Pl. III, 230.

B. CENTRAL GREECE.

AEGINA. Stater of the oldest type (700-550), bearing the tortoise with plain shell and row of eight dots down the middle. Rev., incuse square divided into eight sections, Pl. IV, 322.

Two staters of the second period (550-480). Obv., tortoise with smooth shell, five dots down the middle, two more at the top; rev., incuse square divided into

five sections.

Two staters of the period 480-431, the shell of the tortoise treated naturally; in one the head full-front, in the other turned to r. Rev., like the preceding, Pl. IV, 325.

Hemiobol of same period, with same designs (head

full-front).

Obol, after 404. Obv., tortoise as above, and Al;

rev., like above, with Δ in upper left section.

AETOLIAN LEAGUE, 279-168. Silver coin, 162.7 grs. Obv., head of Aetolos to r., wearing an oak wreath intertwined with his diadem; below, Φl. Rev., Aetolos, as a nude young warrior, standing to l., resting his r. foot upon a rock, and leaning upon his spear. In field, Δ.

Ditto, 81.42 grs. Obv., head of Artemis to r., laureate, and with bow and quiver. Φ I behind. Rev., Aetolia dressed like Artemis, seated on a pile of shields; r., trophy of Gallic arms; l., two mono-

grams.

Ditto, 37.2 grs. Obv., head of Aetolia wearing earring and petasos; \$\Phi\$I behind. Rev., Kalydonian boar;

between the legs NI; in exergue a spear-head.

ATHENS. Early archaic style (before 480). Ten tetradrachms with the familiar types, no two from the same die, showing the gradual advance in the primitive representations of the head of Athena. (One of these, Pl. IV, 285, is from the Bunbury sale, No. 976; published Numismatic Chronicle, 1881, pl. iv, 2.) Two drachmas, two obols, and one hemiobol, with the same types.

Later archaic style (fifth century). Nine tetradrachms, two didrachms (128.97 grs. and 132.4 grs.), five drachmas, two obols and one hemiobol, all with

the familiar types, Pl. IV, 299.

Style of the decline (fourth century?). Gold stater (chrysos). See Head, B. M. Catalogue, Attica, p. xxvi; two tetradrachms; one three-quarters obol (tritemorion), with AOE within three crescents on the rev.; two quarter-obols (tetartemoria), with AOE above a crescent on the rev.

Period 196-187. Tetradrachm; obv., head of Athena of late style; rev., owl and inscriptions AΘE — MIKI — ΘΕΟΦΡΑ, within a wreath of wheat.

Period 186-147. Tetradrachm; obv., head of Athena; rev., owl standing on an amphora; symbol, bow and quiver (?), and inscriptions $A\ThetaE - HPA - API \le TO\Phi - \PhiI\Lambda AN$ and $\Gamma\Lambda$, all within an olive wreath.

About 146. Drachma; types as above; symbol, dolphin and trident, inscriptions AΘE — ΞΕΝΟΚΛΗ
— APMOΞΕΝΟ ...

CHALKIS (or Megara). Two obols, before 480. Obv., wheel of four spokes; rev., incuse square, roughly

quartered.

CORINTH. Six staters of various dates, from 500 to after 338, with the familiar types of Pegasos and Athena. The oldest of them has no symbol on the rev.; the others have respectively a flying dove in a wreath, a serpent, an aplustre (?), the fore part of a bull, and a chimaera and AP.

Two trihemidrachms of about 338. Obv., Bellerophon on Pegasos, charging to r.; rev., Chimaera and

ΔI, an amphora across the exergue line.

Five drachmas; one of 500-430, with Pegasos and head of Athena; the others of 350-338, with Pegasos on obv., and on rev. head of Aphrodite,—two with her hair in a sakkos, the others with it loose.

One hemidrachm, 350-338, with types like the pre-

ceding (hair in sakkos).

Four diobols, 430–338 or later. Obv., Pegasos flying to l.; rev., I, Pegasos trotting to r.; II, Pegasos trotting to l.; III, Pegasos full-front and Δ IO; IV, Pegasos three-quarters front, and Δ IO.

One obol, 400-350. Obv., Pegasos; rev., head of

a trident decorated with scrolls.

Delphi. Two staters of about 346. Obv., head of Demeter veiled and wreathed with wheat; rev., AMΦI-KTIONΩN, Apollo in long garments seated upon the omphalos, holding a long laurel branch, his lyre at his side; symbol, a tripod, Pl. III, 251.

ERETRIA. Didrachm, 600-480. Obv., Gorgon's head, of very archaic style; rev., quadripartite incuse square,

lion's head in one section.

Tetradrachm, same period and types, but style slightly more advanced; the fore paws as well as head of the lion on the rev., Pl. IV, 273.

Drachma, 480-445. Obv., cow licking her foot, E

below; rev., cuttle-fish.

Drachma, 411-336. Obv., head of nymph Euboea; rev., EY, head and neck of a bull, filleted. (Coin of the Federation of Euboea.)

Haliartos. Stater, 550-480. Obv., Boeotian shield;

rev., mill-sail square, with aspirate in centre.

HISTIAEA. Drachma, 369-336. Obv., head of a Maenad; rev., bull standing under a vine, monogram in field, and I≤TI in exergue.

Tetrobol, 313-265. Obv., head of a Maenad wearing a sphendoné; rev., Histiaea seated on the stern

of a galley, holding a trophy-stand.

LEUKAS. Drachma, 500-430, like the Corinthian coins of the period, with Λ under the Pegasos; rev., head of Aphrodite.

Stater of same period, with Pegasos and archaic

head of Athena, A under the former.

Stater, 430-400; designs as above with fine head of Athena.

Hemidrachm, 430-330. Obv., fore half of Pegasos and Δ ; rev., head of Aphrodite, three-quarters front.

LOCRI OPUNTII. Three staters, 369-338, one of which is an ancient counterfeit, silver-plated. Obv., head of Persephone; rev., Ajax charging to r., armed with a sword. Details: I, AlA≤, griffin on shield, spear on ground, Pl. IV, 243. II, no name, spear and helmet on ground, serpent on shield. III (counterfeit), no name, broken spear on ground, serpent on shield.

Two hemidrachms of same period, with types as above. Details: I, griffin on shield, helmet on ground.

II, serpent on shield, spear on ground.

One hemidrachm, 338-300. Types as above, with $\Lambda OKP\Omega N$ instead of OTTONTION on rev., no sym-

bols, monogram between his legs.

MEGARA. Drachma, about 307. Obv., head of Apollo, laureate; rev., seven-stringed lyre. (See, also, Chalkis.)

Mykalessos. Obol, 387-374. Obv., Boeotian shield;

rev., thunderbolt and MY.

ORCHOMENOS. Two obols, 600-480. Obv., sprouting grain of wheat (on one E); rev., incuse square, divided (E on one, ER on the other).

Stater, 387-374. Obv., Boeotian shield, ear of wheat across one end; rev., amphora, with EY above

and EPXO below.

Hemidrachm, same period. Obv., Boeotian shield;

rev., EPX in wreath of wheat.

PHOKIS. Two obols, 480-421. Obv., bull's head facing; rev., fore part of boar to 1., one with the inscription ΦOKI .

Hemidrachm of same period. Obv. as above; rev.,

same inscription, and female head to r.

Hemidrachm, 357-346. Obv. as above; rev., head of Apollo, lyre and traces of inscription.

See, also, Delphi.

Tanagra. Drachma, 550-480. Obv., Boeotian shield, T in one of the side openings; rev., incuse cross with

pointed ends, T — T in opposite arms.

THEBES. Drachma, 600-550. Obv., Boeotian shield, as on all the following Theban coins; rev., incuse square in eight sections.

Drachma, 550-480. Rev. as above with archaic Θ in centre.

Quarter-obol (tetartemorion), same period. Rev.,

archaic O in incuse square.

Three staters of the period about 450. Revs., I, II, Herakles kneeling, stringing his bow, symbol a club. (One from the Bunbury sale, No. 947, Pl. IV, 265.) III, Herakles rushing to r., brandishing club and carrying tripod.

Hemidrachm, 426-387. Rev., OEB, Kantharos.

club and axe.

Two staters of the Boeotian League (379-338). Rev., amphora and magistrate's name, KAAAI and TIMO respectively.

THESPIAE. Obol, 387-374. Obv., Boeotian shield; rev., crescent and inscription.

C. Peloponnesos.

Argos. Obol, 322-229. Obv., head of wolf, ≤1; rev., A, NI in corners.

Two tetrobols of same period. Obv., fore part of wolf, one to 1., the other to r. Rev., I, large A, club below, TP above; II, NI above the A, nothing below. Three-quarters obol (tritemorion), same period.

Obv., head of wolf, ≤1 above; rev., large A, with

round shield below, and HP above.

ARKADIA. Thirteen triobols of the period 480-417. Obv., Zeus enthroned, his eagle flying; rev., head of Artemis or Despoina; both types with numerous small variations of pose and details in the several examples.

Didrachm, about 370. Obv., head of Zeus to 1.; rev., AP (in monogram), Pan seated upon a rock, holding his stick, his syrinx at his feet. On the rock the artist's signature OAYM.

For towns of Arkadia see their names in the alpha-

betical list.

ELIS. Stater, before 471. Obv., archaic eagle flying to l., carrying a hare; rev., thunderbolt in a round incuse.

Two staters, 471-370. I, obv., eagle standing to 1., over its prey; rev., Niké, full-front, head to 1., holding a fillet and palm branch. At in upper corners. II, obv., eagle flying to r., with a hare; rev., Niké seated on a square base, holding out a wreath (?). In field Λ .

Stater, 421-365. Obv., head of Hera wearing a diadem; rev., eagle standing within an olive wreath.

(Bunbury sale, No. 1093.)

Hemidrachm, 365-322. Obv., head of Zeus to r.;

rev., eagle standing upon a meta, FA.

Hemidrachm, 312-271. Obv., like preceding, but later style; rev., thunderbolt and FA within an olive wreath.

EPIDAUROS. Diobol? (36.69 grs.), third century. Obv., head of Asklepios, laureate, in field Ε; rev., ΕΠ (monogram) in a wreath.

HERAEA. Obol, 420-370. Obv., head of Artemis; rev.,

H, with a bow across the middle bar.

HERMIONE. Two triobols of the period 350-322. Obv., head of Demeter wreathed with wheat; rev., EP (monogram) in wreath of wheat. (One of these is from the Bunbury sale, No. 1121.)

KLEITOR. Obol, 400-322. Obv., head of Athena; rev.,

bridled horse, prancing.

MESSENE. Tetrobol? (35.23 grs.), 280-146. Obv., head of Zeus; rev., olive wreath enclosing a tripod and in-

scriptions ME≤ — ITTTAPXO≤.

PHENEOS. Two obols of the period 431-370. Obv., head of Hermes, his petasos hanging at his neck; rev., ram standing to r. Symbol, on one only, a caduceus.

ram standing to r. Symbol, on one only, a caduceus. Two staters, 360-300. Obv., head of Demeter; rev., Hermes hastening to l., carrying the infant Arkas on his l. arm, caduceus in r. hand. One of the coins has a phialé (or Θ?) as symbol, between the legs of Hermes, Pl. IV, 386.

Phlios. Two obols of the period 431-370. Obv., fore part of bull, butting; rev., a large Φ, and a dot in

each of the four corners.

SIKYON. Hemiobol, before 400. Obv., dove pecking its foot; rev., E≤, dove flying to r.

Obol, 400-332. Obv., ≤I, dove alighting to r., O

below; rev., dove flying to r.

Drachma, same period. Obv., Chimaera, ≤E below the body; rev., dove flying to l., in an olive wreath.

STYMPHALOS. Obol, 431-370. Obv., head of young Herakles in lion-skin; rev., head and neck of a Stymphalian bird.

TEGEA. Obol, before 431? Obv., head of Athena, wearing olive wreath but no helmet, hair in queue behind:

rev., T.

THELPUSA. Two obols, 400-370. Obv., head of Demeter Erinys to r., wearing earing and necklace. Under her chin Θ. Rev., EPIΩN, the horse Arion, with loose rein, prancing to r.

D. ISLANDS OF THE AEGEAN.

Not including those on the Asiatic Coast.

Crete. — Gortyna. Drachma, 300-200. Obv., head of Zeus; rev., Europa on the Bull, her mantle blown by the wind.

Lappa. Stater, 431-400. Obv., A]ATTTION (retrograde), large female head — Artemis? — to r., wearing pendant earring and bead necklace; rev., ATTOA-AO]N, Apollo, in himation, seated to r. (his shoulders full-front), his r. hand resting on a large sphere the sun? — and the l. holding a five-stringed tortoiseshell lyre on his lap.

Phalasarna. Stater, 400-300. Obv., head of Diktynna to r., her hair bound by a cord; rev., ΦA , head

of a trident, with a scroll at the neck.

Delos. Stater, before 500. Obv., two dolphins, one above the other, swimming in opposite directions; rev., incuse square, divided unevenly into five sections.

KEOS. Iulis. Stater, about 300. Obv., head of Aristaeos, laureate, to r., bearded and with thick hair brushed forward; rev., IOΛΟΥ, a bee; symbol, head of the dog Sirius, KI below.¹

Naxos. Stater, sixth century. Obv., Kantharos, with ivy leaf above it and one hanging from each handle; rev.,

quadripartite incuse square.

ASIA MINOR.

Pontos. — MITHRADATES EUPATOR. Two tetradrachms, — I, struck B. C. 97; obv., head of Mithradates, Pl. IV, 398; rev., BA≤IΛΕΩ≤ ΕΥΠΑΤΟΡΟ≤, Pegasos drinking, crescent, star, monogram, E≤, and Z, all in ivy wreath. II, struck B. C., 74, obv., as above; rev., BA≤IΛΕΩ ΜΙΘΡΑΔΑΤΟΥ≤ ΕΥΠΑΤΟΡΟ≤, stag grazing, crescent, star, two monograms and ΓΚ≤.

Paphlagonia. — AMASTRIS. Two staters of the third century. I, obv., head of Mithras, wearing Phrygian cap, laureate, with a star above the wreath; rev., Anaïtis (?) enthroned, crowned, and holding a Niké. Her sceptre leans against the throne. Symbol a rose, monogram under seat. II, obv. as above, except that the star is below the wreath; rev., as above, except that the goddess holds the sceptre in her l., no monogram under the throne, and symbol a bud (?).

Bithynia. — HÉRAKLEIA. Diobol, 415-394. Obv., head of bearded Herakles; rev., ΗΡΑΚΛΕΙΑ on a raised square, surrounding a quadripartite square, and

within an incuse square.

Two tetrobols, 364-353. Obv. as above but finer style; rev., a bull butting to l. One has a club below the chin of Herakles, the other a bunch of grapes on the rev.

¹ This is probably the specimen referred to by Head, *Historia Numorum*, p. 411, note, as suspicious in character. Other experts, however, have pronounced it genuine.

Stater, 347-338. Obv., head of young Dionysos, thyrsos below; rev., TIMOΘEOY ΔIONY≤IOY, young Herakles attaching a spear to a trophy, a ram's head on the ground.

Stater, 338-306. Obv., like preceding; rev., ∆IONI ≤IOY. Herakles as above, no ram's head.

Drachma, same period. Types as in preceding. KALCHEDON. Drachma, about 400. Obv., bearded head to l.; rev., KAAX, between the four spokes of a radiate wheel. (From the Montagu sale, No. 485.)

Mysia. — Adramytion. Drachma of the second century. Obv., head of Zeus to l.; rev., AΔPAMYTHNΩN, eagle with spread wings standing on a thunderbolt, three-quarters front to l. In field ΛY above a bee.

ANTANDROS. Drachma, before 420. Obv., female head to r., her hair bound by a crossed cord; rev., ANTAN (retrograde), goat standing to l.

Assos. Hemidrachm, after 400. Obv., head of Athena in laureate Attic helmet; A≤I≤ON around three sides of a bucranium.

KYZIKOS. Period 500-450. Two electrum staters, one with a sphinx standing to l. on a tunny; the other a lion standing to r. on a tunny, biting a sword which he holds between his fore paws, Pl. IV, 415. Three hektae with, respectively, a sphinx seated on a tunny; a man kneeling to l., holding a tunny; and a Triton holding a wreath, with tunny below.

Period 450-400. Five electrum staters: I, head of a youth to l.; II, hoplitodromos (?) bending to r., his r. arm extended in front, a tunny l. Pl. IV, 419; III, head of a bull to l., tunny below; IV, head of Atys to r., tunny below; V, youth (Apollo?) kneeling on a tunny, holding a bow in his l. hand. One hekte, with head of Atys and a tunny, as in No. IV.

Period 400-350. One electrum stater. Helios kneeling to r. between two horses, tunny below, Pl. IV, 424. (Montagu sale, No. 498.) Silver

tetradrachm; obv., <ΩTEIPA, head of Kora Soteira to I., veiled and wreathed; rev., lion's head

to l., tunny below, Pl. IV, 425.

LAMPSAKOS. Five gold staters of the period 400-350. Obv., I, II, head to Zeus to l., behind it a thunderbolt, Pl. V, 426; III, head of young Pan, horned, Pl. V, 428; IV, head of a Maenad to l., with loose hair, Pl. V, 429; V, female head to l., wearing sphendoné and wreathed with flowers, Pl. V, 430. Rev., the same in all five, fore part of a winged horse to r.

Silver hemidrachm, same period. Obv., head of Athena; rev., AAM, fore part of winged horse as

above, an ear of wheat below.

Troas. — Abydos. Two hemidrachms of the period 320–280. Obv., head of Apollo; rev., eagle standing to l. Symbols: on one a tripod and ∧Y≤A≤; on the other a bee and Y∧∧I∏∏O≤.

ILION. Tetradrachm, after 189. Obv., head of Athena to r., in three-crested helmet with an olive wreath on the front; rev., AΘHNA≤ IΛΙΑΔΟ≤, Athena Ilias standing, holding spear and distaff, and wearing a kalathos. At her feet a small Pegasos grazing. In field a monogram; in exergue MENEΦPONO≤ MENEΦPONO.

Acolis. — Kyme. Hemidrachm, after 350. Obv., ΞΕΝΩΝ, eagle standing to r., looking back; rev., KY, fore part of a prancing horse, one-handled cup below.

Tetradrachm, after 190. Obv., female head (Kyme?); rev., KYMAIΩN, bridled horse, one-handled cup on exergue-line, OΛYMTIO≤ below;

all in wreath.

Lesbos. Six electrum hektae of the period 480-440: I, obv., Gorgon's head, full-front; rev., incuse head of Herakles to l. (From the Carfrae sale, No. 222.) II, obv., fore part of a winged boar to r.; incuse lion's head to r. (From the Carfrae sale, No. 218.) III, same types, in wonderful preservation. IV, obv., head of Apollo to l.; rev., incuse female head

to r., hair in sphendoné. V, obv., head of a ram to l., cock below; rev., incuse lion's head to r. VI, obv., like preceding; rev., incuse head of Herakles to r., row of seven small squares below.

Billon stater, before 440. Obv., two calves' heads, face to face, with an olive tree between

them; rev., incuse square.

Seven electrum hektae, of the period 440-350. I, II, obv., fore part of a winged lion to l.; rev., sphinx seated to r. III, obv., head of Apollo to r.; rev., female head wearing a sphendoné, a coiled serpent behind. (From the Carfrae sale, No. 237.) IV, like the preceding, except that the serpent is on the obv. V, obv., youthful male head with horn of Ammon; rev., eagle standing to r., looking back. VI, obv., head of a wreathed and bearded satyr to r.; rev., two rams' heads, butting, a palmette between them. VII, obv., head of Zeus or Asklepios, laureate; rev., bust of Niké (head to r., bust fullfront), with two stars above it.

METHYMNA. Didrachm, 500-450. Obv., boar walking to r.; rev., head of Athena, in Attic helmet adorned with the fore part of Pegasos. Inscrip-

tion on both sides of the coin.

Tetrobol? (99.3 grs.) of the period 420-377. Obv., head of Athena; rev., lyre on a square tablet in an incuse square. (From the Montagu sale, No.

537.)
MYTILENE. Triobol? (43.8 grs.) of the fourth century. Obv., head of Apollo; rev., five-stringed lyre, a knotted fillet around its r. arm. Symbol, a

flower (?).

Ionia. One-sixth stater, electrum, of the 7th (?) century (36.1 grs.). Coin roughly oval, with striated surface on the obv., and oblong incuse, divided, on rev., Pl. V, 454.

One-sixth stater of same period (35 grs.). Oval, convex, obv. plain; rev., rough oblong incuse,

divided into halves.

Electrum stater (fragment, 97.34 grs.), of same

period. Obv., lion's head, facing; rev., incuse

square, divided diagonally.

One-third stater, electrum, of the sixth century (73.11 grs.). Obv., fore part of ram to l.; rev., incuse divided into six parts, each roughly subdivided.

One-twelfth stater, electrum, of same period (18.06 grs.). Obv., head of a lion to r., with open mouth.

(Lydian?)

Electrum stater of about 500 (216.07 grs.). Obv., fore part of winged boar to r.; rev., quadripartite

incuse square.

Chios. Silver stater of the sixth century. Obv., archaic sphinx seated to l.; at l. amphora and vine; countermarked with an uncertain design. Rev., incuse square, roughly quartered, countermarked with another, smaller.

Drachma, 412-350. Obv., on a round shield a seated sphinx, amphora and bunch of grapes at l.; rev., incuse square, divided by two bands, on one

of which ΓΗΡΩ≤.

EPHESOS. Two didrachms of the period 415-394. I, obv., bee with curved wings; rev., quadripartite incuse square with rough surface. II, obv., bee with straight wings; rev., like preceding.

Tetradrachm, 387-295. Obv., bee with straight wings; rev., fore part of a stag, palm tree, and

ΦANAΓOPH≤.

Tetrobol (of Ephesos under the name of Arsinoë, 288-280). Obv., veiled head of Arsinoë; rev.,

AP≤I, bow and quiver, ΞENOKA.

Two drachmas, 202-133. I, obv., bee with straight wings; rev., standing stag and palm tree, Δ HMAPX. II, like the preceding, with the name ITITOME $\Delta\Omega$ N.

ERYTHRAE. Two didrachms, before 480. Obv., nude, long-haired youth riding a galloping horse to r.; rev., quadripartite incuse square.

Drachma, fifth century. Obv., nude man holding

in a prancing horse; rev., EPY, shallow square with a rosette of twelve petals.

Diobol, same period. Obv., Pegasos flying to r.;

rev., EPYO and rosette as above.

Drachma, fourth century. Obv., head of Herakles as on coins of Alexander; rev., EPY, club, bow in case, owl, monogram and TI]EAOTI∆H≤.

KLAZOMENAE. Period 387-300. Gold octobol, 87.84 Obv., head of Apollo, laureate, almost fullfront to r., his chlamys fastened at his neck; rev., swan walking to 1. feeding, ∧EYKAIO \ and monogram, Pl. V, 464.

Two tetradrachms. I, obv., head of Apollo, almost full-front to l., wearing wreath and stephanos; rev., swan preening its wings; symbol, fore part of a boar. II, obv., as in preceding without the stephanos; rev., swan as in preceding, I≤IKAH≤,

Pl. V. 460.

Six drachmas. Obv., head of Apollo, laureate, three-quarters front to l. Rev., on five, swan standing to l., flapping its wings, three of them with the name AΠΟΛΛΑ≤, Pl. V, 465, one with TTYΘΕΟ≤ and a monogram, and one with MANΔPΩN[AΞ. On the sixth the swan is feeding, and the name is ΔIONY≶A≤.

Six hemidrachms. Obv., as in preceding; rev., swan flapping its wings; on three of them the name ATTOAAA≤ (one with a ram's head as symbol), on two ΠΥΘΕΟ≤, and on one MANΔPΩNAΞ.

KOLOPHON. Drachma of the fifth century. Obv., head of Apollo to r., of transitional style; rev., KOΛΟΦΩNION and a seven-stringed lyre.

Drachma of the fourth century. Obv., head of Apollo to l.; rev., lyre and inscription, and NIKIA≤,

Pl. V, 476.

MILETOS. Two tetradrachms, 350-334. Obv., head of Apollo to 1., laureate and with long hair. Rev., MI (monogram), and lion standing to l., looking back at an eight-pointed star. On one the name ΔHMAINO≤, Pl. V, 489, on the other . . . ₹ΤΡΑ-ΤΙΔΗ≤.

Drachma, of same period and with same types,

the magistrate's name being ∆IOTTOMTT[O≤.

PHOKAEA. Electrum hekte of the fifth century. Obv., head of Herakles, a seal below; rev., mill-sail square.

Samos. Tetradrachm, 439-394. Obv., lion's scalp; rev., fore part of bull to r., olive branch behind.

(From the Carfrae sale, No. 263.)

Tetradrachm, 394-365. Obv., lion's scalp; rev., fore part of bull kneeling to r., olive branch, monogram, and HΓH≤IANAΞ, Pl. V, 495.

Bronze coin, same period. Obv., head of Hera

to l.; rev., lion's scalp.

Caria. — APHRODISIAS, see under Plarasa.

IDYMA. Hemidrachm (32 grs.), 437-400. Obv., head of Pan, full-front, with staring eyes, hair on end, and curving horns rising from his forehead. Rev., IΔΥΜΙΟΝ around a fig leaf.

KAUNOS. Silver stater, about 500. Obv., fore part of a lion to l., on his shoulder O; rev., incuse square divided into two parts, rough surface.

KNIDOS. Drachma, 500-480. Obv., fore part of lion; rev., KNI and archaic head of Aphrodite to 1.

Drachma, 412-400. Obv., head and r. fore leg of lion; rev., head of Aphrodite to r., wearing a

sphendoné. In field, A.

Drachma, 390-300. Obv., head of Aphrodite to r., wearing sphendoné; rev., KNI, head and r. fore leg of a lion to r., star under the paw, and traces of a magistrate's name.

PLARASA AND APHRODISIAS. Drachma, time of Augustus. Obv., veiled female bust, wearing a stephané; rev., the names of the towns, eagle standing on

thunderbolt, and EENOKPATH≤.

STRATONIKEIA. Two hemidrachms of the period 166-88. I, obv., head of Hekate, laureate, to r., crescent above, BWPANAEYC; rev., CTPA, Niké hold-

ing wreath and palm branch. Above, APICTEAC. II, obv., head of Zeus; rev., ≤T, eagle standing to r., F, and MEAANOOY.

Tabae. Drachma, first century. Obv., head of young Dionysos; rev., Tyche holding a phialé and cornu-

copia, KETTA.

Satraps of Caria. — MAUSOLOS, 377-353. Two tetradrachms. Obv., head of Apollo, almost full-front to r.; rev., name, and Zeus in long drapery, standing to r., holding a long spear and a double axe. On one, B in front of his feet.

HIDRIEUS, 351-344. Drachma, with types like pre-

ceding and the king's name.

PIXODAROS, 340-334. Gold twenty-fourth stater (5.3 grs.). Obv., head of Apollo to l.; rev., TI and double axe.

Four didrachms. Obv., head of Apollo, three-quarters front to r.; rev., king's name, and Zeus, in

long drapery, holding a sceptre.

Islands off Caria. — KALYMNA. Didrachm, third century.
Obv., head of a young warrior, helmeted; rev.,

name and lyre in a square of dots.

Kos. Three tetradrachms of the period 366-300. Obv., head of bearded Herakles to l. in a lion-skin cap, Pl. V, 515; rev., crab and club. Magistrates' names, respectively ΞΑΝΘΙΠΠΟ ΘΕΟΔΟΤΟ[≤, ΑΘΑΝΙΩ[Ν.

Didrachm, same period. Obv., head of Herakles to r.; rev., veiled female head to l., $\phi | \Lambda O ...$

Drachma, r66-88. Obv., head of Asklepios, laureate, to r.; rev., in incuse square $K\Omega N$, coiled serpent, $NIK\Omega N$. Outside, ΠI .

RHODES. Silver stater of Kameiros, sixth century.
Obv., fig leaf; rev., oblong incuse divided into two

parts.

Period 408-400. Hemidrachm; obv., head of Helios, looking towards the spectator over his r. shoulder; rev., head of Rhodos, wearing a sphendoné.

Period 400-333. Two tetradrachms; obv., head of Helios, almost full-front to r.; rev., a rose; symbols, aplustre and φ. Pl. V, 524. (One from the Bunbury sale, 2d part, No. 271.)

Didrachm with same types; symbols on rev., a

bunch of grapes and E.

Period 304-166. Two tetradrachms; obv., head of Helios, radiate; rev., a rose. Symbols: I, aplustre, P, APISTOKPITOS, II, skyphos and AETIΩN.

Didrachm, same types, magistrate's name, Aristo-

kritos; symbol, a palm.

Two drachmas, same types; names, AMEINIA with head of trident), and EYKPATH (with

tripod).

Period 189-166. Tetradrachm; obv., head of young Herakles to r.; rev., AAEEAN Δ POY Zeus enthroned, holding eagle and sceptre; symbol, a rose, PO and AINHT Ω P.

Period 166-88. Drachma; obv., head of Helios, radiate, to r.; rev., a rose, an Egyptian disk flanked

by two serpents, and APTEMΩN.

Lydia. Time of Kroesos (?), 568-554. Gold stater; obv., fore parts of a lion and a bull, face to face; rev., oblong incuse divided into two parts.

Lycia. — Period 520-480. Silver stater; obv., fore part of a boar, no letters; rev., rough incuse with rounded

corners, crossed by transverse lines.

Täththiväibi (of Telmessos?), 480-460. Silver stater. Obv., semi-archaic female head to l., hair fastened by band which crosses three times; rev., name and triskelis in dotted square.

Khäräi of Xanthos, 450-410. Obv., head of Athena to r., wearing Attic helmet, three olive leaves on the front; rev., inscription and head of a bearded

Satrap in a Persian headdress.

Khäriga of Xanthos, about 410. Obv., head of Athena to r. within an olive wreath; rev., inscription, and Athena seated on a rock, holding her spear; an owl perched on her l. wrist, and a caduceus (?) in

front of her face, Pl. V, 537. Uncertain, about 400, Silver stater (142.75 grs.). Obv., lion with bearded tail, seated to r., head fullfront, left fore paw raised. Rev., fore part of bridled Pegasos flying to r., broad girth around his

Federal drachma, 168-78. Obv., head of OLYMPOS. Apollo, laureate, to r.; rev., OAYMTH, and lyre;

symbols, trophy and palm branch.

Phaselis. Federal hemidrachm, 168-81. Obv., head of Apollo to r., with quiver; rev., \$\PhiA\\$\text{H\$\Lambda\$I}\$, and lyre; symbols, flaming torch and crown of Isis.

Pamphylia. - ASPENDOS. Two silver staters of the fourth century. I, obv., two youths wrestling, one pulling two ends of a cord around the other's waist, Pl. V, 541; rev., Estfediius, nude youth slinging, and triskelis. II, obv., wrestlers, one seizing the other's wrists, between them BA, rev. like preceding, but the youth wears a chiton, and there is a Φ in the field, in addition to the triskelis.

Silver stater of the fourth century. Obv., standing Athena, holding a Niké; symbol, a pomegranate. In field three Aramaic (?) letters. Rev., Aramaic (?) inscription, Apollo, in a chlamys, holding a phialé over a flaming altar, and carrying a

laurel branch.

Tetradrachm, 190-36. Obv., head of Athena to r., in three-crested Corinthian helmet; rev., flying Niké holding a wreath, ΔE , and pomegranate.

Cilicia. KELENDERIS (?). Drachma of the sixth century. Obv., a goat kneeling to r.; rev., rough incuse

square.

MALLOS (?). Two silver staters of the period 485-425. Obv., draped, winged, female figure running or flying to l., carrying a wreath and caduceus; rev., I, a pyramidal stone with a bunch of grapes on either side; II, pyramidal stone bisected down the middle. Two letters on each rev.

Silver stater, 400-380. Obv., head of NAGIDOS. bearded Dionysos to r., wreathed with ivy; rev.,

head of Aphrodite in an oval incuse.

Soli. Silver stater, after 380. Obv., head of bearded Herakles to r., the lion-skin tied around his neck; rev, in an incuse circle traces of ≤OAEON, and head of a bearded Satrap in a Persian hood.

Tarsos. Silver stater of Pharnabazos, 379-374. Obv., head of Arethusa, copied from Kimon's Syracusan type; rev., inscription, head of Ares (?) in crested

Attic helmet, and OIK.

Stater of Tarcamus or Datames, 378-372. Obv., inscription, Baal enthroned within a circle of turrets. holding a sceptre, bunch of grapes, and ear of wheat; at his side an incense-burner; between the legs of the throne a bucranium.

Cappadocia. - ARIARATHES IV, B. C. 187. Drachma; obv., head of the king; rev., Athena with Niké, shield. and spear. King's inscription, EY SEB I S, TA and

two monograms.

Syria. — Antiochos I, 281-261. Gold stater; obv., head of Antiochos; rev., Apollo seated on the omphalos, holding a bow and arrow. In field Δ . (From the Montagu sale, No. 692.)

ANTIOCHOS III, the Great, 222-187. Drachma; obv., head of Antiochos; rev., elephant. Monogram in .

field.

ANTIOCHOS IX, 116-95. Tetradrachm; obv., head of Antiochos; rev., Athena Nikephoros and monogram. ΦIΛΟΠΑΤΟΡΟ≤ added to king's title. All in laurel wreath.

SELEUKOS VI, 96-95. Tetradrachm; obv., head of Seleukos; rev., Zeus enthroned, holding Niké and ETTIΦANOY≤ NIKATOPO≤ added to king's title. Under the throne TTP (monogram).

TIGRANES I, 83-69. Tetradrachm; obv., head of Tigranes in a decorated tiara; rev., seated Tyche, holding out a palm branch, Orontes at her feet. Two monograms in field, Pl. V, 557.

SELEUKIA. Tetradrachm, B. C. 91. Obv., turreted and veiled head of a goddess to r.; rev., within a laurel wreath, ≤EΛΕΥΚΕΩΝ ΤΗ≤ IEPA≤ KAI AYTONOMOY, a thunderbolt on a stool, and two monograms.

Phoenicia. — ARADOS. Drachma, 350-330. Ob., Dagon holding two dolphins, Phoenician inscription; rev.,

a galley, with a winged sea-horse below.

TRIPOLIS. Tetradrachm, first or second century. Obv., heads of the Dioskouroi, with stars above them; rev., inscription of the city, Tyche standing to l., holding a sickle and cornucopia, EH, HI, all in laurel wreath.

Parthia. — MITHRADATES I, 174-136. Tetradrachm; obv., head of Mithradates; rev., BA≤IΛΕΩ≤ ΜΕΓΑΛΟΥ ΑΡ≤ΑΚΟΥ ΦΙΛΕΛΛΗΝΟ≤, young Herakles holding a phialé in his r. hand, club and lion-skin on l. àrm. Monogram below.

AFRICA.

Egypt. — PTOLEMY I. As governor for Alexander IV, tetradrachm of the period 316-311. Obv., head of Alexander the Great, to r., horned and wearing an elephant's skin; rev., ΑΛΕΞΑΝΔΡΟΥ, Zeus enthroned, holding eagle and sceptre; symbol, a thunderbolt; under throne OP.

Independent, 311-305. Tetradrachm; obv., head of Alexander as in preceding; rev., ΑΛΕΞΑΝΔΡΟΥ, Athena brandishing spear and shield to r., eagle on

thunderbolt, and two monograms.

King, 305-284. Gold triobol (26.6 grs.); obv., head of Ptolemy to r., wearing diadem and aegis; rev., eagle on thunderbolt, AX (monogram).

BERENIKE II, 258-247. Gold tetrobol (32.98 grs.). Obv., veiled head of Berenike to r., with diadem; rev., cornucopia between two stars.

CLEOPATRA VII (the famous), 52-30. Drachma; obv.,

head of Cleopatra; rev., KAEOTTATPAC BACI-AICCHC, crown of Isis, date, - L IA (i. c. Anno XI = B, C. 42), — and TA.

Zeugitania. — CARTHAGE. Electrum didrachm of the period 340-242. Obv., head of Persephone to l.: rev.. horse standing to r.

Gold 21 drachms (144.56 grs.), of same period. Obv., head of Persephone to l.; rev., horse stand-

ing to r., three dots in field.

Gold hexadrachm (348.62 grs.), 241-218. Obv., head of Persephone to l.; rev., horse prancing to r., beside a date palm, Punic inscription below.

Gold tridrachm of same period. Obv., head of Persephone as above; rev., horse standing to r. Above, a flaming disk between two serpents.

MISCELLANEOUS GREEK.

LEAD TESSERAE, stamped on one side only. I, AOE, upper half of Aphrodite (?) with nude torso, drapery at waist, seated to l., her r. hand extended. II, ∆HMO≤, a draped and bearded man stands to r., offering a wreath to a woman who is seated opposite him. III, Gorgoneion.

Silver coin, 87.68 grs. Obv., archaic UNIDENTIFIED. female figure, with curled wings on shoulders and feet, running to l., looking back, both hands outspread. She wears a closely fitting chiton, girt at the waist. Rev., within a dotted square in an incuse square, a griffin standing to l., with r. fore paw raised.

No inscription. (Lycian octobol?) Silver coin, 35.97 grs. Obv., head of bearded Herakles, almost full-front to l., wearing the lion skin. Rev., in incuse square APA (sequence?), and bow and quiver combined. See the Zeitschrift für Numismatik, XIV, 1887, pl. I, 5.

Silver coin, 10.86 grs. Obv., uncrested Corinthian helmet to l. Rev., quadripartite incuse square, of mill-sail type. No inscription.

Silver coin, 40.71 grs. Obv., eagle to r., with raised wing and spread tail, devouring a hind into whose body it has fastened its talons. Rev., quadripartite incuse of the mill-sail type. No inscription.

ROMAN.

A. CONSULAR.

- Denarius of the first period of the Republic, 268-254, with the head of Roma and the Dioscuri; inscription, ROMA.
- Ditto, of the Italiote allies in the Social War. (About 91-88 B. c.) Obv., female head to l., laureate and wearing earring and necklace, border of dots. Rev., kneeling youth, holding a pig, between two rows of soldiers, four in each. Standard in the background.

Ditto, L. Roscius Fabatus, B. c. 64. Babelon, II, 402, 1. Ditto, Marcius Philippus, B. c. 60. Babelon, II, 197, 28. Ditto, T. Carisius, B. c. 48. Babelon, I, 316, 10.

B. IMPERIAL.

- Augustus. Aureus. Cohen, I, Octave Auguste, No. 26. (A very fine example.) Pl. V, 585.
 - Three Denarii. Cohen, I, Octave Auguste, Nos.
 - Large bronze. Cohen, I, Octave Auguste, No. 309.
- (From the Modena collection.)
 ANTONIA. Middle bronze. Cohen, I, Antonia, No. 6.
- CALIGULA. Large bronze. Cohen, I, Caligula, No. 9. (From the Modena collection.)
- NERO. Aureus. Cohen, I, Néron, No. 210.
 - Two large bronze. Cohen, I, Neron, Nos. 38 and 83. (The first from the Modena collection.)
- Galba. Two large bronze. Cohen, I, Galba, Nos. 135, 297. (The second from the Modena collection.)
- DOMITIAN. Aureus. Cohen, I, Domitien, No. 48.

 Middle bronze. Cohen, I, Domitien, No. 650.

- TRAJAN. Aureus. Cohen, II, *Trajan*, No. 187.
 Denarius. Cohen, II, *Trajan*, No. 216.
 Large bronze. Cohen, II, *Trajan*, No. 368.
- HADRIAN. Aureus. Cohen, II, Adrien, No. 1480. Two large bronze. Cohen, II, Adrien, Nos. 125,
- LUCIUS VERUS. Aureus. Cohen, III, Lucius Verus, No. 248.
- COMMODUS. Middle bronze. Cohen, III, Commode, No. 193.
- CARACALLA. Two middle bronze. Cohen, IV, Caracalla, Nos. 268, 580.
- MACRINUS. Small bronze. Cohen, IV, Macrin, No. 107.
 MAXIMINUS I. Middle bronze. Cohen, IV, Maximin I,
 No. 93.
- GORDIANUS III. Middle bronze. Cohen, V, Gordiane III, No. 158.
- PROBUS. Aureus. Cohen, VI, Probus, No. 781.

KEY TO THE PLATES.

PLATE I.

NO.	METAL	WEIGHT IN GRAINS	
21	Ar.	244.5	Thurii. Head of Athena r. On her helmet is Skylla and a griffin. In front, Φ. Rev. ΘΟΥΡΙΩΝ. Bull
			butting r. In exergue, a fish. P. 13.
28	Ar.	120.07	Croton. Head of Hera Lakinia facing. In field, r. B. Rev. KPO-TΩNIATA≤. Herakles seated l.
32	Ar.	120.5	on a rock with his club and wine cup. P. 14. Pandosia. Head of Hera Lakinia. Rev. ΓΑΝΔΟ≤ΙΝΩΝ. Pan the hunter with hound and spears in his hand seated on a rock: in front, a terminal figure to which is affixed
35	Ar.	110.8	a caduceus. In field, Ф. P. 14. Terina. TEPINAIO. Female head r. Rev. Niké, seated on base l., holding olive spray. P. 10, 15.
37	Ar.	267.36	Agrigentum. AKPAI A. Two eagles standing on hare. <i>Rev.</i> AKPAIA[TI]NON. Crab; below,
51	Ar.	264.3	Scylla l. P. 16. Naxos (Sicily). Head of Dionysos r. crowned with ivy. Rev. NAXION. Silenos seated on ground about to drink from kantharos. P. 17.

PLATE I — continued.

NO.	METAL	WEIGHT IN GRAINS	
53	Ar.	130.29	Naxos (Sicily). NAΞΙΩΝ. Head of Apollo laureate, r. Rev. Silenos
			seated on ground about to drink from kantharos. Beside him, ter- minal figure and thyrsos. P. 17.
67	Ar.	266.23	Syracuse. <pre> <pre> Syracuse. <pre> Syracuse</pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre>
68	Ar.	251.99	Syracuse. APEΘΟ≤A (traces). Head of Arethusa facing, dolphins amid her hair. On diadem, KIMΩN (traces). Rev. ≤YPA-KO≤IΩN. Quadriga l., Niké flying to crown charioteer: in exergue, ear of corn. P. 19.

PLATE II.

NO.	METAL	WEIGHT IN GRAINS	
85	Ar.	665.11	Syracuse. < ΥΡΑΚΟ<ΙΩΝ. Head of Persephone l. crowned with wreath of barley; around, four dolphins; in field, cockle-shell. <i>Rev.</i> Quadriga l. Niké flying to crown charioteer. In exergue, helmet, cuirass, and pair of greaves. P. 19.

PLATE II - continued.

METAL	WEIGHT IN GRAINS	
Ar.	437-13	Orreskii. OPPH≤KION. Spearman wearing petasos r. between two
Ar.	442.1	oxen. Rev. Shallow incuse square divided into four parts. P. 23. Getas, King of Edoni. BI≤≤A NΩ∃. Spearman r. between two oxen. ΓΕΤΑΒΑ≤ΙΛΕΥΗΔΩΝΕΩΝ mithin incuse square surrounding
Ar.	260.16	within incuse square surrounding quadripartite, dotted square. P. 23. Akanthos . Lioness to r. attacking fallen bull: above, a cockleshell. <i>Rev.</i> Quadripartite incuse
Ar.	217.46	square. P. 24. Akanthos. Lion to r. attacking bull. Rev. AKANOION around quadripartite square: the whole
Ar.	222.79	within incuse square. P. 24. Chalkidike. Head of Apollo, r. Rev. ΧΑΛΚΙΔΕΩΝ. Lyre: below, EΓΙ ΑΡΙ<ΤΩΝΟς. P. 24.
Ar.	133.0	Philip II of Macedon. Head of Apollo r. Rev. OINITTOY. Bigar.
Ar.	261.89	In field, thunderbolt. P. 25. Alexander III of Macedon. Head of Herakles r. in lion's skin. Rev. AAEIANAPOY. Zeus holding eagle and sceptre seated l. Under throne, monogram. P. 26.
	Ar. Ar. Ar. Ar.	Ar. 260.16 Ar. 217.46 Ar. 222.79 Ar. 133.0

PLATE III.

NO.	METAL	WEIGHT IN GRAINS	
169	Ar.	261.05	Demetrios Poliorketes. Head of Demetrios r. diademed and with bull's horn in hair. Rev. BA <i-λεω< foot="" in<="" l.="" on="" poseidon="" r.="" rock.="" standing="" td="" with="" δημητριου.=""></i-λεω<>
182	Ar.	255.4	field, monograms. P. 27. Aenos. Head of Hermes r., wearing cap. Rev. In incuse square, AINI. Goat walking r. In front, terminal figure of Hermes standing on
185	Ar.	247.37	throne; in front, caduceus. P. 29. Aenos. Head of Hermes facing wearing cap. Rev. AINION. Goat to r. In field, barley corn and bunch of grapes. P. 29.
193	Ar.	36.26	Dikaea. Head to l. with hair rolled behind. Rev. Δ IKAIA. Bull's head r. within incuse square. P. 46.
207	Ar.	263.2	Lysimachos of Thrace. Head of Alexander the Great r., with ram's horn; below, K. Rev. BA≤IΛΕΩ≤ ΛΥ≤IMAXOY. Athena seated l. holding Niké. In field, trophystand (?), and crescent. In ex-
215	Ar.	93.9	ergue, monogram. P. 30. Larissa. Youth struggling with bull l. Rev. ∧API≤AIA. Horse running free r. within incuse square. P. 31.
223	Ar.	92.62	Melitaea. Head of Zeus, crowned with olive, r. Rev. In incuse square. MEΛΙΤΕ[ΩΝ]. Bull grazing.r. In
227	Ar.	95.96	exergue, oak-branch. P. 31. Pharsalos. Head of Athena in

PLATE III - continued.

no.	METAL	WEIGHT IN GRAINS	
230	Ar.	184.2	decorated helmet r. Rev. In incuse square, young horseman bearing flail-like weapon r. P. 31. Alexander of Pherae. Head of Hekate facing; in field, torch. Rev. AAEEANAPOY. Horseman with spear r. Double axe beneath
243	Ar.	186.72	the horse, and on his flank. P. 32. Locri Opuntii. Head of Persephone l. with wreath of barley in her hair. *Rev. OΠΟΝΤΙΩΝ. Ajax AlA* with helmet, shield, and sword
251	Ar.	189.65	charging r. On the ground, a spear. P. 33. Delphi. Head of Demeter l., veiled and wreathed with wheat. Rev. AMΦIKTIONΩN. Apollo with lyre and laurel-branch seated l. on omphalos; in front, tripod. P. 34.

PLATE IV.

NO.	METAL	WEIGHT IN GRAINS	
265	Ar.	183.7	Thebes. Boeotian shield. Rev. In incuse square, ΘΕΒΑΙΟ≤. Herakles kneeling r., stringing bow; beside him, club. P. 34.

PLATE IV - continued.

NO.	METAL	WEIGHT IN GRAINS	
273	Ar.	263.61 pierced	Eretria. Head of Gorgon. Rev. In incuse square, lion's head and
285	Ar.	265.10	fore paws facing. P. 24. Athens. Head of Athena r. Rev. In incuse square, AOE. Owl; olive
299	Ar.	,	spray in field. P. 37. Athens. Head of Athena r. Rev. In incuse square AOE. Owl; olive spray
322	Ar.	190.38	and crescent moon in field. P. 37. Aegina. Tortoise. Rev. Incuse square divided into eight triangles.
325	Ar.	189.51	P. 5, 39. Aegina. Tortoise. Rev. Incuse square divided into five compart-
386	Ar.	188.3	ments. P. 39. Phoneos. Head of Demeter r., wearing wreath of corn. Rev. ΦΕ-ΝΕΩΝ. Hermes carrying Arkas l.
398	Ar.	251.8	In field, patera. P. 42. Mithradates VI of Pontos. Head of Mithradates to r. wearing diadem. [Rev. Within ivy wreath BA≤IΛΕΩ≤ EΥΠΑΤΟΡΟ≤. Pegasos drinking l.; crescent and star, and monograms in field.] P. 46.
415	El.	244.37	Kyzikos. Lion standing r. on tunny, biting a sword. [Rev. Incuse square of "mill-sail" pattern.] P. 47.
419	El.	248.8	Kyzikos. Youthful nude warrior with helmet and shield standing on
	·e		base and stretching out his right hand. [Rev. As preceding coin.] P. 47.

PLATE IV - continued.

NO.	METAL	WEIGHT IN GRAINS	
424	El.		Kyzikos. Helios radiate, kneeling r. between two horses. Rev. Incuse square of "mill-sail" pattern. P. 47.
425	Ar.	229.73	Kyzikos. ≤Ω]TEIPA. Head of Koré Soteira l. with corn-wreath and veil. Rev. KY[I]. Lion's head above tunny fish. P. 47.

PLATE V.

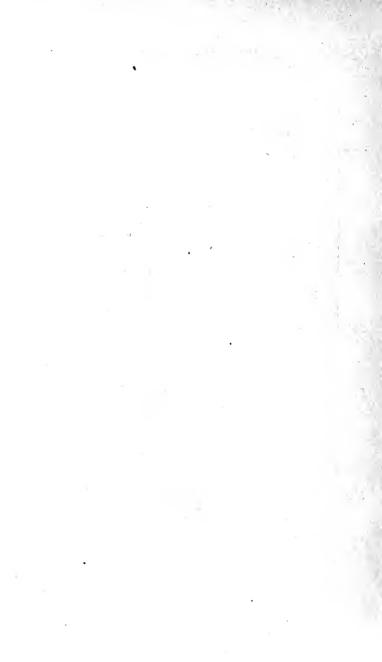
NO.	METAL	WEIGHT IN GRAINS	
426	Av.		Lampsakos. Head of Zeus lau-
			reate l. Behind the head, thunder- bolt. <i>Rev.</i> In incuse square, fore part of winged horse r. P. 48.
428	Av.	129.36	Lampsakos. Head of youthful Pan with horn growing from forehead l. [Rev. In incuse square, fore part of winged horse r.] P. 48.
429	Av.	130.39	Lampsakos. Head of a Maenad with flying hair, her head bound with ivy wreath l. [Rev. In incuse square, fore part of winged horse r.] P. 48.
430	Av.	129.89	Lampsakos. Girl's head l. wearing wreath of flowers. [Rev. In incuse square, fore part of winged horse r.] P. 48.

PLATE V - continued.

NO.	METAL	WEIGHT IN GRAINS	
454	El.	36.1	Ionia. Striations. Rev. Rough oblong incuse, divided. P. 4.
460	Ar.	260.69	Klazomenae. Head of Apollo fac- ing. Rev. KAAIOMENION. Swan l. preening its wings. I≤IKAH≤. P. 50.
464	Av.	87.84	Klazomenae. Head of Apollo fac- ing. Rev. KAA. Swan I. feeding. In field, ΛΕΥΚΑΙΟ and monogram. P. 50.
465	Ar.	64.26	Klazomenae. Head of Apollo facing. <i>Rev.</i> KAA. Swan l. flapping his wings. ATTOAAA≤. P. 50.
476	Ar.	55.33	Kolophon. Head of Apollo, r. Rev. ΚΟΛΟΦΩ. Lyre; in field, NIKIA≤. P. 51.
489	Ar.	235.3	Miletos. Head of Apollo l. laureate. <i>Rev.</i> Lion to l. looking back at a star. Monogram in field. △HMAINO≼. P. 51.
495	Ar.	232.1	Samos. Lion's scalp. Rev. ≷A. Forepart of bull r. In field, HΓH-
515	Ar.	236.6	Kos. Head of Herakles I. [Rev. Within a dotted square in an incuse square, KΩION. Crab and club.
524	Ar.	235.8	Beneath, AΘANIΩ[N]. P. 52. Rhodes. Head of Helios facing. Rev. In incuse square, POΔION. Rose with bud. In field, Φ and aplustre (?) P. 52.
537	Ar.	127.63	aplustre (?) Khäriga of Xanthos. Head of Athena r. within olive wreath. Die

PLATE V - continued.

No.	METAL	WEIGHT IN GRAINS	
.541	Ar.	163.76	much worn. Rev. In incuse square WYPFYP PPFMP+=KHÄRIGA ARNNAH (Xanthos). Athena in crested Athenian helmet, wearing necklace, sleeveless chiton and himation, seated on a rock r.: her left hand rests on round shield, and owl facing her stands on her wrist; her r. hand rests on spear which passes behind her elbow. In front of her face, a caduceus (?). Behind helmet, $\uparrow = \ddot{A}$. P. 53. Aspendos. Within dotted circle, two youths wrestling. [Rev. Within
557	Ar.	246.38	dotted incuse square, E]≤TFE- ∆IIV≤. Slinger r. In field, tri- skeles.] P. 54. Tigranes I of Syria. Within filleted border, bust of Tigranes r. wearing tiara and diadem. Rev. Within
585	Av.	123.4	laurel wreath, BA≤IΛΕΩ≤ TIΓPA-NOY. Tyche of Antioch seated r. At her feet the personification of the river Orontes swimming r. In field, monograms. P. 56. Augustus CAESAR. Head of Augustus l. <i>Rev.</i> AVGVSTVS. Cow r. P. 63.













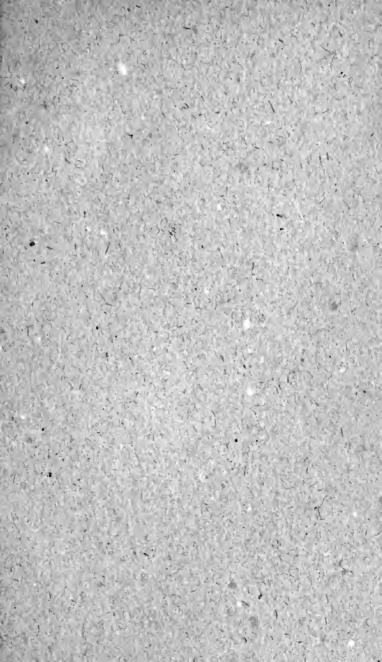












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APR 29 1950	
13Feb'59MR	
REC'D LD	
JAN 30 1959	
LIBRARY UNE	
JAN 7	
REC'D LD	
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