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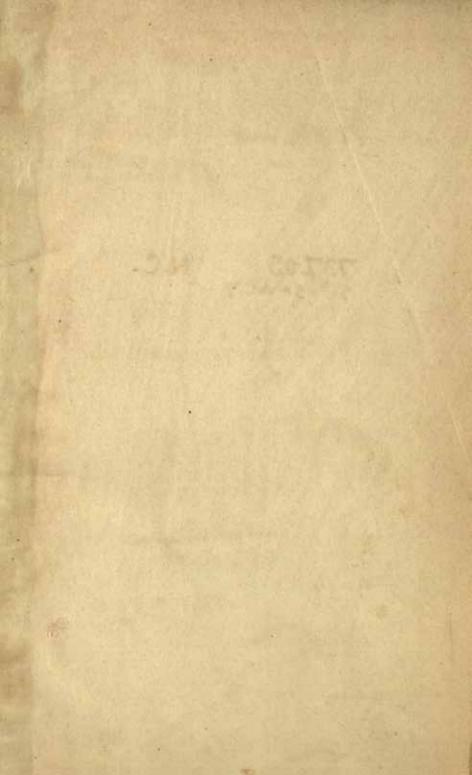
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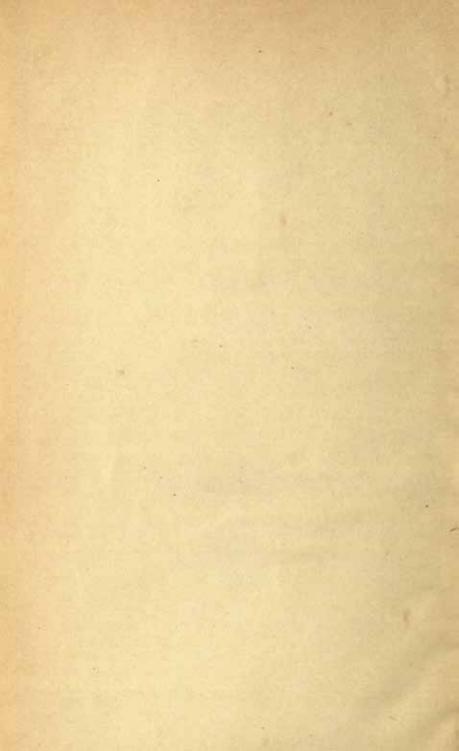
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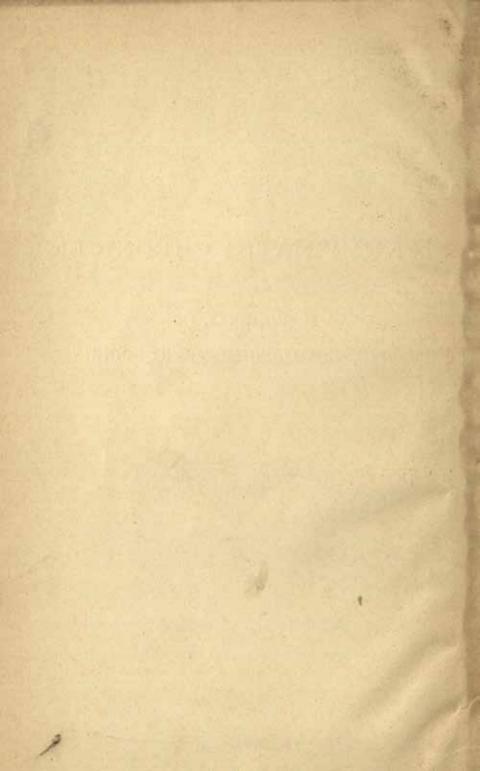


THE

# NUMISMATIC CHRONICLE

AND

JOURNAL OF
THE ROYAL NUMISMATIC SOCIETY



## NUMISMATIC CHRONICLE

AND

### JOURNAL

OF THE

### ROYAL NUMISMATIC SOCIETY

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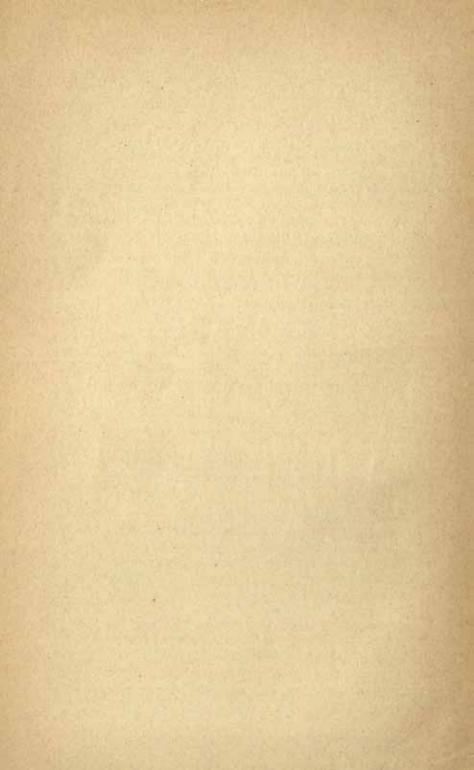
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LIST OF FELLOWS OF THE ROYAL NUMISMATIC SOCIETY (separately paged).



## THE AUTONOMOUS COINAGE OF SMYRNA.

(Continued from vol. iii, p. 30.)

SECTION II.

[SEE PLATES I-V.]

[Note.—The system of arrangement adopted in this section is that which seems most convenient for dealing with the mass of material. It is hardly possible from the evidence at present available to determine exactly the chronological order of the numerous magistrates who struck coins during the time under review. There were two denominations of silver and six of bronze which were issued somewhat irregularly, and many magistrates are represented in one of these only. In the coins of any one denomination considerations of style may give clues to the succession of the magistrates: but, except in one or two periods, there are not sufficient links between the different series to enable them to be fitted completely together. The plan followed therefore has been, first to arrange each series and divide it up at any points where a change or break in treatment occurs, and then correlate the various series and separate the whole into periods agreeing as closely as possible with these divi-The coins falling within each period are further classified into groups according to style: but, while the succession of the periods is probably approximately correct, the chronological order of the groups in each period is much less clear, and it is possible that in some periods at any rate two or even three groups may have been concurrent. The test of style only brings into a group the work of one artist, and, as will be seen later, there are reasons for thinking that there was more than one shop at times in the mint of Smyrna, and more than one artist employed in designing dies. There is a further difficulty in the probability that more than one magistrate at a time was responsible for coinage: if the office was, as in some cities,

an annual one, the mere number of names recorded in this section shows that this must have been the rule in the second century, as it is much greater than the number of years covered: and, apart from this, the evidence from the use of dies (which will be discussed later) seems to show that in some years there were three monetary magistrates in office together. The clearest case of this is where all three were striking Homereia simultaneously: of course, if there were a board of three and they arranged to take responsibility for different denominations, there would not be any clues obtainable from die-connexions.

The Homereia of type J are by far the most abundant of all the issues: this series has been taken as the key in the arrangement, and the others brought so far as possible into relation with it. In addition to the sizes and weights of the coins, which are given wherever available, the obverse and reverse dies of the Homereia have been indicated by letters in each issue represented by more than one specimen. The die-position is regularly \(^{\text{

necessary to add this.]

At this point an almost complete change in the types of the bronze coinage of Smyrna took place. All the old types, except B (Apollo—tripod), were dropped, and five new ones, J (Apollo—Homer), K (Apollo—Chelys), L (Apollo—hands in caestus), M (Citygoddess—statue of Aphrodite Stratonikis), and N (Citygoddess—altar), came in, to persist with slight modifications till the end of the autonomous coinage. Late in this section some exceptional types occur—O (Citygoddess—lion), O<sub>2</sub> (City-goddess—lion in wreath), and P (Mithradates—Nike)—each represented by a single issue only. The module of the coins was also altered: the two highest denominations of bronze, J and M, are larger than any that had previously been struck at Smyrna.

About the same time the first issue of silver was made, in the form of tetradrachms with the types of Alexander the Great and a drachma of local types. Subsequently a regular series of tetradrachms, later supplemented by drachmas, was struck: these were described in detail in *Num. Chron.*, 1914, 273, and references to that article will take the place of discussion here. For a few years after the constitution of the Roman province of Asia the cistophorus was adopted at Smyrna, but quickly fell out of favour. Gold was only issued once, during the Mithridatic war.

The reorganization of the coinage of Smyrna which marks the commencement of this section may be assumed to have followed shortly after the battle of Magnesia. The issue of the 'spread' Alexandrine tetradrachms in Western Asia Minor is generally accepted as commencing then: the solitary issue of drachmas without a magistrate's name at Smyrna is closely related in style to the Smyrnaean Alexandrines: and these drachmas are certainly contemporary with some of the earliest Homereia. Moreover, the greater liberty obtained by the Greek cities in Ionia, and especially by Smyrna, after the defeat of Antiochos by the Romans, was an obvious occasion for developing the local coinage on a more ambitious scale, not only by striking silver, but also by instituting higher denominations of bronze.

#### PERIOD VIII.

The arrangement of the coins in this period is simplified by the fact that, as in the periods immediately preceding it, many of the magistrates struck coins of more than one denomination, so that there are clues for the cross-classification of the different series.

Type J. (a) The earliest group of Homereia is possibly to be found in the issues of Menodoros, Zenis, Charikles, and Aristomenes, the three last-named of whom used an obverse die in common.1 The general appearance of the head of Apollo on coins of this group is rather square, with the hair drawn across the crown in furrowed masses and fastened behind in a knot of slightly waved strands: over the brow are thick rolls, and from behind the ear two stiffly twisted locks fall on the neck with a forward trend: the ear is free: the eyelids are slightly curved: the wreath is formed of pairs of leaves with broad ties between the pairs: there is a border of dots. On the reverse Homer is shown, with his head bowed forward, holding a sceptre with a trefoil head transversely in his right hand and a roll horizontally in his left: the lettering of the inscriptions is small and neat. On one obverse die of Charikles the head of Apollo, though generally similar in style to the others, is markedly longer.

(β) In the next group there is a more noticeable differentiation between two types of the head of Apollo, the square and the long: and this is associated with marks on the reverses. Three magistrates belong to this group—Apollophanes, Xenondes, and Hikesios—and obverse dies were shared by each pair. Coins of Apollophanes are known with the square head only: but the other two have examples of both forms. On the reverse the name of the magistrate is frequently

¹ In some cases it was probably a hub rather than a die that was used in common by two or more magistrates at Smyrna: but as it is not material for the purposes of this classification to distinguish between cases where the same dies, and those where dies from the same hub, were employed, references are only made to common use of 'dies'.

accompanied by a letter:  $\Delta$ ,  $\Sigma$ , and W occur: coins with W have the long head, those with  $\Delta$ ,  $\Sigma$ , or nothing the square one. There is a further distinction in style between the two sets in the treatment of the reverses: associated with the square head is found a smaller figure of Homer and thinner lettering than with the long head, and on the latter type the figure of Homer is more upright. The varieties may belong to distinct shops, indicated by the adjunct letters. The general style is similar to that of group  $\alpha$ .

- $(\gamma)$  Coins of Menon and Konon show a somewhat different treatment of the head on the obverse, midway between the two styles of group  $\beta$  as regards shape, with the hair more finely divided on the crown and the falling locks stiffer. On the reverse the figure of Homer is smaller, and the whole effect is one of more minute and detailed work. Two different monograms occur with the name of Konon, but they do not seem to indicate separate shops, as they are found with the same obverse die: this die was also used by Menon. There is no border of dots on the obverse.
- $(\delta)$  The issues of Phanodemos and Pythion form another group: in style they have a general resemblance to the square-headed types of group  $\beta$ , the most noticeable differences being that in the head of Apollo the face tends to be smaller in proportion to the whole, and there is no border of dots on the obverse. The two magistrates used one obverse die in commen.

Type M. (a) All the magistrates' names found on coins of type M of this period occur also on the Homereia, and their classification follows accordingly. In the first group the denomination is represented only

by coins of Charikles: these have on the obverse a square head of the goddess, with a crown of four turrets: the hoop of the crown is straight and narrow: the hair does not rise above the line of the hoop, and is drawn back from the forehead in parallel masses, covering the top of the ear, behind which it is gathered into a bunch showing three twists, and three corkscrew locks fall on the neck: there is a border of dots. On the reverse, the figure of Aphrodite Stratonikis is turned with the head in profile to the right, the left arm and leg being slightly advanced: the left hand carries a statuette of Nike and rests on a column, the statuette being almost vertically over the column.

- $(\beta)$  The three magistrates who struck Homereia of group  $\beta$  all issued type M as well: and in this series also there are differentiating letters with the name on the reverse: Apollophanes has K, Hikesios  $\Delta$  and K, Xenondes  $\Sigma$ . In style the treatment of both obverse and reverse is the same as on the coins of Charikles, except that the head on the obverse tends to be larger and looks heavier: it is of the square type, thus corresponding to the Homereia lettered  $\Delta$  and  $\Sigma$ , which have the square head of Apollo.
- $(\gamma)$  In the next group also both magistrates issued both the larger denominations: and the variations in the style of the head of the city-goddess are much the same as in that of Apollo: it is rather longer than in groups  $\alpha$  and  $\beta$ , the hair is more finely divided, and the falling locks are stiffer: also there is no border of dots. The knot at the back of the head is fuller, and rises slightly over the hoop of the crown, partly concealing the base of the rearmost turret. The same monograms occur with the name of Konon as on the Homereia.

Type B. (a) The coins of type B-the only link with the previous section-which belong to this period are all closely related in style, and may be taken as forming a single group: and since, out of the five names of magistrates-Aristomenes, Zenis, Herophon, Samon (?), and Charikles-which occur on them, three also occur on the Homereia of group α, their place is fairly certain. The head of Apollo on the obverse is very like that found in group γ of period VII, and is of a much softer type than the larger heads on the Homereia of the same magistrate: as noted in the account of period VII, it suggests Dionysos rather than Apollo. Obvious points of differentiation apart from the general effect are that on the smaller coins the falling locks of hair are thin and waved, and the laurel-wreath formed of pairs of leaves set close together, in contrast to the straight stiffly twisted locks and wreath of alternate pairs of leaves and ties of the Homereia. On the reverse the tripod is varied from that of the previous period by the arrangement of the ties between the legs, which appear as two X-shaped cross-ties above and below, with a ring between them. The ethnic and magistrate's name are given in full.

Type L. (a) Type L is also represented in this period by a few coins of a single group, the magistrates known as striking the denomination being Exakest(es), Mentor, Menodoros, and Moirage(nes). The head of Apollo is of exactly the same style as on the coins of type B assigned to this period and to group  $\alpha$ : in view of this, and as Menodoros issued Homereia of group  $\alpha$ , these coins of type L may also be placed in the same group. The reverse type consists of two hands in caestus, the right hand, which is the nearer,

showing the back and having the fingers open, the other, which is partly hidden, showing the palm, with the fingers clenched: the hands are placed with the fingers downwards, and on either side is a palm-branch upwards, curving over inwards at the top. The name and ethnic are sometimes contracted, presumably for convenience of spacing.

Type N. (a) Early examples of type N are rare: only six are recorded, of four different magistrates. The style of the head of the goddess on the obverse is close to that on the coins of type M of group  $\beta$ , but with only three turrets on the crown: the hoop is narrow, and the hair does not rise above it: there are three locks falling in straight twists. On the reverse the type is a fire-altar with a domed cover ending in a spike: the body is a short cylinder, drawn in at the middle, between two plates of approximately equal size: the upper of these, on which the cover rests, has a pendent handle at either side: the lower has three bowed legs. There is no marked difference in style between the coins: two bear the name of Aristo(), who may be the Aristomenes of group  $\alpha$ .

(γ) Similarly Konon, of whom there are two examples, may be the magistrate who struck types J and M of group γ. The remaining coins are of Plato, whose name does not occur in any of the other series, and of Artemi( ), who cannot be identified with certainty: but, as the work of their dies is almost exactly that of Konon's, they should probably go with Konon in group γ. On all these small coins the names are contracted as convenient.

Type K. (a) The treatment of the head of Apollo is the best guide for the classification of coins of

type K in this period. There are two magistrates, Zopy(ros) and Home(ros), whose issues have a head closely similar to that on the coins of types B and L classed in group  $\alpha$ , which is a survival from earlier times. The lyre on the reverse has four strings, and a marked rim round the raised centre of the shell. These two magistrates have one obverse die in common.

 $(\gamma)$  A coin of Konon has a similar reverse, but on the obverse a head of stronger style, though of smaller size and more delicate work, resembling generally the heads on his Homereia. An even closer resemblance to these is found in the coins of Eumachos, the obverse of which is practically a reduced copy of that of type J in group  $\gamma$ : his reverses have a lyre with three strings: and the shell shows no rim, but an irregular edge.

Tetradrachms. (a) The Alexandrine tetradrachms of Smyrna have as a symbol on the reverse a turreted head of the city-goddess to left, with a monogram; and these monograms may serve to place some of the coins in relation with the bronze. The issue was probably a limited one, as specimens are comparatively rarer than those of most of the neighbouring mints which struck these tetradrachms: a parallel to this lukewarm support by Smyrna of an inter-state currency experiment will be found later in regard to the cistophori. On grounds of style it would be reasonable to assign all the tetradrachms to this period, and most of them to group  $\alpha$ , as the monograms can be resolved into the names of magistrates who struck bronze then.

(β) One tetradrachm stands apart from the rest, showing inferior work, especially in the reverse die, which is coarsely and rather carelessly executed: and, as analogies to this are to be found in some of the Homereia of group  $\beta$ , this coin may be placed with them: in this instance the monogram does not seem to contain the name of any known monetary magistrate.

Drachmas. ( $\beta$ ) The solitary issue of silver drachmas was discussed at length in Num. Chron., 1921, p. 143: there is no magistrate's name on this, but the head of Apollo on the obverse is so exactly that of the Homerein of group  $\beta$  that it may unhesitatingly be classified with them.

#### (Group a.)

74. Aristomenes. Type J.

### r. ↓ IMYPNAIΩN, I. ↓ APIΣTOMENHΣ

A [5360 <sup>17</sup>] (20 mm. Be): A [ΣK 1038] (20 mm. Ad): L (19 mm. 8·14 grm. Aa): O [= Num. Chron. 1900, p. 205 | (19 mm., 8·73 grm. Af): P [4193 = Mi. 941 ?]: V (21 mm., 7·37 grm. Ae): JGM (19 mm., 7·88 grm. Bb).

75. Aristomenes. Type B.

## r. ↓ IMYPNAIΩN, I. ↓ APIΣTOMENHΣ

L (12 mm., 1-84 grm.): JGM (12 mm., 2-29 grm.).

76. Aristo(menes). Type N.

### r. ↓ IMYPN, 1. ↓ APIΣTO

B (11 mm.) [Pl. I]: O. New Coll. (11 mm., 1-13 grm.).

77. Exakest(es). Type L.

### r. ↓ IMYPNAI, 1. ↓ ΕΞΑΚΕΣΤ JGM (12-5 mm., 1-54 grm.).

Exakestes (?) Tetradrachm (Alexandrine); in field 1. ➤
 L (33 mm., 260-3 grm.): [Müller 992].

79. Zenis. Type J.

#### r. ↓ IMYPNAIΩN, I. ↓ IHNIΣ

P (4253 = Mi. S. 1424): JGM (22 mm., 8-32 grm.).

80. Zenis. Type B.

#### r. ↓ IMYPNAIΩN, 1. ↓ IHNIΣ

B (12.5 mm.): K (13 mm.): L [BMC 16] (13 mm., 1.91 grm.): JGM [= H. Weber 6121] (12.5 mm., 1.84 grm.): JGM (13 mm., 2.17 grm.).

81. Zopy(ros). Type K.

#### r. ↓ IMYP, 1. ↓ IΩΠY

P [4314 °] (10 mm.) [Pl. I]: JGM (10 mm., 0.92 grm.).

82. Herophon. Type B.

#### r. ↓ IMYPNAIΩN, I. ↓ HPOΦΩN

B (13 mm.): K (13 mm.): P [4323 = Mi. S. 1499]: JGM (14 mm., 2-06 grm.): JGM (14 mm., 2-46 grm.).

83. Mentor. Type L.

#### r. ↓ IMYP, I. ↓ MENTΩP

P [4293 = Mi. 1033] (13 mm.).

84. Mentor (?) Tetradrachm (Alexandrine); in field 1. M. L (30 mm., 263-1 grm.); [Müller 993 (?)].

85. Menodoros. Type J.

## r. ↓ ΙΜΥΡΝΑΙΩΝ, Ι. ↓ ΜΗΝΟΔΩΡΟΣ

K (20 mm.).

86. Menodoros. Type I..

#### r. 1 ΙΜΥΡΝΑΙΩΝ, 1. 1 ΜΗΝΟΔΩΡΟΣ

B [= Imh. Gr. M. 352] (14 mm., 2-55 grm.): B (14-5 mm.): G [Macd. 77 = Mi. S. 1497] (14 mm., 2-62 grm.): K (13 mm.): V (14 mm., 2-60 grm.) [Pl. I].

87. Moirage(nes). Type L.
r. ↓ IMYPNAI, I. ↓ MOIPAFE
B (15 mm.).

88. Moiragenes (?) Tetradrachm (Alexandrine); in field 1.

B (32 mm., 16-02 grm.).

89. Home(ros). Type K.

#### r. | IMYP, I. | OMH

K (10 mm.): O. New Coll. (9.5 mm., 1.24 grm.): JGM (9 mm., 1.13 grm.): JGM (9 mm., 0.93 grm.).

90. Samon. Type B.

### r. ↓ IMYPNAIΩN, l. ↓ ΣΑΜΩΝ B (13-5 mm.): V (13-5 mm., 1-93 grm.).

91. Charikles. Type J.

#### r. ↓ IMYPNAIΩN, 1. ↓ XAPIKΛHΣ

K (20 mm. Aa): P [4190 = Mi. 935] (21 mm. Bb):
 V (22 mm., 8-15 grm. Ac): E. T. Newell (19 mm., 8-45 grm. Aa): JGM (20 mm., 7-93 grm. Ad) [Pl. I]: [Mi. 1020 (Cous.)].

92. Charikles. Type M.

#### r. ↓ IMYPNAIΩN, 1. ↓ XAPIKΛHΣ

A [5370]: A [5370 °]: O. Christ Church [ = Mus. Mead., p. 34]: JGM (18-5 mm., 5-22 grm.) [Pl. I].

93. Charikles. Type B.

### r. ↓ IMYPNAIΩN, I. ↓ XAPIKAHΣ

B (13 mm.) [Pl. I]: V (12.5 mm., 1.76 grm.).

(Group B.)

94. Apollophanes. Type J.

### r. ↓ ΙΜΥΡΝΑΙΩΝ, 1. ↓ ΑΠΟΛΛΟΦΑΝΗΣ

B (21 mm. Bb); L (20-5 mm., 7-64 grm. Aa); JGM (21 mm.: 9-01 grm. Aa).

94 b. Apollophanes. Type J.

## r. ↓ ΙΜΥΡΝΑΙΩΝ, I. ↓ ΑΠΟΛΛΟΦΑΝΗΣ

A [5360 15] (20 mm. Ac): Gotha.

95. Apollophanes. Type M.

#### r. ↓ ΙΜΥΡΝΑΙΩΝ, 1. ↓ ΑΠΟΛΛΟΦΑΝΗΣ Κ

B (19 mm.): B (18 mm.): P [Wadd. 1944] (20 mm.).

[The adjunct letter is uncertain in G [Macd. 42 = Mi. S. 1518] (18 mm., 4-05 grm.): JGM (18 mm., 4-29 grm.)].

96. Archig( ) (?) Tetradrachm (Alexandrine); in field I.

L (83 mm., 261-6 grm.): [Müller 994 (?) (本)].

97. Hikesios. Type J.

#### r. ↓ IMYPNAIΩN, 1. ↓ ΙΚΕΣΙΟΣ Β (20 mm. Ce) [Pl. I].

97 b. Hikesios. Type J.

## r. ↓ IMYPNAIΩN, 1. ↓ IKEΣIOΣ

G [Macd. 19] (22 mm., 5-24 grm. Aa): V (21 mm., 7-16 grm. Ad): JGM (20 mm., 7-55 grm. Aa).

97 c. Hikesios. Type J.

## r. ↓ IMYPNAIΩN, 1. ↓ IKEΣIOΣ

B (21 mm. Bb): G [Macd 18 = Mi. S. 1431] (21 mm., 6-93 grm. Bb): V (22 mm., 8-85 grm. Be).

98. Hikesios. Type M.

#### r. ↓ ΙΜΥΡΝΑΙΩΝ, 1. ↓ ΙΚΕΣΙΟΣ Δ

B (20 mm.) [Pl. I]: B (20 mm.): G [Maed. 51] (20 mm., 4.92 grm.): L [BMC. 25] (20 mm., 4.88 grm.): P [4364 = Mi. 1079]: JGM (19 mm., 3.95 grm.).

98 b. Hikesios. Type M.

## r. ↓ IMYPNAIΩN, I. ↓ IKEΣIOΣ

A |5366 θ] (19 mm.): A [1891/2 KZ 311]: L (21 mm., 3-84 grm.).

99. Xenondes. Type J.

### r. ↓ IMYPNAIΩN, I. ↓ ΞΕΝΩΝΔΗΣ JGM (21 mm., 7-80 grm. Bd.).

99 b. Xenondes. Type J.

#### r. ↓ IMYPNAIΩN, 1. ↓ ΞΕΝΩΝΔΗΣ Δ

B (21 mm. Bb): B (20 mm. Be): O. Christ Church [= Mus. Mead., p. 34].

99 c. Xenondes. Type J.

#### r. ↓ IMYPNAIΩN, 1. ↓ ΞΕΝΩΝΔΗΣ Σ

P [4223 = Mi. S. 1440] (20 mm. Be).

99 d. Xenondes. Type J.

## r. ↓ ΙΜΥΡΝΑΙΩΝ, I. ↓ ΞΕΝΩΝΔΗΣ

L (22 mm., 8-79 grm. Aa).

100. Xenondes. Type M.

## r. ↓ IMYPNAIΩN, 1. ↓ ΞΕΝΩΝΔΗΣ

2

B (18 mm.): JGM (19 mm., 4-85 grm.).

[The adjunct letter is uncertain in A [5368] (18-5 mm.): B (18-5 mm.): O. Christ Church: V (20 mm., 5-48 grm.)].

101. No name. A drachma.

#### L J IMYPNAIΩN

Hague (22 mm., 3.75 grm.): L [= Num. Chron. 1921, 143] (22 mm., 4.12 grm.).

#### (Group y.)

102. Artemi( ). Type N.

#### r. ↓ IMYPNA, I. ↓ APTEMI

O. New Coll. (11 mm., 1-27 grm.) [Pl. I]: [Philipsen Sale 2216]: [Mi. S. 1486].

103. Eumachos. Type K.

#### r. J IMYPNA, 1. J EYMAXOΣ

B (10-5 mm.): O [= Num. Chron. 1900, 204] (9.5 mm., 1-02 grm.).

101. Konon. Type J.

## r. ↓ IMYPNAIΩN, I. ↓ KONΩN

A [5363 \*] (20 mm. Ab): A [ΣK 1058] (20 mm. Aa): G [Macd. 20] (22 mm., 10-66 grm. Aa): O. Christ Church [= Mus. Mead., p. 34]: P [4236 = Mi. 980?] (mon. ★): V (20-5 mm., 9-10 grm. Ab): JGM (20-5 mm., 8-64 grm. Ab).

104 b. Konon. Type J.

## r. ↓ IMYPNAIΩN, I. ↓ KONΩN

A | ΣK 1059 | (mon. ≼) (20-5 mm. Be) : B (22 mm. Ad) : JGM (21 mm., 6-81 grm. Ae).

105. Konon. Type M.

## r. ↓ IMYPNAIΩN, 1. ↓ KONΩN

P [4365 = Mi. 1080]: JGM (19 mm., 4-00 grm.).

105b. Konon. Type M.

### r. ↓ IMYPNAIΩN, 1. ↓ KONΩN

A.

L [BMC. 26] (18 mm., 3-66 grm.): O. Christ Church [= Mus. Mead., p. 34]: JGM (18-5 mm., 3-69 grm.).

106. Konon. Type N.

### r. ↓ IMYPNA, I. ↓ KONΩN

A [ΣK 1121 | (11 mm.): P [Wadd. 1947] (11 mm.).

107. Konon. Type K.

### r. ↓ IMYP, l. ↓ KONΩN

L [BMC, 72 = Mi. S. 1472] (10 mm., 1-14 grm.) [Pl. I].

108. Menon. Type J.

#### r. ↓ IMYPNAIΩN, 1. ↓ MENΩN

B (20 mm. Be): L (20 5 mm., 8-40 grm. Ab): O (20 mm., 8-11 grm. Be): P [4241 = Mi. S. 1434?]: V (21 mm., 7-81 grm. Bd) [Pl. I]: JGM (20 mm., 7-46 grm. Aa).

109. Menon. Type M.

#### r. J IMYPNAIΩN, I. J MENΩN

P [4369 = Mi, S. 1534] (19 mm.): V (17 mm., 4.05 grm.): JGM (12 mm., 4.73 grm.) [Pl. I].

110. Plato(n). Type N.

### r. ↓ IMYP, 1. ↓ ΠΛΑΤΩ

L (10 mm., 1.32 grm.).

(Group &.)

111. Pythion. Type J.

#### r. \$ ΙΜΥΡΝΑΙΩΝ, 1. \$ ΠΥΘΙΩΝ

Λ [ΣK 1073] (21 mm. Aa): B (20 mm. Aa) [Pl. I].

112. Phanodemos. Type J.

#### r. \$ ΙΜΥΡΝΑΙΩΝ, 1. \$ ΦΑΝΟΔΗΜΟΣ

A [ΣK 1070] (20 mm. Aa): JGM (20 mm., 5-49 grm. Bb).

#### PERIOD IX.

The artistic style of this period is rather transitional, which tends to make the classification of the coins more difficult: and the cases where a magistrate struck more than one denomination are rarer than in the last period.

Type J. (a) Of the Homereia, the nearest in style to those of the last period is a coin of Pytheos, which shows a development from group y. The work on the obverse is broader, the hair is more massed, and the locks on the neck have a slight backward curve. The execution of the figure of Homer on the reverse and the lettering of the inscriptions are noticeably good. Very near to this are coins of Artemidoros, Hermippos, and Theudes, on which the magistrate's name is accompanied by a monogram placed † instead of -> as in previous cases where monograms or letters occurred in this series: on these coins the head of Apollo has the hair more broken on the crown, and the backward curve of the locks on the neck is more marked: the tendency to make the face proportionally smaller, noted on group & of period VIII, is carried farther.

(β) Coins of Demetrios and Philokrates have a head of heavier style: the work is coarser, and a thin third lock is introduced at the back of the neck, curving along the profile line, while the other two locks, the first of which is very thick, are brought forward at a wide angle to it: the ear is partly covered. A mannerism found also in the next group may be noted in the sharply pointed finish of the front lock. The two magistrates have one obverse die in common: on the reverses of Philokrates there is a monogram placed † as in group a.

- $(\gamma)$  The Homereia of Boularchos and Eudoros are of the same heavy style as those of group  $\beta$ . The head is in lower relief than on the latter, with a fuller face, the ear more covered, and the three locks of hair closer together, the third being more conspicuous and straighter: the knot at the back, instead of being in nearly vertical lines, is rolled outwards and downwards. No monograms occur on the reverses.
- (δ) There is a distinct falling off in point of execution to be observed in the next group, formed by the issues of Dorotheos and Hermogenes, who have two obverse dies in common. The head of Apollo is coarser in style, the work of some dies being very clumsy, with the hair very stiff, and the front lock curved back: usually there is a border of dots: but on some better dies the locks are straight and the hair is massed in ridges on the crown: these have no border. On the reverse the lettering is large and often rather irregular: there is a monogram placed ↑.
- (ε) A development from the better obverse dies of group δ may be traced in coins bearing the names of Hermippos, Menodotos, Metrodoros, and Patron, with a monogram placed →: the hair on the crown is carefully treated, and the three locks are in stiff straight corkscrews at a slight angle from one another: the knot at the back is twisted round and up: there is no border. Hermippos and Patron have one die in common, and so have Patron and Menodotos. With these may be classed on grounds of general treatment a die of Theudes, without monogram, on which, however, the head is rather heavier and goes back more to

that of group  $\beta$ , with two locks brought forward on the neck and ending in points: this also has no border.

Type M. (a) Apollonides and Chrysoros struck coins of type M which show more delicate work than any of the preceding issues, especially in one obverse die which they both used. The head of the goddess is smaller, and the hair treated in more detail: at the back it is twisted up over the hoop of the crown, which is straight and narrow, and curved forward by the last turret: the ear is almost covered, and there is a stray wisp of hair on the cheek in front of it: the falling locks are close together and curved slightly backwards: there is a border of dots. On the reverse the figure of Aphrodite is finished in minute detail. and in this respect, as well as in the neat lettering, these coins closely resemble the Homereia of Pytheos. to which they are also very similar in the style of the obverses. Chrysoros also used an obverse die of less merit, with a larger head, though following generally the same lines of treatment, except that the ear is less covered, and there does not appear to be a border. Very near to the last are the obverse dies of Menelaos. though rather stiffer: the bunch of hair at the back is of two straight twists, and barely rises above the hoop of the crown, which is straight and appears broader as the hair is rolled lower under it. The reverse is of rougher style than those of Apollonides and Chrysoros, and the lettering heavier: there is a monogram placed \( \) by the name, which may link these coins with the Homereia of Artemidoros, Hermippos, and Theudes of group a.

(β) The coins with the names of Demetrios and Philokrates may certainly be assigned to the magistrates who struck Homereia of group  $\beta$ . As in the Homereia, the work is coarser than in group  $\alpha$ : the hoop of the crown is narrow and straight: the hair is irregularly bunched at the back, rising over the hoop: the locks are stiffly twisted and straight, with a pointed end as in the head on the Homereia: the ear is almost covered: and there is a wisp of hair on the cheek: there is a border of dots. On the reverse dies of Philokrates there is the same monogram as on his Homereia, and similarly placed: Demetrios has no monogram (also as in the Homereia): but in the exergue of the reverse there is a palm-branch.

(δ) No coins of type M seem to be related to the Homereia of group y: but there is a transitional group which includes issues of Apollonides, Protagoras, Pytheos, and Sosos. Some of the obverse dies of Pytheos are very like those of the last group, in a stiff style with straight locks and a border of dots: they are distinguishable, however, by the more formal massing of the hair over the forehead and in the knot behind, which is made up of three twists. But other dies of Pytheos, and all those of the other three magistrates, show a new treatment of the falling locks, which are loosely waved, usually in curves which follow one another. The work is generally poor: the hoop of the crown is narrow, with a tendency to curve downwards in the middle, and the turrets are higher in proportion to their width than before: the hair does not rise above the hoop, but sometimes just conceals it at the back: the knot is of three concentric twists: the ear is almost covered: there is no border. On the reverse with the name is a monogram placed -. In point of style these coins are very near to the

Homereia of Dorotheos and Hermogenes, and they may be grouped with them, although the names of Pytheos and Apollonides occur, without monograms, in group  $\alpha$ : the difference in style is so marked as to suggest that the issues should be separated.

(e) Another group of closely related coins, with the names of Theudes, Metrodoros, and Sotas, has as a distinguishing characteristic a letter or monogram, △ or ♠, on the reverse, placed between the ethnic and the figure. The head on the obverse is square in type. rather reminiscent of group  $\beta$  of period VIII, with the hair at the back just covering the end of the hoop: the bunch behind is made up sometimes of narrow parallel strands, sometimes of three or four knots: the falling locks are loosely twisted, and the ear is almost uncovered: the hoop of the crown is broader and appears to swell out with an upward curve in the middle. On the reverse, the figure of Aphrodite looks rather stumpy, and her left hand, which carries Nike, is advanced well beyond the supporting column. The style, and the names of two of the three magistrates, seem to link these coins with the Homereia of group e.

Type B. (8) There is only one issue of type B which can be referred to this period, struck by Menekra(tes). The head of Apollo on this is not very closely related to that on the larger coins of type J: as in period VIII, the artist would appear to have had a different ideal in mind for the smaller dies, though here the head is not so effeminate as before; it is longer in shape, and the hair is more broadly treated: the locks are waved, but not so freely. On the reverse, the ties of the tripod are two crosses: the names are contracted. For reasons which will appear

in the discussion of type N, Menekrates may be placed in group  $\delta$ .

Type L. (8) Type L is rather better represented than type B in this period: the coins are easily distinguishable from those of the previous period by the reverse, on which the hands are placed with the fingers upwards, and the two palm-branches are in reversed positions on the two sides, that on the right upwards, the other downwards. The fingers are more spread, and the cross-strapping of the hands varied from the previous arrangement. Coins with the names of Menekr(ates) and Posei(donios) have a head of free style, almost exactly that of the issues of Menekrates of type B, and they doubtless belong to the same group.

(ε) A coin of Artemon is stiffer in style, with the hair falling in two straight locks: the nearest parallel to it is on the Homereia of group ε.

Type N. (a) In coins of type N the reverse begins to show a variation from previous examples in the narrowing of the body of the altar, which gives it a pinched-in appearance. The issues of Philotas and Silon (?) have on the obverse a head very similar to that on type M of Chrysoros, with the hair twisted up at the back and falling in locks with a backward curve: the turrets of the crown, three in number, are higher and narrower than in period VIII.

 $(\beta)$  A link in name with the larger denominations is given by Philokra(tes), whose coins of this type are similar in style to those of type M with his name. To the same group belongs a coin of Kallis: both of these issues show stiffer and coarser work than that of group  $\alpha$ .

(δ) There is an improvement in freedom of style in the coins of Menek(rates) and Posei(donios), who may certainly be identified with the magistrates who struck type L: the shape of the heads and the treatment of the features are so similar in both types that the work can be ascribed to the same artist. The heads of the goddess on these coins are practically reduced copies of those which appear on the coins of Pytheos of type M, both varieties, that with stiff straight locks and that with wavy curls, appearing here also: and this seems to place these two magistrates definitely in group δ.

(ε) Further improvement of style is shown in the coins of Hermopha(nes) and Metrodo(ros), which are broader in treatment, with a squarer head, and straight locks: they come very close to group ε of type M,

in which the name of Metrodoros also occurs.

Type K. (β) Examples of type K are more plentiful than of any of the other small denominations in this period. A coin with the name of Aristo( ) shows some connexion with those of period VIII in the form of the lyre on the reverse, which has a bordered shell, three strings, and widely bowed horns: the head on the obverse is, however, of poorer style than on the earlier coins, and resembles in treatment those of Demetrios and Philokrates, with which it may be associated.

(δ) There seems to have been a comparatively large issue of a group which includes the names of Dionysios, Eudemos, Menekrates, Poseidonios, and Sarapion, as the coins of all except Eudemos are fairly common: they all have a characteristic arrangement of the magistrate's name on the reverse, beginning on the left of the lyre, reading downwards, and turning below it at right angles. The execution of the dies shows much diversity of treatment: some of the heads are very poor, others fairly free: on some the falling locks are stiff and straight, on others waved backwards: in some of the inscriptions of Dionysios and Poseidonios the lunate form of C is used. The general effect of the heads, however, is a poorer and more stilted version of those found on the coins of Menekrates and Poseidonios of types B and L, and the issues may well go together. The module and design of these coins are slightly larger than in the previous period. With them, on grounds of style, must go the coins of Pytheos, one of whose obverse dies is exactly similar to two of those of Dionysios, while others have a smaller and weaker head conceived on the same lines.

(ε) A distinctly higher level of art is shown on the coins of Artemon, Hermopha(nes), and Herogeiton, which have a fuller and rounder head, with two thin waved locks falling on the neck at a rather wide angle: on the reverse the lyre has five strings and no rim to the shell.

Tetradrachms. ( $\beta$ ) The tetradrachms belonging to what was described, in The Silver Coinage of Smyrna, as the First Series, with only a monogram and the ethnic in a wreath on the reverse, correspond generally in the style of the heads of their obverses with the bronze of this period, though the work on the silver coins is distinctly superior. The earliest of them, with the monogram of Arist( ), may possibly belong to the magistrate who struck type K in group  $\beta$ .

(δ) The coins with the monograms of Menekrates

and Poseidonios are closely related by their use of obverse dies, and as the same names occur in a similar relationship in group  $\delta$  of types L, N, and K, it is probable that these magistrates may be identified as striking both silver and bronze.

(ε) There remain three issues of this series, one of which was not catalogued in *The Silver Coinage*. Two of the monograms were resolved there as Zopyros and Metrodoros: the latter name occurs on bronze of group ε, and may well be of the same magistrate. Zopyros (?) is connected with Metrodoros by the use of obverse dies, and should be placed in the same group rather than be referred back to the Zopyros of period VIII. The new monogram is presumably for Eut(yches?): there is an example of this issue in the Lewis Collection, and Bunbury 196 may be ascribed to it: this magistrate used die H, the same as Zopyros (?), and may be put between him and Metrodoros.

#### (Group a.)

113. Apollonides. Type M.

#### r. ↓ ΙΜΥΡΝΑΙΩΝ, Ι. ↓ ΑΠΟΛΛΩΝΙΔΗΣ

A [ΣK 1129] (19-5 mm.): B [= Imhoof, Gr. M. 343] (20 mm., 4-05 grm.): V (17 mm., 3-65 grm.): JGM (20 mm., 5-39 grm.).

114. Artemidoros Metr( ?). Type J.

# r. ↓ IMYPNAIΩN, I. ↓ APTEMIΔΩΡΟΣ

A [ΣK 1072] (20 mm. Aa): V. Schottenst. [3324] (21 mm., 8-62 grm.): JGM (21-5 mm., 6-80 grm. Bb).

115. Hermippos Art( ?). Type J.

### r. † IMYPNAIΩN, L ↓ ΕΡΜΙΠΠΟΣ

₹

? Amsterdam [Boissevain 78] ( ]PΣIΠΠ - -) (19-5 mm., 9-66 grm.) : C [M°Clean] (23-5 mm., 8-83 grm. Aa) : L [BMC, 89] (22 mm., 6-62 grm. Aa) [Pl. I] : P [4213 = Mi. S. 1422] : [Rhousopoulos sale 3782 (22 mm.)].

116. Theudes Pal( ?). Type J.

#### r. ↓ IMYPNAIΩN, I. ↓ ΘΕΥΔΗΣ

K

B (20 mm.).

117. Menelaos Patr( ?). Type M.

#### r. \$ IMYPNAIΩN, I. \$ MENEΛΑΟΣ

1

B [= Imhoof, Gr. M. 344] (20 mm., 4-80 grm.); G [Macd. 52] (19 mm., 4-44 grm.); V (21 mm., 4-96 grm.); JGM (19 mm., 5-48 grm.).

118. Pytheos. Type J.

r. ↓ IMYPNAIΩN, 1. ↓ ΠΥΘΕΟΣ V (22 mm., 7-65 grm.).

119. Silo(n?). Type N.

r. J IMYP, I. J ΣΙΛΩ -

C [Leake suppl.] (12 mm. [Pl. II]).

120. Philotas. Type N.

r. \$ IMYPNA, 1. \$ ΦΙΛΩΤΑΣ 3

B (11 mm.): JGM (10-5 mm., 1-19 grm.): JGM (11 mm., 0-89 grm.).

<sup>&</sup>lt;sup>2</sup> The coins of Philotas have the die-position ↑↓, an exception to the general rule at Smyrna.

121. Chrysoros. Type M.

#### r. ↓ ΙΜΥΡΝΑΙΩΝ, I. ↓ ΧΡΥΣΩΡΟΣ

A [ΣK 1130] (18-5 mm.): B (20 mm.): B (19 mm.) Pl. II : O. Christ Church = Mus. Mead., p. 34 (18-5 mm.): P [4378 = Mi. 1088].

(Group B.)

122. Aristo( ?). Type K.

r. J IMYP, I. J APIΣTO JGM (10 mm., 1-19 grm.) [Pl. II].

123. Arist( ?). Tetradrachm.

IMYP NAIΩN, below (a) A, (b) A

L [BMC. 3] (a) (33 mm., 16-44 grm.): P [Wadd. 1929 | (b) (33 mm., 15-97 grm.): Petrograd (a) (34 mm., 16-20 grm.): [E. F. Weber sale 2942 (b) (36 mm., 15.97 grm.)]: [Rous sale 192].

124. Demetrios. Type J.

#### r. J IMYPNAIΩN, I. J ΔHMHTPIOΣ

A [ΣK 1041] (22 mm. Aa): C [Leake, Num. Hell., ii. 118 (20 mm., 8-30 grm. Bb): P [4202= Mi. 947 .

125. Demetrios. Type M.

r. J IMYPNAIΩN, I. J ΔΗΜΗΤΡΙΟΣ O (18 mm., 4-37 grm.) Pl. II.

126. Kallis( ?). Type N. r. J IMYP, L J ΚΑΛΛΙΣ B (11.5 mm.) [Pl. II].

127. Philokrates Ga(?). Type J.

r. ↓ IMYPNAIΩN, 1. ↓ ΦΙΛΟΚΡΑΤΗΣ

K

B (21 mm. Aa): K (22.5 mm. Bb) [Pl. I].

128. Philokrates Ga(?). Type M.

## r. ↓ IMYPNAIΩN, 1. ↓ ΦΙΛΟΚΡΑΤΗΣ

L (18 mm., 4·77 grm.): JGM (19 mm., 4·20 grm.): JGM (17 mm., 3·59 grm.): [Mi. 1086 (Cous.)].

129. Philokr(ates). Type N.

#### r. ↓ IMYP, 1. ↓ ΦIΛOKP

 $P [4392^a = Mi. S. 1496] (10 mm.).$ 

(Group y.)

130. Boularchos. Type J.

#### r. ↓ IMYPNAIΩN, 1. ↓ BOYΛΑΡΧΟΣ

A [5361] (23 mm. Bb): B (20 mm. Cc): K (21 mm. Cd): JGM (21 mm., 8-35 grm. Aa): [Mi. 946 (Cous.)].

131. Eudoros. Type J.

#### τ. ↓ ΙΜΥΡΝΑΙΩΝ, Ι. ↓ ΕΥΔΩΡΟΣ

A [5363] (20 mm. Aa): A [ΣK 1048] (20 mm. Ab): Gotha (22 mm. Aa) [Pl. I]: P (4218 = Mi. 961]: V. Schottenst. [3320] (21 mm., 9·10 grm.).

(Group &.)

132. Apollonides Metroph(anous). Type M.

### r. ↓ ΣΜΥΡΝΑΙΩΝ, 1. ↓ ΑΠΟΛΛΩΝΙΔΗΣ

A [5366β] (20 mm.): A [ΣK 1138] (20 mm.): B (18·5 mm.): G [Macd. 43 = Mi. S. 1515] (18 mm., 4·79 grm.): Gotha: K [Ram. 53] (18·5 mm.): L [BMC. 20] (19 mm., 5·37 grm.): O (17 mm., 5·76 grm.): O. Christ Church: P [4349 = Mi 1065]: W. H. Buckler (19 mm., 4·50 grm.): E. Rogers (19·5 mm., 6·31 grm.): JGM (18 mm., 4·96 grm.): JGM (19 mm., 4·28 grm.): JGM (17 mm., 4·92 grm.): JGM (18·5 mm., 4·15 grm.): [Bell, Sardis, 208 (18 mm., 4·10 grm.)].

133. Dionysios. Type K.

r. ↓ IMYP, (a) 1. and below ↓ ΔΙΟΝΥΣΙ→ΟΣ. (b) 1. and below  $\downarrow \Delta IONY \rightarrow \Sigma IO\Sigma$ . (c) 1.  $\downarrow$ **ΔIONYCI** 

Amsterdam [Boissevain 81] (b?) (11-5 mm., 1-52 grm.): B (a) (12 mm.): B (e) (11.5 mm.): L (e) (11 mm., 1-18 grm.): P [4306 = Mi. S. 1471] (a): V (b) (12 mm., 1.58 grm.): JGM (a) (10.5 mm., 1-13 grm.): JGM (e) (11 mm., 1-11 grm.).

134. Dorotheos Apo( ?). Type J.

## r. | ΙΜΥΡΝΑΙΩΝ, 1. | ΔΩΡΟΘΕΟΣ

A [5362<sup>5</sup>] (22 mm. Aa): A [5362<sup>5</sup>] (21 mm. Bb): A [ΣK 1045] (20-5 mm. Aa): A [ΣK 1046] (21 mm. Ac): B (21 mm. Bb): B (21 mm. Cd): K (21-5 mm. Ef): K (20 mm. De): P [4208 = Mi. S. 1419.

135. Hermogenes Artem(?). Type J.

#### r. | IMYPNAIΩN, 1. | EPMOFENHΣ €

A [536243] (20 mm. Bf): B (21 mm. Be): K (19 mm. Bg): L BMC. 90 (21 mm., 8-63 grm. Aa) Pl. I : L (21 mm., 11-11 grm. Ab): W. H. Buckler (20 mm., 7-22 grm. Ad): JGM (22 mm., 8-67 grm. Ac).

136. Eudemos. Type K.

r. ↓ IMYP, 1. and below ↓ EYΔHM→OΣ P 4308 (11 mm.).

137. Menekra(tes). Type B.

#### r. | IMYPNA, 1. | MENEKPA

B (13 mm.) [Pl. II]: G [Macd. 64] (13 mm., 2-49 grm.): P [4826 = Mi. 1051] (12 mm.): P [4327] = Mi. S. 1503 (18.5 mm.).

138. Menekr(ates). Type L.

#### r. ↓ IMYPNA, 1. ↓ MENEKP

K (14 mm.): O (12-5 mm., 1-75 grm.): JGM (13 mm., 2-36 grm.) [Pl. II].

139. Menck(rates). Type N.

#### r. ↓ IMYP, 1. ↓ MENEK

B (11 mm.): L [BMC. 69] (11 mm., 1-40 grm.)
[Pl. II]: JGM (11 mm., 1-57 grm.).

140. Menekrates. Type K.

#### r. IMYP, 1. and below ↓ MENEK→PATHΣ

A [ΣK 1123] (11-5 mm.): A [ΣK 1125] (12 mm.): B(11 mm.) [Pl. II]: L[BMC. 73] (11-5 mm., 1-45 grm.): L(11 mm., 1-41 grm.): O. Christ Church: O. New Coll. (12 mm., 1-83 grm.): P [4803=Mi. S. 1466?]: E. Rogers (11 mm., 1-38 grm.): JGM (11 mm., 1-30 grm.): JGM (11 mm., 1-20 grm.).

141. Menekrates (?). Tetradrachm.

#### IMYP NAIΩN, below, PP

B (35 mm., 16-02 grm.): L [BMC. 4] (35 mm., 16-62 grm.): Naples [8180] (34 mm., 16-62 grm.): V. Numism. Gesellsch. [= N.Z. 1914, 224] (32 mm., 15-91 grm.): G. Locker-Lampson [309 = Rhousopoulos sale 3775 = Rosenberg sale 9/3/14 124] (36 mm., 16-58 grm.); C. C. Torrey (32 mm., 15-36 grm.): [Hirsch sale 17/11/13, 844 (36 mm., 16-52 grm.)]: [Prowe sale 1021]: [Bourgey sale 22/3/10, 270].

142. Posci(donios). Type L.

#### r. ↓ IMYPNAI, I. ↓ ΠΟΣΕΙ

L [BMC. 63] (12 mm., 1.97 grm.): JGM (12 mm., 2.22 grm.).

143. Posei(donios). Type N.

#### r. ↓ IMYP, 1. ↓ ΠΟΣΕΙ

L (10-5 mm., 1-53 grm.): O (11 mm., 1-64 grm.): JGM (10-5 mm., 1-23 grm.).

144. Poscidonios. Type K.

# r. $\downarrow \text{IMYP}$ , $\langle a \rangle$ I. and below $\downarrow \text{ΠΟΣΕΙΔ} \rightarrow \Omega \text{NIO}\Sigma$ , $\langle b \rangle$ I. $\downarrow \text{ΠΟCΙΔ}\Omega \text{N}$

Amsterdam [Boissevain 80] ⟨ ]OCEIΔΩNIO[ ⟩ (10 mm., 1·14 grm.): B ⟨a⟩ (10·5 mm.): L [BMC. 74] ⟨a⟩ (11·5 mm., 0·97 grm.): P [4310 = Mi. S. 1474] ⟨a⟩: V ⟨b⟩ (12 mm., 1·69 grm.): E. Rogers ⟨a⟩ (10·5 mm., 1·09 grm.): JGM ⟨a⟩ (11·5 mm., 1·43 grm.).

145. Poseidonios (?). Tetradrachm.

#### IMYP NAIΩN, below,

B (33 mm., 15-88 grm.): B (35 mm., 16-26 grm.):
Brussels (35 mm., 16-63 grm.): L. Victoria and
Albert Mus. [? = Carfrae sale 260] (35 mm.): O
(35 mm., 16-58 grm.): P [4156 = Mi. 910]
(35 mm.): JGM (34 mm., 15-64 grm.): JGM
[= Hirsch sale 17/11/13, 845] (33 mm., 15-85
grm.): [Berlin dupl. sale 487 (33 mm., 15-90
grm.)]: [Montagu sale 583 (33 mm., 16-26 grm.)].

146. Protagoras Er( ?). Type M.

#### r. ↓ ΙΜΥΡΝΑΙΩΝ, 1. ↓ ΠΡΩΤΑΓΟΡΑΣ Œ

B (19 mm.): O. Christ Church [= Mus. Mead., p. 34] (18 mm.).

147. Pytheos Phan( ?). Type M.

### r. ↓ IMYPNAIΩN, 1. ↓ ΠΥΘΕΟΣ

喇

A [ΣK 1131] (18 mm.): A [ΣK 1132] (17 mm.):
A [ΣK 1145] (18-5 mm.): B [= Imhoof, Gr. M.
345] (20 mm., 5-80 grm.): C. Corpus (19 mm.):
G [Macd. 57] (18 mm., 5-60 grm.): L [BMC. 31]
(18 mm., 5-53 grm.) [Pl. II]: O. Christ Church

[= Mus. Mead., p. 34]: O. New Coll. (19 mm., 5.70 grm.]: P [4377 = Mi. 1087]: V (20 mm., 5.47 grm.): JGM (18 mm., 4.07 grm.): JGM (20 mm., 5.43 grm.): JGM (19 mm., 5.70 grm.).

#### 148. Pytheos. Type K.

#### r. ↓ IMYP, 1. ↓ ΠΥΘΕΟΣ

A [1891/2 KZ 308]: B (10-5 mm.): L (11-5 mm., 1-28 grm.): P [4312 = Mi, 1041]: V (10-5 mm., 1-00 grm.): W. H. Buckler (10 mm., 1-09 grm.): E. Rogers: JGM (10 mm., 1-01 grm.).

#### 149. Sarapion. Type K.

# r. $\downarrow \text{IMYP}$ , l. and below, (a) $\downarrow \text{SAPA} \rightarrow \Pi \text{I}\Omega \text{N}$ , (b) $\downarrow \text{SAPA} \rightarrow \Pi \text{I}\Omega$ , (c) $\downarrow \text{SAPA} \rightarrow \Pi \text{I}$

A [5371] (c): A [5372] (e): A [1891/2 KZ 306]
(a): A [1891/2 KZ 307] (a): B (a) (12 mm.):
B (a) (12 mm.): B (b) (12 mm.): B (c) (13 mm.):
G [Macd. 83] (c) (11 mm., 1-03 grm.): K (b)
(12 mm.): L [BMC. 75] (b) (12 mm., 1-04 grm.):
L [BMC. 76] (c) (12 mm., 0-99 grm.): L (b)
(12 mm., 1-58 grm.): L (c) (11-5 mm., 1-14 grm.):
O. Christ Church [= Mus. Mead., 34] (c): P
[4313 = Mi. 1042] (a): V (a) (11-5 mm., 1-54 grm.): E. Rogers: JGM (a) (12 mm., 1-43 grm.):
JGM (a?) (12 mm., 1-35 grm.): JGM (b) (12 mm.,
1-15 grm.): JGM (c) (11 mm., 1-99 grm.): JGM
(c) (11-5 mm., 1-04 grm.).

#### 150. Sosos Po( ?). Type M.

## r. ↓ ΙΜΥΡΝΑΙΩΝ, 1. ↓ ΣΩΣΟΣ

B [= Imhoof, Gr. M. 346] (19 mm., 5-53 grm.):
 O. Christ Church [= Mus. Mead., p. 34] (19 mm.):
 V (19 mm., 5-31 grm.).

#### (Group $\epsilon$ .)

#### 151. Artemon. Type L.

#### TMYPNAIΩN, r. ↑ APTEMΩN

L [BMC. 61] (13 mm., 1-34 grm.) [Pl. II]: P [4283 = Mi. 1026].

152. Artemon. Type K.

r. ↓ IMYP, 1. ↓ APTEMΩN B (12-5 mm.).

153. Hermippos Au( ?). Type J.

## r. ↓ IMYPNAIΩN, I. ↓ EPMIΠΠΟΣ

B (21 mm. Bb): V (20 mm., 7-05 grm. Aa).

154. Hermopha(nes?). Type N.

#### r. ↓ IMYP, 1. ↓ EPMOΦA

B (12.5 mm.): B (12 mm.): K (12.5 mm.): L (12.5 mm., 1.65 grm.): P [4387 = Mi. 1100]: V (13 mm., 1.42 grm.): JGM (12 mm., 1.36 grm.) [Pl. II]: JGM (11 mm., 1.68 grm.).

155. Hermopha(nes?). Type K.

#### r. ↓ IMYP, I. ↓ EPMOΦA

P [4307 = Mi. 1039]: V (10 mm., 1.43 grm.): JGM (10.5 mm., 1.10 grm.).

156. Eut( ?). Tetradrachm.

#### IMYP NAIΩN, below, Ě

C. Corpus (34 mm., 15-55 grm.): C. S. Gulbenkian [= Bunbury sale 198] (16-07 grm.).

157. Zopy(ros?). Tetradrachm.

#### IMYP NAIΩN, below, ♀

G [Macd. 1] (34 mm., 16-61 grm.): Hague (33 mm., 16-1 grm.): P [4155 = de Luynes 2286] (34 mm., 16-30 grm.): Petrograd (34 mm., 16-65 grm.): R. Jameson (34 mm., 16-67 grm.): JGM [= Benson sale 690] (34 mm., 15-38 grm.): [Bement sale 1480 = Philipsen sale 2212 (38 mm., 15-49 grm.)]: [H. Weber 6117 (33 mm., 16-71 grm.)]: [Hess sale 7/10/07 1750 (37 mm., 15-85 grm.)]: [Prowe sale 1022 (35 mm., 15-30 grm.)].

158. Herogeiton. Type K.

#### r. J ZMYP, I. J. HPOΓΕΙΤΩΝ

B (12 mm.): JGM (11 mm., 1-29 grm.) [Pl. II].

159. Theudes. Type J.

#### r. ↓ IMYPNAIΩN, I. ↓ ΘΕΥΔΗΣ

A [5363 <sup>γ</sup>] (21 mm. Aa): A [5363 <sup>δ</sup>] (21 mm. Bb).

160. Theudes. Type M.

## r. ↓ IMYPNAIΩN, l. ↓ ΘΕΥΔΗΣ, in field r. ⟨a⟩ Δ, ⟨b⟩ Λ.

B (a) (20 mm.): G [Macd. 49] (a) (19 mm., 5.54 grm.): G [Macd. 50] (a) (19 mm., 4.66 grm.): P [4363 = Mi. S. 1527] (a): V (b) (18 mm., 4.73 grm.): E. Rogers (a): JGM (a) (18 mm., 4.74 grm.): JGM (b) (18 mm., 4.82 grm.): JGM (b) (17.5 mm., 6.30 grm.): [?Mi. 1078 (Cous.)].

161. Menodotos Metr( ?). Type J.

# r. ↓ IMYPNAIΩN, 1. ↓ MHNOΔΟΤΟΣ

B (21 mm. Aa): P [4244 = Mi. 987]: JGM (21 mm., 7.14 grm. Aa): JGM (21 mm., 8.58 grm. Ab).

162. Metrodoros Lo( ?). Type J.

## τ. ↓ ΙΜΥΡΝΑΙΩΝ, Ι. ↓ ΜΗΤΡΟΔΩΡΟΣ

JGM (21 mm., 8-77 grm. Aa): JGM (20 mm., 7-34 grm. Ab) [Pl. I].

163. Metrodoros. Type M.

## r. ↓ IMΥPNAIΩN. 1. ↓ MHΤΡΟΔΩΡΟΣ, in field r. Δ

A [5367 γ]: A [ΣK 1143] (18 mm.): A [ΣK 1144] (18·5 mm.): B (19·5 mm.) [Pl. II]: C [Leake, Num. Hell. ii. 117] (18 mm., 5·01 grm.): K (18·5 mm.): L [BMC. 37] (18 mm., 5·89 grm.): O. Christ

Church [= Mus. Mead., p. 34]: O. New Coll. (20 mm., 5-32 grm.): P [4370 = Mi. 1082]: JGM (19 mm., 6-06 grm.): JGM (18-5 mm., 5-17 grm.): JGM (18 mm., 4-87 grm.).

164. Metrodo(ros). Type N.

#### r. ↓ IMYPN, 1.↓ MHTPOΔΩ

A [5874]: A [5875]: B (11 mm.): B (11.5 mm.): K (12 mm.): L [BMC. 70] (12 mm., 1.49 grm.): W. H. Buckler (11.5 mm., 1.73 grm.): E. Rogers: JGM (12 mm., 1.52 grm.): [Pozzi 3021 (12 mm., 1.65 grm.)].

165. Metrodoros (?). Tetradrachm.

## IMYP NAIΩN, below, (a) PP, (b) PP, (c) PP

Boston [ = Warren 1129] (a) (36 mm., 15-31 grm.); C [Leake suppl.] (a) (32 mm., 16-15 grm.); G [Macd. 2] (b) (33 mm., 16-41 grm.); [Pozzi sale 2512 (a) (40 mm., 16-12 grm.)]; [Delbeke sale 194 (c) (37 mm., 16-26 grm.)]; [Mi. 911]; [Mi. 912].

166. Patron Me( ?). Type J.

#### r. ↓ IMYPNAIΩN, 1. ↓ ΠΑΤΡΩΝ ME

A [ΣK 1064] (18.5 mm. Bb): B (19 mm. Bb): B (20 mm. Ac): B (18.5 mm. Ad): O (20 mm., 7.16 grm. Be): P [4270] (20 mm. Aa): [Mi. 998 (Cous.)].

167. Sotas. Type M.

r.  $\downarrow$  IMYPNAI $\Omega$ N, l.  $\downarrow$   $\Sigma\Omega$ TA $\Sigma$ , in field r. (a)  $\Delta$ , (b)  $\Lambda$ 

B (a) (20 mm.): B (a) (18-5 mm.): K (a) (19 mm.): L (b) (17-5 mm., 5-24 grm.): P [4379=Mi. 1091] (a): P [4379<sup>a</sup>] (a): V (a) (19 mm., 5-28 grm.): JGM (a) (18 mm., 5-00 grm.).

#### PERIOD X.

In the next period the mint appears to have been mainly occupied in striking Homereia: the names of magistrates which occur on the coins of this denomination are not found on silver or on the smaller sizes of bronze, nor are there any specimens of either of the latter classes which can be placed in this period on grounds of style except a few examples of type M. It is thus easier to obtain an approximately chronological arrangement here than in the last period, with the aid of common use of dies and some evidence from a hoard.

- Type J. (a) The first group includes coins with the names of Euphemos, Asklepiodoros, Aristokrates, Theotimos, Pollis, Archias, and Tharsynon. These have a head of Apollo very similar to that found in group € of period IX, but in lower relief and longer in appearance: the treatment of the hair follows the same scheme. On the reverse the lettering is good, though rather larger than before: Homer sits upright: the magistrates' names are regularly accompanied by monograms, placed → outside the name. Theotimos, Pollis, and Archias used one obverse die in common: and one die of Archias seems to be one of Aristokrates retouched.
- $(\beta)$  In the next group, formed by the issues of Eudemos and Zotion, who both used the same obverse die, the treatment of the head is somewhat similar to that of group  $\alpha$ , but the jaw is squarer and the nose longer: the scheme of the hair is varied by the two locks on the top of the head being twisted up again in crescent form instead of ending under the wreath:

and the rolls on the temple merge over the ear into the front falling lock. There is no monogram on the reverse.

- (γ) Under the magistrates of the third group, Kallistratos and Krokines, the phenomenon noted in period VIII of the simultaneous use of obverse dies executed in two different styles recurs. One set of dies carries on from group β in the shape of the head, but has the hair on the crown more broken up, and the knot at the back smaller: the other has a smaller and squarer head, with the hair on the crown radiating from a point farther forward and carried down to the wreath, and the rolls on the forehead more massed, while the treatment generally has a wiry effect: in both sets the lettering on the reverse is less regular in alignment, and the head of Homer is frequently much bowed. Many of the obverse dies—at least seven—were used in common by both magistrates.
- (δ) Two sets of obverse dies are also found in group δ, which comprises coins of Arrhidaios, Diogenes, and Pasikrates, the names being accompanied by monograms, which in the case of the two latter are double. In one set, which follows on the larger type of head of group γ, there is a distinct falling-off in execution: the hair is irregularly treated and the sequence of the locks not carried out naturally: the knot at the back of the head tends to become a jumble of lines: the features are coarser, and the wreath smaller. In the other, developed from the square type, there is rather an improvement, the style being freer and less wiry. The lettering on the reverse, especially on coins with obverses of the first-mentioned set, is straggling and untidy. There are many instances of the common use

of obverse dies: six were used by all three magistrates, and seven others by at least two of them.3

Type M. (y) The only coins of type M which can be placed in this period are of Apollonios Py( ), Demetrios Metrod(orou), and Hegesias Pa( ). These three magistrates are linked by their use in common of an obverse die: the style of their coins is very close to that of the Homereia of group y. In comparison with the coins of this type of the previous period, they show a distinct improvement on groups  $\delta$  and  $\epsilon$ : the treatment of the head on the obverse is more delicate, especially as regards the hair, which is neatly rolled and bunched: the waving of the falling locks, first noted in some of the dies of Pytheos, is accentuated, and the three locks are spread: the crown is better proportioned, with only a slight curve in the hoop. The reverses vary in merit: some are good, but on others the figure of Aphrodite is clumsy, and the lettering, especially on the coins of Apollonios and Hegesias, coarse. The monogram is placed →.4

<sup>&</sup>lt;sup>2</sup> The hoard described in Num. Chron., 1916, 246, was mainly composed of Homereia of this period: and, so far as can be judged from the condition of the coins, the evidence it supplies tends to support the order of the groups given above. The least worn specimens were the coins of Arrhidaios, Diogenes, and Pasikrates, 38 in all: next, in point of wear, came 11 of Kallistratos and Krokines: the rest, including examples of Archias (1), Eudemos (1), Tharsynon (1), Theotimos (3), and Pollis (5) out of groups a and β, Hermogenes (1) from period IX, and Xenondes (2) from period VIII, were all considerably worn.

<sup>\*</sup> The position of these coins in the grouping is confirmed by the evidence of the hoard just mentioned. There were in it specimens of the issues of all three magistrates in fairly fresh condition, comparable with those of Kallistratos and Krokines: the examples of Apollonides Metroph(anou), Pytheos Phan(), and Apollophanes were much more worn.

Cistophori. It seems probable that the few cistophori of Smyrna belong to this period. They cannot be brought into relation with the bronze series by style, as, owing to the diverse nature of the types, there are no points of comparison. But the fabric and the lettering are both unlike anything normally produced at Smyrna-the inscriptions are very short, but contain two forms, A with broken crossbar and V without a tail, which hardly ever occur, and another, Z, which is unusual, on the autonomous coinage-and these cistophori may have been struck elsewhere. As, however, there is a change in reverse types between the tetradrachms assigned on grounds of style to period IX and those similarly assigned to period XI, which might be consequent on a break in the series due to the temporary adoption of the cistophorus as a silver denomination, there is some reason for placing the cistophori in period X: they are dated in years 1, 2, and 8 (s.c. 133, 132, and 126), which, as will be seen later, would agree fairly well with the latter part of period X.

(Group a.)

168. Aristokrates Phan( ?). Type J.

# r. ↓ IMYPNAIΩN, I. ↓ APIΣTOKPATHΣ

Amsterdam [Boissevain 77] (19·5 mm., 7·00 grm.):
A [ΣΚ 1039] (22 mm. Ab): B (20 mm. Aa):
B (19 mm. Bc): L (20 mm., 7·27 grm. Bc): O
[= Num. Chron. 1900, p. 205] (19 mm., 7·58 grm. Be): V (22 mm., 7·35 grm. Ab): V (21 mm., 8·42 grm. Bd): JGM (22 mm., 7·91 grm. Aa):
JGM (20 mm., 5·91 grm. Ab): [Mi. S. 1414 (Sest.)].

169. Archias Phan(?). Type J.

### r. ↓ IMYPNAIΩN, 1. ↓ APXIAΣ

A

A [ΣK 1040] (21 mm. Ad): C [Leake, Num. Hell., ii. 118] (20 mm., 8·19 grm.): G [Macd. 17] (22 mm., 10·85 grm. Ab): K (20·5 mm. Bf): L (22 mm., 8·59 grm. Aa): P (4197 = Mi. 943]: V (22 mm., 6·67 grm. Bb): V. Schottenst. [3325] (19 mm., 9·71 grm.): W. H. Buckler (22 mm., 8·60 grm. Ac): JGM (21 mm., 10·43 grm. Be).

170. Asklepiodoros Hag(iou?). Type J.

#### r. ↓ ΙΜΥΡΝΑΙΩΝ, I. ↓ ΑΣΚΛΗΠΙΟΔΩΡΟΣ ΑΓ

A [5360 <sup>ιθ</sup>] (21 mm. Aa): B (21 mm., Bb): V (21 mm., 8-71 grm. Ce): [Mi. 945 (Cous.)?]

171. Euphemos Herod(ou?). Type J.

#### r. ↓ IMYPNAIΩN, 1. ↓ EYΦHMOΣ (AP (?)

A [5363 5] (20 mm.): P. [Wadd. 1940] (21 mm.).

172. Tharsynon. Type J.

# r. ↓ ΙΜΥΡΝΑΙΩΝ, 1. ↓ ΘΑΡΣΥΝΩΝ

A [5363 'β] (22 mm. Ab): A [ΣK 1056] (19-5 mm. Ab): B (21 mm. Ac): B (21 mm. Ac): B (19 mm. Ad): C [Leake, Num. Hell., ii. 118] (21 mm., 8-73 grm.): K [Ram. 13] (19 mm. Ac): L (20 mm., 9-68 grm. Aa): P [4228 = Mi. 970]: V (22 mm., 8-57 grm. Ae): V. Schottenst. [3327] (19 mm., 8-85 grm.): JGM (21-5 mm., 10-00 grm. Aa).

173. Theotimos The(otimou?). Type J.

# r. ↓ IMYPNAIΩN, 1. ↓ ΘΕΟΤΙΜΟΣ

A [5363 <sup>θ</sup>] (20 mm. Bb): A [ΣK 1057] (20 mm. Ad): B (21.5 mm. Bb): C [Leake, Num. Hell., ii.

118] (22 mm., 7-40 grm.): L (22 mm., 8-67 grm. Ac): O |= Num. Chron. 1900, 205 | (20.5 mm., 8-14 grm. Bf): P [4229 = Mi. S. 1430]: V (21 mm., 7-57 grm. Ae): V. Schottenst. [3328] (21 mm., 8-06 grm.): JGM (23 mm., 8-58 grm. Bb): JGM (21 mm., 8-79 grm. Aa) [Pl. II].

#### 174. Pollis Ari( ?). Type J.

#### r. ↓ ΙΜΥΡΝΑΙΩΝ, Ι. ↓ ΠΟΛΛΙΣ MP

A [53657]: A [1891/2 KZ 302] (20 mm. Bg): B (20 mm. Bg): C [Leake, Num. Hell., ii. 118] (22.5 mm., 6.28 grm.): G [Macd. 23] (22 mm., 7.51 grm. Bg): L BMC, 95 (22 mm., 7.41 grm. Cf): L (20 mm., 6-39 grm. Ae): P [4256 = Mi. 999]: V. Schottenst. [3329] (22 mm., 8-47 grm.): E. Rogers (21 mm., 7.93 grm. Bb): JGM (21 mm., 8.21 grm. Bd): JGM (22.5 mm., 7.00 grm. Aa): JGM (21 mm., 7.52 grm. Cc).

#### (Group B.)

175. Eudemos. Type J.

#### r. J IMYPNAIΩN, 1. J EYΔHMOΣ

B (21 mm. Ab): B (20 mm. Ac): G [Macd. 13 = Mi. S. 1423 (22 mm., 9-33 grm. Aa): L (21 mm., 8-71 grm. Aa): P [4217 = Mi. 960]: JGM (21 mm., 8.82 grm, Ab).

176. Zotion. Type J.

### r. ↓ IMYPNAIΩN, 1. ↓ IΩTIΩN

A [5363 7] (20 mm. Ac): A [ΣK 1052] (20 mm. Ab): B (19 mm. Ad): L (20 mm., 7.80 grm. Aa): O. New Coll. (20.5 mm., 7.16 grm. Ab): P [4224 = Mi. 968]: V (21 mm., 9.59 grm. Aa): JGM (20 mm., 7.98 grm. Aa) [Pl. II].

#### (Group y.)

177. Apollonios Py( ?). Type M.

#### r. ↓ ΙΜΥΡΝΑΙΩΝ, Ι. ↓ ΑΠΟΛΛΩΝΙΟΣ Μ

A | 1891/2 KZ 310|: B (18 mm.): Manchester (18 mm.): JGM (17 mm., 3.51 grm.): JGM (18 mm., 6.53 grm.).

178. Demetrios Metrodorou (?). Type M.

r. ↓ IMYPNAIΩN, 1. ↓ (a) ΔHMHTPIOΣ,

## (b) ΔΗΜΗΤΡΙΟΣ



B (a) (18 mm.): B (b) (17 mm.): G [Macd. 44] (a) (18 mm., 4-70 grm.): L [BMC. 22] (b) (17.5 mm., 3-64 grm.): P [4355 = Mi. 1072] (b): V (b) (17 mm., 3-40 grm.): W. H. Buckler (a) (18-5 mm., 4-73 grm.): E. Rogers: JGM (a) (1.-5 mm., 3-30 grm.): JGM (a) (16-5 mm., 3-84 grm.): JGM (a) (18 mm., 4-02 grm.) [P1. II].

179. Hegesias Pa(?). Type M.

## r. ↓ ΙΜΥΡΝΑΙΩΝ, Ι. ↓ ΗΓΗΣΙΑΣ

A [**X**K 1195] (18 mm.): K (17 mm.): L [BMC. 24] (18 mm., 4.85 grm.): P [4360 = Mi. S. 1528?]: P [4361 = Mi. S. 1529?]: V (17 mm., 33·7 grm.): E. Rogers (17 mm., 3·22 grm.): JGM (16 mm., 4·35 grm.): JGM (16 mm., 4·21 grm.): JGM (17·5 mm., 4·94 grm.): [Mi. 1077 (Cous.)].

180. Kallistratos. Type J.

# r. $\downarrow$ ΣΜΥΡΝΑΙΩΝ, l. $\downarrow$ (a) ΚΑΛΛΙΣΤΡΑΤΟΣ (b) ΚΑΛΛΙΣΤΡΑ

A [5363 <sup>45</sup>] (a) (20 mm. Gn): A [5363 <sup>43</sup>] (b) (21 mm. Ao): A [5363 <sup>43</sup>] (b) (21 mm. Lf): A [ΣK 1071] (b) (22 mm. Jp): B (b) (20 mm. Cq): B (b) (21 mm. Cr): C [Leake, Num. Hell., ii. 118] (a) (23 mm., 10-68 grm.): G [Macd. 14] (b) (23 mm., 8-39 grm. Kk): K (b?) (20 mm. Ms): L [BMC.

[79] (b) (21 mm., 8-47 grm. Ee): L [BMC. 80] (b) (20 mm., 9-00 grm. Ff): L. [BMC, 81] (b) (20 mm., 8-94 grm. Dd): O. Christ Church [= Mus. Mead., p. 34 | (b) : O. New Coll. (b) (21 mm., 8.76 grm. Au): P [4235 = Mi. 978] (a): V (a) (20 mm., 7-40 grm. At): V. Schottenst. [3321] (b: on rev., \(\Gamma\) to r.) (21 mm., 8-11 grm.): W. H. Buckler (a) (20 mm., 8-89 grm. J1); W. H. Buckler (a) (21.5 mm., 7.90 grm. Gg): E. T. Newell (b) (21.5 mm., 6.75 grm. Jm): E. Rogers (b?) (21 mm., 8-19 grm. Ao): JGM (a) (22 mm., 6-68 grm. Gg.): JGM (b?) (21 mm., 8-92 grm. An): JGM (b) (20 mm., 8-14 grm. Hf): JGM (b) (22 mm., 8-48 grm. Ce) Pl. II : JGM (b) 22 mm., 7-86 grm. Fj): JGM (a) (21 mm., 8-38 grm. Bb): JGM (a) (20 mm., 8-77 grm. Bb).

#### 181. Krokines. Type J.

### r. ↓ IMYPNAIΩN, I. ↓ KPΩKINHΣ

A [5363 \*a] (19 mm, Hm): A [5363 \*β] (19 mm, Hn): A [5363 \*β] (20 mm, Jo): A [1891/2 KZ 303] (20 mm, Bb): B (20.5 mm, Dl): B (20 mm, Bp): B (21 mm, Kg): Gotha: K (20 mm, Gr): L [BMC, 82] (22 mm, 8-66 grm, Gg): L [BMC, 83] (20 mm, 9-05 grm, Bh): P [4238 = Mi, 982]: V (20.5 mm, 10-70 grm, Aa); W. H. Buckler (21 mm, 7-19 grm, Dl): E. T. Newell (Γ to r. on rev.) (22.5 mm, 9-24 grm, Dk): E. Rogers (21 mm, 8-62 grm, Ej): JGM (21 mm, 7-59 grm, Aa): JGM (21 mm, 8-48 grm, Ff): JGM (19.5 mm, 9-25 grm, Cc): JGM (Γ to r. on rev.) (22 mm, 10-30 grm, Dd): JGM (19 mm, 7-90 grm, Ee): JGM (21 mm, 7-30 grm, Bb).

#### (Group ô.)

182. Arrhidaios Menekratous (?). Type J.

r. ↓ IMYPNAIΩN, I. ↓ APPIΔAIOΣ
(a) AR (b) MR (c) AR

(d) M (e) A

A [5360 "] (a) (22 mm. Pu): A [5360 "] (d) (23 mm. Ot): A [5360 "] (a) (21 mm. Qw): A [1891/2 KZ 295] (e) (23 mm. Rx): A [1891/2

KZ 296 (a) (22 mm. Bn): A [1892/3 IZ 58 (b) (21 mm. Jk): A [Σ. Τσιβ. 810] (a) (20 mm. By): A [ΣΚ 1210] (b) (20 mm.): B (a) (21 mm. Cz): B (a) (21.5 mm. Saa): B (b) (21.5 mm. Tbb): B (a) (21 mm. Sn): C. Corpus: G | Macd. 15 = Mi. S. 1412 (b) (22 mm., 7-16 grm. Fs): G [Macd. 16 = Mi. S. 1413 (a) (22 mm., 8-26 grm. De): Gotha: K [Ram. 8] (c) (21 mm. Cd): K [Ram. 9] (e) (21 mm. Cg): K (b) (21-5 mm. Wdd): K (a) (22 mm. Xee): L BMC. 86 (e) (20 mm., 8-17 grm. Cg): L [BMC, 87] (b) (20 mm., 8-14 grm. Kj): L BMC. 88 (a) (22 mm., 7-27 grm. Bl): O (b) (22 mm., 8.05 grm. Yff): O. Christ Church = Mus. Mead., p. 34 |: P [4194=Mi. 937] (c): P [4195] (b): Toronto (a) (22 mm., 9-32 grm. Aa): V (a) (23.5 mm., 6.87 grm. Ucc): V (a) (20 mm., 7-99 grm. Bl): V. Schottenst. | 3322 | (a) (22 mm., 10-15 grm.): V. Schottenst. [3323] (a) (21 mm., 9-15 grm.): W. H. Buckler (a) (21 mm., 8-70 grm. Lt): E. T. Newell (b) (20 mm., 7-66 grm. Kj): E. Rogers (a) (20-5 mm., 9-28 grm. Ab): JGM (a) (22 mm., 11.51 grm. Ef): JGM (e) (22 mm., 6-34 grm. Cg): JGM (b) (22 mm., 7-90 grm. Kq): JGM (a) (21 mm., 8-25 grm. Lo): JGM (b) (20 mm., 10-29 grm. Jk): JGM (a) (22 mm., 7-89 grm. Be) [Pl. II]: JGM (b) (21 mm., 8-80 grm. Gr): JGM (c) (21-5 mm., 8-97 grm, Cd): JGM (a) (22 mm., 8-89 grm. De): JGM (b) (22 mm., 7.43 grm. Ns): JGM (b) (22 mm., 6.68 grm. Mp): JGM (b) (21 mm., 9-59 grm. Kj): JGM (a) (23 mm., 7-88 grm. Sn): JGM (a) (21-5 mm., 7-68 grm. Aa): JGM(b) (23 mm., 8-74 grm. Hj): JGM (b) (20 mm., 9-23 grm. Gh): [Lavy 2312 (e) : [Windischgrätz 1662 (23 mm.)].

183. Diogenes Euryd( ?). Type J.

# r. ↓ IMYPNAIΩN, 1. ↓ ⟨a⟩ ΔΙΟΓΕΝΗΣ &E TOY NY

#### (b) AIOFENHY 達 Toy 出

A  $[5362^a]$   $\langle a \rangle$  (25 mm. Or): A  $[\Sigma K \ 1043]$   $\langle a \rangle$  (22 mm. Rx): B  $\langle b \rangle$  (20 mm. Kl): B  $\langle b \rangle$  (23 mm. No): B  $\langle a \rangle$  (21 mm. Sc): C [Leake, Num. Hell.,] (5.9) (22.5 mm., 11.12 grm.): Gotha: K

(a) (20 mm, Gk): L (b) (21 mm., 7.78 grm. No): O. Christ Church [= Mus. Mead., p. 34]: P [4205 = Mi. 950] (b): V (a) (20 mm., 7.40 grm. Cj): V (a) (20 mm., 9.28 grm. Fy): V. Schottenst. | 3330 | (22 mm., 9-77 grm.) : V. Schottenst. [3331] (20 mm., 8-78 grm.): V. Schottenst. [3332] (21 mm., 7-27 grm.): W. H. Buckler (a) (22 mm., 9-25 grm. Ps): W. H. Buckler (a) (22 mm., 8-81 grm. Gt): W. H. Buckler (a) (22-5 mm., 8.59 grm. Qu): E. Rogers (a) (21 mm., 8.08 grm. Ci): JGM (a) (23 mm., 6.91 grm. Bb): JGM (a) (21 mm., 7.76 grm. Dd): JGM (a) (22 mm., 8-56 grm. Gg): JGM (a) (21 mm., 9-50 grm. Ee): JGM (a) (23 mm., 10-32 grm. Hh): JGM (a) (20 mm., 7.90 grm. Lm): JGM (a) (21 mm., 7.54 grm, Mn): JGM (a) (22 mm., 8.95 grm. Ff): JGM (a) (21 mm., 6.64 grm. Cc): JGM (a) 21 mm., 6.00 grm. Or): JGM (a) (20 mm., 6.55 grm. Aa): JGM (b) (20 mm., 9-38 grm. Kl): JGM (a) (23 mm., 8.55 grm. Mn): JGM (a) (21 mm., 7-56 grm. Gp): JGM (a) (22 mm., 9-07 grm. Gk).

184. Diogenes Me( ?). Type J.

#### r. ↓ IMYPNAIΩN, I. ↓ ΔΙΟΓΕΝΗΣ M TOY H

A [5362 β] (20 mm. Ab): A [1892/3 IZ 59] (20-5 mm. Bc): A | ΣK 1042] (21 mm. Cd): B (21 mm. Ae): K [Ram. 10] (20 mm. Af): P [4206 = Mi. 951]: V. Schottenst. [3326] (21 mm., 7-25 grm.): JGM (20 mm., 7-85 grm. Aa).

185. Pasikrates Metr( ?). Type J.

# r. ↓ IMYPNAIΩN, I. ↓ ΠΑΣΙΚΡΑΤΗΣ

A [5365 °] (21 mm. Fh): A [5365 °] (22 mm. Dw):
A [5365 °] (21 mm. Px): A [1892/3 Λ 40] (21 mm. Fj): A [1891/2 KZ 304] (21 mm. My): A

[ΣΚ 1062] (22 mm. Ez): A [ΣΚ 1063] (23 mm. Kn): B (22 mm. Oaa): B (21 mm. Hbb): B

(20 mm. Dcc): B (22 mm. Ku): C [Leake, Num. Hell., ii. 118] (22 mm., 8-27 grm.): C. Corpus:

G [Macd. 21] (22 mm., 8-06 grm. Qs): G [Macd. 22] (21 mm., 7-25 grm. Qt): Gotha: K (20 mm.

Hdd): L [BMC, 98] (22-5 mm., 7-99 grm. Lp): L BMC. 94 (21 mm., 8-86 grm. Qo): O (20 mm., 7.86 grm. Vhh): O. Christ Church [= Mus. Mead., p. 34]: P [4254 = Mi. 994]: V (22 mm., 8-21 grm, Ree): V (21-5 mm., 6-25 grm, Sff): V (21 mm., 6.92 grm. De): V (20.5 mm., 7.80 grm. HI): V (22 mm., 8-35 grm, Tgg): W. H. Buckler (21 mm., 8-15 grm. Ku): E. Rogers (21 mm., 5-70 grm. Be): JGM (22 mm., 8-87 grm. Mr): JGM (22 mm., 8-52 grm. Bb): JGM (22 mm., 9-71 grm. Aa): JGM (21 mm., 8-05 grm. Jm): JGM (22 mm., 6.79 grm. Cd): JGM (21 mm., 7.90 grm. De): JGM (21 mm., 8-61 grm. Ef): JGM (22 mm., 8-62 grm. Fg): JGM (21 mm., 8-39 grm. Fh): JGM (22 mm., 8-78 grm. Fj): JGM (23.5 mm., 8.79 grm. Gk): JGM (21 mm., 7.79 grm. Hl): JGM (22 mm., 9-03 grm. Kn): JGM (23 mm., 8-72 grm. Nl) : JGM (22 mm., 6-72 grm. Kg): JGM (20.5 mm., 7.77 grm. Ds): JGM (22.5 mm., 7-33 grm. De): H. Weber 6131 (20-5 mm., 6-84 Qo) : [Mi. S. 1442 (Sest.)].

(Cistophori.)

186. Year 1.

Above &, on r. A

L [BMC. 1] (28.5 mm., 11.88 grm.).

187. Year 2.

Above A, on r. B

B (27.5 mm., 12.39 grm.).

188. Year 2.

Above PP, on r. B

C. Corpus (28 mm.): L [BMC. 2] (29 mm., 12-39 grm.).

189. Year 8.

Above W, on r. H

B (= Imhoof, M. G. 129] (27 mm., 12-51 grm.): Hague (28 mm., 12-6 grm.): [Whittall sale 1012].

#### PERIOD XI.

The smaller denominations of bronze reappear amongst the issues of period XI, though they can only be grouped with the Homereia by the test of style: several magistrates' names are found with two or more of the types B, L, N, and K, but there is only one which may possibly be identical with a name occurring on a Homereion.

Type J. (a) The obverse-dies of the first group have a head which appears to be derived from that in the first set of group & in period X, but with considerable degradation in the execution. The whole treatment is decidedly coarse: the hair is in ropy twists on the crown and forehead, with a small knot, sometimes twisted round, sometimes a gathering of lumps, at the back: the falling locks are often in knobs, and in some cases there are only two, both brought forward: the ear is always uncovered, with a small lock in front of it on the cheek. The lettering on the reverse is clumsy, and the magistrate's name is usually in two lines, though exceptions to this occur in all cases but one. The names found are Alexion, Phanokrates, Potamon, Hermagoras, and Dionysios: three dies were used in common by Phanokrates, Potamon, and Hermagoras, one by Potamon and Dionysios, and one by Hermagoras and Dionysios.

 $(\beta)$  Coins of Apollodoros and Herakleides show a transitional and poorer style, with some variations in the dies. The head on the obverse has the hair on the crown gathered in smaller masses, often closely cross-hatched: the ear is partly covered, with a small lock in front as in group  $\alpha$ : the laurel-wreath is

thinner, and the ties tend to disappear. The lettering on the reverse is rather smaller and neater than in group  $\alpha$ : the magistrate's name, as in that group, is normally, but not always, in two lines: when the name of Herakleides is in one line, it is accompanied by a monogram placed  $\uparrow$ .

(γ) An issue which presents some exceptional features may probably be placed next in order. In this there are two varieties of head, one reminiscent of group δ of period X, the other of the last group: but both have common points of style. The hair is treated in detail, and is not massed or lumpy: the effect is usually rather wiry: the locks on the neck are thin, and the knot at the back small: the ear is partly covered, with a small lock in front: the wreath is narrow, and the ties hardly visible. The magistrate's name is given with a patronymic as Eumelos Zopyrou, the name being on the left, the patronymic in the exergue: this is the only instance in the Homereia of such an arrangement, and the first of a patronymic given in full.

Type M. (β) Only one issue of the Aphrodite type seems to belong to this period: it bears the name of Apollonios with the monogram Po( ). In general style it is very near to the Homereia of Herakleides: there is the same coarseness of feature and ropy treatment of the hair on the obverse: the three falling locks are thin and waved. The reverses are very poor in workmanship, with a clumsy figure of Aphrodite and irregular lettering: the name is divided into two lines, with the monogram in the second line sometimes before and sometimes after the latter part of the name.

- Type B. ( $\beta$ ) There was a revival of type B in this period: probably the earliest example of it is a single coin with the name of Apollo[ ], which stands by itself as regards this type in style, but is very similar in the treatment of the head on the obverse to a coin of Apollod( ) of type L. The magistrate may be the Apollodoros who struck Homereia of group  $\beta$ , as there is some likeness of style. On the reverse the ties of the tripod are two crosses, as in the last preceding issue of this type in period IX.
- (γ) Two other magistrates, Apol( ) Amyn( ) and Bion Pose( ), also struck type B: and their coins may be grouped with the Homereia of Eumelos on account of the similar arrangement of the names on the reverse, with the patronymic in the exergue. They are linked together by the use of two dies in common. As in the case of Eumelos, there are two distinct varieties of head on their coins: one is fairly round work, with a small knot of hair at the back, a thin wreath, and only two locks falling at a wide angle: the other is sharper and stiffer, with three closely twisted locks near together. The ties of the tripod seem to be derived from those on previous issues, but have degenerated into two zigzag lines downwards between the legs.
- Type L. (β) The issue of Apollod(), which is represented by a single specimen, has already been mentioned as similar in the style of the head on the obverse to that on the coin of Apollo[] of type B. The arrangement of the hands and palms is like that on the coins of period IX.
- (γ) Coins of Apol( ) Amyn( ) and Bion Pose( ) also have obverses resembling in style those of the

second variety with the same names described under type B: the rounder head does not occur on their coins of this type, which may point to the two varieties of type B having been struck at two different shops, only one of which produced type L. There are also coins of this type of Apollo( ) Neo( ) and Hermokl( ) Hermi( ), with a slightly less angular head on the obverse, but the same placing of names on the reverse, which should clearly be classed with this group. On all four issues the arrangement of the palms is the same as in the last group, but on those of Apol( ) Amyn( ) and Bion Pose( ) the hands are placed close together, so that the farther one only appears as an outline to the left of the other, and the fingers are less spread.

Type N. (y) The two magistrates Apollo( Neo( ) and Hermokl( ) Hermi( ) also struck type N, together with two others, Diony( ) Hermip( ) and Hikesi( ) Metr( ): all used the same scheme for the names on the reverse, with the second name in the exergue. The head of the Citygoddess on these does not correspond closely to that on the larger coins of type M in group B of this period: it is apparently of an earlier style, with stiff curls as in period IX: but it is very similar in treatment to the heads of Apollo on the coins of types B and L in group y, and, as in these, two varieties are found, a rounder head with two falling locks spread out at an angle, and a sharper one with three parallel locks. The altar on the reverse is as a rule carelessly engraved: the lines are irregular, and the handles are elongated loops sticking out at an angle to the body instead of rings hanging straight down: the legs are shorter in proportion to the body than before.

Type K. (y) The names of Apollo( ) Neo( ) and Hermokl( ) Hermi( ) recur on coins of type K, with two others similarly arranged, Metro( ) Apol( ) and Sopa( ) Para( ): the two former, as on their coins of type L, use dies with a less angular head than the other two, whose obverses correspond to the stiffer style of Apoll( ) Amyn( ) and Bion Pose( ). The lyre on the reverse is usually clumsy in execution, and varies a good deal in form.

Silver. (a) and (b) The silver coins classed in the first group of the second series in Num. Chron. 1914 are closely related in the style of their obverses to the bronze of this period. The treatment of the hair is very similar, in the ropy twists on the forehead and the lumpy knob at the back, alike in tetradrachms and drachmas, to that of groups  $\alpha$  and  $\beta$ : the head of Apollo on the drachmas, with the three straight falling locks and the curl in front of the ear, closely resembles that on some of the Homereia, though it is of more careful execution. The fondness for writing the longer personal names in two lines, characteristic of the Homereia of this period, is also evident in these silver coins. It was suggested previously that this group might be divided into two by die-relations and style, the first section being formed by Apollodotos, Apollophanes, Herakleides, Moschos, Ktoupon, and Phanes: and possibly the two first might be given to group a, and the remainder to group  $\beta$ , where the name of Herakleides occurs on Homereia.

(γ) The remaining magistrates, Nikostratos and Leokrates, who appear to stand by themselves, might then be put into group  $\gamma$ : and it is consistent with this that the obverse die of the drachma of Nikostratos is very like some of those of the Homereia of Eumelos.

#### (Group a.)

190. Alexion. Type J.

## r. $\downarrow$ IMYPNAI $\Omega$ N, 1. $\downarrow$ (a) $\stackrel{AAEI}{\Omega}N$ , (b) AAEI $\Omega$ N

A [5360<sup>4</sup>] ⟨a⟩ (22 mm. Be): A [5360<sup>40</sup>] ⟨a⟩ (22 mm. Ad): A [ΣK 1034] ⟨a⟩ (22 mm. Ad): B ⟨b⟩ (22 mm. Ae): B ⟨a⟩ (24 mm. Be): B ⟨a⟩ (21 mm. Af): K ⟨a⟩ (21 mm. Ag): L ⟨b⟩ (22 mm., 10·18 grm. Aa): P [4281 = Mi. 926] ⟨a⟩: V ⟨a⟩ (21·5 mm., 9·14 grm. Ad): E. Rogers ⟨a⟩ (21 mm., 9·18 grm. Ab): JGM ⟨a⟩ (23 mm., 8·65 grm. Ac).

191. Dionysios. Type J.

#### r. ↓ IMYPNAIΩN, I. ↓ ΔΙΟΝΥΣΙ ΟΣ

A [5362 δ] (23 mm. Bd): A [5362 ε] (20 mm. De):
A [ΣΚ 1044] (21.5 mm. Bf): B (20 mm. Ag):
B (20 mm. Eb): G [Maed. 12] (22 mm., 7-19 grm.
Ce): L (21 mm., 8-36 grm. Aa): P [4207 = Mi.
952]: V (21.5 mm., 8-32 grm. Ag): V (22.5 mm., 8-07 grm. Fh): JGM (21 mm., 7-07 grm.
Bb).

192. Hermagoras. Type J.

# r. ↓ IMYPNAIΩN, 1. ↓ ⟨a⟩ EPMAFO,

#### (b) ΕΡΜΑΓΟΡΑΣ

A [5362<sup>13</sup>] (a) (23 mm. Bb): A [5362<sup>1β</sup>] (a) (21 mm. Ab): A [5362<sup>17</sup>] (a) (22 mm. Be): A [1891/2 KZ 297] (a) (21 mm. Ad): A [1908/9 MB 36] (a) (22 mm. Ae): B (a) (21 mm. Af): B (a) (22 mm. Cg): B (b) (22 mm. Ch): K [Ram. 5] (a) (22 mm. Dk): L (a) (23 mm., 10·14 grm. Aa): P [4212] (a): V (a) (23 mm., 8·82 grm. Bm): V (a) (21 mm., 7·69 grm. Cn): V (a) (23 mm., 9·60 grm. Al): V. Schottenst. [3319] (23 mm., 9·60 grm.): JGM (a) (22 mm., 8·29 grm. Cj).

193. Potamon. Type J.

# r. ↓ IMYPNAIΩN, l. ↓ (a) NOTA MΩN

#### (b) ΠΟΤΑΜΩΝ

A [5365 \*] (a) (22 mm. De): A [5365 \*] (a) (21.5 mm. Dd): A [847 A.E.] (a) (21 mm. Af): A [ΣΚ 1066] (a) (21 mm. Ch): B (a) (22 mm. Ag): B (a) (20 mm. Af): Gotha: K [Ram. 14] (b) (22 mm. Bj): K (b) (22 mm. Ek): L (a) 22 mm., 7.86 grm. Aa): L (b) (21 mm., 9.45 grm. Bb): O. Christ Church [= Mus. Mead., p. 34] (a): P [4263 = Mi. 1007] (a): P [4263 a] (a): V (a) (21 mm., 8.02 grm. Dl): V (b) (22 mm., 8.32 grm. Bj): JGM (a) (21 mm., 10.05 grm. Cc): JGM (a) (20 mm., 5.64 grm. Dd).

194. Phanokrates. Type J.

## r. ↓ IMYPNAIΩN, l. ↓ (a) ΦΑΝΟΚΡΑ, THΣ

### (b) ΦΑΝΟΚΡΑΤΗΣ

A [5366] (a) (22 mm. Ad): A [5366a] (a) (21 mm. Ae): B (a) (22 mm. Af): B (a) (20 mm. Ag): B (b) (24 mm. Ch): K (b) (21 mm. Dk): L [BMC. 84] (a) (21 mm., 6-20 grm. Aa) [Pl. II]: L [BMC. 85] (a) (21-5 mm., 7-08 grm. Ab): L (b) (22 mm., 7-16 grm.): O [=Num. Chr. 1900, 205] (b) (20 mm., 6-83 grm. Dl): O. New Coll. (a) (21 mm., 6-68 grm. Ag): P [4273 = Mi. 1019] (a): P [4273 a] (a): W. H. Buckler (a) (23-5 mm., 6-92 grm. Be): E. Rogers: JGM (a) (22 mm., 8-41 grm. Bj): JGM (b) (22 mm., 9-10 grm. Am): [Philipsen sale 2216]: [Cat. Gréau 1802].

#### (Group B.)

195. Apollodotos. Tetradrachm.

## Above $\rightarrow$ IMYPNAI $\Omega$ N, below $\rightarrow$ A $\Pi$ O $\Lambda$ AO $\Delta$ OTO $\Sigma$

B (33 mm., 16-45 grm.): L [BMC. 5 = Mi. S. 1390] (34 mm., 16-59 grm.): [Prowe sale 1023 (35 mm., 16-10 grm.)].

196. Apollodotos. Drachma.

### r. ↓ ΙΜΥΡΝΑΙΩΝ, I. ↓ ΑΠΟΛΛΟΔΟΤΟΣ

P [4164 (de Luynes 2289) = Mi, S. 1396?] (22 mm., 3.90 grm.): [Imhoof Blumer [Kl. M., i. 96. 2] (21 mm., 4.01 grm.)]: [Prowe sale 1027 (20 mm., 3.96 grm.)]: [Bement sale 1482=H. Weber 6118 (19 mm., 4.00 grm.)].

197. Apollodoros. Type J.

 $r.\downarrow \text{IMYPNAION}, \quad L\downarrow\langle a\rangle$ AΠΟΛΛΟΔΩ
POΣ

(b) ΑΠΟΛΛΟΔ, (e) ΑΠΟΛΛΟΔΩΡΟΣ

A [5360<sup>17</sup>] ⟨a⟩ (21 mm. Ce): A [ΣK 1036] ⟨a⟩ (21 mm. Dd): A [ΣK 1035] ⟨a⟩ (21 mm. Cf): A [ΣK 1037] ⟨b⟩ (20 mm. Eg): B ⟨e⟩ (20 mm. Fk): B ⟨a⟩ (22 mm. Fl): B ⟨a⟩ (22 mm. Ch): B ⟨a⟩ (23 mm. Fg): K ⟨a⟩ (20 mm. Bm): L ⟨a⟩ (20.5 mm., 9.49 grm. Aa) [Pl. II]: New York [= John Ward eat. 676] ⟨a⟩ (20.5 mm., 8.01 grm.): O. Christ Church ⟨a⟩: P [4185 = Mi. 930] ⟨a⟩: V ⟨a⟩ (21 mm., 7.58 grm. Gn): E. Rogers ⟨a⟩ (20.5 mm., 6.87 grm. Ab): JGM ⟨a⟩ (21 mm., 7.52 grm. Be): JGM ⟨a⟩ (20 mm., 8.12 grm. Aa).

198. Apollo(doros?). Type B.

r. ↓ IMYPNA, 1. ↓ ΑΠΟΛΛΟ Gotha (13 mm.) [Pl. III].

199. Apollod(oros?). Type L.

r. ↓ IMYPNA, l. ↓ ΑΠΟΛΛΟΔ Gotha (18-5 mm.) [Pl. III].

200. Apollophanes. Tetradrachm.

Above  $\rightarrow \langle a \rangle$  IMYPNAI $\Omega$ N,  $\langle b \rangle$  NAI $\Omega$ N, below  $\rightarrow$ AΠΟΛΛΟΦΑ NH $\Sigma$ 

Brussels (b) (35 mm., 16·16 grm.): Hague (a) (35 mm., 16·6 grm.): L [= Montagu sale 585] (a) (34 mm., 15·29 grm.): V(a) (35 mm., 16·51 grm.).

201. Apollophanes. Drachma.

#### r. ↓ **IMYPNAIΩN**, 1. ↓ **AΠΟΛΛΟΦΑΝΗΣ** B [= Imhoof, Kl. M. i. 96. 1] (19 mm., 3-71 grm.).

202. Apollonios Po(?). Type M.

# r. $\downarrow$ ΙΜΥΡΝΑΙΩΝ, 1. $\downarrow$ (a) ΑΠΟΛΛΩΝΙ ΟΣ

- (b)  $\square$  NIO $\Sigma$  (c)  $\square$  NIO $\Sigma$  (d)  $\square$  NO $\Sigma$  (e) ALOVYU (e) VIO $\Sigma$  (d)  $\square$  NO $\Sigma$
- B (a) (18 mm.): B (d) (17 mm.): K (a) (15-5 mm.):
  O (a) (16 mm., 5-37 grm.): P [4350] (e): P
  [4351] (a) (17 mm.): P [4352] (b): P [4353] (a):
  V (e) (18 mm., 4-04 grm.): E. Rogers (e): JGM
  [= H. Weber 6123] (b) (17 mm., 5-29 grm.)
  Pl. III]: JGM (d) (17 mm., 3-77 grm.): [H. Weber 6122 (a) (17 mm., 3-56 grm.)].

#### 203. Herakleides. Tetradrachm.

#### Above → IMYPNAIΩN, below → HPAKΛΕΙΔΗΣ

Hague (34 mm., 16-6 grm.): JGM [= Butler sale 241] (34 mm., 16-21 grm.): [Bougerol sale 304]: [Prowe sale 1024(35 mm., 16-37 grm.)]: [Bement sale 1481 (34 mm., 16-40 grm.)].

204. Herakleides. Type J.

## r. ↓ IMYPNAIΩN, I. ↓ HPAKAEI ΔHΣ

A [5363] (20 mm. Aa): A [5363] (19 mm. Ab): A [ΣΚ1054] (21 mm. Ag): A [ΣΚ1055] (19 mm. Dh): B (19 mm. Ee): L (20 mm., 6·79 grm. Dd): P [4225 = Mi. 969]: W. H. Buckler (18 mm., 7·47 grm. Ff): JGM (20 mm., 7·76 grm. Ee).

204 b. Herakleides (?). Type J.

#### r. $\downarrow$ IMΥΡΝΑΙΩΝ, 1. $\downarrow$ ΗΡΑΚΛΕΙΔΗΣ $\pm$ (?)

A [**ΣK** 1053] (20 mm. Cc): B (21 mm. F?): L [BMC 92] (19 mm., 8-42 grm. Bb): JGM (20 mm., 6-63 grm. Cc).

205. Ktoupon. Tetradrachm.

### Ab. →IMYPNAIΩN, bel. → KTOYΠΩN C [McClean] (83 mm., 16.54 grm.).

206. Moschos. Tetradrachm.

Ab.  $\rightarrow$  (a) IMYPNAIΩN, (b) NAIΩN, bel.  $\rightarrow$  MOΣΧΟΣ

Brussels (a) (35 mm., 16-01 grm.); C | Leake] (a) (33 mm., 16-8 grm.); P [Wadd. 1935] (b) (30 mm., 16-06 grm.); [E. F. Weber sale 2943 = C. Clark sale 233 (b) (34 mm., 16-12 grm.)]; [Collignon sale 345 (a)]; [Naville sale V 2590 (a) (35 mm., 16-28 grm.)]; Borrell sale 196 (16-79 grm.)]; [Dryasdust sale 261 (35 mm., 16-26 grm.)].

207. Moschos. Drachma.

### Γ. ↓ ΙΜΥΡΝΑΙΩΝ, Ι. ↓ ΜΟΣΧΟΣ

V (18 mm., 3.98 grm.): E. T. Newell [= E. F. Weber sale 2945] (17 mm., 3.95 grm.).

208. Phanes. Tetradrachm.

## $Ab. \rightarrow IMYP$ $NAI\OmegaN$ , bel. $\rightarrow \Phi ANH\Sigma$

K (33 mm., 16-6 grm.): E. T. Newell.

209. Phanes. Drachma.

#### r. J IMYPNAIΩN, 1. J ΦANHΣ

B (19 mm., 3-43 grm.): P [Wadd, 1939] (19 mm., 3-77 grm.).

(Group y.)

210. Apol(l ?) Amyn( ?). Type B.

### r. ↓ IMYPN, 1. ↓ AΠΟΛ, bel. → AMYN

A [5375 δ]: A [ΣK 1163] (14 mm.): A [ΣK 1169] (13·5 mm.): B (14 mm.): B (14 mm.): B (18 mm.): B (19 mm.): B (19 mm.): B (19 mm.): L (19 mm.): B (19 mm.): P [4819 = Mi. 1049]: JGM (19 mm., 1.81 grm.): JGM (14 mm., 1.72 grm.).

211 Apoll( ?) Amy(n ?). Type L.

### r. $\downarrow$ IMYP, l. $\downarrow$ (a) AΠΟΛΛ, (b) AΠΟΛ, bel. $\rightarrow$ AMY

A [53727] (a): B (b) (15 mm): B [= Imhoof, Gr. M., pl. ix. 12] (b) (15 mm.): G [Maed. 76] (b) (14 mm., 1-68 grm.): K (b) (14 mm.): P 4280 = Mi. 1024] (a): JGM (a) (14 mm., 2-01 grm.): JGM (b) (15-5 mm., 1-95 grm.): JGM (a: IMYPNA) (15-5 mm., 2-06 grm.).

212. Apollon(ios?) Neo(?). Type L.

## r. $\downarrow$ IMYPNAI $\Omega$ N, l. $\downarrow$ A $\Pi$ O $\Lambda\Lambda\Omega$ N, bel. $\rightarrow$ NE $\Omega$

O [ = Num. Chr. 1900, 204] (14 mm., 1.36 grm.): O. Christ Church: P |4281 = Mi. S. 1454 |: JGM (13 mm., 1-82 grm.).

213. Apollo(nios?) Neo( ?). Type N.

### r. $\downarrow$ IMYPN, I. $\downarrow$ AΠΟΛΛΩ, bel. $\rightarrow$ NEΩ B (12 mm.): JGM (12 mm., 1-34 grm.).

## 214. Apollo(nios?) Neo(?). Type K.

## r. $\downarrow$ IMYPN, I. $\downarrow$ AΠΟΛΛΩ, bel. $\rightarrow$ NEΩ

A [5370 °] (12 mm.): B(13 mm.): JGM(IMYPNA) (12.5 mm., 1.56 grm.).

215. Bion Pose( ?). Type B.

## r. $\downarrow$ IMYP, l. $\downarrow$ BI $\Omega$ N, bel. $\rightarrow$ $\Pi$ O $\Sigma$ E

A [5875 °]: A [1891/2 KS 552]: A [ΣK 1170] (13.5 mm.): B (IMYPN: ΠΟΣ) (15 mm.): B (13-5 mm.) Pl. III : G [ Macd. 67 = Mi. S. 1512] (15 mm., 2-49 grm.): K (14 mm.): L (14 mm., 2-02 grm.): P [4821 = Mi. 1050]: V (13-5 mm., 2-14 grm.): E. Rogers (16 mm., 2-09 grm.): JGM (15 mm., 1.94 grm.): JGM (13 mm., 1.95 grm.).

216. Bion Pose( ?). Type L.

## $r. \downarrow IMYP$ , $l. \downarrow BI\Omega N$ , bel. $\rightarrow \PiO\Sigma E$

K (14 mm.): L [BMC. 64] (14-5 mm., 1-72 grm.): O (14 mm., 2.25 grm.): P [4284=Mi. 1027]: JGM (18mm., 1.94grm.) Pl.III]: JGM (IMYPN) (15 mm., 248 grm.): JGM = H. Weber 6126] (14.5 mm., 2.59 grm.).

217. Diony(sios?) Hermip(pou). Type N.

# r. $\downarrow$ IMYP, 1. $\downarrow$ $\Delta$ iONY, bel. $\rightarrow$ (a) EPMIII, (b) EPM A [5378] (a): A [XK 1117] (a) (12 mm.): B (b)

| 5373 | (a): A | 2K 1117 | (a) (12 mm.): B (b) (12.5 mm.): B (a) (12 mm.): C [M°Clean] (b) (12 mm., 1.49 grm.): Gotha: K (a) (12 mm.): L [BMC. 68 | (a) (12.5 mm., 1.65 grm.): O (a) (12 mm., 1.63 grm.): O (a) (10.5 mm., 1.97 grm.): P [4385 | (a): E. Rogers (a) (12.5 mm., 1.45 grm.): JGM (b) (13 mm., 1.38 grm.): JGM (a) (13 mm., 1.45 grm.): JGM (a) (11 mm., 1.46 grm.): [H. Weber 6127 (a) (11.5 mm., 1.68 grm.)]: [Mi. S. 1492 (Sest.) (b)].

218. Hermokl(es) Herm(ippou). Type L.

r. ↓ IMYPN, 1. ↓ EPMOKA, bel. → EPM B (13-5 mm.): | Philipsen sale 2216 |.

219. Hermok(les) Hermi(ppou). Type N.

### r. ↓ IMYPN, 1. ↓ EPMOK, bel. → EPMI

P [4386]: JGM (12 mm., 1-86 grm.): [Philipsen sale 2216].

220. Hermokl(es) Hermi(ppou). Type K.

r. ↓ IMYP, I. ↓ EPMOKA, bel. → EPMI B (11 mm.).

221. Eumelos Zopyrou. Type J.

# r. $\downarrow$ IMYPNAI $\Omega$ N, 1. $\downarrow$ EYMH $\Lambda$ O $\Sigma$ , bel. $\rightarrow$ I $\Omega$ - $\Pi$ YPOY

A [5363 a] (21 mm, Gk): A [5363 β] (19 mm, Hm):
A [5363 γ] (20 mm, Ac): A [5363 δ] (21 mm, Bl): A [5363 γ] (21 mm, Bn): A [1891/2 KZ 298] (20 mm, Jo): A [1891/2 KZ 299] (20 mm, Jo): A [1891/2 KZ 299] (20 mm, Ap): A [ΣΚ 1049] (19 mm, Lq): A [ΣΚ 1050] (20 mm, Jr): B (20 mm, Bs) [Pl. II]: B (19 mm, Bt): B (19 mm, Cv.): Gotha: L [BMC, 104] (19-5 mm, 7-72 grm, Bb): L (22 mm., 8-70 grm, Aa): O (20 mm., 10-67 grm, Cy): O (19 mm., 8-58 grm, Dz): P [4220 = Mi, 964]: V (21 mm., 8-70 grm, Fw): W. H. Buckler (20 mm., 8-64

grm. Fj): E. T. Newell (20 mm., 7.95 grm. Bh): E. Rogers (21 mm., 7.10 grm. Ac): A. M. Woodward (21 mm. Bx): JGM (24 mm., 8.74 grm. Ad): JGM (21 mm., 7.54 grm. Dg): JGM (21 mm., 7.50 grm. Ee): JGM (21 mm., 6.59 grm. Cf).

222. Hikesi(os) Metro(?). Type N.

r.  $\downarrow$  IMYP, 1.  $\downarrow$  IKEXI, bel.  $\rightarrow$  (a) MHTPO, (b) MHTP, (c) MHT

A [1891/2 KZ 312] (a): A [ΣK 1115] (a) (12.5 mm.): B (c) (12 mm.): B (b) (13 mm.): G [Macd. 79 = Mi. S. 1487] (c) (13 mm., 1.52 grm.): L (b) (12.5 mm., 1.89 grm.): V (a) (11 mm., 2.82 grm.): JGM (c) (13 mm., 1.68 grm.) [Pl III]: JGM (c) (12 mm., 1.39 grm.).

223. Leokrates. Tetradrachm.

 $Ab. \rightarrow IMYP$ ,  $bel. \rightarrow \Lambda E \Omega K P A$   $NAI\Omega N$   $TH\Sigma$ 

B (32 mm., 16-87 grm.): P [Wadd. 1938] (33 mm., 16-17 grm.).

224. Metro( ?) Apol( ?). Type K.

r. ↓ IMYP, 1. ↓ MHTPO, bel. → AΠOA

A [5370 <sup>5</sup>]: B (11·5 mm.): B (12 mm.) [Pl. III]: B (MHTP AΠ) (11 mm.): C [Leake, Num, Hell., ii. 118] (11·5 mm., 1·39 grm.): K (AΠΟ) (13 mm.): L (11 mm., 1·46 grm.): O (11 mm., 1·01 grm.): P [4309 = Mi. 1040]: V (11 mm., 1·38 grm.): E. Rogers: JGM (11 mm., 1·14 grm.).

225. Moschion. Type L.

r. J IMYPNAI, I. J MOΣXIΩN

L [BMC. 62] (13 mm., 2·13 grm.): P [4279 = Mi. 1034].

226. Nikostratos. Tetradrachm.

#### $Ab. \rightarrow IMYP$ , bel. $\rightarrow NIKO\Sigma TPA$ $NAI\Omega N$ $TO\Sigma$

B (31 mm., 16-46 grm.): Hague (31 mm., 16-2 grm.): P [Wadd. 1936] (30 mm., 15-98 grm.): V (31 mm., 16-14 grm.): JGM [= Benson sale 689] (33 mm., 16-19 grm.): [H. P. Smith sale 255 = White King sale 231 (31 mm., 16-39 grm.): [Sotheby's sale 8/12/15, 208 (16-52 grm.)].

227. Nikostratos. Drachma.

## τ. ↓ ΙΜΥΡΝΑΙΩΝ, Ι. ↓ ΝΙΚΟΣΤΡΑ

L (20 mm., 4-07 grm.).

228. Sopa(tros?) Para(monou?). Type K.

#### r. $\downarrow$ IMYP, l. $\downarrow$ $\Sigma\Omega\Pi A$ , bel. $\rightarrow$ (a) $\Pi APA$ , (b) $\Pi AP$

B ⟨b⟩ (11·5 mm.): Gotha ⟨b⟩ (12 mm.): Gotha ⟨a⟩ (10·5 mm.): K ⟨b⟩ (11·5 mm.): K ⟨b⟩ (11 mm.): L ⟨a⟩ (12 mm., 1·32 grm.): P [4314=Mi. 1043 | ⟨a⟩: V ⟨a⟩ (10·5 mm., 1·20 grm.): V.Schottenst. [3318] ⟨b⟩ (11 mm., 0·98 grm.): JGM ⟨a⟩ (11·5 mm., 1·73 grm.): JGM ⟨a⟩ (11 mm., 1·21 grm.): [E. F. Weber sale 2950 ⟨b⟩ (11 mm.)].

#### PERIOD XII.

All denominations are represented in this period: but it seems to have become more and more the practice for a magistrate to confine himself to the issue of one denomination only, except in the smallest bronze coins, and consequently there are hardly any links between the different series to be found in magistrates' names.

Type J. (a) In the first group of Homereia the style shows a marked change from that of the previous period, to which it is in some respects superior. The general appearance of the head on the obverse is rounder and fuller: the massing of the hair on the crown tends to break up: there are three closely twisted locks falling on the neck, two of which are often brought forward from the third: the ear is partly covered, with a curl in front: the knot at the back is small: the wreath is thin, with no noticeable ties. There are three magistrates in this group, Pyrrhos and Sarapion, both of whose names are accompanied by monograms placed —, and Metrodoros Pasikratou: on the reverses of Sarapion and Metrodoros there is also a monogram on the throne of Homer. One obverse die was shared by Pyrrhos and Sarapion.

(β) The coins of Semagoras are separated from those of the last group by the treatment of the falling locks of hair, which are only two, both brought forward: the style is generally similar, but the lines are usually more sharply cut: the ear is always uncovered. On the reverse a peculiar feature is the pose of the right hand of Homer: instead of being doubled up under his chin, it has the fingers spread out, with the thumb just touching the beard. There is a monogram with the name, placed as on the coins of Pyrrhos and Sarapion.

(γ) Another magistrate whose issues seem to stand alone is Hermokles Pytheou. In these the obverses show two hands: the first is represented by a head somewhat resembling those of group α, but with more disordered hair and an irregular wreath: the curl in front of the ear is less marked, and sometimes absent; the pose is altered by the head being thrown forward instead of resting squarely on the neck, giving a more angular effect to the face: there are three falling locks, more loosely twisted than in groups α and β: the ear is nearly covered. The other set of dies is of much heavier work, with a squarely posed head and smoother hair, but poorly executed. On the reverses associated with the latter set the lettering is clumsy and the figure of Homer badly drawn: the reverses of the first set are much better. The hand of Homer, as on the coins of Semagoras, is away from the chin: the fingers, however, are not spread, but doubled over in a hooked form.

- (δ) There is more evidence that two artists were at work in the next group, which includes coins of Apollonios Metrodorou, Aischrion Diogenous, and Charixenos Trikkas. One set of obverse dies closely resembles the first set of Hermokles, and is marked by having an A placed behind the head in the angle between the knot of hair and the falling locks: the other, which is of the heavier style, has no letter. The reverses are poor in execution: on one or two the right hand of Homer is placed as in the last group, but usually it is under the chin.
- ( $\epsilon$ ) Apparently belonging to this period, but forming a transition to the next, are some rather mixed issues in the names of Apollophanes Orobitenos and Antikrates Kalliou. These also have two sets of obverse dies with the same differences of style as in groups  $\gamma$  and  $\delta$ : the letter behind the head found in group  $\delta$  does not recur here. The work, however, is decidedly inferior both on obverse and on reverse: the hair is roughly treated, and in some cases one of the falling locks is omitted, while in two or three of the dies these locks are loosely twisted and slightly waved: the lettering is careless, and there are variants in the spelling of the name Orobitenos, which is sometimes so badly spaced that some letters are crowded out.

Type M. (α) An issue of type M with the name of Demetrios has a general similarity of style to the Homereia of group α, and like them is of neater work than the coins of the previous period, going back rather to period X: but as compared to the coins of that period the head is heavier and the hair less delicately worked in the rolls on the forehead and the knot at the back, while the falling locks are less waved.

- (β) A development of this style appears in the coins of Protomachos and Moschos, on the obverses of which there is very little detail in the hair except in the knot: over the forehead there is simply a broad band lightly hatched with cross-strokes, and the falling locks, often only two in number, are thick lines slightly waved. On the reverse a change in the pose of Aphrodite is noticeable: on about half the dies of Protomachos and the one of Moschos the upper part of her body, instead of being in profile, is turned to the front, with the right arm showing out clearly at the waist, though the head is still in profile. On one exceptional reverse of Protomachos the column is omitted, and in its place is a monogram q. The same monogram in a reversed form is used on the coins of Moschos and is below the name: probably it is not a patronymic in these cases. One obverse die was used in common by the two magistrates, who may be placed in group  $\beta$ .
- (δ) Other coins with the name of Moschos, but a different monogram, apparently At(), show a similar head of heavier work, with the falling locks straighter, and the downward curve of the hoop of the crown very marked. The reverses of these coins are very clumsily executed. These may belong to group δ.

- Type B. (α) This period saw the end of the long series of coins with the tripod reverse. The issues of this type are distinguished from all previous ones by the elaboration of the lebes on the tripod, which appears as two bowls, one fitted into the other, each with three rings shown at the sides. The ties between the legs of the tripod are represented by a diamond above and a line below. Coins of this type with the name of Paramonos have on the obverse a head very similar to that on the Homereia of Pyrrhos, of neat work and rounded form, with carefully detailed hair and three closely twisted locks. This issue is fairly common.
- (γ) The other magistrates who struck type B in this period are much more scantily represented. Two coins with the name of Menopha( ) show some relation to the Homereia of group γ: the work is careless on obverse and reverse alike, and the head has the forward tilt which is found on some of the larger coins.
- (δ) The coin of Moschos, which is of inferior execution with more disordered hair, is nearer to the Homereia of group δ, and the magistrate may be the same who struck type M in this group. Finally, a specimen of Arista( ) seems to go with that of Moschos, though the outline of the head is rather sharper and there are only two falling locks.
- Type L. (a) The name of Paramonos is found also on coins of type L, with a similar head to that of type B, but with only two falling locks at a wide angle, as in group γ of period XI: the head is, however, differentiated from the latter by a longer neck and larger knot of hair. On all the reverses of this type assignable to this period the second hand has entirely

vanished: only one hand is shown, with a thin palmleaf close to it on either side.

- (γ) Inferior work of the same class marks the issues of Menoph( ) and Menekrat( ), which may be placed in group γ on the strength of the former name corresponding to one in type B: a slight forward tilt of the head is observable in these coins as in those of type B. The execution of the reverses is poor, especially in the coins of Menekrat( ), most of which have the abbreviation Menek( ) or Mene( ) only, in coarse lettering: on these the palm-leaf at the left of the hand degenerates into a line.
- ( $\delta$ ) There is only one example of Moschos, who, as in regard to type B, may be assigned to group  $\delta$ , though the dies are better in his coin of type L: the work, however, though fairly neat, is rather weak.
- Type N. (a) Issues of the altar type are scarce in this period. One set has the name of Deme(), who may be identical with the Demetrios who struck type M in group  $\alpha$ , as the head shows the same neat rounded work: some of the dies are almost certainly by the same hand as some of those of Paramonos for type B. The altar on the reverse is rather pinched in at the waist and more elongated in appearance than in earlier periods: the handles are similar to those found in period XI.
- $(\delta)$  The dies of Timon and Diony( ) are of much less careful execution, and the head usually shows the forward tilt already noted as occurring in groups  $\gamma$  and  $\delta$ : on the whole these coins have most resemblance to those of group  $\delta$  in other series. It may be remarked that the hair is more archaistic in treatment than on the larger coins of type M with the same head: a

parallel to this may be found in the contemporary heads of Apollo on the Homereia and in the smaller denominations respectively. The altar on the reverse is decidedly clumsy, especially on the coins of Diony(), where it is usually out of plane.

Type K. (a) Coins of type K struck by Bion and Apol() Pat() may be placed in group  $\alpha$  on account of the general likeness of the head on them to that on the issues of Paramonos of type L. The workmanship of these little coins is very neat: special points are that Bion has a star on the shell of the lyre, and that the second name of Apol() Pat() is in an exceptional position, above the lyre.

- (β) The coins with the name of Atta( ) are also of neat style, but with a rather larger head, and the two falling locks are not straight twists, but wavy lines: the hand seems to be that of the artist of the coins of Protomachos of type M.
- (γ) Meno( ) and Menek( ) are only represented by one specimen each, neither very clear: but the work is certainly inferior, and so far as can be judged is comparable with that of the coins of Menoph( ) of types B and L and of Menekrat( ) of type L: the magistrates are probably the same.
- Silver. (a) The silver coins of the "second group" of the second series in the former classification appear to correspond generally with this period, and they can be further subdivided to accord with the present grouping. Dionysios and Polynikos may be placed in group α: the head of the goddess on their dies O and Q is not unlike that on the coins of Demetrios of type M, though, as usually occurs, the hair is more elaborately treated on the tetradrachms than on the

smaller bronze coins. With these must be grouped the drachmas of Epandros and Iatrodoros, previously placed in the third series, together with those of a magistrate not noted in the former list, Hermagoras Tr( ), one of whose obverse dies is the same as that used by Iatrodoros: the heads on the obverses of these drachmas are so similar to those on the Homereia of Pyrrhos and Sarapion that there can be little doubt that they are by the same hand, and there are monograms on the throne on the reverses of Epandros and Iatrodoros as on those of Sarapion and Metrodoros.

- $(\beta)$  The next two dies, R and S, of the tetradrachms have no close analogies in the bronze series: but, as their position in the order of the silver issues is fairly certain, it may be safe to place the magistrates who used them, Metrodoros and Herakleides, in group  $\beta$  or  $\gamma$ , preferably the former, as the treatment of the hair is more like that on the Homereia of Semagoras than that on those of Hermokles.
- (δ) Die S was also used by Metrobios, Artemon, and Theotimos: but the last-named magistrate had also a die T, which resembles the style of those of Moschos of group δ in the heaviness of the head and the pronounced downward curve of the hoop of the crown. These three magistrates also struck drachmas from a common obverse die, which is very like those of Menoph( ) and Menekrat( ) of types B and L of group γ, though it also resembles those of Apollonios Magas in the next period. As the silver dies would probably continue longer in use than those of the bronze, it is best to place these three magistrates in group δ.5

<sup>5</sup> The tetradrachm described by L. Meyer in his account of the

#### (Group a.)

229. Apol( ?) Pat( ?). Type K.

#### r. $\downarrow$ IMYP, l. $\downarrow$ A $\Pi$ O $\Lambda$ , ab. $\rightarrow$ $\Pi$ AT

A [5370 γ] (10-5 mm.): A [ΣK 1110] (10-5 mm.):
A [ΣK 1124] (9 mm.): B (10-5 mm.): B (11 mm.): K (10 mm.): K (10 mm.): L [BMC. 71] (11 mm., 1-29 grm.): P [4304]: V. Schottenst. [3317] (10 mm., 0-78 grm.): JGM (11 mm., 1-09 grm.): JGM (10 mm., 1-07 grm.).

230. Bion. Type K.

#### r. ↓ IMYP, 1. ↓ BIΩN

C [McClean] (9.5 mm., 0.79 grm.): K (10.5 mm.) [Pl. 1V]: JGM (10.5 mm., 1.18 grm.): JGM (10 mm., 1.08 grm.): JGM (9.5 mm., 1.30 grm.): [Rhousopoulos sale 3781 (9 mm.)].

231. Demetrios. Type M.

#### r. | IMYPNAIΩN, 1. | ΔΗΜΗΤΡΙΟΣ

A [5366']: A [ΣK 1141] (18 mm.): A [ΣK 1142] (18 mm.): B (19 mm.): K [Ram. 42] (18 mm.): K (18 mm.): L (17.5 mm., 3.59 grm.): Manchester (19.5 mm.): O (19 mm., 4.53 grm.) [Pl. III]: O. Christ Church [= Mus. Mead., p. 34]: JGM (18 mm., 2.96 grm.): [Mi. S. 1521]: [Seyffer cat. 928 (17 mm., 3.19 grm.)].

find of silver coins of Smyrna and Pergamon made in 1865 (Wiew. Numism. Monatshefte, iv. 289), with the name of IΠΠΟΝΙΔΩΝ MHPPIXOY, may belong to this or any one of the three following periods, in all of which names with patronymics or epithets occur: it was associated with coins of all periods from XI onwards. It was presumably the same coin which was lot 1007 in the Whittall sale 1884, where the name is given, probably more correctly, as IΠΠΟΜΕΔΩΝ ΜΗΤΡΙΧΟΥ. But I have not been able to trace what has become of the specimen in question, so that its place in the series cannot be determined.

232. Deme(trios). Type N.

#### r. ↓ IMYP, I. ↓ ∆HMH

A [5372 <sup>c</sup>]: A [1892/3 IZ 61]: A [ΣK 1118] (12 mm.): B (12 mm.) [Pl. IV]: B (11-5 mm.): C [Leake suppl.] (10-5 mm.): K (11-5 mm.): K [Ram. 86] (10 mm.): L [BMC. 67] (12 mm., 1-38 grm.): O (12 mm., 1-57 grm.): P [4383 = Mi. 1098]: V. Schottenst. [3316] (11 mm., 1-33 grm.): W. H. Buckler (11 mm., 1-37 grm.): E. Rogers (11 mm., 1-66 grm.): JGM (11-5 mm., 1-46 grm.): JGM (13 mm., 1-54 grm.): [Pozzi 3024 (11 mm., 1-58 grm.)].

233. Dionysios. Tetradrachm.

### $Ab. \rightarrow IMYP$ $NAI\OmegaN$ $BAY\Sigma$

B (33 mm., 16-37 grm.): G [Macd. 3 = Mi. S. 1392] (BA ΥΣ erased) (30 mm., 16-87 grm.): Hague (31 mm., 16-35 grm.): L (31 mm., 16-56 grm.): P [4158 = de Luynes 2287] (31 mm., 16-67 grm.): JGM [Sotheby's sale 3/4/14, 64] (33 mm., 16-45 grm.): [Philipsen sale 2213 (BA ΥΣ erased) (31 mm., 16-70 grm.)].

234. Epandros. Drachma.

r. ↓ IMYPNAIΩN, l. ↓ EΠΑΝΔΡΟΣ, on throne Æ, i.f.r. bunch of grapes.

P [4165 = Mi. 919] (18 mm.): [F. Imhoof-Blumer (18 mm., 3.75 grm.)].

235. Hermagoras Tr( ?). Drachma.

r. ↓ ΣΜΥΡΝΑΙΩΝ, 1. ↓ ΕΡΜΑΓΟΡΑΣ, i.f.r. bunch of grapes. TP

JGM [= Pozzi sale 2515] (19 mm., 3-94 grm.):
JGM [= H. Weber 6119] (15-5 mm., 3-89 grm.).

236. Introdoros Introdorou). Drachma.

#### r. \$\frac{1}{2} IMYPNAIΩN, 1. \$\frac{1}{2} IATPOΔΩΡΟΣ, on throne

Munich [= Mi. S. 1397] (17 mm.).

237. Metrodoros Pasikratou. Type J.

# r. ↓ IMΥΡΝΑΙΩΝ, I. ↓ MHΤΡΟΔΩΡΟΣ, on throne 🖂

A [5365 a] (20 mm. Af): A [5365 β] (22 mm. Ag): A [5365 γ] (21 mm. Ah): A [1891/2 KZ 300] (20 mm. Af): A [ΣK 1061] (21 mm. Cj): B (21 mm. Bk): B (23 mm. Cl): B (22 mm. Dm): C [Leake, Num. Hell., ii. 118] (22 mm., 8·35 grm.): G [Macd. 30] (23 mm., 9·65 grm. Cd): L [BMC. 106] (21 mm., 9·49 grm. Aa): O (23 mm., 8·58 grm. En): O. Christ Church [= Mus. Mead.. p. 34]: P [4250 = Mi. 990]: V (22 mm., 10·58 grm. Co): W. H. Buckler (21·5 mm., 7·98 grm. Cf): E. T. Newell (23·5 mm., 7·09 grm. Ce): JGM (22 mm., 8·95 grm. Be): JGM (21 mm., 8·20 grm. Ab).

238. Paramonos. Type B.

#### r. ↓ ΙΜΥΡΝΑΙΩΝ, Ι. ↓ ΠΑΡΑΜΟΝΟΣ

A [1891/2 KZ 305] (IMYPN ΠΑΡΑΜΟ): A (IMYPNAI ΠΑΡΑΜΟΝ) (13-5 mm.): B (13 mm.): B (12.5 mm.): B (13 mm.): G [Macd. 65] (13 mm., 2.04 grm.): G [Macd. 66] (14 mm., 2.62 grm.): Gotha: K (13.5 mm.): L [BMC. 17] (13 mm., 2.21 grm.): L BMC. 18 (13 mm., 1.84 grm.): L (14 mm., 1.64 grm.): O. Christ Church: P [4328]: P [4328 a]: P [4329]: V (13 mm., 2-11 grm.): V (13 mm., 1-66 grm.); V. Schottenst. [3312] (12 mm., 1-62 grm.): W. H. Buckler (13 mm., 2.13 grm.): W. H. Buckler (ΠΑΡΑΜΟΝΟ) (12-5 mm., 1-67 grm.): W. H. Buckler (13 mm., 1.85 grm.): E. Rogers (14 mm., 2-84 grm.): JGM (13-5 mm., 1-88 grm.): JGM (IMYPNAI ΠΑΡΑΜΟΝ) (13-5 mm., 1-92 grm.): JGM (IMYPNAI NAPAMON) (14 mm., 1.95 grm.) Pl. III].

239. Paramo(nos). Type L.

#### r. ↓ IMYPNAI, 1. ↓ ПАРАМО

A [5372 <sup>5</sup>]: B (14 mm.): B (13 mm.): C [Leake, Num. Hell., ii, 118] (13 mm., 2·15 grm.): K (14 mm.): K (14 mm.): L [BMC. 57]: (12·5 mm., 2·48 grm.): L [BMC. 58] (13·5 mm., 1·91 grm.): P [4298 = Mi. 1036?]: P [4299]: V (13·5 mm., 2·54 grm.) [Pl. III]: W. H. Buckler (13 mm., 1·95 grm.): JGM (14 mm., 1·89 grm.): [E. F. Weber sale 2949 (13 mm.)]: [Lavy 2314 (PAM)].

240. Polynikos Thed( ?). Tetradrachm.

### Ab. → IMYPNAI, bel. → ΠΟΛΥΝΙΚΟΣ ΩN

B (29 mm., 16-75 grm.): V (29 mm., 14-83 grm.):
[Northwick sale 1068 (29 mm., 16-77 grm.)]:
[Egger cat. xiv. 493 (31 mm., 16-46 grm.)]:
[Bourgey's sale 22/3/10, 271].

241. Pyrrhos Epan(drou?). Type J.

### r. ↓ IMYPNAIΩN, 1. ↓ ΠΥΡΡΟΣ

A [5365 ta] (21 mm. Dh): A [5365 ts] (22 mm. Bj): A [ΣK 1065] (21 mm. Bk): B (22 mm. Em): B (22 mm. Dh): B (21.5 mm. Al): C. Corpus: G [Macd. 24] (22 mm., 10.33 grm. Cc): G [Macd. 25] (22 mm., 8.29 grm. Be): G [Macd. 26] (24 mm., 8.26 grm. Bf): K (22 mm. En): K (21 mm. Co): L (21 mm., 9.76 grm. Aa): O. Christ Church [= Mus. Mead., p. 34]: P [4265 = Mi. 1009]: P [4266 = Mi. 1010]: V (21.5 mm., 9.53 grm. Cp): V (21 mm., 7.77 grm. En): W. H. Buckler (21 mm., 8.53 grm. Cd): W. H. Buckler (21.5 mm., 8.72 grm. Dg): JGM (23 mm., 9.82 grm. Bb): JGM (22 mm., 8.19 grm. Cp).

242. Sarapion Metrodor(ou)?. Type J.

### r. ↓ ΙΜΥΡΝΑΙΩΝ, l. ↓ ΣΑΡΑΠΙΩΝ, on throne

A [5365 <sup>47</sup>] (20 mm. Ce): A [5365 <sup>45</sup>] (22 mm. Cf): A [ΣK 1067] (22 mm. Cg): B (21 mm. Dd): B (20 mm. Bj) [Pl. III]: B (20 mm. Ek): B (20 mm. Cl): B (22 mm. Bh.): Gotha: K (21 mm. Fm): L [BMC. 96] (21 mm., 10-50 grm. Aa): L [BMC. 97] (21 mm., 7-95 grm. Bb): O. Christ Church [= Mus. Mead., p. 34] (22 mm. Cg): P [4267 = Mi. 1011]: V (20 mm., 7-95 grm. Bn): W. H. Buckler (22 mm., 7-61 grm. Dd): JGM (21 mm., 8-02 grm. Ce).

#### (Group B.)

243. Atta(los?). Type K.

#### r.↓IMYP, l.↓ATTA

B (10 mm.): G [Macd. 84 = Mi. S. 1470] (9 mm., 1.36 grm.): L [BMC. 78] (10 mm., 1.01 grm.) [Pl. IV]: P[4305 = Mi. S. 1469]: V (10.5 mm., 1.04 grm.): JGM (9 mm., 1.03 grm.).

244. Herakleides. Tetradrachm.

#### Ab. → IMYPNAIΩN, bel. → HPAKΛEIΔHΣ

L [BMC. 6] (29 mm., 16-84 grm.): P [4159 = Mi. 914] (32 mm.): V (30 mm., 16-67 grm.) [Thomas sale 2262 (30 mm., 16-58 grm.)]: [Prowe sale 1025 (32 mm., 16-39 grm.)].

245. Metrodoros Taben( ?). Tetradrachm.

### Ab. $\rightarrow$ IMYPNAI $\Omega$ N, bel. $\rightarrow$ MHTPO $\Delta\Omega$ PO $\Sigma$

C [McClean] (33 mm., 16.41 grm.).

246. Moschos [Er( ?)]. Type M.

r. ↓ IMYPNAIΩN, 1. ↓ ΜΟΣΧΟΣ ffi B (17 mm.).

47. Protomachos. Type M.

#### τ. ↓ ΙΜΥΡΝΑΙΩΝ, Ι. ↓ ΠΡΩΤΟΜΑΧΟΣ

A [5366 ]: A [5369]: A [5369 ]: B (18-5 mm.):
B (17-5 mm.): B (17 mm.): B (17 mm.):
Gotha: K (17 mm.): L [BMC. 30] (18 mm.,

4-05 grm.): P [4376 = Mi. S. 1544?]: V (18 mm., 4-34 grm.): JGM (17 mm., 4-28 grm.): JGM (16-5 mm., 3-52 grm.): JGM (17 mm., 3-89 grm.): JGM (17 mm., 4-75 grm.): JGM (18 mm., 4-06 grm.): [Philipsen sale 2216]: [Mi. 1085 (Cous.)].

248. Protomachos [Er(?]. Type M.

#### r. \$\frac{1}{2} IMYPNAIΩN, L. \$\frac{1}{2} ΠΡΩΤΟΜΑΧΟΣ, i.f.r. \$\frac{1}{2}\$

L (17 mm., 3.73 grm.) [Pl. III]: O. Christ Church [= Mus. Mead., p. 34].

249. Semagoras Kot( ?). Type J.

#### r. ↓ IMYPNAIΩN, 1. ↓ ΣΗΜΑ ΓΟΡΑΣ «€

A [5361 a] (21 mm. Ad): A [5365 a] (20 mm. De): B [= Imhoof, Gr. M. 342] (22 mm., 7-65 grm. Aa): B (21 mm. Bf): B (20 mm. Bg): B (20 mm. Ch): K (21 mm. Dj): L [BMC. 98] (19 mm., 9-08 grm. Aa) [Pl. III]: O (21 mm., 9-98 grm. Am): P [4201 = Mi 1012]: P [4268]: V (21 mm., 8-49 grm. Aa): V (20 mm., 8-14 grm. Al): W. H. Buckler (21 mm., 9-60 grm. Bc): E. Rogers: JGM (22 mm., 8-02 grm. Bb): [H. Weber 6133 (19 mm., 7-59 grm. Bk)].

(Group y.)

250. Hermokles Pytheou. Type J.

#### r. ↓ IMYPNAIΩN, 1. ↓ EPMOKΛHΣ ΠΥΘΕΟΥ

A [XT 809] (20 mm. Ad): A [XK 1047] (19 mm., De): B (20 mm. Ef): Gotha (19 mm. Cd): K (20-5 mm. Fg): L [BMC. 103] (21 mm., 11-06 grm. Aa) [Pl. III]: O. Christ Church [= Mus. Mead., p. 34]: P [4216 = Mi. 959]: V (20-5 mm., 7-97 grm. Gh): V (21 mm., 7-38 grm. Hj): JGM (20 mm., 9-21 grm. Bc): JGM (21-5 mm., 8-23 grm. Ab).

251. Menek(rates). Type L.

#### r. ↓ IMYPN, I. ↓ MENEK

A [1891/2 KZ 309]: B (IMYPNA) (12 mm.):
B (14 mm.): B (14 mm.): C | Leake, Num. Hell.,
ii. 118] (13 mm., 2-48 grm.) [Pl. III]: G [Macd.
74] (13 mm., 2-33 grm.): G [Macd. 75] (13 mm.,
2-26 grm.): Gotha: K (13 mm.): L [BMC. 54]
(13 mm., 2-01 grm.): L [BMC. 55] (13 mm., 1-81
grm.): P [4292 = Mi, 1032?]: P [4294 = Mi.
S.1460] (MENEKP): P [4295]: V (MENEKPAT)
(12 mm., 2-25 grm.): W. H. Buckler (13-5 mm.,
2-39 grm.): E. Rogers (14-5 mm., 1-76 grm.):
JGM (14 mm., 2-19 grm.): JGM (13 mm., 2-02
grm.): JGM (12-5 mm., 1-76 grm.).

252, Menek(rates). Type K.

r. ↓ IMYP, I. ↓ MENEK

JGM (9.5 mm., 0.88 grm.) [Pl. IV].

253. Menoph(anes?). Type B.

r. ↓ IMYPN, I. ↓ MHNOΦ

A [ΣK 1113] (13 mm.): JGM (14 mm., 2-20 grm.) [Pl. 111].

254. Menopha(nes). Type L.

r. ↓ IMYPNA, 1. ↓ MHNOΦA

K (15 mm.): L (14 mm., 2-32 grm.): P [4296 = Mi. S. 1461]  $\langle MHNO\phi \rangle$ 

255. Meno(phanes?). Type K.

r. J ZMYP, 1. J MHNO

V (11 mm., 1-17 grm.).

#### (Group &.)

256. Aischrion Diogenous. Type J.

r. ↓ ΙΜΥΡΝΑΙΩΝ, 1. ↓ ΑΙΣΧΡΙΩΝ hind head ΔΙΟΓΕΝΟΥΣ: obv. A be-

B (23 mm. Bb): B (21 mm. Cc): K [Ram. 10] (20-5 mm. Dd): L (23 mm., 8-93 grm. Aa) Pl. III]: P [4234 = Mi. 976]: [Mi. 920 (Cous.)].

257. Apollonios Metrodorou. Type J.

### r. $\downarrow$ IMΥΡΝΑΙΩΝ, 1. $\downarrow$ ΑΠΟΛΛΩΝΙΟΣ : obv. ΜΗΤΡΟΔΩΡΟΥ

(a) A behind head, (b) nil.

V (b) (21 mm., 8-18 grm. Bb): JGM (a) (20 mm., 8-01 grm. Aa): JGM (b) (21 mm., 8-97 grm. Cc); [Mi. 933 (Cous.)?].

258. Arista( ?). Type B.

r. ↓ IMYPN, I. ↓ APIΣTA

P [4320 = Mi. S. 1513] (13 mm.).

259. Artemon Gellias. Tetradrachm.

Ab.  $\rightarrow$  IMYPNAI $\Omega$ N, bel.  $\rightarrow$  APTEM $\Omega$ N  $\Gamma$ EANIAC

JGM [= Pozzi sale 2513] (30 mm., 16-19 grm.).

260. Artemon Ge?(lias). Drachma.

r. ↓ IMYPNAIΩN, 1. ↓ APTEMΩNΓEΛ B (19 mm., 4·10 grm.).

261. Diony(sios?). Type N.

r. ↓ IMYP, 1. ↓ ∆IONY

A [5373 a] (13 mm.): A [ΣK 1116] (11 mm.): Gotha: K (10 mm.): W. H. Buckler (11 mm., 1·30 grm.): JGM (11 mm., 1·70 grm.) [Pl. IV]. 262. Theotimos. Tetradrachm.

Ab.  $\rightarrow$  IMYPNAI $\Omega$ N, bel.  $\rightarrow$   $\Theta$ EOTIMOC B (30 mm., 16-54 grm.): C [McClean]  $\langle$   $\Omega$ N (33 mm., 16-28 grm.): P [Wadd. 1932] (31 mm., 16-65 grm.).

263. Theotimos. Drachma.

r. ↓ IMYPNAIΩN, I. ↓ ΘΕΟΤΙΜΟC K (21 mm., 3-88 grm.).

264. Metrobios. Tetradrachm.

Ab.  $\rightarrow$  IMYPNAI $\Omega$ N, bel.  $\rightarrow$  MHTPOBIO $\Sigma$  BA Y $\Sigma$  P [4162 = Mi. 917] (31 mm.).

265. Metrobios. Drachma.

r. ↓ IMYPNAIΩN, 1. ↓ MHTPOBIOΣBA P [Wadd. 1938] (19 mm., 4.22 grm.).

266. Moschos [At( )]. Type M.

 $r.\downarrow$  IMYPNAI $\Omega$ N,  $l.\downarrow\langle a\rangle$  MOSXOS  $\clubsuit$ ,  $\langle b\rangle$  MOSXOS  $\clubsuit$ 

A [53675] (a): B (a) (18 mm.): B (b) (19 mm.): B (b) (17 mm.): Gotha: L (a) (18.5 mm., 5.16 grm.): JGM (a) (19 mm., 4.02 grm.) [Pl. III]: [H. Weber 6124 (a) (17 mm., 4.91 grm.)].

267. Moschos. Type B.

r. ↓ IMYPNAI, 1. ↓ ΜΟΣΧΟΣ JGM (13 mm., 2-47 grm.) [Pl. III].

268. Moschos. Type L. r. ↓ IMYPNA, 1. ↓ ΜΟΣΧΟΣ B (13 mm.) [Pl. III]. 269. Timon. Type N.

#### r. ↓ IMYP, I. ↓ TIMΩN

A [5875 β]: A [5375 γ]: B (12-5 mm.): B (13 mm.): Gotha: L (12 mm., 1-23 grm.): O [= Num. Chron. 1900, 204] (11-5 mm., 1-90 grm.): P [4392 = Mi. 1102]: JGM (13 mm., 1-49 grm.).

270. Charixenos Trikkas. Type J.

#### r. ↓ ΙΜΥΡΝΑΙΩΝ, 1. ↓ ΧΑΡΙΞΕΝΟΣ : obv. ⟨a⟩ Α ΤΡΙΚΚΑΣ

behind head, (b) nil.

B (a) (20 mm. Be): P [4274] (b) (20 mm. Aa): V (b) (20.5 mm., 8.06 grm. Cd): JGM (a) (20 mm., 7.95 grm. Bb): [E. F. Weber sale 2951 (21 mm.)].

#### (Group €.)

271. Antikrates Kalliou. Type J.

### r. ↓ IMYPNAIΩN, 1. ↓ ANTIKPATHΣ KAAAIOY

P [4182 = Mi. 927?]: P [4255] (19-5 mm. Aa): V [= Mi. S. 1441] (20 mm., 6-46 grm. Bb).

272. Apollophanes Orobeitenos. Type J.

### r. $\downarrow$ IMΥΡΝΑΙΩΝ, 1. $\downarrow$ (a) ΑΠΟΛΛΟΦΑΝΗΣ ΟΡΟΒΕΙΤΗΝΟΣ

#### (b) ΑΠΟΛΛΟΦΑΝΗΣ, (e) ΑΠΟΛΛΟΦΑ ΟΡΟΒΙΤΗΝΟΣ, (e) ΝΗΣΟΡΟΒΕ

B (a) (20 mm. Bl.): G [Macd. 27 = Mi. S. 1446]
(a) (21 mm., 9-97 grm. Cc): K (b) (20-5 mm. Hm):
K [Ram. 6] (a?) (21 mm. Ln): L [BMC. 99] (a)
(20 mm., 10-00 grm. Aa): L [BMC. 100] (a)
(21 mm., 6-07 grm. Bb): P [4186] (c): P [4187=
Mi. 1004] (a): V (b) (20 mm., 9-00 grm. Mo): V
(c) (20 mm., 7-99 grm. Np): W. H. Buckler (b)
(20 mm., 9-00 grm. Kk): JGM (b) (20 mm., 9-87
grm. Dd) [Pl. III]: JGM (c) (19 mm., 8-93 grm.
Ee): JGM (a) (20 mm., 7-92 grm. Ff): JGM (a) (21
mm., 7-03 grm. Gg): JGM (b) (19 mm., 8-25 grm.
Hh): JGM (a) (21 mm., 5-69 grm. Jj).

#### Period XIII.

In the next period the art of the mint of Smyrna seems temporarily to have gone to pieces, and the execution of the dies is far worse than at any previous time in its history. Except for the Homereia, the issues are scanty, and there are none at all of type L. No name of a magistrate occurs on more than one denomination, unless the Demetrios who struck type M was the same as the one who struck silver.

Type J. (a) The first group of Homereia is formed by the issues of Apollonios Magas, Herodes Archiou, Hieronymos Hieronymou, Apatourios, and Menekrates [ ]ambala( ). On the obverses of these the heads are nearly always markedly smaller than in earlier issues: the same two types of head are found as in the previous period, one tilted forward, the other set squarely on the neck: the former usually has the falling locks spread, two forwards and one backwards, the other has all three close together. The work is coarse, and the lines deeply cut and harsh: the hair is disorderly, and the wreath irregular. Some of the dies look as if they had been recut, but this may be due merely to the uncertainty of the work. The lettering of the reverses is very poor-so much so that in the case of Menekrates, of whom two specimens exist, the reading of the second name is doubtful and the first name appears to be in the genitive case. On one reverse die of Herodes Homer has his right hand clenched, but with the thumb extended under his chin: as a rule in this group the hand is hooked, often away from the chin.

(β) Another group comprises coins of rather mixed

style, but all poor: the lines are not so deeply cut and the head is as a rule larger than in group a. Both types of head again occur: the hair on the crown is usually disordered, and that on the temple lumpy: sometimes there are two locks on the neck, sometimes three, but always formal: the ear is either covered or not marked, and occasionally a short curl is indicated on the cheek: the wreath is thin. The magistrates are Apollonios Sepia, Artemidoros Apoll( ), Kratinos Kratinou, Menophilos Krabaus, and Menekrates Agrios: Apollonios and Menekrates both held office twice. In some cases, but not always, a monogram follows the name of Apollonios in his first magistracy: and Kratinos on two of his four reverse dies has a monogram in the field outside the ethnic. On one die of Apollonios the initial letter of the ethnic is clearly Z, not I: this letter is so frequently off the flan that not much use can be made of its form for purposes of classification.

- (γ) A different type of head is found on the coins of Praxagoras Hikesiou, Athenaios Eudemou, and Glaukias Medos: the face is sparer and sharper, with a rather deep-set eye: there is not much detail in the hair, which has a flattened look: and the falling locks, two in number, are short and spread out. The lettering on the reverse is thick and large.
- (δ) There is some improvement noticeable in the workmanship of the next group, which includes issues of Hermogenes Hermokratous, Hermolaos Parmeniontos, Nikadas Metrodorou Theudas, Diodoros Phanagorou, Theotimos Hylas, and Phanes Metrodotou. The head is usually rounded, with a full eye: the hair on the crown is in orderly rows, and on the forehead

in a series of masses, with a small neat knob at the back: there are usually three locks, slightly spread, with the front one most marked, but on the coins of Hermogenes and Phanes only two: the lettering on the reverse is rather carelessly spaced, but otherwise fairly good.

Type M. (a) Coins with the Aphrodite reverse were struck by comparatively few magistrates in this period, though the issues which were made seem to have been fairly large. The only one which corresponds in style to group a of the Homereia is that of Demetrios, whose obverse dies show both the poses of head found in type J, the forward-tilted one with spread locks and the square-set one with close straight locks: the hair is rather disorderly in the former, and in both the head is small and the lines harsh: on these, and on all the other obverse dies of this type in the period, there is a new feature in a border of dots. The figure on the reverse is clumsy, sometimes almost barbarous, and the lettering is coarse and badly spaced. On two of the obverse dies used by Demetrios the crown has three turrets only.

- $(\beta)$  Coins of Moschos (without any monogram) and Heras show a mixture of styles comparable with that found in group  $\beta$  of the Homereia: the hair is carelessly arranged and lumpy, and the ear rarely visible: the locks are either two or three. The reverses are again very poor, and the lettering rough: on the coins of Moschos, the name is written indifferently upwards or downwards.
- $(\delta)$  A revival of style like that in group  $\delta$  of the Homereia is observable in other issues with the name of Moschos, which are distinguished by the addition of

a letter E or monogram FP. The head in some dies is not unlike that on the coins of the Moschos of group & in period XII, but on others is more rounded and has three falling locks instead of two: the hair is neater than in the last two groups, and the figure on the reverse much better executed: it is marked by a curious backward bend of the upper part of the body. The lettering is small and neat: Moschos Her( ) used a lunate C. The two magistrates, if they are distinct, had one die in common.

Type N. ( $\beta$ ) The only coins of the altar-type that can be assigned to this period are those with the names of Herak( ) and Menodo( ), which may belong to group  $\beta$ . The heads on the obverses show the uncertainty of style which characterizes this group, and the reverses are badly executed: the altar is thin and elongated, and sometimes resembles a lighthouse more than an altar, while in other cases the upper part is out of line and looks as if it were falling over.

Type K. ( $\delta$ ) The lyre-type is represented by a single magistrate, Gerry( ), whose coins have a monogram above the lyre. The head is rather like that on the Homereia of group  $\delta$ , rounded, with hair in neat lines and a small knot, and three falling locks. The lettering on the reverse is fair: the forms  $\epsilon$  and  $\mathbf{Z}$  are used.

Silver. (α) Comparison with the bronze issues suggests that the arrangement formerly adopted for the silver coins needs some modification in the third group of the second series: the magistrates who used the tetradrachm-dies U, V, W, and X should be placed after those who used Y, Z, AA, BB, and CC. Of the latter, Z and CC are fairly close to some of the dies of Demetrios of type M in group α, while the other three

appear to be by the same hand as those of Moschos in the last group of period XII. These dies were used by four magistrates, Herakleides, Hermippos, Demetrios, and Phanokrates, the first and last of whom struck drachmas also: and the drachma-dies resemble those of the Homereia of Apollonios Magas and Herodes Archiou with the square-set head. All four are linked by the common use of dies: and, while Z and CC are very different in style from the other three dies, the individual magistrates used dies of both styles: so it is probably safe to place all four in group  $\alpha$ .

(Group a.)

273. Apatourios Par( ?). Type J.

### τ.↓ ΙΜΥΡΝΑΙΩΝ, Ι.↓ ΑΠΑΤΟΥΡΙΟΣ

B (18 mm. Bb): P [4183 = Mi. 928] (22 mm. Aa): V (20-5 mm., 8-03 grm. Ce): [Mi. 997 (Cous.)].

274. Apollonios Magas. Type J.

#### r. ↓ ΙΜΥΡΝΑΙΩΝ, 1. ↓ ΑΠΟΛΛΩΝΙΟΣ ΜΑΓΑΣ

B (19-5 mm. Bb): G [Macd. 28 = Mi. S. 1448] (21 mm., 6-19 grm. Cc): L (21 mm., 7-95 grm. Bb): O. Christ Church [= Mus. Mead., p. 34]: P [4188 = Mi. 931]: V (20 mm., 6-96 grm. Dd): JGM (20 mm., 9-85 mm. Aa): JGM (19 mm., 8-76 grm. Ee).

275. Demetrios Antig( ?). Type M.

r. ↓ IMYPNAIΩN, L. ↓⟨a⟩ AHMHTPI, ⟨b⟩ ΔΗΜΗΤΡΙΟΣ

A [5367  $^{\beta}$ ] (a): G [Macd. 45] (b) (16 mm., 4-05 grm.): K (a) (17 mm.): L [BMC. 23] (b) (17

mm., 4·40 grm.): V (a) (16·5 mm., 4·62 grm.): V. Schottenst. [3313] (?) (16 mm., 4·77 grm.): JGM (a) (16·5 mm., 4·03 grm.) [Pl. IV]: JGM (a) (17 mm., 4·30 grm.): [E. F. Weber sale 2946 (16 mm.)].

276. Demetrios. Tetradrachm.

### Ab. $\rightarrow NAI\Omega N$ , bel. $\rightarrow \Delta HMHTPI$

New York [= John Ward cat. 675] (32 mm., 15-88 grm.): V (32 mm., 16-01 grm.): JGM [= Sotheby's sale 8/12/15, 209] (32 mm., 16-52 grm.): [Lambros sale 737 (31 mm., 16-03 grm.)].

277. Hermippos Sipylou. Tetradrachm.

### Ab. $\rightarrow$ IMYP, bel. $\rightarrow$ EPMIΠΠΟΣ ΣΙΠΥΛΟΥ

B (31 mm., 15-30 grm.): C [McClean] (33 mm., 16-52 grm.): Hague (31 mm., 16-4 grm.): Munich (30 mm.): P [Wadd. 1931 = Northwick sale 1069?] (34 mm., 16-40 grm.): [Tobin Bush sale 171]: [Rhousopoulos sale 3776 (33 mm., 16-25 grm.)]: [Prowe sale 1026 (33 mm., 16-30 grm.)]: [Sotheby's sale 8/12/15, 210 (16-32 grm.)]: [Lucerne sale, iv. 868 = H. Weber 6115 (29 mm., 15-78 grm.)].

278. Herakleides. Tetradrachm.

# Ab. → IMYPNAIΩN, tel. → ⟨a⟩ AHΣ AHΣ AHΣ AHΣ AHΣ AHΣ AHΣ

B (a) (33 mm., 16-60 grm.): Munich (a) (31 mm.):
P [4160] (b) (31 mm.): P [4157 = de Luynes
2288 = Thomas sale 2263?] (b) (29 mm., 16-40
grm.): [Burel sale 290]: [Lucerne sale, iv. 869 =
H. Weber 6116 (a) (35 mm., 16-17 grm.)]:
[Schulman's sale 17/3/24, 98 (b) (31 mm., 15-6
grm.)].

279. Herakleides. Drachma.

r. ↓ IMYPNAIΩN, I. ↓ HPAKAEIΔHΣ, ex. PP B [= Borrell sale 198] (19 mm., 3-94 grm.). 280. Herodes Archiou. Type J.

#### r. ↓ ΙΜΥΡΝΑΙΩΝ, 1. ↓ ΗΡΩΔΗΣ ΑΡΧΙΟΥ

A [5363 'a] (20 mm. Ac): B (19 mm. Cd): G [Macd. 29] (21 mm., 8-42 grm. Bb): O [= Num. Chron. 1900, 205] (20-5 mm., 9-04 grm. Bb): P [4227=Mi. S. 1427]: V (20-5 mm., 9-08 grm. Cd): JGM (21 mm., 7-61 grm. Aa).

281. Hieronymos Hieronymou. Type J.

#### r. ↓ IMYPNAIΩN, 1. ↓ IEPΩNYMOΣ IEPΩNYMOY

B (19 mm. Bb): P [4232 = Mi, 974]: A. M. Woodward (21 mm. Ca): JGM (22 mm., 7-06 grm. Aa) [Pl. IV].

282. Menekrates [ ]ambala( ). Type J.

#### r. ↓ IMYPNAIΩN, 1. ↓ MENEKPATOV |AMBAΛA[

B (18 mm, Bb): P [4242 = Mi, 985] (19 mm, Aa).

283. Phanokrates. Tetradrachm.

#### Ab. $\rightarrow$ IMYPNAI $\Omega$ N, bel. $\rightarrow$ $\phi$ ANOKPA THE

P [4163 = Mi. 918] (34 mm.): JGM ⟨IMYP | NAIΩN⟩ (33 mm., 16-38 grm.).

284. Phanokrates. Drachma.

#### r. \ IMYPNAIΩN, I. \ ΦΑΝΟΚΡΑΤΗΣ, ex.

L [BMC. 8] (18 mm., 3-38 grm.): [Comm. (New York 1917)].

#### (Group B.)

285. Apollonios Sepia. Type J.

#### r. ↓ ΙΜΥΡΝΑΙΩΝ, 1. ↓ ΑΠΟΛΛΩΝΙΟΣ ΣΗΠΙΑ Μ

C [McClean] (22 mm., 8-75 grm. Ef): K (19-5 mm.):
 L (21 mm., 8-87 grm. Aa): P [4189 = Mi. 932]:
 V (20-5 mm., 9-38 grm. Fg): JGM (20 mm., 9-32 grm. Bc): JGM (21 mm., 8-08 grm. Cd): JGM (no monogram) (19-5 mm., 8-71 grm. Ab): [H. Weber 6134 (19-5 mm., 10-20 grm. De)]: [Mi. S. 1409].

286. Apollonios Sepia II. Type J.

#### r. ↓ ΙΜΥΡΝΑΙΩΝ, 1. ↓ ΑΠΟΛΛΩΝΙΟΣ ΣΗΠΙΑΤΟΒ

L (20 mm., 8-60 grm.): JGM (20 mm., 8-35 grm. Aa).

287. Artemidoros Apoll( ). Type J.

### $r.\downarrow \text{IMYPNAI}\Omega N, 1.\downarrow \text{APTEMI}\Delta\Omega [\\ \text{AHO}\Lambda\Lambda [$

JGM (20 mm., 10-27 grm.).

288. Herak(leides?). Type N.

#### r. J IMYP, I. J HPAK

B (11.5 mm.): P [4388 = Mi. 1101] (12 mm.): JGM (10 mm., 1.02 grm.).

289. Heras Heg( ?). Type M.

#### r. J IMYPNAIΩN, 1. J HPAΣ H

A [5366 <sup>5</sup>]: A [5366 <sup>7</sup>]: A [1891/2 KS 553]: A [1892/3 KA 9]: A [ΣK 1134] (17 mm.): B (17 mm.): B (17.5 mm.): B (16 mm.): G [Macd. 47] (15 mm., 3.98 grm.): G [Macd. 48] (16 mm., 3.72 grm.): K (16.5 mm.): L (16 mm., 3.55 grm.): P [4359 = Mi. 1075?]: P [4367]: V [= Mi. S. 1539?] (16.5 mm., 3.48 grm.): V. (15.5 mm., 4.54 grm.): E. Rogers (16 mm., 3.63 grm.): JGM (17 mm., 4.29 grm.): JGM (17.5 mm., 5.51

grm.): JGM (17-5 mm., 3-77 grm.): JGM (16-5 mm., 5-83 grm.): [Rhousopoulos sale 3778 (17-5 mm.)]: |Philipsen sale 2216].

290. Kratinos Kratinou. Type J.

### r. ↓ IMYPNAIΩN, I. ↓ KPATINOΣ, to r. (a) \(\overline{\mathbb{N}}\), KPATINOY

(b) nil.

B  $\langle b \rangle$  (19.5 mm. Ab): B  $\langle a \rangle$  (18 mm. Be): P [4237 = Mi. 981]: V  $\langle b \rangle$  (19 mm., 7.67 grm. Cd): JGM  $\langle a \rangle$  (19 mm., 7.89 grm. Aa).

291. Menekrates Agrios. Type J.

#### r. ↓ IMYPNAIΩN, 1. ↓ MENEKPATHΣ AΓΡΙΟΣ

A [5364] (20 mm. Dd): A [ΣK 1060] (19·5 mm., Ef): B (20 mm. Ce): L (20 mm., 7·15 grm. Ce): P [4243 = Mi. 986]: JGM (20 mm., 8·22 grm. Aa): JGM (19 mm., 10·14 grm. Bb): JGM [= H. Weber 6136] (18 mm., 7·32 grm. Fg).

292. Menekrates Agrics II. Type J.

#### r. ↓ IMYPNAIΩN 1. ↓ MENEKPATHΣ AΓΡΙΟΣΤΟΒ

O [= Num. Chron. 1900, 205] (20 mm., 9.97 grm. Bb): JGM (21 mm., 9.00 grm. Aa).

293. Menodotos. Type N.

#### r.↓ IMYPN, 1.↓ MHNOΔΟΤΟΣ

A [ΣK 1119] (12 mm.): O (10·5 mm., 1·25 grm.) [Pl. IV]: P [4390 = Mi. S. 1494] (MHNO) (11 mm.): JGM (MHNOΔ) (10·5 mm., 1·26 grm.).

294. Menophilos Krabaus. Type J.

#### r. ↓ ΙΜΥΡΝΑΙΩΝ, Ι. ↓ ΜΗΝΟΦΙΛΟΣ ΚΡΑΒΑΥΣ

A [5365] (20 mm. Fg): Gotha: K (20 mm. Ah):
L [BMC. 105] (21-5 mm., 9-16 grm. Aa): P
[4245 = Mi. S. 1435]: P [4246]: V (21 mm.,
8-99 grm. Gj): W. H. Buckler (19 mm., 7-45
grm. Cf): W. H. Buckler (21 mm., 9-65 grm.
Ee): JGM (19 mm., 7-67 grm. Dd): JGM (20
mm., 9-72 grm. Ce) [Pl. IV]: JGM (20 mm.,
9-32 grm. Bb).

295. Moschos. Type M.

## (a) r. $\downarrow$ IMYPNAI $\Omega$ N, I. $\downarrow$ MO $\Sigma$ XO $\Sigma$ , (b) r. $\uparrow$ IMYPNAI $\Omega$ N, I. $\uparrow$ MO $\Sigma$ XO $\Sigma$

A [5867 δ] (a): A [5867 6] (b): A [5867 θ] (b): A [ΣΚ 1128] (b) (17 mm.): A [XK 1136] (b) (15mm.): A [ΣK 1148] (a) (17 mm.): A [ΣK 1149] (b) (16 mm.): B (b) (17 mm.) [Pl. IV]: B (b) (17 mm.): B (b) (16-5 mm.): B (a) (16-5 mm.): B (a) (17 mm.): C [Leake, Num. Hell., ii. 117] (b) (17 mm., 3-66 grm.): G [Macd. 53] (a) (16 mm., 3-47 grm.): G [Macd. 54] (a) (16 mm., 4-53 grm.): K (b) (17 mm.): L [BMC. 28] (a) (17 mm., 4-77 grm.): L [BMC. 29] (b) (16 mm., 3-87 grm.): O (a) (16 mm., 5-18 grm.): O (b) (17 mm., 5-48 grm.): O (a) (17 mm., 4-38 grm.): O. New Coll. (b) (16 mm., 3.97 grm.): P [4372 = Mi. 1083?] (a): P [4373] (a): V (b) (15-5 mm., 4-17 grm.): E. Rogers (a) (16.5 mm., 3.99 grm.): JGM (a) (17 mm., 2-83 grm.): JGM (b) (17-5 mm., 3-97 grm.): JGM (b) (18 mm., 4.32 grm.): JGM (b) (16.5 mm., 3-47 grm.): JGM (a) (17 mm., 3-27 grm.).

(Group y.)

296. Athenaios Eudemou. Type J.

#### r. ↓ IMYPNAIΩN, I. ↓ AΘHNAIOΣ EYΔHMOY

B (22 mm. Bb): K [Ram. 11] (22 mm. Bc): P [4179 = Mi. 925]: V (19 mm., 7.28 grm. Bd.): JGM (21 mm., 8.19 grm. Aa).

297. Glaukias Medos. Type J.

#### r. ↓ ΙΜΥΡΝΑΙΩΝ, 1.↓ ΓΛΑΥΚΙΑΣ ΜΗΔΟΣ

JGM (18 mm., 9-10 grm.).

298. Praxagoras Hikesiou. Type J.

#### r. ↓ IMYPNAIΩN, I. ↓ ΠΡΑΞΑΓΟΡΑΣ IKEΣIOY

A [5360  $^{16}$ ] (19 mm. Ab): B (20 mm. Bc) [Pl. IV]: P [4264 = Mi. 1008]: JGM (19-5 mm., 9-10 grm. Aa).

(Group 8.)

299. Gerry( ?) Meta( ?). Type K.

#### r. ↓ ZMYP, 1. ↓ Γ€PPY, ab. 3d

A [5370 5] (11 mm.): A [5370 1]: B (10.5 mm.):
B (10 mm.): K (11.5 mm.): L [BMC. 77] (9.5 mm., 0.73 grm.): L (11 mm., 1.08 grm.): O.
Christ Church: E. Rogers (10 mm., 1.24 grm.):
JGM (11 mm., 1.22 grm): JGM (11 mm., 1.07 grm.) [Pl. IV]: [Mi. S. 1468 (Sest.)].

300. Diodoros Phanagorou. Type J.

#### r. ↓ ΙΜΥΡΝΑΙΩΝ, 1. ↓ ΔΙΟΔΩΡΟΣ ΦΑΝΑΓΟΡΟΥ

A [5362 γ] (20 mm. Ab): B (20 mm. Ad): K. Mus. Thorv. [Mull. 1480] (20 mm. Ae): L (20 mm., 6-69 grm. Aa).

301. Hermogenes Hermokratous. Type J.

#### r. ↓ IMYPNAIΩN, 1. ↓ EPMOFENHΣ EPMOKPATI

L (19 mm., 6-83 grm. Aa): P [4215 = Mi. 958]: JGM (21 mm., 7-55 grm. Bb).

302. Hermolaos Parmeniontos. Type J.

#### r. ↓ IMYPNAIΩN, 1. ↓ ΠΑΡΜΕΝΙΟΝ ΤΟΣ

L (20-5 mm., 9-02 grm.).

303. Theotimos Hylas. Type J.

#### r. ↓ ΙΜΥΡΝΑΙΩΝ, 1. ↓ ΘΕΟΤΙΜΟΣ ΥΛΑΣ

P [4230 = Mi. S. 1429] (20 mm. Aa): JGM (21 mm., 8-92 grm. Bb): [Mi. 971 (Cous.)?].

304. Moschos E( ?). Type M.

#### r. \$ ΙΜΥΡΝΑΙΩΝ, 1. \$ ΜΟΣΧΟΣΕ

A [5367 γ]: A [1892/3 IZ 60]: A [ΣK 1140] (17 mm.): B (17 mm.): B (16 mm.): V (17 mm., 4.04 grm.).

305 Moschos Her( ?). Type M.

#### r. ↓ IMYPNAIΩN, I. ↓ MOCXOC HP

A [5367°] (16-5 mm.): C [McClean] (17 mm., 5-83 grm.) [Pl. IV]: JGM (18 mm., 4-59 grm.): [Rhousopoulos sale 3777 (17 mm.)].

306. Nikadas Metrodorou Theudas. Type J.

#### r. ↓ ΙΜΥΡΝΑΙΩΝ, Ι. ↓ ΜΗΤΡΟΔΩΡΟΥ ΘΕΥΔΑΣ

L [BMC. 107] (21 mm., 8-07 grm. Aa): P [4252= Mi. 992]: V [= Mi. S. 1438] (19 mm., 8-26 grm. Ae): JGM (19 mm., 9-03 grm. Bb).

307. Phanes Metrodotou. Type J.

#### r. ↓ IMYPNAIΩN, I. ↓ ΦΑΝΗΣ MHTPOΔΟΤΟΥ

A [ΣK 1069] (19 mm. Bb): O [= Num. Chron. 1900, 206] (21 mm., 9-90 grm. Cc): O. Christ Church [= Mus. Mead., p. 34]: P [4233 = Mi, 975]: P [4272]: V (20 mm., 6-77 grm. Dd): JGM (20 mm., 7-05 grm. Aa) [Pl. IV].

#### PERIOD XIV.

The improvement of style noted in the last group continued into the following period, although it did not last long. In this period the smaller denominations were all struck by magistrates whose names also occur on the Homereia, which simplifies the classification.

Type J. (a) A first group is formed by the coins of Semagoras (in a second term of office) and Posideos Moschou. In these the workmanship of the dies is generally neat and good, and the head in some respects recalls that found in the first magistracy of Semagoras: it is, however, on a smaller scale, and the hair is treated

in a style of which the first traces only appear in the last group of period XIII, the rolls on the forehead being carried on over the ear to the front lock. There are three locks, the first being the most prominent and sometimes partially covering the second: the hair on the crown is in regular curves, in one die of Posideos rather massed. Another feature which occasionally appears in the coins of the last group of period XIII, but in this group becomes normal, is that the field of the reverse is markedly concave. The lettering is neat.

- $(\beta)$  There is some falling off in the execution of the dies of Aristagoras and Moschos Moschou, and the treatment of the hair is varied; over the forehead it is in a series of close twists carried over the ear into the knob at the back, and the falling locks, also closely twisted, emerge from underneath this: on the crown it is in successive masses: the eye is more marked than in the last group. The concavity of reverse is also found in this group: the lettering is fair, but inferior to that of group  $\alpha$ .
- $(\gamma)$  A further degeneration of style is shown by the issues of Artemidoros and Herakleides: two of the obverse dies used by the former are fair, but the other two, and all those of Herakleides, are coarse: the rolls of hair carry on from the forehead to the knob as in group  $\beta$ , and the massing of the hair on the crown is similar: on the poorer dies there are only two falling locks, the front one being irregularly twisted forward. The lettering on the reverse is careless: the field is usually slightly concave.
  - (δ) The worst workmanship of the period, however, is found in the dies of the next group, which are care-

lessly engraved, usually with a small head on the obverse: the general arrangement of the hair is as in groups  $\beta$  and  $\gamma$ , but the treatment is often sketchy, and the locks, which are regularly three in number, are sometimes reduced to mere lines. The reverses are also poor, with careless lettering. The magistrates of this group are Artemidoros Althas, Menekrates Kephalionos, Hekatonymos Hephaistionos, Iason Iasonos, Nikias Leptos, Aristoxenos Apollonidou, Epikrates Hermokratous, and Elaton Metroph().

Type M. (a) In the first group, there are examples of the Aphrodite type with the names of Semagoras and Posideos: the crown with three turrets only, which occurred once in the last period, now became normal in this type and persisted to the end of the autonomous series: only one die of Semagoras, the worst in point of style, has the four-turreted crown. The head is tilted forward, and the crown slants upwards from the back, with the turrets set on the hoop, which is represented only by a line, at an acute angle instead of squarely. The work is not as neat as in the Homereia: but the same scheme of the hair, carried from the forehead over the ear and twisted into the front lock, occurs. The border of dots, which was found on coins of the last period, is only lightly marked.

(β) Aristagoras and Moschos Moschou also struck this type, and some of their dies are fairly good. Here again the same treatment of the hair as in the Homereia is noticeable. The head on the obverse is more squarely set than in group α: one or two dies have pellets on the crown: there does not seem to be a border of dots.

- (δ) The coins of this type of Hekatonymos Hephaistionos and Menekrates Kephalionos are, like their Homereia, very poorly executed: the style of the head is coarse, the eye prominent, and the hair in a continuous mass from forehead to knot with little attention to detail: the reverses also are carelessly done. The obverse dies of Hekatonymos have a border of dots: those of Menekrates have not.
- Type L. (a) Type L is represented in this period only by coins of Semagoras and Posideos: they have on the obverse a head rather stiffer than that on the Homereia of the same magistrates, but of fairly neat work: on the reverse there is only one hand, and no palm-leaf on either side.
- Type N. (δ) Single examples of the altar-type are known with the names of Mene( ) and Hekato( ), presumably Menekrates Kephalionos and Hekatonymos Hephaistionos: they show the same careless work and bad execution as the larger coins with those names, and have a very debased form of altar as in period XIII.
- Type K. (a) The only certain specimen of the lyretype in this period is of Poside(os) Mos(chou), a coin of good workmanship, with a head of softer style than, though of the same general pose as, that on the coins of Posideos of type L. Another coin of very similar style, on which all that can be read of the name is [magor[, is very probably of Semagoras, as his other issues are so very closely parallel to those of Posideos.
- Silver. (a) The tetradrachms of Theodotos, Menodotos Sarapionos, and Herakleidou (this name is in the genitive, an exception to the general rule at Smyrna) have a head on the obverse very like that on the coins

of Semagoras and Posideos of type M: there is the same forward inclination of the head, and the same upward tilt of the crown and angular setting of the turrets on a narrow hoop: there are two pellets in each of the spaces between the turrets. The treatment of the hair over the forehead is also similar: in die X the twist over the ear into the front lock is noticeable.

#### (Group a.)

308. Herakleides. Tetradrachm.

Ab. → IMYPNAIΩN, bel. → HPAKΛΕΙΔΟΥ, to r. P

Brussels (29 mm., 16-36 grm.): P [4161] (31 mm.): [Bunbury sale 200 (16-45 grm.)?].

309. Theodotos Hera( ?). Tetradrachm.

### Ab. $\rightarrow$ IMYPNAI $\Omega$ N, bel. $\rightarrow$ $\Theta$ EO $\Delta$ OTO $\Sigma$

G [Macd. 4 = Mi. S. 1394] (30 mm., 16-78 grm.).

310. Menodotos Sarapionos. Tetradrachm.

#### Ab. ΙΜΥΡΝΑΙΩΝ, bel. → ΜΗΝΟΔΟΤΟΣ ΣΑΡΑΠΙΩΝΟΣ

Gotha (33 mm., 16-35 grm.).

311. Posideos Moschou. Type J.

#### r. ↓ ΙΜΥΡΝΑΙΩΝ, Ι. ↓ ΠΟΣΙΔΕΟΣ ΜΟΣΧΟΥ

B (21 mm. Ce): Gotha (21 mm. Bb) [Pl. IV]: P [4262=Mi. 1005?]: JGM (21 mm., 10-47 grm. Aa).

312. Posideos Moschou. Type M.

#### r. ↓ ΙΜΥΡΝΑΙΩΝ, 1. ↓ ΠΟΣΙΔΕΟΣ ΜΟΣΧΟΥ

B (16 mm.): G [Macd. 55 = Mi. S. 1537?] (16 mm., 3-82 grm.): G [Macd. 56] (16 mm., 3-86 grm.): O. Christ Church [= Mus. Mead., p. 34]: P [4375 = Mi. S. 1542].

313. Posideos Moschou. Type L.

#### r. ↓ ΙΜΥΡΝΑΙΩΝ, l. ↓ ΠΟΣΙΔΕΟΣ ΜΟΣΧΟΥ

K (14 mm.): P [4300=Mi. 1037] (14 mm) [Pl. V.]

314. Posideos Moschou. Type K.

r.  $\downarrow$  IMYPNA, l.  $\downarrow$  ΠΟΣΙΔΕ, bel.  $\rightarrow$  ΜΟΣ B (11-5 mm.) [Pl. V].

315. Semagoras Kot( ?) II. Type J.

#### r. ↓ IMYPNAIΩN, I. ↓ ΣΗΜΑΓΟΡΑΣ & TOB

A [ΣK 1068] (20 mm. Bb): K (20 mm. Cc): P [4269 = Mi. 1013] (21 mm. Aa): JGM (21 mm., 6.98 grm. Dd).

316. Semagoras Kot( ?) II. Type M.

#### r. ↓ IMYPNAIΩN, I. ↓ ΣΗΜΑΓΟΡΑΣ ← TOB

B (15.5 mm.) [Pl. V]: L (16 mm., 2-83 grm.): P [Wadd. 1645] (16 mm.): JGM (16-5 mm., 4-23 grm.): JGM (16 mm., 3-14 grm.).

317. Semagoras Kot( ?) II. Type L.

#### r. ↓ IMYPNAIΩN, I. ↓ ΣΗΜΑΓΟΡΑΣ ★ TOB

P[4301 = Mi. 1038] (14 mm.).

318. ? Semagoras Kot( ?) II. Type K.
r. ↓ IMYPN[ ], 1. ↓ ]MAFO[
O (12 mm., 1.73 grm.).

(Group B.)

319. Aristagoras Par( ?). Type J.

### r. ↓ IMYPNAIΩN, I. ↓ ΑΡΙΣΤΑΓΟΡΑΣ

C [Leake suppl.] (21.5 mm. Cc) [Pl. IV]: K (18.5 mm. Bb): P [4191 = Mi. 938] (20 mm. Aa): V (21 mm., 8.28 grm. Dd): [Mi. 936 (Cous.)].

320. Aristagoras Par( ?). Type M.

# r. \$ IMYPNAIΩN, L \$\langle (a) APIΣΤΑΓΟ, PAΣ PAPE

(b) ΑΡΙΣΤΑΓΟΡΑΣ

B (b) (16 mm.): K (a) (15 mm.): L [BMC. 21] (a) (17 mm., 3-88 grm.): P [4354=Mi. 1070] (a): V (b) (17 mm., 4-36 grm.) [Pl. V]: JGM (a) (17 mm., 3-50 grm.): JGM (a) (17 mm., 3-09 grm.): [Mi. 1069 (Cous.)?]: [Mi. S. 1519 (Sest.)?]: [E. F. Weber sale £946 (15-5 mm.)]: [Lavy cat. 2318].

321. Moschos Moschou. Type J.

#### r. ↓ ΙΜΥΡΝΑΙΩΝ, 1. ↓ ΜΟΣΧΟΣ ΜΟΣΧΟΥ

A [Soutzo 1454]: G [Macd. 31] (22 mm., 9.75 grm. Aa): O. Christ Church [= Mus. Mead., p. 34]: P [4251 = Mi. 991]: V (20.5 mm., 8.94 grm. Cc): E. T. Newell (19 mm., 7.62 grm. Ba): JGM (20.5 mm., 7.85 grm. Bb): [E. F. Weber sale 2951 (20 mm.)].

322. Moschos Moschou. Type M.

#### r. ↓ ΙΜΥΡΝΑΙΩΝ, l. ↓ ΜΟΣΧΟΣ ΜΟΣΧΟΥ

C. Corpus (16.5 mm.): K (16.5 mm.): L [BMC. 33] (17 mm., 4.87 grm.): O (19 mm., 3.20 grm.): O. Christ Church [= Mus. Mead., p. 34]: P [4374= Mi. 1084]: E. Rogers: JGM (17 mm., 4.19 grm.): JGM (16 mm., 4.52 grm.): JGM (17.5 mm., 4.14 grm.).

(Group y.)

323. Artemidoros Cha( ?). Type J.

#### r. ↓ IMYPNAIΩN, 1. ↓ APTEMIΔΩ Ă POΣ

A [1905/6 H 91 β] (APTM—) (20 mm. Bb): L (21 mm., 6-64 grm. Aa) [Pl.IV]: O. Christ Church [= Mus. Mead., p. 34]: E. Rogers (APTEMIΔ): JGM (21.5 mm., 8-67 grm. Cc): [H. Weber 6135 (22 mm., 8-48 grm.)].

324. Herakleides Pon(?). Type J.

### r. ↓ ΙΜΥΡΝΑΙΩΝ, I. ↓ ΗΡΑΚΛΕΙΔΗΣ

B (21.5 mm. Bb); L [BMC. 91] (21 mm., 8.57 grm. Aa): P [4226 = Mi. S. 1426]: W. H. Buckler (\mathbf{P}) (22 mm., 8.61 grm. Cc).

(Group &.)

325. Aristoxenos Apollonidou. Type J.

r. ↓ ΙΜΥΡΝΑΙΩΝ, I. ↓ ΑΠΟΛΛΩΝΙΔΟΥ

P[4192 = Mi. 989] (19 mm.).

326. Artemidoros Althas. Type J.

#### r. ↓ ΙΜΥΡΝΑΙΩΝ, 1. ↓ ΑΡΤΕΜΙΔΩΡΟΣ ΑΛΘΑΣ

L [BMC, 101] (19 mm., 9-44 grm. Bb): JGM (20 mm., 8-78 grm. Aa) [Pl. IV].

327. Hekatonymos Hephaistionos. Type J.

#### r. ↓ ΙΜΥΡΝΑΙΩΝ, 1. ↓ ΕΚΑΤΩΝΥΜΟΣ ΗΦΑΙΣΤΙΩΝΟΣ

P[4209 = Mi. S. 1420]: JGM (22 mm., 9-74 grm.).

328. Hekatonymos Hephaistionos. Type M.

#### r. ↓ ΙΜΥΡΝΑΙΩΝ, Ι. ↓ ΕΚΑΤΩΝΥΜΟΣ ΗΦΑΙΣΤΙΩΝΟΣ

B (16·5 mm.): P [4358 = Mi. S. 1526]: JGM (16·5 mm., 4·38 grm.): JGM (16 mm., 4·29 grm.): JGM (15 mm., 4·28 grm.): [Mi. S. 1525 (Sest.)]: [Mi. 1074 (Cous.)].

329. Hekato(nymos). Type N.

r. ↓ IMYP, 1. ↓ EKATΩ

L (11.5 mm., 1.45 grm.) [Pl. V].

330. Elaton Metroph(anous). Type J.

r. ↓ IMYPNAIΩN, 1. ↓ EΛΑΤΩΝ MHTPOΦ

L [BMC. 102] (19 mm., 8-52 grm.): P [4222].

331. Epikrates Hermokrat(ous). Type J.

#### r. ↓ IMYPNAIΩN, 1. ↓ EΠΙΚΡΑΤΗΣ EPMOKPAT

L (20 mm., 7-60 grm. Aa): P [4210 = Mi. 954]: V (19-5 mm., 9-18 grm. Bb).

332. Iuson Iusonos. Type J.

#### r. ↓ ΙΜΥΡΝΑΙΩΝ, Ι. ↓ΙΑΣΩΝΙΑΣΟ ΝΟΣ

A [5363 \*\*] (19 mm.): B (20 mm. Dd): K (21 mm. Ce): L (20 mm., 9.34 grm.): O. Christ Church [= Mus. Mead., p. 34]; P [4198 = Mi. 1014?]: P [4199]: V (22 mm., 7.92 grm. Ef): JGM (23 mm., 6.97 grm. Bb): JGM (20 mm., 10.00 grm. Ce): JGM (19 mm., 9.26 grm. Aa).

333. Menekrates Kephalionos. Type J.

#### r. ↓ ΙΜΥΡΝΑΙΩΝ, Ι. ↓ ΜΕΝΕΚΡΑΤΗΣ ΚΕΦΑΛΙΩΝΟΣ

G [Macd. 33=Mi. S. 1439] (22 mm., 8-68 grm. Aa): L [Weber] (21 mm., 8-43 grm.): P [Wadd. 1941] (21 mm. Bb).

334. Menekrates Kephalionos. Type M.

#### r. ↓ ΙΜΥΡΝΑΙΩΝ, 1. ↓ ΜΕΝΕΚΡΑΤΗΣ ΚΕΦΑΛΙΩΝΟΣ

A [1920 IE 432] (17 mm.): B (17 mm.): P [4368= Mi. S. 1533]: JGM (16 mm., 3-54 grm.): JGM (15 mm., 3-52 grm.) [Pl. V].

335. Mene(krates). Type N.

r. J IMYP, I. J MENE

C. Corpus (12 mm.).

336. Nikius Leptos Type J.

#### r. ↓ ΙΜΥΡΝΑΙΩΝ, Ι. ↓ ΝΙΚΙΑΣ ΛΕΠΤΟΣ

B (20 mm, Bc): G [Macd, 32] (22 mm., 8-03 grm. Bb): K (22 mm, Cd): O [= Num. Chron. 1900, p. 205] (20-5 mm., 8-63 grm. De): V (19-5 mm., 9-78 grm. Cf): JGM (22 mm., 7-44 grm. Aa).

## PERIOD XV.

The next period is a transitional one, in which several changes of treatment of the types appear: fortunately it is datable with some certainty by the occurrence in it of coins with the head of Mithradates.

Type J. (a) The Homereia which form the first group are of Artemidoros Demetriou, Latimos Hieronos, and Achilletos Achilletou. The head on the first of these is not unlike some of those in group  $\delta$  of period XIV, especially that on one die shared by Artemidoros Althas and Iason: but the work is better and the lines firmer. There is a great improvement in the reverses, notably in the lettering, which is larger, clearly cut, and well spaced. The head on the coins of Achilletos is an exceptional one, with a long and rather flattened skull, and careful treatment of details. On all the dies the hair is carried back from the forehead to the knot in one long spiral roll: the arrangement on the crown is neatly worked out, and the falling locks are stiffly and closely twisted: the wreath is carefully finished.

(β) The head on the coins of Hippias Artemidorou, Hikesios, Apellikon, and Hermogenes Trikkas is closely allied to that on those of Achilletos, but with more roundness of form and softness of line. The lettering on the reverse is very bold and clear: the form Z is regularly used in the ethnic.

Type M. (a) Latimos Hieronos struck type M as well as type J: on his coins the figure of Aphrodite is placed in a new pose, which became normal in this type hereafter, with the whole body full to front and the right hand holding up the skirt. The head on the obverse is an improvement on that of the previous

period, and is similar in work to that on the Homereia of this group. There are pairs of pellets between the turrets of the crown, as on the silver of period XIV.

 $(\beta)$  The coins of Dionysios Skaman() and Simon Artemidorou correspond to those of group  $\beta$  of the Homereia: there is the same softening of style, and bold lettering on the reverse, with the initial Z in the ethnic. In a single instance Dionysios used the old pose of Aphrodite with head turned to right on a reverse die. The flans in this group are noticeably larger.

Type N. (β) The only small denomination struck in this period was type N, of which there are coins of four magistrates—Diogenes, Hieronymos, Sopatros, and Phrygana()—all of whom used one obverse die in common, and two a second as well. On these the head is a rather inferior reduction of that on the coins of Dionysios of type M, with a similar treatment of the hair, which justifies their being placed in the same group. The altar on the reverse has a new-form: the body, instead of being narrowed at the top, is of an hour-glass shape: the handles are long double lines hanging almost perpendicularly. As in the case of type M of this group, the flans are larger than those of preceding issues.

Type  $O_1$ . (a) The use of the type with the head of the city-goddess on the obverse and a lion on the reverse seems to have been limited to a single issue of bronze, in the name of Herakleides: and the style of the head places it in group  $\alpha$  of this period. One of the three obverse dies has a crown with four turrets, but the others show only three.

Type  $O_2$ . (a) To the same group apparently belongs

the solitary issue, by Phanes Matronos, of a larger coin with similar types, but the reverse encircled with a wreath of oak, which was evidently copied on a reduced scale from the silver tetradrachms.

Type P. (a) The coins with the head of Mithradates Eupator on the obverse, struck by Hermogenes Phrixos, may be referred to group  $\alpha$ : the work is fairly good and careful, resembling that of the coins of types J and M in that group; the style of lettering and use of initial Z are rather suggestive of group  $\beta$ , but the general effect is nearer the other group.

Silver. (a) The tetradrachm of Apollas Galates is like the bronze of group  $\alpha$  in style. The head is more squarely set on the neck than in the tetradrachms of period XIV, and the turrets of the crown are more nearly at right angles to the hoop, though the stepped effect persists to a modified degree. The pellets between the turrets again occur. The series of twists of hair over the forehead is carried on to the back of the head: the lines are harsh, and the general treatment stiff.

(β) There is an improvement and softening of style in the coins of Anaxenor Athenionos and Dionysios Motylos (who used the same obverse die) and Kleandrides: the obverse die of the last-named in particular is very close to those of Dionysios of type M in the pose of the head. Both dies differ from that of Apollas in the treatment of the crown: the stepping has almost disappeared, and the walls between the turrets are carried higher.

Gold. (a) The only known gold coin of Smyrna clearly belongs to this period. It has the same types as those used for the bronze of type M, and the obverse

die is evidently by the same hand as that of the tetradrachms of group  $\alpha$ : the crown is slightly stepped, with pellets between the turrets. The pose of Aphrodite on the reverse is that which was first introduced on the bronze in this group.

(Group a.)

337. Apollas Galates. Tetradrachm.

Ab. →ΙΜΥΡΝΑΙΩΝ, bel. → ΑΠΟΛΛΑΣ ΓΑΛΑΤΗΣ

B (30 mm., 16-36 grm.).

338. Artemidoros Demetriou. Type J.

# r. ↓ IMYPNAIΩN, I. ↓ ΔHMHTPIOY (?)

C [Leake, Num. Hell., ii. 118] (21 mm., 8-37 grm. Ac): K (20 mm. Ab): P | 4196 = Mi. 944]: V (21 mm., 8-63 grm. Bd): JGM (22 mm., 7-41 grm. Aa).

339. Achilletos Achilletou. Type J.

## r. ↓ IMYPNAIΩN, I. ↓ AXIΛΛΗΤΟΣ : οδε. A

behind head.

Gotha: L (22 mm., 8-67 grm. Ab): P [4200 = Mi. S. 1405]: V (22 mm., 9-00 grm. Be): V (20-5 mm., 10-99 grm. Cd): JGM (21 mm., 8-64 grm. Aa) [Pl. V].

340. Hermogenes Phrixos. Type P.

## r. \ ZMYPNAIΩN, I. \ EPMOFENHΣ ΦΡΙΞΟΣ

B (25 mm.) · B (24 mm.) : B (25.5 mm.) : C [McClean] (27 mm., 11.65 grm.) : G [Macd. 85] (28 mm., 13.70 grm.) : Gotha : L [BMC. 118] (25.5 mm., 13.36 grm.) [Pl. V] : L [BMC. 119] (24.5 mm., 16.53 grm.) : O. Christ Church : W. H. Buckler (24 mm., 12.34 grm.) : JGM (25.5 mm., 13.54 grm.) : [Philipsen sale 2217] : [Rhousopoulos sale 3783 (25 mm.)] : [E. F. Weber sale 2953 (27 mm.)].

341 Herakleides. Type O.

## Ab. →IMYPNA IΩN, bel. → HPAKΛΕΙΔΗΣ

B (21 mm.): P [4381 = Mi. 1096] (22 mm.): V (21 mm., 10-79 grm.): JGM (22 mm., 8-39 grm.) [Pl. V].

342. Latimos Hieronos. Type J.

## r. ↓ ΙΜΥΡΝΑΙΩΝ, 1. ↓ ΛΑΤΙΜΟΣ ΙΕΡΩΝΟΣ

A [5364] (20 mm.).

343. Latimos Hieronos. Type M.

## r. ↓ ΙΜΥΡΝΑΙΩΝ, I. ↓ ΛΑΤΙΜΟΣ ΙΕΡΩΝΟΣ

A [5363 \*5]: A [1920 IE 433] (18 mm.): B (16 mm.): B (15.5 mm.): G [Macd. 39] (16 mm., 4.24 grm.): G [Macd. 40] (16 mm., 3.60 grm.): G [Macd. 41] (16 mm., 3.53 grm.): Gotha: K (15 mm.): K (16.5 mm.): K (14.5 mm.): L [BMC. 32] (16.5 mm., 4.46 grm.): P [4366 = Mi. 1081]: P [Wadd. 7130] (18 mm.): V (16 mm., 4.07 grm.): W. H. Buckler (16.5 mm., 3.39 grm.): W. H. Buckler (16.5 mm., 3.75 grm.): E. Rogers: JGM (17.5 mm., 5.33 grm.) [PL V]: JGM (17 mm., 4.47 grm.).

344. Prytaneis. Gold stater.

## r. ↓ IMYPNAIΩN, l. ↓ ΠΡΥΤΑΝΕΙΣ P. (20 mm., 8-50 grm.) | Pl. V.

P (20 mm., 8-50 grm.) [Pl. V].

345. Phanes Matronos. Type O2.

## $Ab. \rightarrow IMYP$ $NAI\OmegaN'$ $bel. \rightarrow TP\Omega NO\Sigma$

P [4380 = Mi. S. 1546] (26 mm.): JGM (28 mm., 11-67 grm.) [Pl. V]: [Mi. 1103 (Cous.)]: [Mi. S. 1395 (Sest.)].

(Group \$.)

346. Anaxenor Athenionos. Tetradrachm.

Ab. → IMYPNAIΩN, bel. → ANAΞΗΝΩΡ ΑΘΗΝΙΩΝΟΣ

K (31 mm., 16-72 grm.).

347. Apellikon. Type J.

## r. ↓ ΖΜΥΡΝΑΙΩΝ, I. ↓ ΑΠΕΛΛΙΚΩΝ

V (19-5 mm., 7-91 grm.).

348. Diogenes. Type N.

## r. J IMYPNAIΩN, 1. J ΔΙΟΓΕΝΗΣ

B (12 mm): P | 4384 = Mi. 1099 | (13 mm.): V (13 mm., 2.04 grm.).

349. Dionysios Motylos. Tetradrachm.

#### Ab. → IMYPNAIΩN, bel. → ΔΙΟΝΥΣΙΟΣ ΜΟΤΥΛΟΣ

B (31 mm., 16-49 grm.).

350. Dionysios Skamand(rou?). Type M.

## r. ↓ ΙΜΥΡΝΑΙΩΝ, 1. ↓ ΔΙΟΝΥΣΙΟΣ ΣΚΑΜΑΝΔ

A [ΣK 1133] (19 mm.): B (19-5 mm.): B (Aphrodite r.) (195 mm.): K (19 mm.): K (18-5 mm.): P [4357 = Mi. 1073]: V (ΣΚΑΜΑΝ) (20 mm., 4-42 grm.) Pl. V : E. Rogers : JGM (20 mm., 9.08 grm.).

351. Hermogenes Trikkas. Type J.

## r. ↓ ZMYPNAIΩN, 1. ↓ EPMOΓENHΣ TPIKKAΣ

A [536244]: K (20-5 mm. Bb): O. Christ Church = Mus. Mead., p. 34 : P | 4214 = Mi. 956? |: V (19 mm., 9.22 grm. Cd): JGM (20 mm., 8.71 grm. Cc).

352. Hieronymos. Type N.

## r. ↓ IMYPNAIΩN, I. ↓ IEPΩNYMOΣ

A [5373β] (12-5 mm.): B (13 mm.): K (13-5 mm.): K [Ram. 85] (13-5 mm.): P [4389 = Mi. S. 1493] (14 mm.).

353. Hikesios. Type J.

## r. J ZMYPNAIΩN, 1. J IKEΣIOΣ

B (20 mm. Bb) [Pl. V]: P [4180 = Mi. 978] (20 mm. Aa): JGM (20 mm., 8-01 grm. Ce).

354. Hippias Artemidorou. Type J.

## r. ↓ ΖΜΥΡΝΑΙΩΝ, Ι. ↓ ΙΠΠΙΑΣ ΑΡΤΕΜΙΔΩΡΟΥ

K (22 mm. Ab): O. Christ Church [= Mus. Mead., 34] (22 mm. Bc): E. T. Newell (21 mm., 7.50 grm. Aa): A. M. Woodward (22 mm. Ad)

355. Kleandrides. Tetradrachm.

Ab. → IMYPNAIΩN, bel. → ΚΛΕΑΝΔΡΙΔΗΣ New York, Amer. Num. Soc. (32 mm.)=[Whittall sale 1006?].

356. Simon Artemidorou. Type M.

## r. ↓ ΙΜΥΡΝΑΙΩΝ, I. ↓ ΣΙΜΩΝ ΑΡΤΕΜΙΔΩΡΟΥ

K (19 mm.).

357. Sopatros. Type N.

## τ. ↓ ΙΜΥΡΝΑΙΩΝ, 1. ↓ ΣΩΠΑΤΡΟΣ

K (14 mm.): L [BMC. 66] (13 mm., 2-47 grm.) [Pl. V] P [4391 = Mi. S. 1495]: E. Rogers.

358. Phrygana( ). Type N.

## r. ↓ IMYPNAIΩN, 1. ↓ ΦΡΥΓΑΝΑ

A [5375 a]: G [Macd. 78 = Mi. S. 1489] (14 mm., 2-83 grm.): JGM (12 mm., 1-93 grm.).

The date of the last period in this section can, as already noted, be determined with greater probability than those of most of the periods into which the coinage has been classified. The bronze with the head of Mithradates must have been struck within the years 87-84: and the gold stater almost certainly belongs to the same time, like the gold coins of Ephesos,

Erythrai, and other cities of Asia. The general state of unrest in Ionia would explain the comparative smallness of the issues at Smyrna in this period: it will be observed that few are represented by more than half a dozen examples. Also the next section is marked by changes in the module and the types of most denominations, which might naturally be associated with the reorganization of affairs in the city after the Mithridatic war.

If period XV may be dated to about 85, and period VIII began shortly after 190, the allotment of the intervening years among the eight periods under review must be considered. For this purpose there are no clear data: the number of magistrates' names which occur is, for reasons given above (p. 2), not a safe guide to the length of a period: nor is the number of issues, as it is not likely that the mint of Smyrna would be equally active from year to year, and where, as at Alexandria, an exactly dated series of coins exists, it is demonstrable that the output of the mint varied very substantially in successive years. But some guidance may be derived from considerations of style, though this is not very definite, as style may have developed more rapidly at one time than another.

Considered simply from this point of view, period IX gives the impression of the longest range: next to it come periods VIII and X: while the remainder may be comprised within comparatively narrow limits. On this basis, it may be suggested that the most suitable allotment would be to give, in round figures, twenty-five years to the first-named period, twenty to each of the next two, and ten each to the rest, with a resultant dating approximately as follows:

Period	VIII			100	190-170
**	IX	8.1.			170-145
.11	X				145-125
"	XI				125-115
11	XII				115-105
.,	XIII	12	1	526	105-95
,,	XIV		-	141	95-85
11	XV		-	1	85-75

If this dating be correct, there may be found some historical confirmation in periods VIII and X, as well as in period XV. After the battle of Magnesia the conditions at Smyrna were changed in the greater freedom secured by the city for the management of its own affairs, but there is no evidence of an immediate expansion of trade. So, while the currency was reorganized, the issues were not very large: and the distinguishing mark of period VIII is that all denominations were struck fairly freely, while at later dates there was a tendency to neglect one or more of the smaller denominations for a time. In period X, on the other hand, there was a concentration on Homereia with only a few issues of the second size, and a very large output: this policy may be connected with the constitution of the Roman province of Asia, which was followed by a considerable increase in the prosperity of Smyrna, and the boom in trade would naturally be accompanied by additions to the provision of currency, especially in the chief denominations of bronze: the issues of the magistrates coining Homereia in groups y and &, which are probably the latest in the period.

and so would come just after the organization of the province, are exceptionally plentiful.<sup>6</sup>

Period XV would mainly fall after the Mithridatic revolt: the two types specially connected with this revolt, that with the head of Mithradates and the gold stater, may on grounds of style be placed quite early in the period. The links to be found in others of the issues with the next section will be noted in the description of that section.

### ADDENDA.

A fresh variety of type N has come to my notice in the collection of Rev. E. Rogers, with the name of  $M]O\Sigma XO\Sigma$ : the head of the obverse, and the form of the altar on the reverse, both clearly belong to Period IX, and are nearest to those of group  $\epsilon$ , in which this coin may accordingly be placed. The ethnic is abbreviated  $\square$ MYPN.

The receipt of a cast of a coin in the Schottenstift cabinet has enabled me to add another magistrate to group XIV γ: it is of type J, with the name HPΩIΔHΣ | NAKOYΣ (20 mm., 8.44 grm.): there is one of the same type at Copenhagen (19.5 mm.). The two are from different obverse dies: the die of the Vienna coin is very like B of Artemidoros and B of Herakleides.

J. G. MILNE.

<sup>\*</sup> The number of specimens recorded is swollen by the fact that a hoard brought into review was largely composed of examples of these issues: but, even apart from this, the Homereia of Kallistratos, Krokines, Arrhidaios, Diogenes, and Pasikrates are the commonest coins of Smyrna.

## RICHBOROUGH COIN-PROBLEMS.

Much controversy has been excited recently by the publication of a theory according to which the Roman occupation of Britain was prolonged far into the fifth century. It was first propounded by the late Prof. Bury in a paper contributed to the Journal of Roman Studies (x. 131) in which he argues that the British portion of the Notitia Dignitatum, usually supposed to represent the conditions at the end of the fourth century, really describes the state of the garrisons in A. D. 428 and the following years. The Notitia of the West as a whole is shown from internal evidence to belong to A.D. 428, and being an official list for reference, not for publication, will contain corrections made during its use in the office of the primicerius notariorum in the course of the following decade. If, therefore, the British section is of the same date, subsequent copies will include the corrections and record the distribution of troops during the years 428-37, and we shall have consequently a picture of Britain down to the latter year. Prof. Bury puts the end of the Roman occupation at the date 441-2 given by the contemporary Gallic Chronicle.1

"The Notitia of A.D. 428", says Prof. Bury, "represents Britain as still a diocese of the empire, under

But this records the completion of the process of conquest— "The Britains, which up to this time have suffered various events and disasters, are reduced under the rule of the Saxons."

the civil government of the vicarius, with its five provinces under two consulars and three praesides, and still defended by Roman troops, (1) limitanei under (a) The Count of the Saxon Shore, in the southeast, (b) the Duke of the Britains, in the north, and (2) a field army under the Count of the Britains."

But Mr. R. G. Collingwood shows (J.R.S. xii) that this picture cannot be contemporary with the document in which it is incorporated. The other literary evidence, and the coin finds all over the country, combine to prove that the greater part of Britain was abandoned at least by 410.

Mommsen regarded the British section as of pre-Constantinian date. To quote again from Prof. Bury, Mommsen concluded that "whoever compiled the Notitia Occidentis, having no information relating to contemporary Britain, which had passed out of the control of Rome but was still theoretically recognized as a part of the empire, had recourse to an ancient list more than a hundred years old in order to fill in the military units. This view has been widely accepted and is certainly erroneous."

The fact is that, since the British list contains units not formed till towards the end of the fourth century, Mommsen's theory errs as far in one direction as Prof. Bury's in the other, and is rejected by Sir Charles Oman in his England before the Norman Conquest. But the principle of Mommsen's attempt to reconcile the document with other literary sources may be applied in a more cautious measure. We may suppose that the British section of the Notitia describes the defences of the country not long prior to evacuation at the end of the fourth century. As a representation of

fact in 428 it is as obsolete as Rex Franciae on money of George III, but perhaps it was inspired by hopes of restoration.

Prof. Bury (*ibid.*, p. 148) discounts the numismatic evidence by urging that towards the end of the fourth century the copper issues of the Western mints were very scanty, but a study of Mr. Collingwood's list of late finds (*J.R.S.*, *loc. cit.*) must, I think, convince any one that it is much too extensive and uniform in the story it tells to be the result of fortuitous absences.

The Richborough coins now show that the output of the Western mints was by no means scanty, and that a vast mass of money struck in the years immediately preceding 395 reached that place.

## TABLE I.

[This Table is based on the coins from all levels published in both the First and Second Reports on Richborough.]

House	of Co	mstanti	nc.	
Circ. A. D. 320-1	337 .		1532	about
837-	364 .		1963	**
House	of Ve	alentinie	an.	
Valentinian I,	A. D. 3	64-375	232	
Valens .			272	
Gratian .		67-383		
Unassigned .			343	
The state of the s			a comme	
Hous	se of T	Theodosi	us	
(A. D	. 383-	circ. 39	5).	
Valentinian II		ALC: NO.	- Ti	
Theodosius K			664 744	
Magnus Maxim	ne and	Viotor		
**	us min			
A	13		42	
Honorius .			1900	
Unassigned .		7	399	
Omassigned .			(048	about

If Britain had been a settled province this money would have circulated to other parts of the country. But the contrary is the case. The finds from Wroxeter, Magna, Silchester, and elsewhere show a rapid tapering off of the stream of coinage from the close of the Constantine era downward, while at Richborough there is a progressive expansion in volume during the same period. This contrast is only explicable if Richborough was cut off from the rest of Britain. In a paper on this subject read in October 1926 before the Society of Antiquaries I gave detailed reasons for concluding that the greater part of Britain was abandoned just before 400, but that Richborough was held, together with a strip of the eastern counties under shelter of other Saxon shore forts, until 407 or 410.

The argument so far has rested on the assumption that the date of the latest coins on a site is within a little the limit of its occupation. But Mr. Edward Foord next comes to the rescue of Prof. Bury's views, and in The Last Age of Roman Britain he propounds a theory of coin drift which involves post-dating the abandonment of northern British sites to at least a generation after the minting of the last coins found on them. His position may be summed up thus:

- Trèves throughout the fourth century was the source of the great bulk of the money circulating in Britain.
- (2) The output of Arles and Lyon was small and little of that reached this country.

<sup>&</sup>lt;sup>2</sup> As shown by the similar proportions of a find of 3 Æ Q from Icklingham described by Mr. J. W. E. Pearce.

- (3) Money took at least thirty years even in time of tranquillity to travel from Trèves to Hadrian's Wall.
- (4) After 407 very little or practically no money at all could have reached Britain.

I give opposite a table of Richborough mint-marks from Valentinian I onward.

This table proves that:

- After the Constantine era Trèves ceased to be the chief source of bronze, the minting of which had been almost entirely transferred elsewhere.
- (2) Far from the output of Arles and Lyon being slender, both much exceeded Trèves during the period after 364, and Arles—in the Constantine era about the equal of Lyon—suddenly jumps into the pre-eminence formerly occupied by Trèves.

Mr. Foord's mint history, therefore, is quite wrong, and the remainder of his argument collapses with it, for if he is right—and I do not doubt he is—in assuming that very little money entered Britain after 407, the drift theory might just allow the great mass of coinage struck between 393 and 395 to scrape in, if the times were tranquil and if it came from Trèves. But the times were not tranquil, and the money came from Arles.

We may be helped by the material before us towards the solution of some numismatic problems.

There are three common reverses struck in bronze during the period from Valentinian II to Honorius:

2 Aelia Flaccilla.

	Alexandria	1     01	111111111	03
	Antioch	1-11	-1110100	7
	Thessalonica	1111		04
	Nicomedia	11	12111-11	4
	Heracleia	1111	11111-1-1	0.3
	Cyzicus	1111	0       01	10
	Constantinople	1111	401	9
	Siscia	1 6 18		88
H	Rome	572 803	26 1   26	200
PABLE 1	anliM	1111	111-11-1	4
TA	Aquileia	85 1 8 1	\$12 8 8 8 0 EF	288
	Trèves	400101	42-04848	138
	Arles or Lyon	2000	11111111	45
	Lyon	5885	25 25 13 13 12 18 18 18 18 18 18	432
	Arles	52 68 15 15	93 855 885 88 88 265	981
			3	•
		1	I I I I I I I I I I I I I I I I I I I	20
		ninn	Fleed nint sius sius us us us us	
		ntin inn inn isig	oring oring oring oring ssig	otal
		Tale Tale Frate June	Wale Vale Khe Wict Vict Eug Arcs Hon	Z
		1	H	

- VICTORIA AVGG with two Victories presenting wreaths to one another.
- (2) VICTORIA AVGGG with Victory moving to the left.
- (3) SALVS REIPVBLICAE with Victory moving left and pulling a captive by the hair.

The reverse (1) is almost identical, though in somewhat smaller module, with a common type of Constans (Cohen 176) and Constantius II (Cohen 293). The latter is the most common Victory type of the later Constantine era, but its derivative under the House of Theodosius, though not rare, is infrequent in the West compared with either of the two bronze types which follow. It is struck by Valentinian II, Theodosius, and Arcadius, but not by Honorius. Before the year 393, therefore, at the latest, it has come to an end, and accordingly it is absent also from the Eastern mints after the death of Theodosius.

The second reverse (2) is very abundant. It is struck by all the emperors; even, with small variations of legend, by the usurpers Maximus and Eugenius. Of the legitimate emperors it is the commonest coinage, but while Eugenius has thirty-two examples, in the case of Maximus it is rarer, at least in this country, than Cohen would lead us to suppose, for only two examples (with VICTORIA AVGG) have yet appeared at Richborough. The preceding emperors all strike similar series, but only Valens and Gratian in bronze, and these are either quite absent from Richborough or extremely rare. At the other end the single-Victory type is absent from Sabatier, Monnaies Byzantines, and is presumably

unrepresented in the mints of Arcadius after the division of East and West in 395.

The third type (3) is also very plentiful, though not so much so as (2). It also is issued by all legitimate emperors from Valentinian II onwards, and alone of the three reverses continues into the Byzantine coinage of Arcadius.

We may thus arrange the three issues chronologically in the order in which we have described them. More precise limits are not yet possible, but before 393 and about 395 respectively, first the double and then the single Victory is abandoned in the West, and thereafter the East is contented to preserve the Safety of the State.

An analysis of the mint-marks follows according to types and yields some interesting results.

The two-Victory type is hardly struck by the Gallic mints, and is predominantly Roman. Its comparative rarity is sufficiently explained by this circumstance. The type with one Victory is predominantly a Gallic type. On the other hand the SALVS REIPVBLICAE type is still more markedly Italian (we might add Eastern, but the mints of the East hardly show in our finds). It must be remembered that the proportion of Italian coins which reached Richborough, as the analysis in our second table makes clear, was quite small, and the figures for the Salus type in the Rome and Aquileia columns must be multiplied correspondingly in order to estimate the relative outputs. Yet even before this is done the Italian figures greatly outnumber the Gallic.

Mr. J. G. Milne's analysis of four Egyptian hoards (Num. Chron., 1926, p. 77) strikingly confirms the

TABLE III.

Analysis of Mint-marks by Types.

	VICTORIA AVGG SALVS REIPVBLICAE		Ar L T R Aq	1 23 27	21 25 45	79 8 -	- 5 10	6 48 70	**
ileia.	-VS RI		T	1	1	66 1	1 1 1	15 6	
q = Aqu	SAI		_	9.1	04		54	12	
. A	ילפפ		Αq	67	-	-	1	04	- 4
= Rome	AAV	One Victory	T R	61	00	30 5 1	4 91	54 11	1
R	TORI	One V	Ar L T R Aq	30 92	16	104 3	11 4 91	122 5	
T = Trèves, R = Rome, Aq = Aquileia.	VIC		Ar	93	83	262	98	252	
E y	5		Aq	4	4	1	1	1	1
Lyon.	Ar = Arles. L = Lyon.	tories	Ar L T R Aq	00	18	60	1		
L		Two Victories	T	1 -	9.1	1	1	1	-
rles.	CTC	Tv	T		L		10	-	1
r = A	>		Ar	1	1	1	1	1	1
-				8				osius .	
				alentinian II	Theodosius .	Arcadius .	onorins .	House of Theodosius	

\* The proportion of Roman marks is exaggerated here only by the fact that ten coins were assigned by the dots in the field. evidence of Richborough. VICTORIA AVGG with two Victories is represented by 66 coins, of which 22 have decipherable mint-marks (Thessalonica 2, Aquileia 1, Rome 19). None are Gallic. Though so much less numerous at Richborough than the series with one Victory, they largely outnumber them here. The single-Victory coins only amount to 37 (3 from Aquileia, 1 from Rome, 4 Lyon, 12 Arles). There is not one Eastern specimen among them. This type is thus again shown to be solely Western 5 and predominantly Gallic. Honorius appears in neither Victoria series.

SALVS REIPVBLICAE on the other hand is Italian and Eastern. The great volume of this type found at Richborough from Italian mints, in spite of the comparatively small total representation of Italy, prepares us for Mr. J. G. Milne's figures. He gives the surprising total of 1,117 legible mint-marks, distributed among the six Eastern mints of Alexandria, Antioch, Cyzicus, Nicomedia, Constantinople, and Thessalonica, with a small Italian representation of 15 from Aquileia and 6 from Rome. There is not one Gallic coin.

Mr. Milne's analysis confirms in every respect the conclusions drawn from the Richborough mint-marks. The two-Victory type is almost exclusively Italian, and belongs especially to Rome and Theodosius, the latter fact no doubt a consequence of its chronology; the one-Victory series is exclusively Western and predominantly Gallic and Arcadian, the latter in consequence of the elder son's provincial command; the Salus type is universal but predominantly Eastern.

<sup>&</sup>lt;sup>5</sup> But two marks of Siscia and one of Antioch seem to occur at Richborough.

Our Richborough table also indicates the process of concentrating the bronze mint at Arles. Trèves has only four bronze coins of Honorius and only of the one-Victory type, while Salus Reipublicae is perhaps scarcely issued from Lyon. It even looks as if at the very end in the West the mints were not shut down simultaneously, but that, not only was reduction gradual, but by a kind of southerly retreat Lyon was closed a year or two before Arles.

It has been rather surprising to find the money of Arcadius so far exceeding that of his father. The only likely reason is, as I have already suggested, that the Gallic provinces were assigned as Arcadius' special sphere, at least until the elevation of Honorius. That would be the traditional procedure under the later empire. An inspection of the Italian mint-marks supports this explanation. If they are taken by themselves the preponderance of Arcadius disappears and they show almost an equality between father and son.

Comparatively few siliquae have been found at Richborough. They come from Trèves and Milan (see Icklingham Hoard, Dr. G. F. Hill's analysis, Num. Chron., 1908) which confine themselves mainly to gold and silver during this period, while Arles and Lyon are even more notably restricted to bronze.

I have made a careful examination of the mint-marks of Arles to verify the practice of assigning the marks CON and CONST to that mint and CONS to Constantinople. There seems no doubt that the attributions are correct. CONS followed by a literal number for the officina occurs on only six coins and must belong to the Eastern mint. The rest, P CON, S CON, T CON, or CONST (under the House of Valentinian I), are of

Arles. Valentinian I has  $\frac{OF \mid I}{CONSP}$  once, if the P is not misread for T, and Valens twice has  $\frac{OF \mid II}{CONS}$ , where S = secunda, and once (also Valens) there is the curious  $\frac{OF \mid \Gamma}{CONST}$  where T may = tertia.

During the whole period from Valentinian I onwards three officinae, P, S, T, are striking bronze at Arles, P and S at Lyon and Aquileia. But apparently Lyon was reduced to P after its recovery from Magnus in 388. At Rome I can trace five on these coins, P, S, T, Q, E, the letters following the R to avoid confusion of the third officina with Trèves. Since quarta and quinta have the same initial, the latter officina is denoted by the fifth letter of the Greek alphabet and Q always means quarta. On a few B replaces S. Trèves probably had only one officina at the end of the reign of Theodosius, and marked bronze TR simply.

I conclude this paper by putting very shortly before the Society a theory of the origin of the dragon series of Anglo-Saxon sceattas to which I have been led by a study of the degraded copies of money of the later Constantine era which are very common at Richborough. The chief type thus perpetuated is that of a legionary spearing a horseman, with the legend FEL TEMP RE-PARATIO. On many of the barbarous copies the flans are reduced and only the horseman appears. The energetic design seems to have arrested the eye of the Saxon conquerors who found these coins still in use, and perhaps used them themselves until they began to strike money of their own.

Some sceattas show traces of the legionary, others develop the element of the spear more strongly, on others the rider is metamorphosed into wings, and a kind of Pegasus type results. But though the design is borrowed the treatment is original, and we may recall the vigour which the Celtic renaissance of the third century imported into the treatment of subjects drawn from nature on the Castor ware of that period.

If this derivation of the dragon sceattas is accepted, the result is to bring the series into the Roman tradition, to which it has long been recognized (C. F. Keary, B.M.C. Introd.) that all the other types directly or indirectly belong.

F. S. SALISBURY.

## UNPUBLISHED SEVENTEENTH-CENTURY TOKENS

IN THE COLLECTION OF WILLIAM GILBERT.

[SEE PLATES VI, VII.]

It is barely necessary to refer to the interest and value, both to the collector and the student, of the tradesmen's tokens issued in the seventeenth century; for their place in numismatics has, for many years now, been firmly established, although for a considerable time they were despised and neglected. Their survival of this neglect was, I think, chiefly owing to an interest peculiar to themselves, in that, although current coin, they "tell of the people", as the late Mr. Llewellynn Jewitt aptly remarked, whereas most coins tell of the rulers of the people. The large, and inestimably valuable, work of Boyne, edited by G. C. Williamson, and completed in 1892, still holds the field as the only general treatise; but during the thirty years or so which have elapsed since its publication, numerous fresh tokens not described in that work have been discovered, and I hope the following descriptions of such tokens in my cabinets will be of service to those who are interested in these little coins, and may perhaps provide stray items of information, and clues, for the local topographer and the genealogist.

I will not occupy space with a dissertation on the

history of, or reason for, these little coins; this has been exhaustively treated in the various works on the subject which are readily accessible to those interested. These are the coins struck by our own ancestors—surely they must be of real interest to us! such intimate interest as no other money can possess; although, as a student of a much wider field of numismatics, I admit a greater general interest attaches to the study of ancient coins. No ancient coin, however, that I possess (beautiful and interesting as many of them are), can have the human appeal to me of the token of William Gilbert, the mercer of Coventry, or that of the High Peak Coal Mines, Derbyshire; each of which was issued by an ancestor of my own.

Each of the tokens described in the following pages is in my collection at the time of writing, with the exception of ten specimens; these having been exchanged with other collectors. The majority are in very fine condition. None of them is to be found in the standard books on the subject, but a few have been described in the publications of numismatic and antiquarian societies—the great bulk of them, however, are now described for the first time.

I have not included in the following list the tokens I possess, which are numerous, having slightly different readings to those described in Williamson's work; for many of such descriptions were doubtless from worn, or imperfect, specimens; neither have I included minor die variations, of which a large number exist.

Where no value is stated the tokens are farthings. The initial W refers to Williamson's Trade Tokens issued in the Seventeenth Century, and the number in brackets following such initial is the number of the token in his list of the county with which I am then

dealing.

I must here gratefully acknowledge the help I have received from my old friend Mr. H. Fentiman (of Messrs. Spink & Son, Ltd.), who has assisted me in determining some of the difficult readings and devices.

## BERKSHIRE.

Abingdon.

Obv. HENRY · MEALES · IN · = 1657.
 Rev. IN · ABINGTON = H. M.

W (7) describes a token of this issuer reading ABINGTON BAKER, I have a specimen of it.

Windsor.

Obv. SAMVEL | BENET | FROM WINDSOR | TO YE
 EAGLE & | CHILD IN THE | STRAND | in
 six lines; below, a coach and pair of horses.

Rev. FROM | THE EAGLE | AND CHILD | TO WINDSOR | AT THE | in five lines; below, the queen's head crowned with H · P · at left-hand side. [Pl. VI. 1.]

This token is octagonal.

Wokingham.

 Obv. THOMAS · GRAPE = a lion rampant. Rev. IN · WOKINGHAM · 1664 = T. D. G.

W (182) describes a similar farthing but dated 1668; this I also have.

## BUCKINGHAMSHIRE.

Amersham.

 Obv. ANDREW · BAROWES · IN = A. B. Rev. AMERSON · CLOTHWORKER = 1652.

W (1) describes a halfpenny of this issuer, dated 1665, which bears the Clothworkers' Arms.

Aylesbury.

 Obv. STEPHEN · BAGNALL = S. I. B. Rev. IN · ALESBVRY · 1656 = A jar.
 This token is struck in lead

Obv. IOHN · DOSSET = a baker's peel.
 Rev. IN · ALSBVRY · 1670 = I. I. D. [Pl. VI. 3.]

Beaconsfield.

Obv. IOHN · FOSCET · OF = A paschal lamb.
 Rev. BECKONSFEILD · 1669 = HIS · HALF · PENY.

W (20) describes a similar token issued by IOHN FOSLET in 1666.

Brill.

8. Obv. WILLIAM · CLARK = HIS · HALFE · PENY · W. E. C.

Rev. AT · BRILL · 1669 = The Mercers' Arms.

Colnbrook.

Obv. ALCE · COAD · AT · THE · BELL = A bell.
 Rev. IN · COLBROOKE · 1669 = HER · HALF · PENY.
 [Pl. VI. 2.]

This is the first token known for the place. It was found in Staines, which is about four miles distant.

Great Horwood.

10. Obv. FRANCIS · WOODCOCKE = HIS · HALF · PENY ·

Rev. IN · GREAT · HORWOOD = F. F. W.

W (74) describes a halfpenny of this issuer showing the Haberdashers' Arms.

#### CAMBRIDGESHIRE.

Cambridge.

 Obv. THOMAS · POWELL · IN · = Rolls of bread arranged in the form of a lozenge.

Rev. CAMBRIDGE · 1666 = HIS · HALF · PENY · T. I. P.

W (72) describes a similar token, but initials on reverse T. E. P., a specimen of which I have.

Ely.

 Obv. CORNLEVS · FVLLER = The Haberdashers' Arms.

Rev.  $IN \cdot ELY \cdot 1654 = C. F.$ 

W (105) describes a similar token, but name spelled CORNELIVS and (106) one spelled CORNLLVS. I have specimens of each of them.

13. I have the farthing of THOMAS · PORTER (W. 115) which shows the Grocers' Arms correctly and also one with four cloves in the base of the shield instead of three.

March.

 Obv. THOMAS · HARRISON = The Haberdashers' Arms.

Rev. OF · MARCH · 1667 = T. M. H.

W (150, 151, 152) describes three tokens of this issuer, all of which I have, and all differing from the above.

Whittlesey.

15. I have the farthings of ROBERT · IVES (W 194, 195), and also a different one, the woolcomb having eleven teeth instead of ten, and being within an inner circle.

#### CHESHIRE.

Macclesfield.

Obv. SAMVELL · LEAH = The Grocers' Arms.
 Rev. OF · MACKLESFIELD = S. I. L.

W (52) copies from Ormerod's History of Cheshire, a partial (and inaccurate) description of this token, no doubt from a worn specimen. Mine is in extra fine condition.

Nantwich.

17. Obv. RICHARD · BARKER · IN = HIS · HALFE · PENY.

Rev. NAMPTWITCH  $\cdot$  1665 = R. E. B.

Sandbach.

18. Obv. IONAH · BOWYER = The Mercers' Arms. Rev. OF · SANDBACH · 1667 = HIS · HALFE · PENNY.

W (70) gives an incomplete description of this token from Ormerod's *History of Cheshire*; mine is a fine specimen.

## CORNWALL.

Camelford.

Obv. NICHOLAS · HENDER = The Mercers' Arms,
 Rev. OF · CAMBELFORDE = N. H. [Pl. VI. 4.]

This is the first token known for this place. Mr. R. N. Worth, the sub-editor of the Cornish section of Williamson's work, remarks in his preface, "It is difficult to understand why some other places of greater relative importance than several recorded are unrepresented; and it is quite possible that additions may yet have to be made for Bossiney, Camelford, Grampound

St. Germans, and Wadebridge". His supposition has therefore proved true so far as the above town is concerned at any rate.

Launceston.

 Obv. ANDREWE · SHEARE = The Mercers' Arms. Rev. OF · LANCESTON · 1667 = A. S.

#### CUMBERLAND.

Cockermouth.

21. Obv. IOHN · FALLOWFEILLD · IN · = MERCER Rev. COCKERMOVTH · 1669 = I. S. F. [Pl. VI. 5.]

There are only five tokens recorded in Williamson's work for the whole of Cumberland, and this one makes the sixth.

#### DEVONSHIRE.

Barnstaple.

Obv. ROBERT · COMES = The Mercers' Arms.
 Rev. IN · BARNSTABLE = R. C.

Crediton.

23. Obv. THOMAS · BVCKINGHAM = A yoke. Rev. OF · CREDITON · 1668 = T. E. B.

Dartmouth.

23°. Obv. WILLIAM · TAYLER · IN · = a chandler. Rev. DERTMOVTH · 1658 = W. I. T.

The first token known with the place-name spelled with an E.

North Tawton.

24. Obv. ROGER · GOSTWYKE = A shield of arms. Rev. IN · NORTH · TAWTON = HIS · HALF · PENY.

Okehampton.

 Obv. IOHN·GAYRE = The Grocers' Arms. Rev. OF·OKEHAMPTON = I. G. <sup>1</sup>/<sub>2</sub>.

W (219) describes a farthing of Hester Geyre of this town.

 Obv. THOMAS · IANES · 1667 = A pair of scales between <sup>1</sup>/<sub>2</sub> and D. T. M. I. below.

Rev. IN · OAKHAMPTON = HIS · HALF · PENY.

W (220) describes a farthing of this issuer.

South Molton.

 Obv. IOHN·ANTHONY·1667 = A merchant's mark between I. A.

Rev. FOR · NECESARY · CHAINGE = HIS · HALF · PENY. [Pl. VI. 6.]

The locality of this token is fixed by the farthing of John Anthony of South Molton (W. 292).

Topsham.

28. Obv. BENNONY · SEWARD = 1652, Rev. IN · TAPSHAM = B. S.

## DORSETSHIRE.

Cranborne.

Obv. HENRY · CASTELL = A castle.
 Rev. IN · CRANBORNE · 1666 = H. C.

Dorchester.

Obv. DORCHESTER · 1667 = S. E. and entwined flowers.

Rev. Three quatrefoil leaves and a boot filling the field.

This is a halfpenny of Simon Eyre, for I also have a token similar to the above but with SIMON · EYRE in centre of obverse (W. 66).

UNPUBLISHED SEVENTEENTH-CENTURY TOKENS. 129

Lyme Regis.

31. I have a town-piece similar to W. 92, but reading LYME · R· instead of LYME · RS.

Melcombe Regis.

32. Obv. IOHN · SWETNAM = I. A. S. Rev. OF · MELTON · DRAPER = I. A. S.

W (104) describes a token of this issuer reading MELCOMB · DRAPER. I have a specimen of it.

Poole.

33. Obv. ELIZABETH · MILLEDGE = A hart passant. Rev. IN · POOLE · 1668 = E. M.

W (116) describes a similar token, but dated 1666, and this I also have.

Weymouth.

34. The farthing of Francis Read (W 202) shows the Grocers' Arms correctly—this I have. I also have one of his showing only five cloves above the chevron instead of six.

## Essex.

Bardfield.

35. I have the farthing of Robert Bowyer (W 2), showing sixteen squares on the chequer board, also a variety showing twenty squares on it.

Bocking.

Obv. IOHN · DOBSON · IN = A woolpack.
 Rev. BOCKING · IN · ESSEX = I. E. D.

BUMISM. CHRON., VOL. VII, SERIES V.

Boreham.

37. Obv. IOHN · COOPER = The Weavers' Arms.
Rev. IN · BORHAM · 1668 = HIS · HALF · PENY.
[Pl. VI. 7.]

This is the first token recorded for this place. It is also the only Essex token, so far known, bearing the Weavers' Arms, although many tokens issued by the Essex weavers show the shuttle alone.

Braintree.

38. I have the token of Peeter Pearcee (W 40) which shows the dog sitting. I also have a variety showing the dog standing on his hind legs.

Brentwood.

39. Obv. EDWARD · SHELTON · IN = A scallop shell.

Rev. BRENTWOOD · IN · ESSEX = E. E. S.

[Pl. VI. 9.]

Chelmsford.

Obv. FRANCIS · ARWAKER = Arms : A chevron between three cotton-hanks.

Rev. OF · CHELMSFORD = F. A.

W (50) describes a token of this issuer reading CHELMESFORD, a specimen of which I have.

Danbury.

41. Obv. DANIELL · DOE · 1666 = A fleur-de-lis.

Rev. OF · DANBVRY · IN · ESSEX = D. E. D.

[Pl. VI. 8.]

This is the first token recorded for this place.

Epping.

 Obv. THOMAS · GROVES = The Merchant Taylors' Arms.

Rev. IN · EPPINGE · 1669 = HIS · HALF · PENY. T. M. G. [Pl. VI. 10.]

This is the first known Essex token to bear the Arms of the Merchant Taylors Company.

43. Obv. RICHARD · KINTON · AT · YE = A crown. R. E. K.

Rev. IN · EPPIN · IN · HOVLDER = HIS · HALF · PENY. [Pl. VI. 11.]

Obv. IOHN · TAVERNER = The Grocers' Arms.
 Rev. AT · EPING · MARSER = I, I, T.

Hedingham Castle.

45. Obv. THOMAS · HVES · 1657 = A castle. Rev. HEADINGHAM · CASTLE = T. H.

Moulsham.

Obv. CHARLES · CLARKE = The Dyers' Arms.
 Rev. OF · MOVSHAM = C. M. C.

This token is omitted in Williamson but is described in the first edition of Boyne under Marsham, Norfolk.

Orsett.

47. Obv. WILL · CLARKE = The Grocers' Arms.

Rev. IN · ORSETT · 1659 = W. P. C. [Pl. VI. 14.]

This is the first token recorded for this place, and was exhibited by me before the R. N. Society on May 17, 1923. It is of special interest as it proves the token reading WILLIAM · CLARKE · IN · OZED · 1659 (W 284) is of Orsett and not of St. Osyth, the place to which it has always hitherto been assigned.

Rochford.

48. Obv. EDWARD · BAYES · OF = An estoile. Rev. ROCHFORD · 1657 = E. A. B.

Romford.

49. Obv. Henry | Dawes · in | Rumford | 1668 | (in four lines).
Rev. HIS · HALF · PENY = A lion rampant.
[Pl. VI. 12.]

Southminster.

 Obv. IOHN · COOPER · 1664 = The King's Head crowned.

Rev.  $IN \cdot SOVTH \cdot MINSTER = I$ . A. C.

51. Obv. WILLIAM · LONE · OF = FOR · NECESS · ARY · CHANGE.

Rev. SOVTHMINSTER · IN · ESSIX = W. A. L. [Pl. VI. 13.]

W (290) gives a farthing of this issuer, which I have. The above token is of a halfpenny size.

Thorpe.

52. I have the farthing of George Nicholson (W 321) and also one without the crown in centre of the reverse.

## GLOUCESTERSHIRE.

Moreton-in-the-Marsh.

53. Obv. ROWLAND · FREEMAN = The Grocers' Arms, Rev. IN · MORTON · HIN · MARSH = R. E. F.

W (132) describes a different farthing of this issuer.

Northleach.

54. Obv. WILLIAM · STONE · OF = A crown.
Rev. NORTH · LEECH · 1669 = HIS · HALF · PENY.

W (144) describes a somewhat similar token, but octagonal; this I have. The above token is circular.

Tetbury.

55. I have a variety of the Town-piece (W 163) reading BVRROVGE instead of BVRROVGH.

#### HAMPSHIRE.

Petersfield.

56. Obv. IOHN·IONES·OF = A sugar loaf. Rev. PETERSFEILD = I. I.

Portsmouth.

- 57. Obv. IAMES · AVSTEN = The Bakers' Arms. Rev. IN · PORTSMOVTH = I. A.
- 57°. Ohv. THOMAS · CARTER · IN = a hat. Rev. PORTESMOVTH · 1664 = T. E. C.

W (139) describes an undated farthing of Alexander Carter, a baker of that town.

- Obv. IOHN · EASTMAN · IN = Three pine-apples.
   Rev. PORTSMOVTH · 1667 = I. M. E.
- Obv. IEANE · GARNHAM = A pelican in its piety.
   Rev. IN · PORTSMOVTH = I. G.

I am indebted to Mr. Luther Clements for the complete reading of this token, his specimen being finer than mine.

59a. Obv. RICHARD · LARDNER = R. L. Rev. IN · PORTSMOVTH = 1655.

#### HEREFORDSHIRE.

Ledbury.

60. Obv. IOBE · MANINGS · OF = A bell. Rev. LEDBVRY · 1670 = HIS · HALF · PENY · I. M.

Leominster.

Obv. AT · LEOMINSTER · 1659 = The Drapers' Arms.
 Rev. IN . HEREFORDSHIER = M. I. P.

Ross.

62. Obv. FRANCIS · HARRIS = A double-headed eagle displayed.
Rev. OF · ROSSE · 1670 = HIS · HALF · PENY · F. H.
[Pl. VI. 15.]

#### HERTFORDSHIRE.

Baldock.

63. Obv. WILL · KNIGHT · AT ·  $Y^E = A$  talbot. Rev. TALBOT · IN · BALDOCK = W. E. K.

Batchworth Bridge.

64. Obv. IOHN · WEADEN · 1667 = HIS · HALFE · PENY.

Rev. AT · BATCHWORT · BRIDG = A bridge.

This is the first token recorded for this place. Mr. Longman (who possesses a finer specimen than mine) kindly referred me to a description of the token in the Numismatic Chronicle, Series III, Vol. XIII (1893), p. 282, by Sir John Evans, who states his specimen was found in Col. Hanbury Barclay's garden at Great Berkhamsted, Herts. The place of issue is a village near Rickmansworth, and about 1833 a new bridge of iron was erected there over the river, the old wooden

bridge (probably the one shown on the token) being dilapidated and dangerous. Entries relating to John and other members of the Weedon family occur in the Rickmansworth parish registers.

Much Hadham.

65. Obv. IOHN · COCKETT · 1668 = I. C. in monogram.
Rev. AT·MVCH · HADHAM = his halfe Penny. Three cloves.

A token of Margery Cockett of Much Hadham, 1666, (also unknown to Williamson), was in the Collection presented to Queens' College, Cambridge, by Mr. Barnes Williams, in 1901.

St. Albans.

66. Obv. THOMAS · HVDGSON · IN · S<sup>T</sup> = T. S. H.

Rev. ALBANS · MEALEMAN = HIS · HALF · PENY.

[Pl. VI. 16.]

## HUNTINGDONSHIRE

Hemingford Grey.

67. Obv. RICHARD · BARINGER = Three shuttles. Rev. AT · H . . . . . . . . GRAY = R. B.

This place is not mentioned in Williamson, and it is not certain the token was issued there, a portion of the name being destroyed by corrosion, but I can find no other place commencing with H having GRAY as an affix.

Spaldwick.

68. Obv. HENRY · BVLL = 1657.

Rev. OF · SPALDWICK = H. B. conjoined.

This is the first token recorded for this place.

#### KENT.

Cowden.

Obv. IOHN · OSBVRNE · OF = 1658.
 Rev. COWDEANE · MERCER = I. O.

#### LANCASHIRE.

Rochdale.

Obv. SAMVEL · WILD = A dog on a cord.
 Rev. IN · RACHDELL · 1652 = S. W.

#### LEICESTERSHIRE.

Hinckley.

71. Obv. IANE · ELTON · 1667 = The Apothecaries' Arms.

Rev. IN · HINCKLEY · 1667 = HER · HALF · PENY.

[Pl. VI. 17.]

Leicester.

Obv. NICHOLAS · SMITH · BREWER = A barrel.
 Rev. IN · LICESTER · 1672 = 1<sup>D</sup> between four cinquefoils.
 [P1, VII, 1.]

This is the first penny token known for the county. W (51) describes a halfpenny of this issuer.

Loughborough.

73. Obv. ROB · BONOMYS · IN · LOVGHBROVGH = A bull's head.

Rev. HIS · HALFE · PENNY · 1664 = Three barrels.

74. Obv. HENRY · SOMERVILE = H. M. S. Rev. IN · LOVGHBOROVGH = A castle.

W (66) describes a halfpenny of this issuer.

#### LINCOLNSHIRE.

Brigg.

 Obv. THOMAS · WATERLAND = The Tallowchandlers' Arms.

Rev. IN · BRIGG · 1668 = HIS · HALFE · PENY.
[Pl. VII. 2.]

Horbling.

76. Obv. ROGER · HALES · 1669 = HIS · HALF · PENY.

Rev. IN · HORBLINGE = The Mercers' Arms.

[Pl. VII. 3.]

This place is not mentioned by Williamson. I find in the parish register:—

No further entries occur until 1835, when a Sarah Hales was married in this church.

#### LONDON.

Air Street.

77. Obv. RICHARD · FVRNIS · AT ·  $Y^E = An$  angel. Rev. ANGELL · IN · ARE · STREET = R. M. F.

This street is not mentioned by Williamson, and this is the first token known for it.

Aldermanbury.

78. Obv. IOHN · BERKET · AT · THE = Arms (a cross engrailed between four saltires).
Rev. IN · ALDERMANBURY · 1669 = HIS · HALF ·

PENY.

79. Obv. LOWE · HARTLEY · AT · YE SIGNE · OF · YE =
An alderman.

Rev. ALDERMAN · IN · ALDERMANBURY = LON-DON · 1<sup>D</sup> 1670. 80. Obv. IOHN·KAYE·1666 = HIS·HALF·PENY.

Rev. IN·ALLMANBVRY = The Mercers' Arms.

I. M. K.

Aldersgate Street.

- Obv. DANIELL · BAKER · 1667 = A hen and chicks.
   Rev. IN · ALDERSGATE · STREET = D. R. B.
- 82. Obv. EDWARD · BAKER · AT · THE = St. George and Dragon.

Rev. IN · ALDERSGAT · STREET · 1668 = HIS · HALFE · PENY.

Aldgate Within.

Obv. IO · BRETT · AT · MITER = A mitre.
 Rev. TAVERN · WITHIN · ALGAT = 1661.

W (77) describes a token issued at this sign by H. S. N. in 1657.

84. Obv. CHEESEMONGER · CORNER = A bear chained.

Rev. SHOPE · WITHIN · ALGATE = T. A. F.

Basing Lane.

85. Obv. AT · THE · WHIT · HORS = A horse. Rev. IN · BASEN · LANE · 1664 = W. P.

W (148) describes a token of this house dated 1652 and with initials I. G. This I also have.

Bedfordbury.

86. Obv. IANE · SWAINE · 1668 = A stick of three candles and a crescent moon.

Rev. IN · BEDFORDBVRY = I. S.

In 1663 Thomas West issued a token from this house (W 155).

Beech Lane.

87. Obv. IOHN · CLARKE · AT · THE = HIS · HALFE · PENY. I. C. C.

Rev. IN · BEACH · LANE · 1669 = A roll of tobacco between two tobacco leaves.

Bethlehem.

88. Obv.  $IOHN \cdot CLAPTON \cdot IN = A$  hand holding a coffeepot over a cup.

Rev. BETHELEM · 1669 = HIS · HALF · PENY.
[Pl. VII. 4.]

W (182) describes a penny token of this issuer, which I also have.

Billingsgate.

89. Obv. VALENTINE · HAYWARD = V. I. H.

Rev. VPON · BILLINGSGATE · 57 = A mermaid and three barrels.

This token proves that W (200) was also issued by him.

Bishopsgate Within.

90. Obv. AT ·THE · 3 · SQVRELS · IN = Three squirrels. Rev. BISHOPSGATE · STREET = W. E. C.

91. Obv. THE · FLOWERPOT · WITH = A vase of flowers. Rev. IN · BISHOPSGATE = I. D. S.

W (222) describes a token of this house issued by John Baker, and another one (256) issued by L. M. T.

Bishopsgate Without.

92. Obv. MORELAND · WITHOVT = G. S. M. Rev. BISHOPS · GATE = A cock.

93. Obv. THOMAS · PORRAMOR = HIS · HALF · PENY. Rev. WITHOUT · BISHOPSGATE = T. M. P.

Blackfriars.

 Obv. IONATHAN · IENINGS · IN = The Goldsmiths' Arms,

Rev. BLACKFRIERS · 1659 = I. M. I.

Blackmore Street.

95. Obv. EDWARD · LOVELL · AT · YE 2 BLAK = Two negroes holding a dart between them.

Rev. IN · BLACKAMOR<sup>E</sup> · STR · TOBAC<sup>CON</sup> = HIS · HALFE · PENY, [Pl. VII. 5.]

This street is not mentioned by Williamson; it was a turning off Drury Lane.

Bloomsbury.

96. Obv. THOMAS · MYERS · 1663 = A man standing on a crescent.

Rev. IN · BLOOMESBVRY = T. M. M.

The well-known sign of the man in the moon.

Bow Lane.

97. Obv. HENRY · FORSTER · AT ·  $Y^E = A$  crooked billet and H. E. F.

Rev. DARK · HOVSE · IN · BOW · LANE = HIS · HALF · PENY.

98. Obv. THE · MERMAYD · TAVERN = A mermaid.

Rev. IN · BOWE · LANE · 1652 = I. A. P.

W (376) describes a similar token, but with initials I. A. D., and this token I have seen.

Bow Street.

99. Obv. ROB · GOFFE · IN · BOWE = A bunch of grapes. Rev. STR<sup>T</sup> · WESTMINSTER = R. A. G. Bread Street.

100. Obv. IOHN·VELEN·AT·REDD = A cross. Rev. ON·BREADSTREET·HIL = I. E. V.

Broad Street.

101. Obv. AT · THE · WHITE · HORSE = A horse with a small R above it.

Rev. IN · BROAD · STREETE = E. A. B. 1670.

W (429) describes a similar token, but dated 1658, of which I have a specimen. The small R signifies the die was engraved by Thomas Rawlins.

102. Obv. WILL · MALLABA ·  $A^{T}$  · HALF = A dove with an olive-branch. W. M. below.

Rev. MOON  $\cdot$  IN  $\cdot$  BROAD  $\cdot$  STREE = A stick of candles and a crescent moon.

The dove with olive branch forms part of the Tallow Chandlers' Arms.

Budge Row.

103. Obv. AT · THE · SHIPE · TAVERNE = A ship.

Rev. IN · BVG · ROW · 1649 = I. M. C. | P1. VII. 11. ]

Capel Lane.

104. Obv. S.DIONY.SIVS = A head with a mitre on it. Rev. CAPEL.LANE.1659 = A communion chalice and wafer.

This lane is not mentioned by Williamson. The token is probably not a trader's, but a communion one. I consider a London locality for it doubtful.

Carter Lane.

105. Obv. AT YE · LEGG · AD · SPVR = A leg with a spur between two stars.

Rev. IN · CARTER · LANE = M. S. A.

Castle Yard.

106. Obv. IOHN · COX · AT · BLEW · 1666 = An anchor between I. M. C.

Rev. IN · CASTLE · YARD · NEER · HOLBORN = HIS · HALF · PENY.

I have two specimens of this token, one struck in copper and one in brass.

Cateaton Street.

107. Obv. THOMAS · HYATT · IN · = A goat.
Rev. CATETON · STREET . . . . . = T. I. H.

108. Obv. THO · SMITH · IN = The Prince of Wales' feathers.

Rev. CATEATEN · STREET = T. E. S.

Cheapside.

109. Obv. ANTHONY · CLARK · AT · Y<sup>E</sup> = A star, Rev. STAR · IN · CHEAPSYDE = A. A. C.

The banns for the marriage of Anthony Clarke and Anne Cole were published June 6, 13, and 20, 1657, at the Church of St. Vedast, Foster Lane.

110. Obv. RICHARD · HILLER = A bird standing on the sun.

Rev. IN · CHEAPESIDE = R. H.

Checker Alley.

Obv. RICH · MORSON · IN · CHECKER · ALY = A chequer board.

Rev. IN · W · CROS · STREET · PINMAKER = HIS · HALF · PENY · 1669. [Pl. VII. 6.]

Clerkenwell.

112. Obv. IOHN · COWICK · AT · THE = An archer and a crescent moon.

Rev. IN · CLARKENWELL · FEILDES = HIS · HALFE · PENY.

Cloth Fair.

113. Obv. THOMAS · CANNINGS · AT ·  $Y^E = A$  man firing a cannon.

Rev. IN · CLOATH · FAIRE · 1667 = HIS · HALFE · PENNY. T. M. C.

114. Obv. WILLIAM · KEAMES · IN · = A harrow.

Rev. CLOATH · FAYRE · 1663 = W. C. K.

W (683) describes a halfpenny of this house issued by William How in 1667.

Coleman Street.

115. Obv. IOHN · WILLETT · AGAINST · LONDON = A cock in a hoop.

Rev. WALL · IN | COLEMAN | STREET | HIS · HALF | PENNY | 1669 (in six lines).

[Pl. VI. 7.]

This token is square shaped, and is the second token known of that shape for the whole of London.

I learn from the registers of Allhallows in London Wall that John Willett married Grace Wilks in that church on January 2, 1665, and so we know from his token that he survived both the plague and the great fire of London, although the fire raged along Coleman Street to quite close to London Wall, probably to within a couple of houses of the issuer, when it turned suddenly westward.

116. Obv. IOHN · SCVDAMOR · AT · THE = The King's Head crowned.

Rev. ONE · COLLIDGE · HILL · 1668 = HIS · HALFE · PENY. I. K. S. [Pl. VII. 8.]

Cornhill.

117. Obv. THE · CASTLE · IN = A castle. Rev. CORNHILL · 1657 = R. E. K.

W (721 and 722) are tokens of this house, issued by a former proprietor in 1651.

Covent Garden.

118. Obv. IOHN | MINCHIN | BAKER (in three lines).

Rev. IN · COVENT · GARDEN · 1652 = An angel.

W (742) describes a farthing of this issuer dated 1664.

Cripplegate.

119. Obv. THOMAS · ASHBY · 1666 = A crown.

Rev. WITHIN · CRIPLE · GATE = HIS · HALF · PENY.

W (788) describes a similar token, but the name is spelt ASHLEY, and I have had a specimen of it.

Custom House.

120. Obv. IO · LARGE · AT · GOLDEN · ANCOR = An anchor.

Rev. OVER · AGAINST · CVSTEM · HOVS = I. B. L.

Drury Lane.

121. Obv. MARY · DENNIS · 1664 = A bear chained.

Rev. IN · DRVRY · LANE = A flower between M. D.

[Pl. VII. 9.]

This token is of halfpenny size. Perhaps she married John Pearce (see below).

L

- 122. Obv. IAMES · HVTTEN · IN · = A crooked billet. Rev. DREWRY · LANE · 1666 = I. E. H.
- 123. Obv. IOHN · PEARCE · AT · YE · BLACK · BEAR = A bear chained. Rev. TAVERNE · IN · DRVERY · LANE = HIS · HALFE · PENEY. I. M. P.

#### East Smithfield.

124. Obv. IONATHAN · GREENE · AT = St. George and the Dragon. Rev. IN · EAST · SMITHFEILD = HIS · HALFE · PENNY · 1669.

- 125. Obv. ARTHER · HVNT · 1666 = A roll of tobacco. Rev. IN · EAST · SMITHFEILD = HIS · HALF · PENY.
- 126. Obv. AT. THE. FLVSHING · IN = Ships in a harbour. Rev. EST · SMITHFILD · 1651 = W. E. T.

#### Exchange.

127. Obv. AT · THE · GLOBE · TAVERN = A Globe. Rev. BEHIND . THE . EXCHENG = W. E.

#### Fenchurch Street.

128. Obv. THE · FOVNTIN · TAVERN = A fountain. Rev. IN · FANCHVRCH · STREETE = W. A. K.

W (989) describes a similar token, but reading FOVNTANE: I have a specimen of it also.

## Fetter Lane.

129. Obv. THOMAS · DVTCH · 1668 = A dog with a ball. Rev. IN · FETTER · LANE = HIS · HALF · PENY. T. S. D.

W (1007) describes a farthing by this issuer. NUMISM. CHRON., VOL. VII, SERIES V.

130. Obv. THE · WHIT · CROS · TAVERN = A St. Andrew's Cross.

Rev. IN · FETTER · LANE · = T. K. F.

W (1025) describes a token of this house issued by Clement Willcocks in 1666.

Field Lane.

131. Obv. AT · THE · GAY · OF · WARICK = Guy, Earl of Warwick, holding a spear with a boar's head on it.

Rev. IN · FILD · LANE · 1653 = R. E. C.

W (1027) describes a token issued at this house by Peter Beckford.

Fleet Street.

132. Obv. AT · THE · RACKET = A racquet.

Rev. IN · FLEET · STREET = W. A. S.

[Pl. VII. 12.]

Racquet Court, Fleet Street, still exists.

133. Obv. THE · BVLL · HEAD · AT · DVNSTONS = A bull's head.

Rev.  $CHVRCH \cdot IN \cdot FLEET \cdot STREET = H. M. Y.$ 

W (1068 and 1069) describes tokens issued at this house by John Bryan in 1656 and 1667.

Fore Street.

134. Obv. ISRAEL · HOBS · AT · YE · GOV = A lion rampant.

Rev. DEN LYON IN FOR STRET = HIS HALF. PENY. I. M. H.

135. Obv.  $IOH \cdot READING \cdot MEALMAN = A$  wheatsheaf. Rev.  $IN \cdot FOR \cdot STREAT \cdot NEXT \cdot Y^{E} \cdot SHIP = I$ . R. Golden Lane.

136. Obv. ADAM · SMITH · AT · THE = A globe. Rev. IN GOLDEN · LANE · 1658 = A. R. S.

Goswell Street.

137. Obv. IACOB · WEIGHT · LETHER = A shoe. I.S.W. Rev. CVTTER · IN · GOSWELL · STRET = HIS · HALF · PENY.

Gracechurch Street.

138. Obv. MARTIN · VERNON · IN = A plough. Rev. GRACHVRCH · STREET = M. A. V. 57.

David Urry issued a halfpenny at the Plough in Gratious Street (W 1207).

Grays Inn Lane.

139. Obv. FRANCIS · BRAKES · IN = The Mercers' Arms. Rev. GRAYES · IN · LANE · 58 = F. M. B.

Great Eastcheap.

140. Obv. THOMAS · BVRROWS · AT · THE = A bear chained.

Rev. IN · GREAT · EASTCHEAP = HIS · HALFE · PENY.

Green Yard.

141. Obv. EXCELLENT · COFFIE = A coffee-pot and cup. Rev. IN | GRENE | YARD · LE | ADENH | ALL (in five lines).

Gutter Lane.

142. Obv. RICHARD · WITE · AT · THE = The Mercers' Arms.

Rev. IN · GVTTER · LANE = R. M. W.

Hamons Quay.

143. Obv. AT · THE · HEN · AND · CHICKINS = A hen with chicks.

Rev. AT · HAMONS · KEY · 1659 = I, R. S. IOHN · SELL.

W (1311) describes a different token of this issuer, also (1309) a token of Elizabeth Fellsted, dated 1667 and (1310), a token of Dorothy Sell dated 1668, all from the same house.

Hog Lane.

144. Obv. AT · Y<sup>E</sup> · 3 · COVLTES · ATT = Three colts.
Rev. HOGGE · LANE · END · 57 = M. B. G.

Holborn.

145. Obv. CHRISTOPHER · CHAPEL = The Devil in Stocks.

Rev. ON · HOLBOVRNE · HILL = C. D. C.

This sign is not mentioned by Larwood and Hotten in their *History of Signboards*—neither have I met with it on any other token.

146. Obv. THOMAS · MASON · AT = Three tuns. Rev. HOLBORNE · BRIDGE = T. S. M.

W (1418) describes a token issued at this house by T.M. H.

147. Obv. GEORGE · PVLLMAN · AT ·  $Y^E$  · GOLDEN = An anchor between G. E. P.

Rev. ANKER · IN · HIGH · HOLBORNE = HIS · HALFE · PENY · 1666.

William Sheers issued a token at the Anchor in Holborn in 1656 (W 1461). Houndsditch.

148. Obv. THOMAS · RAYNIE · IN = A sugar loaf.

Rev. HOVNSDICH · CONFECTIONER = HIS · HALF · PENY, T. A. R.

Jamaica House.

149. Obv. W · E · P. At the Jamaicoe House (in five lines). Rev. His Halfe peny 1668. A man sitting on a barrel and holding a bunch of grapes. [Pl. VII. 13.]

This token is octagonal.

Jerusalem Alley.

150. Obv. LAVRANCE · CASH · IN · IERVSALEM = A boar's head. 1667.

Rev. ALLY · IN · GRACECHVRCH · STREET = HIS·HALFE·PENNY, L. A. C.

Jewin Street.

 Obv. GEORGE · LONGMAN · IN = G. A. L. between entwined flowers.

Rev. IEWEN · STREET · SILKMAN = HIS · HALFE · PENNY.

King Street.

152. Obv. WILLIAM · NETTLETON · IN · = A bull's head.
Rev. KING · STREET · WESTMINSTER = W. K. N.

W (1615) gives a partial description of this token from a poor specimen.

Leadenhall Street.

153. Obv. ANTHONY · CLOVFER = 1671.

Rev. IN · LEADEN · HALL · STREET = POVL · TERER.

154. Obv. AT · THE · BVRD · IN · HAND = N. A. M. Rev. IN · LEADENHALL · STRET = A hand holding a bird.

155. Obv. ALLICE · ONLEEY · AT · THE · BVLLS = A bull's head.

Rev.  $\text{HEAD} \cdot \text{IN} \cdot \text{LEADENHALL} \cdot \text{STREET} = \text{HER}$ 1<sup>D</sup> 1668.

She was buried in the cloister of St. Peter's, Cornhill, (in which parish the Bull's Head was situated) on December 1, 1670. Her husband, George Onely, vintner, was buried there, January 27, 1656; and her servant Anne Rancez was buried in the churchyard on December 24, 1667.

156. Obv. IOHN · OWEN · AT · YE OLD KINGS = The King's Head.

Rev.  $\text{HEAD} \cdot \text{IN} \cdot \text{LEADENHAL} \cdot \text{STRET} = \text{HIS} \cdot \text{HALF} \cdot \text{PENY}$ , I. I. O.

157. Obv. IN.THE.HOOPE.TAVERN = A hoop. Rev. LEADENHALL.STREET = T. E. P.

158. Obv. IOHN · STVRT · MEALMAN = A stag and a fleur-de-lis.

Rev. AT · LEADEN · HALL · 1651 = I. F. S.

159. Obv. MICHAEL · WELCH · IN · LEADEN = A hart lodged.

 $Rev. \text{ HAL} \cdot \text{STREET} \cdot \text{BY} \cdot \text{CREED} \cdot \text{CHVRCH} = \text{HIS} \cdot \text{HALF} \cdot \text{PENY}. M. W.$ 

Lillypot Lane.

160. Obv. WILL · COOPER · IN · = A sugar loaf. Rev. LILLYPOT · LANE · 1656 = W. A. C.

Lime Street.

161. Obv. AT · Y · IACK · OF · NEWBVY = Jack of Newbury.

Rev. IN · LIME · STREETE · 1651 = V. I. P.

Little Britain.

162. Obv. HESTER · MICHELL = A bunch of grapes. Rev. LITTLE · BRITTAINE = H. M. 1656.

London Bridge.

163. Obv. NICHOLAS · HARRISON · AT · BLAK = A bull.

Rev. ON · LONDON · BRIDG · 1666 = HIS · HALF · PENY. [Pl. VII. 10.]

London Wall.

164. Obv. OLIVER · ALIN · AT · YE · SLEDG = A sledge drawn by two horses passing a building.

Rev. AT · LONDON · WALE = O. I. A.

James, the son of Oliver Allen and Jane his wife was baptized on February 28, 1663, at Allhallows, London Wall. The sign of the Sledge is not mentioned by Larwood. The building shown on the token was probably the Bethlehem Hospital.

165. Obv. RICHARD · WALLTER · AT · LONDON = The Mercers' Arms.

Rev. WALL · AGAINST · MOORGATE = The Clothworkers' Arms.

Long Acre.

166. Obv. THOMAS · BARNES · OYLEMAN = The Salters' Arms.

Rev. AGAINST · LONG · AKER · END · 1666 = HIS · HALFE · PENNY. T. E. B.

W (1781) describes a halfpenny of John Barnes of Long Acre—a wine cooper.

167. Obv. ANDREW · BRODHVRST · 1667 = HIS · HALFE · PENNY.

Rev. MILLINER · IN · LONG · AKER = A. M. B.

168. Obv. IOHN · DICKIT · AT · THE · 1667 = A maiden's head.

Rev. MAIDENHEAD · IN · LONG · AKER = HIS · HALFE · PENNY. I. M. D.

169. Obv. RICHARD · HARRISON · AT = A globe on a stand.

Rev. THE · GLOAB · IN · LONG · ACRE = R. A. H.

W (1778) describes a halfpenny issued at the Globe Tavern in Long Acre, by James Aylard and another (1787) by Will. Edmonds.

170. Obv. WILL · MERREDETH · AT ·  $Y^E = A$  peacock in its pride.

Rev. IN · LONGE · AKER · 1664 = W. E. M.

171. Obv. ROBERT · PARSONS · IN · LONG · AKER = 1666.

Rev. MEALEMAN · HIS · HALF · PENY = R. H. P. between entwined flowers.

Long Lane.

172. Obv. THOMAS · MORTON · AT = A grasshopper.

Rev. THE · GRASHOPER · IN · LONG · LANE =
T. M. M.

W (1825) describes a halfpenny of this issuer at the same sign. This sign is not infrequent and was usually adopted as a compliment to Sir Thomas Gresham, founder of the Royal Exchange, who was a Mercer, and whose family crest was a grasshopper.

Lothbury.

173. Obv. WILL · CARTER · COOKE · AT = THE · MARTI · NEECO.

Rev. IN · LOTHBURY ·  $1669 = HIS \cdot HALF \cdot PENY$ . W. M. C.

This sign is not mentioned by Larwood.

Maiden Lane.

174. Obv. Io · SEDGWICK · AT · YE · SIDER · HOVSE = I. M. S. and arms: on a cross five bells.

Rev. IN · MAYDEN · LAINE · COVEN · GARDEN = HIS · HALFE · PENY. 1667.

These arms are those of the Sedgwick family. I recently noted them carved on a tomb in Chingford old churchyard, Essex.

Mark Lane.

175. Obv. DANIELL · MILES · IN = HIS · HALF · PENY.

Rev. MARKE · LANE · 1666 = A coffee-pot.

Middle Row (Holborn).

176. Obv. ISAAC · BAXTER · AT · YE · ROYAL = A ship. I. S. B.

Rev. CEACH · IN · MIDLE · ROW = HIS · HALFE · PENY.

This sign is not mentioned by Larwood, but W (1442) mentions a house of this name in Holborn.

Milk Street.

177. Obv. ROB · BREARELEY = A ship. Rev. IN · MILK · STREETE = R. A. B.

178. Obv. ISACK · HODGKIN = The sun in splendour. Rev. IN · MILK · STREETE = I. E. H.

This man issued a halfpenny at the Sun Tavern, without Cripplegate, but no initials on it (W 797). My token above enables us to assign the farthing issued by I. E. H. at the Sun Tavern, Cripplegate. (W 795) to him also, with certainty.

Minories.

179. Obv. HENRY · COX · = A horse.

Rev. IN · YE · MINORES = H. A. C.

The family of Cox evidently flourished in the Minories, Williamson describing tokens of George and Thomas Cox there.

180. Obv. MARY · MINCHING = A woman spinning.

Rev. IN · THE · MINORIES = M. I. M. 1671.

A large penny token.

[Pl. VII. 14.]

Monmouth Street.

181. Obv. RICH · FRANCKES · MEAL · MAN = HIS · HALF · PENY. R. A. F.

Rev. AT · Y<sup>E</sup> · IN · MONMOVTH · STREET = A wheatsheaf between 16-69.

This street is not mentioned by Williamson. There were three streets of the name, one in Shadwell, one in Spitalfields, and one in St. Giles.

Moorfields.

182. Obv. EDWA · BEECH · AT · Y · DUNKIRK = A castle.

Rev. NEW · GATE · MOREFEILD = E. A. B.

This sign is not mentioned by Larwood.

188. Obv. EDWARD · GRANTE · NEARE ·  $Y^E = A$  roll of tobacco.

Rev. BEARE · IN · MORE · FEILDS = HIS · HALFE · PENY.

W (1960) describes a similar token but with surname GRAVEL. I have never seen that token, and think it was probably a misreading of the above.

184. Obv. R·W·AT·THE·COK = A cock.
Rev. G·C·IN·MORFILDES = A chained bear.

Evidently issued for two different houses. W (1956) describes a token with the above reverse, but a different obverse. I have a specimen of it.

Moorgate.

185. Obv. WILL · PLIMPTON · HIS · HALF · PENY = Crossed keys.

Rev. WITHIN · MOREGATE · 1669 = A cross between W. P. and M. P.

The present Cross Keys House, Moorgate, is doubtless erected on the site of the above. Cross Keys Court, London Wall, leads to the rear of it.

W. GILBERT.

(To be continued.)

# IMITATIONS DE LA DRACHME DE VARAH-RAN V FRAPPÉE À MERV.

[V. PLANCHE VIII.]

De ma description des monnaies incertaines de la Sogdiane et contrées voisines, parue dans la Revue Numismatique en 1925 et 1926, j'ai détaché pour les lecteurs du Numismatic Chronicle ce petit mémoire qui forme un tout et à propos duquel j'ai à présenter quelques solutions nouvelles. Il s'agit des Imitations de la drachme de Varahran V frappée à Merv.

On exhume fréquemment du sol de la Transoxiane, anciens Khanats de Bokhara et de Khokand, des monnaies d'imitation sassanide présentant au droit une effigie couronnée d'une tiare dentelée, et au revers un pyrée avec férouer, accosté de deux assistants; les unes ont au droit une légende arabe; les autres, plus fréquentes, particulièrement à Bokhara, ont des légendes bilingues; l'une derrière la tête du roi est en arabe, ou en pehlvi plus ou moins défiguré, l'autre devant est écrite dans une écriture spéciale d'apparence araméenne dont on ne connaît pas d'autres spécimens et qui est restée longtemps lettre morte.

Fraehn, l'éminent numismate russe qui avait fait connaître en 1819 1 une monnaie de la première caté-

<sup>&</sup>lt;sup>1</sup> Fraehn, Novae symbolae ad rem numariam Mohammedanorum, 1819, No. 14, Pl. II.

gorie, à légende arabe, et, en 1832,<sup>2</sup> deux variétés des monnaies bilingues, n'a pas tenté d'interpréter les légendes araméennes, et d'autres orientalistes tels que Stickel<sup>3</sup> et Thomas <sup>4</sup> n'ont pas été plus heureux.

Ce n'est qu'en 1876 que, grâce à des indications fournies par des manuscrits nouvellement parvenus en Russie, Pierre Lerch a pu déchiffrer la légende araméenne et attribuer en toute certitude les monnaies bilingues aux souverains de Bokhara antérieurs à la conquête arabe et à ceux qui dans la suite l'ont gouverné au nom des califes de Bagdad ou des émirs samanides. Dans une communication faite en 1876 au congrès des orientalistes à St.-Pétersbourg, Lerch a résumé le résultat de ses investigations et établi, en s'appuyant sur les manuscrits de l'histoire de Bokhara de Narchakhi, que la légende en caractères inconnus qu'il appelle Sogdiens était à lire BUKhAR KhUDDAT.

Depuis, l'histoire de Bokhara de Narchakhi a été publiée par Ch. Schefer, d'après deux manuscrits de la Bibliothèque Nationale. En raison de l'importance fondamentale de ce texte que nous aurons fréquemment l'occasion de citer, nous donnerons quelques précisions au sujet de sa composition.

L'histoire de Bokhara تاريخ بخارا a été rédigée primi-

Fraehn, Die Münzen der Chane von Ulus-Dschutschi's, 1832, Pl. XVI.

Stickel, Das grossherzoglich orientalische M\u00e4nzcabinet zu Jena, 1870.

<sup>4</sup> Thomas, Prinsep's Essays on 'Indian Antiquities', 1858, vol. ii, p. 116.

Publications de l'École des langues orientales vivantes: Description topographique et historique de Boukhara, par Mohammed Narchakhy. Texte persan, publié par Charles Schefer, Paris 1892.

tivement par Abou Bekr Mohammed ibn Djaf'ar, originaire de Narchakh, bourg du district de Bokhara: achevée en 332 H (943), elle fut dédiée par lui à l'émir samanide Abou Mohammed Nouh, fils de Nasr. L'usage de la langue arabe étant tombé en désuétude dans la Transoxiane, Abou Nasr Ahmed, né à Qoba, ville de la province de Ferghanah, fit une traduction en persan de l'histoire de Narchakhi, en l'abrégeant quelque peu. Sa traduction parut en 522 H (1128); plus tard, elle fut encore abrégée en 574 H (1178), par Mohammed ibn Omar ibn Zofer. Ce dernier, tout en abrégeant l'ouvrage de Narchakhi, y a inséré quelques extraits d'un ouvrage intitulé "trésor des sciences" خزائن العلوم, dû à la plume d'Abou'l Hassan Abd-er-rahman, fils de Mohammed et natif de Nichabour.

Ainsi, dans l'ouvragei ntitulé "Histoire de Bokhara de Narchakhi" nous trouvons en langue persane des indications de sources différentes, les unes se rapportant à la rédaction originale en 332, les autres ajoutées par les traducteurs en 522 et 574, quelquefois d'après le "trésor des sciences" de Nichaboury dont la date est inconnue. C'est grâce à ces additions faites au texte primitif, que Lerch a pu suivre le monnayage des Bukhar-Khuddat 6 de Bokhara jusqu'à une époque très postérieure à la conquête arabe.

L'histoire de Narchakhi a consacré un chapitre entier au monnayage de Bokhara; il est intitulé 7 "histoire de la frappe des dirhems et de l'argent à Bokhara".

7 Texte de Schefer, p. 34.

<sup>4</sup> Je conserve ici la lecture de Lerch, bien que, pour des raisons que je développerai, je propose de la modifier.

Il est également fait mention de ce monnayage dans un autre chapitre.\*

Nous donnons de ces textes, auxquels nous aurons à recourir fréquemment, une traduction littérale que M. Blochet a eu l'obligeance de faire à notre intention:

Page 6: Sous le Khalifat d'Abou-bekr on frappa à Bokhara des pièces d'argent pur, avant cette époque il n'y avait pas de

monnavage à Bokhara.

Page 34 : La première personne qui frappa de l'argent à Bokhara fut un nommé Kānā (UV) boukhar Khoudāt (ایخا, خدات), il regna à Bokhara pendant 30 ans. Il y avait a Bokhara des marchands qui vendaient du coton et du blé et qui l'avertirent qu'on frappait de l'argent dans les autres pays. Il ordonna alors que l'on frappàt de l'argent à Bokhara avec de l'argent pur et il commanda qu'on gravat son portrait avec la couronne; cela se passait du temps du Khalifat du Commandeur des Croyants Abou-bekr es-sadiq et cela dura jusqu'à l'époque d'Haroun-er-rechid, alors que Ghitrif, fils d'Ata (اغطريف بن عطا), devint émir du Khoraçan, au mois de Ramadhan de l'année 185. Ce Ghitrif était le frère de la mère d'Haroun-er-rechid, qui se nommait Kheizouran et qui était fille d'Ata et originaire du Yemen, d'une ville appelée Dierch. Cette femme avait été emmenée prisonnière de son pays et conduite dans le Tabaristan et de là chez le Khalife Mahdi qui en eut deux fils, l'un Mousa-el hadi, et le second Haroun-er-rechid. Quand Kheizouran fut ainsi arrivée à une haute position, Ghitrif se rendit auprès d'elle du Yemen et vécut près d'elle. Haroun-er-rechid lui donna ensuite le gouvernement du Khoraçan. A cette époque l'argent du Khoarizm était celui qui était en circulation, mais les gens de Bokhara ne le recevaient qu'avec répugnance en échange de l'argent de Bokhara. Quand Ghitrif ibn Ata arriva dans le Khoraçan, les Alides et les notables allèrent le trouver et lui exposèrent qu'il ne restait pas d'argent dans la ville et que l'émir du Khoraçan serait bien venu de leur faire frapper de la monnaie d'argent du type de celle qui était usitée à Bokhara dans les temps anciens ; ils ajoutèrent qu'il fallait que personne ne fit sortir cet argent de leurs mains et

<sup>\*</sup> Texte de Schefer, p. 6.

ne l'emportat hors de la ville, de façon qu'il leur fût possible

de se livrer à leurs transactions commerciales.

A cette époque l'argent était cher ; on réunit ensuite les gens de Bokhara et on leur demanda quelle était leur opinion sur ce point ; ils furent d'avis que l'on frappat la monnaie de six métaux; or, argent (مشاء), étain, fer, cuivre, et qu'on frappat au nom de Ghitrif, avec les coins qui servaient anciennement, c'est à dire que ce fût une monnaie Ghitrifienne, et le vulgaire le nommait ghidrifi (غديف). La monnaie ancienne était d'argent pur et les monnaies que l'on frappa avec l'alliage précité devinrent noires, de sorte que les gens de Bokhara ne voulaient plus les accepter, mais le Sultan se facha contre eux, si bien qu'ils finirent par les prendre avec répugnance et qu'ils en fixèrent la valeur à six Ghitrifi pour un dirhem d'argent fin, et le Sultan les prenaît pour cette valeur, cela fut cause que le Kharadj (impôt foncier) de Bokhara devint écrasant : en effet, cet impôt était anciennement d'environ 200,000 dirhems d'argent que l'on payait en Ghitrifi ; plus tard, quand ces Ghitrifi devinrent rares et prirent la valeur d'un dirhem d'argent pur, le sultan refusa les dirhems d'argent pour le paiement de l'impôt et exigea des Ghitrifi et le Kharadj de Bokhara monta jusqu'a 1,608,567 Ghitrifi.

## DESCRIPTION DES MONNAIES.

Je ferai la description de toutes les monnaies qui me sont connues: pour compléter les indications de la planche annexée, j'ai dressé un tableau où sont reproduites en fac-similé les légendes bokhariennes les plus intéressantes des monnaies de ma collection: ayant pu les examiner tout à loisir, je puis en garantir la rigoureuse exactitude, mieux que je ne saurais le faire pour les reproductions données par différents auteurs.

Ces monnaies ont pour la plupart été étudiées par Fraehn, Thomas, Tiesenhausen, Dorn, Lerch, de Markoff, Drouin, et l'on me reprochera peut-être de ne pas me borner à la description des monnaies inédites. Mais, je crois bon de réunir tous les matériaux pour en faciliter l'étude et y intéresser un plus grand nombre de numismates: combien en est-il qu'elle rebuterait, si je me contentais de références à des travaux déjà anciens, écrits pour la plupart en langue étrangère et disséminés dans des recueils périodiques qu'il est difficile de se procurer!

Je distinguerai dans ces monnaies deux catégories: les monnaies bilingues et les monnaies à légende arabe.

#### lère Catégorie: Monnaies bilingues.

Ces monnaies présentent toutes à droite de l'effigie du droit une légende écrite dans une écriture spéciale que j'appellerai bokharienne, et à gauche une courte légende, en écriture pehlvie-sassanide altérée ou en écriture arabe. Incontestablement, elles sont des imitations sassanides.

Quel en est le prototype?

Ainsi que l'ont bien vu Lerch et Markoff, c'est une drachme de Varahran V frappée à Merv, figurée [Pl. VIII. 1]. On sait que Varahran V. le Bahram Gour des auteurs orientaux, qui régna de 420 à 438 J.-c., remporta une grande victoire sur les Ephtalites à Kouch-Mihan, près de Merv, vers 428 : c'est probablement vers cette époque que fut frappée la drachme prototype des monnaies de Bokhara. A la suite de cette victoire, des relations politiques et commerciales s'établirent entre les Sassanides et les tribus qui occupaient la Transoxiane, et ce type, qui en raison de celui du pyrée devait être favorablement accueilli par des populations en majeure partie ignicoles, a pu s'y immobiliser, pour constituer, concurremment avec les drachmes des derniers Sassanides, la circulation courante à Bokhara. jusqu'au moment où le Kodâh Kânâ inaugura le monnayage spécial dont parle Narchakhy, au temps d'Abou Bekr 632-634 J.-c.

Les monnaies bilingues peuvent se distinguer en six classes d'après la légende qui figure à gauche de l'effigie:

- 1º Légende pehlvie: altération du commencement de la légende de la drachme de Merv. (MaZDa) IaSN BaGI RAM SheTRI.
  - 2º Légende arabe: de lecture incertaine ......
  - 3º Légende arabe coufique: >010.
  - 4º Légende arabe—الهدى el-Mahdî.
- 5° Légende arabe—المهدى الغضل ها el-Mahdî el-fadhel lillahi.
  - 60 Légende arabe-ديد لخليفه.
  - 70 Légende arabe-مهديد الخليفة مرون.

1ère Classe: Monnaies bilingues à légende pehlvie altérée.

Je décrirai d'abord le prototype, drachme de Varahran V. [Pl. VIII. 1.]

1.—Profil à droite de Varahran V, coiffé d'une tiare dentelée à trois crans; au-dessus de la tiare un point surmonté par un croissant surmonté lui-même de la sphère, caractéristique de la coiffure des rois sassanides. La barbe, figurée sommairement par une série de points, est prolongée au-dessous du menton par un point entouré d'un cordon dont les extrémités se voient sur le cou; derrière la tête touffe de cheveux ronde. Le buste est figuré de face, il est entouré d'un collier de perles qui dessine la base du cou. A gauche, au-dessus de l'épaule, un ruban; au-dessous du collier de perles on distingue quatre protubérances qui figurent les pectoraux et les épaules et qui se retrouveront sous la forme

de globules sur les imitations. Autour de l'effigie légende sassanide :

# MaZDalaSN BaGl RAMTcheTRI VaRaHRAN MaLKAN MaLKA

Le Mazdéen, le divin, la prospérité de l'empire, Varahran roi des rois.

R—Au centre, un pyrée composé d'une base à deux degrés, d'un fût et d'un chapiteau formé de deux tables superposées. Sur la table supérieure, les flammes du pyrée. En avant du pyrée, profil à droite de Varahran V, avec la tiare, le collier de perles et trois protubérances figurant le buste. Il est à remarquer que la tête du roi n'est pas, comme sur les monnaies de ses prédecesseurs, placée au milieu des flammes, sur la table supérieure du pyrée, mais en avant du pyrée, en sorte qu'elle cache la partie centrale du chapiteau dont les extrémités restent seules visibles.

C'est là une disposition assez singulière que les imitations bokhariennes n'ont pas toujours bien rendue: les plus anciennes l'ont copiée servilement, d'autres ont cru voir dans la partie gauche du chapiteau l'oreille de la figure royale et ont purement et simplement supprimé la partie droite; enfin les dernières imitations au nom d'El-Mahdî ont fait disparaître toute trace du chapiteau. La représentation primitive du pyrée se trouve ainsi notablement altérée: le férouer du roi y prend une place prépondérante qui explique la dénomination de pyrée anthropoïde que lui a appliquée Drouin.

La figure du revers est complétée par deux personnages armés faisant face au pyrée, et par des légendes pehlvies; à gauche le nom كركائي, VaRaHRAN, à droite 150 MeRU (Merv).

Le tout dans un cercle de grainetis.—Ar., poids 48, 15. [Pl. VIII. 1.]

2. Effigie très analogue à celle du prototype: Audessus de la tiare, un point et un croissant; au-dessus, un globule qui représente la sphère du prototype. Le cordon de perles qui entoure le buste est assez nettement visible. Au-dessous, les quatre globules signalés dans le prototype. A gauche, la pièce est fortement ébréchée et il ne reste de la légende pehlvie que quelques restes où je crois voir un fragment du mot BaGI.

A droite, légende bokharienne de douze lettres : BUHAR HUD KANA.9

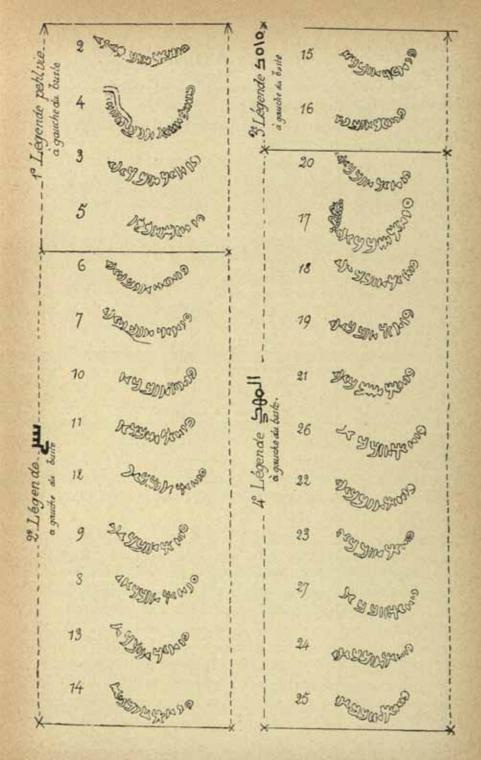
Le tout dans un cercle de grainetis.

B—comme au prototype, sauf que les légendes sont indistinctes.

Ar. (fragmentée), p. 29-50.

- 2º. Drachme de la collection Grégorief, avec le pyrée Khorazmien en estampille, figurée au paragrache 17, d'après le dessin donné par Lerch (Revue de Numismatique, 1926).
- 3. Effigie analogue au prototype. Au-dessus de la tiare, un point, puis un cercle complet avec un globule au centre. Le cordon perlé qui entoure le buste est remplacé par un large ruban, au-dessous duquel on voit des globules, au nombre de trois seulement, qu'on retrouvera identiques sur toutes les imitations postérieures, sauf sur le type exceptionnel 4 et 4<sup>2</sup>. A gauche, légende

Dans les transcriptions des légendes bokhariennes, je remplacerai le Kh par H, et je transcrirai par U (prononcé ou) le vav araméen.



pehlvie IaSN BaGI; à droite, la légende bokharienne BUHAR HUD KANA.

R-Comme le prototype, à droite, en pehlvi MeRU,

p. 3s,23. [Pl. VIII. 2.]

4. Effigie qui se distingue de celle de Varahran V. Le nez assez long et légèrement aquilin de celui-ci est remplacé par un nez gros et busqué; l'ensemble de la physionomie présente un aspect plutôt tartare qu'iranien. Au-dessus de la tiare, point et cercle avec globule au centre. Le buste est limité par un large ruban, au-dessous duquel les globules sont en partie remplacés par une légende bokharienne.

A gauche, légende pehlvie IASN BaGI, à droite légende bokharienne qui se prolonge au-dessous du buste. Je crois pouvoir lire dans les treize premières lettres BUHAR HuDAAN HUD; quant aux lettres qui suivent, resserrées au-dessous du buste dans un espace très limité, elles sont d'une lecture incertaine, je les ai reproduites en vraie grandeur dans le tableau des légendes; on serait tenté d'y chercher le nom du bukhar-Khudâ Kânâ cité par Narchakhi. Au point de vue épigraphique l'identification est difficile.

R Comme au prototype, sans légende. Ar., p. 2<sup>g</sup>,80. [Pl. VIII. 3.]

42. Une pièce semblable, dont le droit est figuré dans le catalogue de la vente White King, Ie et He partie [Pl. VIII. 848], est attribuée à Varahran-Tchoubin. Autant qu'on peut en juger par la phototypie, la légende est identique à la nôtre. Cette pièce a été achetée pour le musée de l'Ermitage par de Markoff, auquel son importance exceptionnelle n'avait pas échappé; j'ignore si le savant russe, dont nous avons à regretter la perte, a interprété la légende.

5. Profil à droite, traits moins accentués que sur le no. 4, effigie un peu banale, que reproduisent les imitations postérieures. Au-dessus de la tiare, un point, puis un cercle, sans globule intérieur ; au-dessous du buste, trois globules. La pièce ébréchée ne laisse apercevoir que de faibles traces de la légende pehlvie de gauche. La légende bokharienne est un peu différente et je la lis BUHAR(? U) HuD KAN.

R. Le chapiteau du pyrée a disparu, l'extrémité gauche de la table supérieure est devenue l'oreille de l'image royale. Ar., fortement ébréchée, p. 28,50, non figurée.

# 2me Classe: Monnaies bilingues à légende arabe incertaine נענן.

# Variété (a).

6. Effigie banale à droite, au-dessus de la tiare point, puis cercle sans globule; en bas, trois globules, audessous d'un cordon perlé. A gauche, légende incertaine; à droite, légende bokharienne BUHAR HUD KANA.

R. Le pyrée avec férouer à gauche.

Ar., un peu ébréchée, p. 28,65. [Pl. VIII. 4.]

Même description. Ar., ébréchée, p. 28,60.

## Variété (b).

 Même description, mais, au-dessus de la tiare, uu point, puis un croissant surmonté d'un point.

R. Le pyrée anthropoïde avec l'effigie à droite, accosté de deux assistants.

Ar., p. 2g,85. [Pl. VIII. 5]

9. Même description. Ar., p. 28,85.

10. Même description, mais avec la légende BUHAR HUD KAN.

# Ar., p. 38,05.

Même description. Ar., p. 28,65.

id. Ar., p. 2g,80.

id. Ar., p. 2s,85.

id. Ar., p. 2<sup>g</sup>,85.

Bien que la plupart de ces pièces ne comportent qu'une description unique, les légendes bokhariennes présentent dans la forme des lettres de nombreuses variétés, que le tableau des légendes permet d'étudier; les monnaies y sont désignées par les mêmes numéros que dans la description qui précède.

# 3me Classe: Monnaies bilingues à légende arabe ⊐0\0.

Même description, sauf la légende arabe.
 Ar., p. 2<sup>g</sup>, 40,

16. Même description. Ar., p. 28,75. [Pl. VIII. 6.]

4me Classe: Monnaies bilingues à légende arabe المهدى.

On peut distinguer deux variétés: la première (a) très rare, dont je ne possède qu'un exemplaire, présente au bas du buste, à la place des trois globules, la mention arabe بنج بر, qui se trouve sur des dirhems abbasides de même époque, où elle est considérée comme une indication telle que "très bon", relative à la pureté du métal, ou tout au moins à la légalité du cours de la pièce : la nôtre me semble d'un alliage assez pauvre. La deuxième variété (b) comprendra les nombreuses pièces de cette classe qui présentent au bas du buste les trois globules. Ces pièces ont l'aspect de l'argent, lorsqu'elles sont à fleur de coin: le plus souvent, elles sont noires, ce qui explique l'expression de "monnaie noire" par laquelle elles sont fréquemment désignées par les auteurs arabes. Je crois bien que la plupart de ces monnaies étaient de l'alliage dont parle Narchakhi, et qu'elles avaient, lors de la frappe, une sauce d'argent qui disparaissait rapidement par la circulation. Ce serait donc les ghitrifis émis sous Haroun er-Rechid, fils et successeur du calife el-Mahdî. celui-ci aurait été conservé, ce qui permettrait de supposer que sous son règne on aurait frappé quelques pièces de meilleur aloi; s'il en était ainsi, on aurait adopté pour les monnaies de billon, afin de les faire accepter plus facilement, le type immobilisé au nom d'el-Mahdî.

Quoi qu'il en soit, nous admettrons que toutes les pièces que nous publions sont de billon, et nous distinguerons par B. B., B. N. (billon blanc, billon noir) celles qui ont l'aspect de l'argent de celles qui sont noires.

# Variété (a). 1 exemplaire.

17. Effigie banale coiffée de la tiare. Au-dessus de la tiare, un point, puis un cercle, au-dessous du cordon perlé بنخ بخ ; derrière le buste la légende arabe المهدى; devant, en écriture bokharienne, BUHAR HUD KANA.

R. le pyrée anthropoïde avec deux assistants. B.B., p. 28,45. [Pl. VIII. 7.];

# Variété (b). 31 exemplaires.

18. Même description, sauf qu'au-dessus de la tiare on a un point, puis le croissant surmonté d'un point, et qu'au-dessous du cordon perlé on a trois globules. Même légende bokharienne. B.B., p. 38,05. [Pl. VIII. 8.]

19. Même description, B.B., p. 38,05. [Pl. VIII. 9.]

20. id. B.B., p. 28,45.

21. id. B.N., p. 2<sup>g</sup>,95.

id. B.N., p. 2<sup>g</sup>,95.

id. B.N., p. 3<sup>g</sup>,20.

24. id. B.N., p. 28,90.

25. id. B.N., p. 2g,65.

Même description, mais avec la légende BUHAR
 HUD KAN. B.N., p. 28,55.

Même description. B.N., p. 2<sup>g</sup>,60.

Toutes ces légendes sont reproduites dans le tableau des légendes, sous les mêmes numéros. Elles ont été choisies parmi les pièces les mieux conservées de ma collection. Je n'ai pas cru utile de reproduire les légendes des vingt autres pièces de ce type que je possède. Ces pièces sont presque toutes en billon noir. Dix de ces pièces ont la légende complète BUHAR HUD KANA, avec le groupe final () dans lequel je

distingue trois lettres A, N, A, contrairement à l'opinion de Lerch qui n'y voit que deux lettres A, T. Dix autres pièces ont le groupe final incomplet A, N.

5me Classe: Monnaies bilingues à légende arabe المهدى الفضل لله.

28. Strog. (Pl. I. 5.) Cette monnaie existait en exemplaire unique dans la collection du comte Stroganoff. Elle figure sous le no. 9 de la planche 1 de la description de cette collection par Tiesenhausen; elle présente, comme notre variété (a) au nom d'el-Mahdî, au-dessus de la tiare, au lieu du croissant habituel, un cercle. Sauf ce détail et la légende arabe, elle est identique aux pièces de la variété (b).

6me Classe: Légende arabe مهديد الخليفة.

29. Strog. (Pl. I. 6): Cette monnaie, comme la précédente, n'est connue que par un exemplaire de la collection Stroganoff. D'après la photographie, Pl. I. 6, la tiare est surmontée d'un point, puis d'un cercle avec point central; la légende arabe est un peu confuse et Tiesenhausen propose de lire le premier mot المبدى, mais la première lettre est certainement un M, et je crois pouvoir lire avec certitude بمبدئ, mot qui se trouve en tête de la légende du no. 7. La légende 6 ne serait donc qu'une abréviation de la légende 7 qui est complétée par le nom du Khalifat (Calife). Quant au mot plétée précédemment par le calife El-Mahdî, sur laquelle est la légende on trouve de même sur les monnaies unilingues arabes, décrites plus loin, le

W. de Tiesenhausen, Notice sur une collection de monnaies orientales de M. le comte S. Stroganoff, St.-Pétersbourg, 1880.

mot معدديه, Mohammedieh, qui, comme l'a bien vu Markoff, est le nom vulgaire d'une monnaie.

Les légendes des monnaies des classes 6 et 7 qui suit sont donc à traduire par:

- 6. Mahdieh du calife.
- 7. Mahdieh du calife Haroun.

Tme Classe: Légende a rabe مهديه لخليفه هرون.

30. Même description.

Cette monnaie existe en plusieurs exemplaires au British Museum: d'après un moulage que je dois à l'obligeance de Mr. Allan, la légende arabe est de parfaite conservation et la traduction: Mahdieh du calife Haroun me paraît indubitable. [Pl. VIII. 10.]

2ème Catégorie: Monnaies à légende arabe.

On en connaît deux variétés de légendes:

- (a) يسم الله محمد رسول الله لخاقان الاعظم خمال امير المومنين \*
- (b) يسم الله محمد رسول الله محمديد مما امر بد الأمير على سليمن لله \*
  - بسم الله محمد رسول الله لخاقان الأعظم خمال امير المومنين \* (a)

31. Cette monnaie de la collection Néjelow de Cazan a été publiée en 1819 par Fraehn. L'effigie est analogue à celle des dernières émissions des monnaies bilingues, sauf que la tiare n'est surmontée que par un simple point. Le commencement de la légende circulaire "au nom de Dieu, Mohammed envoyé de Dieu" ne présente pas de difficulté. Le reste de la légende contient un mot de lecture douteuse, Fraehn l'a lu خال العمل , le traduisant par "ami sincère". On trouve un titre analogue تما الموادية. "ami de l'émir des croyants", sur des monnaies des sultans seldjoucides. Quant au , خال الأعطى , Khâqân suprême, qui se dit l'ami de l'émir

des Croyants, Lerch y voit un de ces Khâqân du Turkestan qui ont régné sur le Ma wara'n-nahr après la chute des Sassanides.

بسم الله محمد رسول الله محمدية مما امر بد الأمير على سليمن لله \* (b)

32. Même effigie que (a); la légende circulaire qui l'entoure doit se lire, comme l'a démontré Markoff: bism' illahi Mohammed rassoul Allah, Mohammedieh mimma amara bihi el emir Ali Suliman lillahi, c.-à-d. "Au nom de Dieu, Mohammed envoyé de Dieu, Mohammedieh frappé par ordre de l'émir Ali Soleiman, (louange) à Dieu."

# Ar., p. 29,80. [Pl. VIII. 11.]

Nous avons pu réunir treize exemplaires de ce type, il est difficile d'en trouver un seul qui réunisse à la fois une conservation parfaite et une légende complète (l'exemplaire figuré est du cabinet des médailles du British Museum); grâce à la comparaisondes treize exemplaires, on peut reconstituer la légende d'une façon certaine et constater que la lecture de Markoff est exacte; nous nous contenterons d'énumérer les exemplaires de notre collection, en indiquant le poids.

- 33. p. 28,30, presque à fleur de coin, légèrement ébréché, lég. complète, mince et fragile.
- 34. p. 24,50, presque à fleur de coin, légèrement ébréché, lég. complète, sauf le mot على; au centre un trou rond, analogue à celui des sapèques du Turkestan chinois.
  - 35. p. 28,35, assez bon, légende complète et lisible.
  - 36. p. 18,55, assez bon, légende complète.
  - 37. p. 3s,20, assez bon, légende presque complète.
  - 38. p. 24,45, assez bon, légende presque complète.
- 39. p. 28,05; 40. p. 28,15; 41. p. 28,00; 42. p. 28,15; 43. p. 28,15; 44. p. 18, 60.

Les pièces 39, 40, 41, 42, 43, 44, sont toutes plus ou moins frustes. Elles présentent néanmoins un certain intérêt, parce que, sur plusieurs d'entre elles, on peut lire le mot de qui est très rarement lisible sur les pièces qui précèdent.

Toutes ces pièces me paraissent être, sinon d'argent pur, tout au moins d'un alliage plus riche que celui des Ghitrifis de Bokhara. La fabrique en est d'ailleurs différente: elles sont parfaitement circulaires et le pourtour en est garni d'un cordon saillant qui rappelle un peu celui des anciennes sapèques chinoises. Le trou central que j'ai signalé sur le no. 34 indique également une influence chinoise.

M. de Markoff a publié une monographie très complète de ces pièces, dans laquelle il a rappelé les travaux de ses devanciers et cité les textes de Narchakhi et des géographes orientaux qui se rapportent aux pièces d'imitation sassanide qui ont eu cours dans la Transoxiane: en ce qui concerne spécialement les pièces à légende arabe qui nous occupent, il a pu, grâce à un exemplaire bien conservé du musée de l'Ermitage, lire le mot mot mot mot adonné l'interprétation: le mot mohammedieh est le nom de la monnaie. Plusieurs auteurs orientaux citent les dirhems mohammedieh comme circulant dans le Ma wara'n-nahr, avec les dirhems Mosayyebis, Ghitrifis et Ismaïliehs. Nous yreviendrons dans la discussion des attributions des différentes catégories des monnaies d'imitation sassanide.

La traduction de Markoff, "au nom de Dieu, Mahomet envoyé de Dieu, Mohammédieh frappé par ordre de l'émir Aly Soleiman," semble certaine. Selon lui, Ali Soleiman serait un gouverneur local du Soghd ou du Ferghanah, dont le nom n'est mentionné nulle part. Markoff se demande s'il ne faut pas admettre qu'entre les mots d'Ali et de Soleiman existait le mot ben "fils", dissimulé par l'ornementation, auquel cas on pourrait penser à un certain wali du calife el-Mahdî, nommé Ali ben Soleiman, qui, au dire de Yaqoub, était en correspondance avec Ghitrif. L'examen attentif des treize exemplaires de ma collection ne laisse apercevoir aucune trace du mot ben.

Discussion des lectures des légendes et des attributions des diverses catégories des monnaies imitées du type de Varahran V.

Si l'on examine le tableau des légendes bokhariennes, on reconnaîtra qu'il n'y a que deux légendes reéllement distinctes: l'une qui porte le n° 4 est représentée par une pièce inédite dont je ne connais que deux exemplaires, l'autre se répète avec quelques variantes graphiques sur les 25 autres fac-similé du tableau.

Cette seconde légende est la seule qui a été connue de Lerch et qui a servi de base à la lecture BUHAR HUDDAT qu'il a fait connaître en 1876 au Congrès des orientalistes de St.-Pétersbourg.

La légende qu'il a reproduite dans la communication faite au Congrès a été choisie parmi celles qui peuvent être considérées comme les plus anciennes parce que les caractères y sont nettement séparés. Il l'a donnée sous la forme ci-dessous:

0 4 5 9 7 10 4 4 10 2 3 1 10 9 8 7 6 5 4 3 2 1

Il y compte onze caractères transcrits, lettre pour lettre, BUHAR HUDDAT. Cette lecture cadrait parfaitement avec le texte de Narchakhi qui donne aux princes de Bokhara le titre de "Bukhar-Khuddât", écrit—iss,

et quelquefois خوا خدات; elle semblait d'ailleurs bien justifiée au point de vue épigraphique. On peut cependant, en se reportant à mon tableau des légendes, faire, sous ce rapport, quelques observations:

Une première constatation indiscutable c'est que nous sommes en présence d'une écriture d'origine araméenne; la forme des caractères 5, 8, 9, très analogue à celle des lettres araméennes D, R, K qui se conserve presque sans changement depuis l'époque achéménide jusqu'à celle des derniers arsacides, suffit à le prouver. Cette première constatation faite, la lecture BUHAR des cinq premières lettres se justifie par les analogies de l'araméen ancien et de ses dérivés l'estranghelo, le pehlvi, et le sogdien:

B avec les formes 1196.

U avec 1 9 9.

H avec HM.

A  $\Im \bowtie \emptyset$  est analogue aux formes sogdiennes signalées sur certaines imitations des tetradrachmes d'Euthydème.

R ) est la forme araméenne ancienne; sur le plus grand nombre des monnaies, elle se distingue des formes similaires de D, K par la direction verticale de la hampe.

La lecture certaine du premier mot BUHAR nous fait connaître cinq lettres, trois d'entre elles se retrouvent dans les lettres 6, 7, 10; restait à déterminer la valeur de la lettre 11 et des lettres 8 et 9. Pour ces dernières on pouvait hésiter entre les valeurs D et K, Lerch y a vu deux D, ce qui lui donnait HUDDA; en se basant sur la forme donnée par Narchakhi, il était naturellement amené à donner à sa onzième lettre la valeur T.

C'est là, je crois, le point défectueux de sa démonstration: je remarquerai d'abord que la forme qu'il assigne aux lettres 10 et 11 n'est pas conforme à celle que je relève sur les légendes les plus anciennes de mon tableau et sur la plupart des légendes postérieures; en réalité, après les deux D de Lerch, la fin de la légende est () dans laquelle je vois trois lettres distinctes: la première et la dernière ont la valeur déjà connue A, la lettre intermédiaire peut être un V, mais plus probablement un N; avec les deux D de Lerch on lirait donc HUDDAVA ou HUDDANA.

Si l'on admet que le deuxième mot de la légende se termine par un A, il est difficile d'y voir une transcription du titre خنات Khodât de Narchakhi, on serait donc conduit à douter de la lecture de Lerch et à en chercher une autre.

Les légendes 2 et 3 de mon tableau présentent des particularités qui permettraient de la chercher dans une voie très différente: les deux lettres auxquelles Lerch attribue une valeur commune D ne sont pas absolument identiques, il est donc possible qu'elles aient des valeurs différentes: eussent-elles même des formes identiques, comme on le voit sur un grand nombre de monnaies, cela ne s'opposerait pas d'une manière absolue à leur reconnaître des valeurs différentes: la similitude des trois lettres D, K, R est en quelque sorte la caractéristique de l'écriture araméenne: je pourrais en citer bien des exemples, je me contenterai de rappeler que sur les monnaies persépolitaines un mot était lu fratadara, fratakara, jusqu'à ce que Clermont-Ganneau eût donné la véritable lecture frataraka qui figure plusieurs fois dans les papyrus araméens d'Éléphantine. Une autre observation que suggère

l'examen des légendes 2 et 3, c'est que la légende semble partagée en trois mots dont le dernier comprendrait quatre lettres. J'arrive par suite à me demander s'il ne serait pas possible d'admettre une lecture BUHAR HUD KANA qui s'accorde assez bien avec le texte de Narchakhi qui nous dit que le premier qui frappa de la monnaie à Bokhara fut un souverain (padichah d'après le texte persan) "dont le nom était Kânâ bukhar Khudât". Ma lecture n'est pas certes sans soulever des difficultés: le terme HUD diffère de la forme HuDAT du texte persan et plus encore de la forme HUDDAT de Lerch. Ce savant, dans un travail très complet rédigé en 1875,11 a longuement discuté l'étymologie de ce terme : le zend Khvadâi comme le persan خداى ,خدا se traduisent par Dieu, seigneur. et ne contiennent pas le T radical de HUDDAT, qui correspondrait à une forme plus ancienne Khwaddâta, crée"; ce concept واستا " dui-même " et جد crée"; ce concept devait spécialement s'appliquer à Dieu et a pu dévier de son acception primitive pour désigner les souverains de Bokhara.

Cette étymologie qui justifiait la lecture HUDDAT de Lerch est aujourd'hui fort discutée. Le même mot se trouve écrit en caractères sogdiens dans les documents découverts par Sir Aurel Stein: il y affecte une forme que M. Cowley lit הותאו et Gauthiot הותאו, HUTAV, forme ancienne dont M. Meillet a donné une étymologie très différente de celle de Lerch.

Il faut noter d'ailleurs que la forme خدات qui figure dans le passage du texte persan de Schéfer, cité plus

<sup>&</sup>lt;sup>11</sup> P. Lerch, Monnaies des Boukhar-Khudat. Travaux de la section orientale de la Société Impériale Archéologique, St.-Pétersbourg, 1875-1909 (en russe).

haut, est exceptionnelle; partout ailleurs le même texte écrit ils qui est la forme adoptée par les géographes arabes, dans laquelle le i n'a aucune valeur étymologique et se transcrit comme le i persan par h. Quant au redoublement du D, qui d'après Lerch serait représenté dans certains manuscrits récents par un techdid, il ne figure jamais dans le texte de Schéfer. Il y a donc lieu de penser que la véritable forme du titre "Seigneur" porté par les souverains de Bokhara était ils qui se trouve quelquefois chez les auteurs orientaux: la forme HUD que je trouve n'en diffère pas beaucoup; le U qui y figure est bien conforme aux habitudes de l'écriture bokharienne qui écrit BUHAR au lieu de .

Bien que ma lecture BUHAR HUD KANA puisse se justifier par les considérations qui précèdent, j'aurais hésité à abandonner celle de Lerch qui a été universellement adoptée, si une monnaie inédite, qu'il n'a pas connue, n'était venue me fournir des arguments de nature à la rendre difficilement acceptable.

Cette monnaie est le no. 4 de ma description: la légende est différente de celle des autres monnaies et il est impossible d'y trouver le HUDDAT de Lerch. A titre purement conjectural je propose de lire pour les trois premiers mots BUHAR HUDAAN HUD: je verrais dans le HUDAAN HUD un titre analogue aux "malkan malka, ispehbedh ispehbedhan, emir el-umara", le roi des rois, l'ispehbedh des ispehbedh, l'émir des émirs, et je traduirais: le Khodah des Khodahs de Bokhara

Épigraphiquement la lecture paraît justifiée: le mot BUHAR nous fait connaître pour R une forme 1) un

peu différente de celle des autres légendes et presque identique à celle du D de la même légende. Le mot HuDAAN est écrit avec une orthographe défective qui supprime U comme en persan; la fin du mot AAN me paraît assurée, nous y trouvons précédée de la lettre A, qui lui est accolée, la lettre N telle qu'elle est signalée dans KANA. Le mot HUD qui suit présente une orthographe différente de celle de HuDAAN. Pour les quatre ou cinq lettres qui suivent on attendrait un nom propre et vraisemblablement celui de KANA, mais, ainsi que je l'ai fait remarquer dans la description. les caractères sont de lecture incertaine et je ne peux y trouver le nom de Kânâ pas plus que ceux des Bokhar-Khodahs qui l'ont suivi et qui d'après Narchakhi ont porté les noms de Bidoun (ou Beudoun). Toghchadeh, Sokhan, Koteïba, Banyat.

La monnaie est en bon argent, elle présente à gauche des restes d'une légende pehlvie, elle semble par suite se classer parmi les plus anciennes. J'ai signalé un deuxième exemplaire de cette monnaie, qui doit être au musée de l'Ermitage.

Nous avons distingué, dans les imitations des dirhems sassanides de Varahran V, deux catégories: la première avec légende bokharienne représente le monnayage spécial à Bokhara, la seconde, à légende arabe, appartient à une autre région.

Il nous reste à préciser, s'il est possible, pour l'une et l'autre de ces catégories, l'époque de leur émission : c'est là un point particulièrement intéressant pour les monnaies de Bokhara, en raison des nombreuses variétés qu'elles présentent; pour arriver à quelques certitudes, ou tout au moins à quelques probabilités, il nous faut recourir encore au texte de Narchakhi, en nous aidant, s'il est besoin, du témoignage d'autres écrivains orientaux.

En ce qui concerne le monnayage de Bokhara, il me semble nécessaire de coordonner les indications chronologiques souvent confuses, quelquefois même contradictoires, que nous fournit Narchakhi:

La première est la date du commencement du monnayage de Bokhara que l'auteur place à l'époque du calife Abou Bekr, 12 (633) 12, sous le règne du Bokhar-Khodah Kânâ; nous admettrons ce point de départ, tout en faisant remarquer, avec Lerch, que le nom de Kânâ n'est mentionné par aucun autre auteur. D'autres dates sont contrôlées par le témoignage d'écrivains orientaux et notamment par Tabari: les plus importantes sont celles du pillage de Bokhara par Obeid-Allah ben Ziyad en 53 et celle de la conquête à l'Islam par Koteïba ben Mouslim en 89.

Ce sont là des points de repère qui permettent de distinguer dans l'histoire de Bokhara une période de prospérité et d'indépendance de 12 à 53, suivie d'une période troublée, pendant laquelle les souverains de Bokhara, tout en conservant leur indépendance, sont tributaires des Arabes. Dans la troisième période qui commence en 89, le territoire de Bokhara est incorporé dans le gouvernement du Khoraçan, et les Bokhar-Khodahs ne sont plus que des vassaux du puissant gouverneur de cette province; convertis par crainte à l'islamisme, ils sont constamment en but aux soupçons d'un maître impitoyable qui leur fait payer de leur vie

<sup>&</sup>lt;sup>12</sup> Dans la suite de cette discussion, nous nous contenterons généralement d'indiquer la date de l'hégire, quelquefois nous la ferons suivre de la date de l'ère chrétienne entre parenthèses.

toute infidélité; ils n'ont plus sous les califes ommeyades et abbasides qu'une autorité purement fictive, dont ils se démettent à l'époque de l'émir Samanide Ismael 279 (892).

Dans ce cadre nettement défini, nous pouvons suivre de plus près les vicissitudes de l'histoire des Bokhar-Khodahs.

Dans la première période un nom a brillé d'un éclat tout particulier. C'est celui d'une femme: Narchakhi et les historiens de la conquête arabe la désignent sous le nom de Khatoun, qui ne semble autre que le titre donné par les Turcs à la femme de leur Khaghan. Veuve du Bokhar-Khodah Bidoun (ou Bendoun), qui laisse en mourant un fils en bas âge Toghchadeh, elle règne en souveraine au milieu d'une cour brillante, dont Narchakhi se plaît à nous décrire les splendeurs, mais son règne, qui dure onze ans, est troublé par les incursions des Arabes et en 53, malgré une vigoureuse résistance, elle dut céder aux attaques victorieuses d'Obeid-Allah qui pille Bokhara et ne s'éloigne qu'après lui avoir imposé un tribut de 1,000,000 dirhems.

La deuxième période, qui comprend la fin du règne de la Khatoun et le commencement de celui de son fils Toghchadeh, se termine en 89 à la conquête de Bokhara par Koteïba ben Mouslim. Toghchadeh est contraint d'embrasser l'Islam et donne à son fils le nom de Koteïba; d'après Narchakhi, il régna 42 ans dont 32 avant la mort de Koteïba ben Mouslim, qui eut lieu en 96 (714); il fut tué 10 ans après sur l'ordre du gouverneur du Khoraçan. Son fils Koteïba eut le même sort après un règne de sept ans. Le texte de Narchakhi est ici fort obscur et présente quelquefois des contradictions; il cite un autre fils de Toghchadeh

du nom de Sokân (ﷺ) qui aurait régné aussi sept ans, mais qui pourrait bien être sous un nom différent le même personnage que Koteïba. Après Koteïba vient un Baniat qu'il dit fils de Toghchadeh et qui est mis à mort par le calife El-Mahdi en 166 pour avoir soutenu la rébellion de Mokanna, le dernier Bokhar-Khodah Abou Ishaq Ibrahim, qui se démit de son autorité sous l'émir Samanide Ismaël en 279. Entre cette date et celle de la mort de Baniat en 166 nous ne trouvons que deux noms, ceux d'Abou-Ishaq et de son père Khaled que Narchakhi dit fils de Baniat, c'est peu pour un intervalle de 113 ans.

Je crois devoir résumer, dans le tableau ci-dessous, les indications chronologiques de Narcha<u>kh</u>i, sans pouvoir en garantir l'exactitude. 13

Premier monnayage de Bokhara sous Kana,		
B. Kh		12
Bidoun (ou Bendoun), B. Kh		?
La Khatoun		49
Pillage de Bokhara par Obeid-Allah	53	
Toghchadeh, B. Kh.		64
Conquête de Bokhara par Koteïba b. Mouslim	89	
Mort de Koterba b. Mouslim	96	
Koterba fils de Toghchadeh, B. Kh.		106
p · · · or · · · m · · · · · · · · · · D V · ·		113
Avènement du calife El-Mahdi	158	***
	100	166
Mort de Baniat		- 7270-0
Khaled fils de Baniat, B. Kh		?
Abou-Ishaq Ibrahim, B. Kh.	070	
Avènement de l'émir Ismaël	279	

Aux première et deuxième périodes qui précèdent la conquête arabe de Bokhara en 89 appartiennent sans contredit les monnaies bilingues d'argent pur, à légen-

<sup>&</sup>lt;sup>15</sup> J'ai inséré dans ce tableau, comme points de repère, quelques dates importantes de la chronologie arabe.

des bokharienne et pehlvie, elles sont à répartir entre Kânâ, Bidoun, la Khatoun et le commencement du règne de Toghchadeh.

Les monnaies bilingues à légende arabe sont postérieures à la conquête arabe de Bokhara, c.-à-d. à l'année 89 de l'hégire; les plus anciennes en argent pur sont celles que j'ai classées dans ma description sous les nos. 2 et 3; celles de la classe 2 avec légende me paraissent antérieures à celles de la classe 3 à légende □010 parce qu'elles ont conservé au revers des restes du chapiteau du pyrée, mais leur légende reste discutable; E. Thomas la lit , 3- "Sunnite", où l'on peut voir une allusion à l'orthodoxie des nouveaux convertis; s'il en est ainsi, elles sont attribuables à Toghchadeh, à une époque voisine de la conquête; la lecture proposée par Markoff reste incertaine. Peut-être faut-il chercher une solution dans une autre voie et y voir, comme l'a suggéré Lerch, un fragment de légende pehlvie, peut-être la fin IaSN du mot (MaZD) IaSN. La monnaie serait dans ce cas à rattacher à la classe 1. L'autre monnaie, d'argent fin, porte la légende 3010 Mohammed, qui n'est peut-être qu'une allusion pieuse au nom du prophète, ce qui la ferait attribuer aux premiers Bokhar-Khodahs convertis à l'islamisme, Toghchadeh ou son fils Koteïba, de 89 à 113. On pourrait aussi y voir le nom du Khalife Mohammed El-Mahdî, qui a inscrit son nom sur des monnaies bien connues, même avant qu'il eût succédé à son père Mançour en 158.

Les monnaies bilingues très rares des classes 5 et 6, que je n'ai pu examiner, doivent appartenir aussi à l'époque d'El-Mahdî et peut-être sont-elles, comme les précédentes, d'un métal assez pur pour justifier cette supposition: quant à celles beaucoup plus nombreuses avec légende المهدى, elles ont dû être frappées d'abord en argent à l'époque d'El-Mahdî par le Bokhar-Khodah Baniat, mais la plupart de celles qui sont parvenues jusqu'à nous ne sont autre chose que des Ghitrifis frappés au type immobilisé d'El-Mahdî, en un alliage de six métaux, par ordre du gouverneur du Khoraçan, en 176. Ce type immobilisé continua d'ailleurs à être frappé à Bokhara plus de cent ans après.

Quant aux monnaies à légende purement arabe, les plus nombreuses sont frappées au nom d'Ali Soleiman, dans lequel Markoff voit avec raison, non pas un gouverneur du Khoraçan, mais un émir du Soghd ou du Ferghana. Dans le mot qui figure dans la légende, il voit le nom même de la monnaie et il cite les textes des auteurs orientaux qui parlent d'une catégorie spéciale de monnaies connues sous le nom de Mohammedies; ce nom leur viendrait, d'après lui, du nom de Mohammed ben Atha, frère de Ghitrif.

La monnaie unique au nom d'un Khaghan turc est d'une attribution plus incertaine.

Pour compléter l'étude des diverses catégories de monnaies circulant en Transoxiane j'emprunterai à Sauvaire quelques citations extraites des écrivains orientaux.

Les habitants de Bokhara ont un dirhem qu'ils appellent Ghitrify, composé de fer, de cuivre jaune, de plemb et d'autres métaux ; il ne passe que dans la circonscription de Bokhara. El-Istakhrī, éd. de Goeje, p. 314.

Le Kharadj de Fergânah est de 280,000 Mohammedys, celui d'El-Châch de 180.000 Mosayyebys, celui de Khodjandah de . . ., celui de Soghd, Kechk, Nasaf, Ochrousanah de . . . . Mohammedys, celui de Bokhara de . . . Ghitrifys. Mohammed, Mosayyeb et Ghitrif étaient trois frères, qui frappèrent ces dirhems; ceux-ci sont noirs à la façon des fels.

El-Moqaddessi, éd. de Goeje, ii, p. 339.

Les habitants de Samarqand ont aussi des monnaies dans le genre de celles de Bokhara et dont ils se servent en guise de dirhems, ce sont des dirhems connus sous le nom de Mohammedys et composés de diverses substances.

Ibn-Haukal, p. 374.

Cette dernière citation nous montre que les Mohammedys dans lesquels on ne peut méconnaître les Mohammediehs d'Ali-Soleiman étaient la monnaie de Samarkand; le texte d'El-Mogaddessy est le seul qui mentionne que Mohammed, Mosayyeb et Ghitrif étaient trois frères, ce qui nous permettrait de penser que les dirhems Mohammedys sont à peu près contemporains des Ghitrifis et probablement un peu postérieurs. Lerch a fait remarquer que Moqaddessy écrivait à une date relativement récente et que pour ce motif son assertion, qui est isolée, pourrait donner lieu à quelques doutes. Le nom de Mosayyeb est d'ailleurs aussi inconnu, comme gouverneur provincial de cette époque, que celui de Mohammed. Ces objections n'empêchent pas de reconnaître des Mohammedys dans les dirhems émis par Ali-Soleiman, comme le veut Markoff. Si on n'admettait pas cette assimilation, on serait amené à voir des Mohammedys dans les dirhems à légende Dolo, mais ceux-ci sont argent pur, ce qui ne s'accorde guère avec l'assertion d'Ibn Haukal et de Moqaddessy qui spécifie que les Mohammedys sont d'un alliage analogue à celui des Ghitrifis.

Quant aux dirhems Mosayyebis, rien ne permet de les assimiler à aucune des monnaies connues jusqu'à présent.

COLONEL ALLOTTE DE LA FUŸE.

#### MISCELLANEA.

# THE COLLECTION OF COINS AT CORPUS CHRISTI COLLEGE, OXFORD.

The collection of coins at Corpus Christi College. Oxford, though small, possesses some interesting specimens and a history which seems to deserve record: this is given here by permission of the President and Fellows of the College.

The oldest part of the collection consists of twenty-five gold and four silver coins, with which is the following note, in the handwriting of Thomas Randolph, President 1748-83: "In the Tower Register, Feb. 27, 1654, there is this entry. Twenty-five pieces of old coines of several sorts in gold, with four in silver, which we found left in the Tower in the year 1648. Edmund Staunton, Prest. Jo. Milward, Vice-ps. Samuel Byfield, Dec. Sen. I have not met with any account of these pieces in any other place, except that in the purse they are in there is a bit of paper, on which is written, but without a date, 25 pieces of gold, whereof 2 Spur Royals, one great piece. On the other side of the paper thus—30 July 1716 25 pieces of Gold, wrof 2 Spur-royals, one great piece. But no mention of the silver pieces, which are five."

The "bit of paper" mentioned by President Randolph is still preserved: the two entries are in different hands. There is also another slip, with the statement:

Value of these coms per 1784	weigh	3	6
	3	15	0
Tonge. Silversmith	12	0	0
	2	0	0
	1	0	0
		11	0 0 3 0
		1	0
Gold	15	12	8
Silver		10	0
	16	2	3

which suggests that in 1784 the College may have contemplated melting down these coins: but fortunately, if such an idea was mooted, it was not carried into effect. They seem to have remained undisturbed in their paper wrappings since that date, except for some notes made on the wrappings by T. G. Faussett, a Fellow of the College, who catalogued other parts of the collection in 1860.

This is as far as the written records go: but something further can be inferred from the coins themselves. They

are:

Gold.—England. Two rose nobles of Edward IV, a crown and a half-crown of Henry VIII. Flanders. Scudo of Philip II. Nymwegen. Double ducat. Hamburg. Ducat of 1497. Lubeck. Ducat. Hungary. Ducats of Sigismund and of Matthias Corvinus. Austria. Archduke Philip. Venice. Scudo of Andrea Gritti. Savoy. Scudo a cavallo of Charles II. Lucca. Republican mancoso. Papal. Scudo of Paul III, of Parma. Two Sicilies. Three of Charles V. Spain. Two of Joanna and Charles. Portugal, Portuguez and four cruzadoes of John III. Silver.—Spain. Two of Charles and Joanna. France. Two of Henry II, dated 1555 and 1556.

It looks as if these coins had been collected about 1560-70. as there is nothing among them of later date; and the fact that they were still in the Tower in 1648, after Charles I had swept the Oxford Colleges bare of all gold and silver, except a few specially cherished treasures, suggests that they must have had some sentimental value attaching to them to have shared an exemption from the melting-pot which was only granted to articles such as founder's plate. The entry in the Tower Register does not suggest that they were hidden away: the occasion of their discovery may have been when on July 11, 1648, the Parliamentary Visitors, according to A. Wood, "if I mistake not, brake open the Treasury, but found nothing". It stands to the credit of the President and Fellows put in by authority of Parliament that, having found these coins, of the history of which they were evidently ignorant, they did not appropriate them to their own uses, as did the Fellows of Magdalen who found a hoard of gold coins in the College at this same time and divided it up amongst themselves.

At present no further clue to the earlier history of these coins can be traced: the contents of the group suggest the idea that they were got together by some one who took a trip to Italy, possibly going through Germany and returning by sea, or vice versa, and retained any pieces that came into his hands on the way and caught his fancy. Several of the specimens are in fine condition, and hardly any much worn. But in any case they seem to be the oldest collection of coins in Oxford.

The first addition to the collection seems to have been a stray shilling of James I: in 1648 there were only four pieces of silver, whereas Randolph, a century later, found five: and the intrusive piece is still with the Tower Hoard. But about 1722 William Hallifax, Scholar and Fellow of the College, and Chaplain of the Levant Company's factory at Aleppo, left a considerable number of coins, of which there is a catalogue, drawn up by Randolph, mentioning 429 specimens: his list shows-Greek, 4 N, 16 R, 39 E; Roman, 4 N, 77 At, 200 Æ (three of these are Byzantine): English and Scotch, 1 A, 34 R, 7 E: "Modern Foreign", 1 N. 13 R. 11 E: Indian, 1 N: Medals, 5 R. 16 E. At the end of the list he notes-" Besides what are contained in this Catalogue, there is a gilt Bowl, with medals round it. but most, if not all of them, spurious: there is also a Bag full of Modern Coins. These were left to the College by Mr. Hallifax." As a matter of fact, the President's verdict on the coins inlaid in the bowl, a piece of Italian work, is perhaps too severe: there are two rows round the bowl, the upper consisting of pseudo-classical medals of Valerio Belli, the lower mainly of Roman denarii, with a Polish medal as centrepiece: gilding and polishing have detracted from their appearance, but they seem to be genuine.

Amongst the Hallifax coins a few deserve special note: a gold stater of Panticapaeum; a very fine stater of Lysimachus: two North Arabian imitations of Athenian tetradrachms (similar to B.M.C. Arabia, pl. xi. 24), doubtless obtained at Aleppo; a group of cistophori of the first century B.C., seven of Pergamon, two of Ephesus, and one of Apamea, which look as if they came from a single find; two curious bronze coins, possibly third-century Palmyrene imitations of types of Antioch; an unpublished aureus of Titus; three pennies of the reign of Stephen (B.M.C. 262, 264, and 269); and a huge Spanish gold coin of Henry IV (Heiss, i. 102, 16, which is probably this coin; Heiss says, "Universidad de Oxford", but there is no specimen in the University cabinet). The Greek bronze, as might be expected in view of the residence of Hallifax at Aleppo, are predominantly Syrian or Egyptian; of the thirty-nine catalogued by Randolph only two come from west of the Taurus, and those which he did not sort show the same distribution. There are in the collection thirty-six of Antioch alone, and twenty-four Seleucid, with some twenty Ptolemaic, and as many Alexandrian; while there are only two Italian, none of Sicily or Greece, and one each from Macedonia, Pontus, Paphlagonia, and Cilicia.

After the Hallifax bequest there were not many additions to the collection. President Randolph gave several Roman bronze in 1767, and "a silver Roman denarius picked up at Worcester", which is of local interest, as it is a denarius of M. Aurelius Scaurus (B.M.C. 1185) in good condition. There are a few more insertions in the catalogue in his hand which refer to donations by other persons. About 1817-18 there was apparently a revival of interest in the collection amongst the junior members of the College: seven donations, totalling twenty-eight coins, are recorded in the course of a twelvemonth, only one coin coming from a Fellow, the rest from three Scholars, amongst whom is Thomas Arnold. The list of donations closes with another famous name—William Buckland—who gave a bronze coin of Probus on Feb. 1, 1819.

Since then, except for the cataloguing done by T. G. Faussett in 1860, which has already been mentioned, nothing seems to have been done with the collection; so that it stands as an illustration of the activities of numismatists of past generations.

J. G. M.

#### REVIEW.

Ceylon Coins and Currency. By H. W. Codrington. Colombo, 1924: 4to. Pp. 290. Pl. VII. Ten rupees. (Memoirs of the Colombo Museum, Series A, no. 3.)

This book is the most important contribution that has been made to any branch of Eastern numismatics for many years. One cannot but regret that so few people are qualified to appreciate its value and to realize the vast amount of labour and research that it represents. It covers the whole history of coinage and currency in Ceylon from the earliest times to the English issues of the first quarter of the nineteenth century. Documents and inscriptions, Pali, Sinhalese, Portuguese, Dutch, and English have been searched for information relating to the coinage, and the material thus

obtained digested and presented in practical form. This thoroughness is in striking contrast to the superficial treatment which the various series of Ceylon coins have hitherto received. Rhys Davids' Coins of Ceylon, the only book of any size on the subject, has long been out of date and was not based on sufficient material.

Here we can do little more than give an outline of the contents of Mr. Codrington's book. The first chapter deals with ancient and medieval metrology; the author has threaded his way with great skill through the maze of literary, epigraphic, and numismatic material, and gives a coherent view of the complicated Sinhalese weight system and its relation to that of the Hindu law-books. "Ancient Coins" are next dealt with; these are the early uninscribed pieces corresponding to the punch-marked coins of ancient India. The silver coins given by Mr. Codrington, who includes in his book coins found in Ceylon as having been current there, in addition to those actually struck in the island, are all of Indian origin. There seem to be no indigenous early silver coins, which is quite in keeping with the later numismatic history of the island. Pl. I. 1 is probably from Western India, Pl. I. 2 is a much worn punch-marked coin, and Pl. I. 3-5 are certainly from Northern India (the score of specimens in the British Museum are all from collections formed in North and North-west India), so that it is remarkable to find them so far south. The type is a tiger-like animal on a hill with the sun rising behind it; similar types occur on the regular punch-marked silver series. Pl. I. 6 may be an early coin of Ceylon, but the fact that Lowenthal records a number from Tinnevelly suggests it is also an importation. In the remarkable large copper pieces (Pl. I. 7-9) and the corresponding small pieces (Pl. I. 10-15) we undoubtedly have an indigenous coinage. At first sight they resemble the early copper coins of India (e.g. of Eran. Cunn., C.A.I., Pl. XI). but the resemblance is quite superficial and amounts to little more than that there are elephants on both. The Cevlon coins are large, thin, and round instead of thick and square. The whole type is struck from a single die and not from separate stamps as is the case in India. The reverse type is always as important as the obverse. Most of the symbols differ in detail from corresponding ones on Indian coins, and the most characteristic one, a svastika on a pole within a railing, has no parallel in India. This latter symbol connects these coins with the "plaques" illustrated on Pl. II. 20-5, which we are reluctant to believe are not coins.

Mr. Codrington still seems to have an open mind on the point. The irregularity in weights can be paralleled in finds of ancient Indian copper coins, and their fine condition is simply due to burial soon after issue. Mr. Codrington rightly claims for Ceylon the round pieces with "maneless lion"

type hitherto treated as Pallava.

The chapter on Roman coins found in Ceylon is of general interest, notably the section on the local bronze imitations of the fourth and later centuries; Pl II. 31 is not copied from a coin of Constantine but from the PONT MAX. denarius of Tiberius. The British Museum has two similar pieces, one from India and the other from Persia. The curious gold pieces, Pl. II. 44, seem to be quite genuine. Their weight is in favour of this and suggests a later date than that at which Mr. Codrington puts them, and the fact that one has been seventy years in the British Museum shows that they can hardly be the work of a modern curio-maker.

The chapter on the medieval coinages of Ceylon makes a great advance on Rhys Davids. By an exhaustive examination of this monotonous series and a careful study of its epigraphy Mr. Codrington is able to throw a good deal of new light on their classification. For the first time we have satisfactory readings of the rare gold pieces, although these do not bring us much nearer definite attributions. Here we can only call attention to the importance of the many new attributions, notably that of the "Setu" coins which the

author shows to be of the Cakravartis of Jaffna.

The second half of the book deals with the European coins of Ceylon and is illustrated by a wealth of documents from the Portuguese, Dutch, and English archives. Attention is called to many new Portuguese and Dutch mint-marks, and the relations of the Ceylon mints with those on the mainland are investigated. A concluding chapter deals with miscellaneous foreign (European, Oriental, and Chinese) coins that have been found in Ceylon. The book, which has a very full index, is excellently printed and has seven excellent plates. We offer our grateful congratulations to the author on the brilliant way in which he has filled a great gap in our knowledge.

J. A.

# GREEK COINS ACQUIRED BY THE BRITISH MUSEUM IN 1926.

# [SEE PLATES IX-XI.]

In compiling the following account, I have as usual had the advantage of consulting Mr. Stanley Robinson on many doubtful points. The illustrations are perhaps less representative than formerly of what has actually been acquired, for it would have been extravagant to reproduce all the coins which have already been described in the British Museum Quarterly. Some of them, however, it has been impossible to deny myself the pleasure of illustrating again.

#### Himera.

 Obv.—Head of nymph facing, inclined to l., with flowing hair confined by ampyx. Plain border.

Rev. - . . . IM[E . . ]. Pecten shell.

Æ ← 12.5 mm. Wt. 1.08 grm. Presented by Monsieur M. P. Vlasto. [Pl. IX.]

The letter E and the two pellets on the right are presumed on the ground of symmetry. For the obverse type compare B.M.C. No. 55, a hexas. The reverse type is new and the denomination tetras does not seem to be otherwise known in the period 413-408 B.C.

Amphipolis.

- 2. Obv.—OANTWNEI NOCK - Head of Pius r., laureate. Border of dots,
  - Rev.—QAMΦ - ΛΕΙΤώΝ Artemis-Tyche standing l., r. resting on long torch, l. on bow on ground; between shaft of torch and body, upwards, HΠO.

    Æ ↑ 22 mm. Wt. 6 grm. 72. [Pl. IX.]

From a small find made at Stavro. The other coins acquired from the same find were of Hadrian (type of Berlin 148), Pius (similar, reading apparently  $AM\Phi I\Pi O \Lambda I[T] \in \Omega$ ), and two of M. Aurelius Caesar (type of Berlin 155).

HIIO, though quite clear, is possibly a blundered name; although there is apparently no other example of a magistrate's name on coins of this time. It is unlikely that it should be meant to describe the Tyche  $(\dot{\eta} \pi \delta \lambda \iota s)$ .

Chalcidian League.

3. Obv.-Head of Apollo r., with long hair, laureate.

Rev.— $XA[\Lambda]$  above,  $KI\Delta$  on r. downwards,  $E\Omega N$  on l. upwards; in exergue  $E\Gamma I \leq TPAT\Omega NO \leq$ .

At \$22.5 mm. Wt. 14.48 grm. [Pl. IX.]

From the collection of the late Vte. de Jonghe. Another specimen from the same die is Hirsch Sale, XIV. 288 = XXIX. 211. The Pozzi specimen 754 and Mionnet II, 304, 29 are from another pair of dies.

Methylium in Thessaly.

- 4. Obv. Young male head L, short hair bound with fillet.
  - Rev.—MEΘVAI on l. upwards, EIΩN on r. \ Female figure seated r. on seat with back, r. resting on sceptre, l. on neck of a small bull beside her. Concave field.

R ↓ 13 mm. Wt. 1 grm. 16.

This obol has been already illustrated by Hermann in Z. f. N., xxxiii, p. 39 note, Pl. I. 18, from a cast at Berlin, which possesses an original in inferior condition; Babelon (Traité, II. iv, p. 287, no. 506 a) misreads the inscription, which ends -EION instead of as usual -EON, and calls the obverse type "head of a



MOLENT CHANNED IN

nymph"; he also describes the animal as a cow. It is not clear whether certain marks above the forehead on the obverse indicate a small horn, or are an ornament fastened to the fillet. The date appears to be about the middle of the fourth century.

The Museum acquired in 1922 a bronze public measure of Methylium, which Mr. Walters allows me to illustrate here. It stands 29-3 cm. high, and is pierced with a hole at the bottom. It is inscribed MEΘΥΛΙΕΙΟΝ ΔΗΜΟΣΙΟΝ. It contains approximately 37 fluid oz. or 0.9713 litre.¹ Viedebantt (Forschungen, p. 60) gives the content of the Attic ξέστης as 0.453 litre; Hultsch (Metr.², p. 703) as 0.547 litre. Our measure, since its half lies between these two estimates, may be regarded as a δίξεστον. Of course the local measure might have differed from the Attic.

Crete.

The Seager bequest of coins has already been described in the public press. A few of the more important specimens have been illustrated in the British Museum Quarterly (1926, No. 1, pp. 22 f.). An article on them and others appears as a contribution to the Essays in Aegean Archaeology presented to Sir Arthur Evans (Oxford, 1927). A few more, not originally in the Seager collection, were acquired out of funds available from the sale of duplicates, according to the terms of the bequest, at the sale of Sir Arthur Evans's coins at Lucerne: see British Museum Quarterly, 1927, No. 4, Pl. LI. It seems unnecessary to go over this ground again; but the two most important pieces in the collection, the staters of Sybrita (No. 5) and Arcadia (No. 6), are illustrated here, honoris causa. [Pl. IX, 5, 6.]

From the great number of staters not described in the above-mentioned places I select a few for notice here, not describing them fully unless they present something new, and placing before them an Alexandrine tetradrachm which seems to be unpublished.

<sup>&</sup>lt;sup>1</sup> Since the measure is encrusted inside, an attempt at exact measurement, with distilled water at a certain temperature, would only be misleading. There seems to be no inner mark, and the measure was doubtless supposed to be filled to the brim.

Aptera. Alexandrine.

Obv.—Head of young Heracles r. in lion-skin. Border of dots.

Rev.—BA≼IΛΕΩ≼ in exergue, AΛΕΞΑΝΔΡΟΥ on r. downwards. Zeus, nude to waist, seated l. on throne, r. leg drawn back, l. hand leaning on sceptre, r. holding eagle. In field l., race torch. Border of dots. Concave field.

R ↑ 15·37 grm. [Pl. IX.]

This was obtained by Mr. Seager in Crete. Its style is peculiar; so far as the date is concerned it is not very early, perhaps of the middle of the third century. The race-torch in the field permits of an attribution—which had occurred to Mr. Seager—to Aptera; such a torch is the type of a number of bronze coins [Svoronos, Pl. I. 18, 20–23].

Aptera.

8. † 11-05 grm. Same dies as Svor., No. 5, Pl. I. 10.

Axus.

9. ↑ 11·10 grm. From Neapolis. Same obv. die as Hirsch, XII. 2090. On the rev. the tripod is smaller. [Pl. IX.]

Chersonesus.

10. ↑ 10-63 grm.

Obv .- Head of nymph r., of poor workmanship.

Rev. | CMO\$93X on l., the rest off the flan. Heracles fighting to l. Concave field. [Pl. X.]

Cnossus.

- 11. 10.91 grm. Same obv. die as B.M.C., No. 4, without countermark; same dies as Weber 4412.
- 12. 10-26 grm. Same obv. die as Benson 603. Rev. Swastika labyrinth moving to l., with star in centre.
- 13. 10-76 grm. Similar to preceding (same rev. die); same obv. die as Hirsch, XXXII. 511.

- 14. 10-56 grm. ex Mavrogordato 2242 (Journ. Int. XIV. 1912, Pl. H 16). Head of nymph l. (same die as Hirsch, XXI. 2096). Rev. Swastika labyrinth moving l.; quincunx of pellets in centre; in each angle a circular depression.
- 15. 10-60 grm. Same dies as Svor., No. 42, Pl. V. 18.
- 16. 10-53 grm. Types of Svor. 43. Same dies as Hirsch, XIII. 2922 = Jameson 1318.
- 10.87 grm. = du Chastel 1889, No. 71 = Feuardent 9. v. 1910, No. 456 = Hirsch, XXXII. 512 = Feuardent 18. vi. 1924.

## Gortyna.

- 18. † 11-58 grm. Europa on bull r., rev. lion's mask. Cp. Svor., No. 3, Pl. XII. 22.
- 19. / 11-26 grm. Similar; rev. as Svor., No. 9, Pl. XII. 25.
- 20. 

  ✓ 11-32 grm. Similar, but bull's head turned back. Cp. Hirsch, XXV. 1489.
- 21. → 11·27 grm. = Svor., No. 24 = Weber 4545.

## Lyttus.

- 22. ↓ 11.86 grm. = Pozzi 1990.
- 23. ↓ 11-67 grm. Eagle flying I. Border of dots. Rev. ^VTT/Z/ON. Boar's head r. Dotted incuse square.
- 10-81 grm. Rev. NVTSOV. Boar's head I. Dotted incuse square. [Pl IX.]
- 25. ↑ 11·11 grm. Eagle flying l. Rev. on l. upwards AVT, above TION. Boar's head l.; dotted incuse square. Same obv. die as Pozzi 1992.
- 26. ↑ 11·09 grm. = Weber 4524.

#### Phaestus.

- 27. 12-05 grm. As Svor., No. 1, Pl. XXII. 34.
- 28. † 11-62 grm. Same dies as Svor., No. 9, Pl. XXIII. 6; fracture behind head of Heracles more advanced than in Hirsch, XIII. 3040.

- 29. \ 11.51 grm. Same dies as Svor., No. 13, Pl. XXIII, 8.
- 30. ← 11.40 grm. = Weber 4551. Same dies as Hirsch, XXV, 1528.
- \[
   \] 11.25 grm. = Pozzi 1995. Same rev. die as Svor.,
   No. 22, Pl. XXIII. 17, and Hirsch, XIII. 3089.
- 82. / 11-55 grm. = Naville, V. 2287.
- 34. ↓ 11-59 grm. Same dies as Bunbury 1211 (= Benson 616 = Naville, V. 2228). Same obv. die as Svor., No. 53, Pl. XXIV. 16.
- 35 † 11.26 grm. Same dies as Carfrae 11 (= Montagu, I. 445); same obv. die as Svor., No. 54, Pl. XXIV. 17. Countermark on obv.: bull's head facing with fillets hanging from horns (Polyrhenium?). [Pl. IX.]
- 36. ↓ 11-19 grm. Head of Apollo r. laur.; rev. ⊃Φ [A]I ₹
  TION. Bull standing r., head reverted. Same obv. die as Svor., No. 76, Pl. XXV. 1, and Hunter. Pl. XLIII. 16. The rev. die seems to be in origin the same as that of the former, but one or the other has been recut, Pl. IX.

#### Phalasarna.

10

- 37. Obv.—Poseidon, young, beardless, with long hair, standing r. beside his horse; he rests r. on trident and l. on the horse's neck; the horse's forefeet are engaged in a rock?
  - Rev.— A between the prongs of a trident head. Concave field.
  - R stater ↑ 24 mm. Wt. 9 grm. 27. Bought at Praesus, Pl. X.

The types are those of Rhaucus. Phalasarna (on the extreme west of the island) was a long way from Rhaucus, which was in the middle. But the same

reverse type and inscription are found on the staters and other coins usually attributed to Phalasarna. It is true that only one or two of the coins so attributed show more than the first two letters of the name, and these read  $\Phi$  with  $\Lambda A$  in the loops of the letter (Svoronos, 11–13). The coins then might equally belong to Phalanna, if such a place really existed in Crete, and the name is not merely a doublet of Phalasarna.

The object at the forefeet of the horse is at first sight puzzling. Were it not for the fact that it occurs at Rhaucus and on coins from more than one die, it might be regarded as due to a flaw. Svoronos calls it a rock or an inverted cauldron. But the feet seem rather to disappear into the object than to be placed on it. It seems reasonable to connect it with a Thessalian legend and to suppose that it is the rock out of which Poseidon, with a stroke of his trident, struck the first horse 2; although it must be admitted that the Thessalian coin-engravers at Orthe represented the birth of the horse more skilfully than it seems to be indicated here.

38. Stater ∠ 10.23 grm. Obv.—Head of nymph r. (as on Svor. 2).

Rev.—• A between prongs of trident downwards.

Incuse circle.

Polyrhenium.

 Stater ↓ 11-64 grm. = Hirsch, XXI. 2199 = Naville, VII. 1319.

Praesus.

 Stater ↑ 10-67 grm. = Hirsch, XXXII. 514 = Naville, VII. 1322.

<sup>&</sup>lt;sup>2</sup> E. H. Meyer in Roscher, iii. 2823.

Rhaucus.

41. Stater / 11-37 grm. = Weber 4589.

Tylissus.

Five staters.

42. Obv.-Female head r., turreted. three-drop ear-ring (same die as Svor., No. 11, Pl. XXXI. 7).

Rev.—OI≥I AVT on r. downwards. Apollo standing L, bow in L, object in r. uncertain; in field r., outside inscription, a laurel-branch.

R → 26 mm. Wt. 10-67 grm. Bought in Crete (Petrodas). Pl. X.

43. ₹ 10.91 grm. = Weber 4598.

44. ↓ 10·19 grm. Obv. resembles Svor., No. 4, Pl. XXX. 31. Rev. → TVAISIO[N] Apollo standing L., holding goat's head and bow. Bought 1924 (Seltman). [Pl. X.]

 ↑ 9-81 grm. Same dies as Svor., No. 5 (Pl. XXXI. 1). Bought in Crete 1924 (Petrodas).

46. ↑ 10-42 grm. Same dies as preceding.

Ionia. Electrum.

47. Obv.-Dog or wolf lying down, curled up.

Rev.—Two incuse squares united in an oblong.

El. 12-5 mm. Wt. 4 grm. 65 (Phoenician third). From Rhodes ?. [Pl. X.]

The Museum has long possessed the only known specimen of the stater to which this third corresponds. The stater came from the Payne Knight collection; the type has always been described as a lion,3 and Miletus accordingly has been supposed to be the mint. The fabric is less flat than in the coins with the recumbent lion, and in this respect Babelon compares the stater to others with a ram and a bull respectively

<sup>&</sup>lt;sup>3</sup> B.M.C., Ionia, p. 183, No. 2, Pl. III, 4; Babelon, Traité, II, p. 26, No. 25, Pl. I. 19.

(Nos. 25 and 38 of his list); the latter shares with our stater one of its reverse punches. The coins are certainly Ionian, but the attribution to Miletus is doubtful.

Cnidus.

The following drachms from among a number recently acquired (all, except No. 49, evidently part of a find) may be noted:

48. Obv.-Head and r. foreleg of lion r.

Rev.—Small head of Aphrodite r., dotted hair bound with fillet, and falling in queue which is tied up at end. Incuse square.

At \$18.5 mm. Wt. 6 grm. 16 (before cleaning). [Pl. X.]

49. Obv.—Similar type.

Rev.—Larger head of Aphrodite r., dotted hair similarly dressed, but queue stands away from the neck; head leaning forward. Incuse square.

Æ ∠ 17-0 mm. Wt. 6 grm. 23.

 Obv.—Similar type (same die as B.M.C. 13 and 14 and Ward 687, 688).

Rev.—Head of Aphrodite r., as on B.M.C., Nos. 12 (Head, Coins of the Ancients, I a. 27), 13 ff., but without inscription. Incuse square.

At ← 18.5 mm. Wt. 6 grm. 16 (before cleaning). [Pl. X.]

51. Obv.—Similar type (same die as B.M.C., No. 15).

Rev.—Head of Aphrodite r. as on B.M.C., No. 17. No inscription. Incuse square.

At \ 18 mm. Wt. 6 grm. 29 (before cleaning). [Pl. X.]

The obverse die appears to have been recut; the remains of an earlier type are visible above the lion's forehead.

52. Obv.-Similar type.

Rev.—Head of Aphrodite r., hair taken up in sling; behind, A. Incuse square. (Same die as Pozzi Catal. 2605.)

At 17.5 mm. Wt. 6 grm. 18 (before cleaning). [Pl. X.]

53. Obr.—Similar type.

Rev.—Similar head to preceding; necklace; behind, K. Incuse square.

At 17.5 mm. Wt. 6 grm. 19 (before cleaning). [Pl. X.]

Of the last two, the former, with A behind the head, is usually attributed to Halicarnassus (Babelon, *Traité*, II. i, p. 422, No. 693). It more probably forms one of a series with the K coin just described.

#### Tralles.

54. Obv.—QAVT KMAVP ANTΩNEINOC. Bust of Caracalla r., bearded, laureate, wearing paludamentum and cuirass. Border of dots.

Rev.—Ω ∈ΠΙΓΡΑΥΡ ∈Υ ∈ΛΠΙΟΤΟΥ, across field TP AΛ | ΛΙ Α | ΝΩΝ, and, in exergue, ΝΕΩ ΚΟΡΩΝ | ΤΩΝΟ ∈ BΑ | CTΩΝ. Asklepios standing to front, head l., r. leaning on serpent-staff, l. wrapped in himation. Border of dots,

Æ 1 33-5 mm. Wt. 19 grm. 74. [Pl. X.]

This magistrate, Aurelius Euelpistos, is not in Münsterberg, and the type of Asklepios seems also to be new for Tralles.

Syria, Antioch, Imitations of Philip Philadelphus.

55. Obv.—Head of Philip r. diademed. Fillet border,

Rev.—BAΣΙΛΕΩ[Σ] | ΦΙΛΙΠΠΟΥ on r. downwards. ΕΠΙΦΑΝΟΥ[Σ | Φ]ΙΛΑΔΕΛ[ΦΟΥ] on l. downwards. Wards. Zeus with sceptre and wreath-bearing Nike enthroned l. as usual; in field l., A and N; in exergue ANΣ. All in wreath.

At ↑ 28-5 mm. Wt. 15-18 grm. [Pl. X.]

56. Obv.-Similar to preceding.

Rev.—Similar type and inscriptions; in field l. 本, beneath throne 人, in exergue I over thunderbolt.

At \$\int 27 \text{ mm.}\$ Wt. 13-94 \text{ grm.} Presented by the Rev. Edgar Rogers. [Pl. X.]

Of these two coins, the second falls naturally into place in the series described by Newell.4 The date i = 10 = 0ctober 1, 40—September 30, 39, has not previously been represented either in silver or in bronze. The first coin is more remarkable; there appears to be little doubt of the date in the exergue.  $AN\Sigma = 251 =$ 62/1 B. C. We have in this coin, dating from a year or two after the formation of the province of Syria, an anticipation of the series which began in 47 B.C. On the other hand, the coin is clearly of the same style as the tetradrachm published by Rogers (Num. Chron., 1912, Pl. XI. 9); Newell in Amer. Journ. Num, 51, 1917, p. 122, No. 457; Naville Sale, X. 1541, now in the British Museum [no. 57, Pl. XI], which has the monograms CB and BV in the field, and (as alleged) A N in the exergue. This is placed by Newell among coins of Philip (Group e), and doubtfully ascribed to Antioch. On this group the letters \$\Phi\$ A (which would form a link with other coins of Philip) are doubtfully assumed by Newell to be present on the left. But they are legible on none of the varieties cited by him, and on the Rogers coin there is certainly no room for them between the word  $\Phi I \Lambda A \Delta E \Lambda \Phi O Y$  and the leaves of the wreath, of which there are traces. On the other hand, there is room (if the full area of the design were preserved) for Y to right of the letters A N.

## 58. Babylon?

The silver decadrachm († 39-62 grm.), illustrated in Pl. XI, has been fully described in *British Museum Quarterly*, No. 2, 1926, pp. 36 f., where the specimen

<sup>4</sup> Num. Chron., 1919, pp. 69-113.

presented to the Museum in 1887 (\42.20 grm.) is illustrated side by side with it. I note here only that the new specimen shows on the obverse the letter £ high up in the field, and two reserve javelins in the left hand of the rider, who is throwing one at Alexander; it also shows that Alexander wears a headdress similar to that on the reverse. The reverse shows that Alexander is being crowned by a flying Victory, and that he wears a helmet combining the Greek crest with the Persian kyrbasia, and bearing tall upright plumes beside the crest. It thus appears that when Alexander had conquered Persia he combined the plumed helmet (which Plutarch describes him as wearing at the Granicus) with the Persian headdress.

The coin is struck over an older one, and so is the 1887 specimen; but it has not yet been possible to discover what the originals were. They might have been specimens of the same coin, badly struck and used again; or decadrachms of Alexander; or even older decadrachms, since the Persian treasury must have contained many old coins from various parts of the Greek world. As to the date, I have said elsewhere that it is probably shortly after the death of Alexander. But, as Mr. Robinson points out, it is not easy to find

of immense quantities of ingots of silver, coins of the Macedonian sovereigns before Alexander, Athenian drachms, and silver Persian coins before Alexander "; this treasure was dug up on the banks of the Tigris about forty miles below Ctesiphon.—B.M. Dept. of Oriental MSS., Catalogue of Rich MSS.; C. J. Rich, Narrative of a Residence in Koordistan, II (1836), pp. 162-3; Buckingham, Travels in Mesopotamia, II (1827), pp. 404-5. The descriptions are unfortunately too vague to admit of reconstructing the find, although many of the coins are in the British Museum.

an occasion for such an issue except just after the Indian expedition; and, though Alexander may not have wished to appear so plainly as a god on a coin struck in his Greek dominions, this scruple would not have weighed so much in the East.

Parthia. Himerus?

- Obv.—Bust r., diademed, with short beard; line of drapery on shoulder. Fillet border.
  - Rev.—ΒΑΣΙΛΕΩΣ | ΜΕΓΑΛΟΥ on r. downwards, AP ΣΑΚΟΥ | NIKHΦOPOY on l. downwards. Bearded Dionysus, wearing kalathos, long tunic and mantle, seated l., holding in r. Nike, who approaches to crown him, in l. cornucopiae; in exergue, two monograms.

R ↑ 30 mm. 5. Wt. 16 grm. 54. [Pl. XI.]

The monograms are the same as on Newell's specimen (Num. Chron., 1924, p. 153, No. 71, Pl. XIV. 1) and on Dayet's (Arethusa, 7, 1925, Pl. XV. 4), but the dies of both sides are different. This specimen also comes from the immense hoard from somewhere in Persia (conveniently known as the "Teheran Find"), of which we have not yet heard the last. The attribution to Himerus seems to me very doubtful.

#### Mithradates III.

- 60. Obv.—Bust l., with short beard, wearing high round helmet with two rows of beads outlining the bowl, horn at side, ear- and neck-flaps, diademed; necklace and cuirass. Border of dots.
  - Rev.—ΒΑΣΙΛΕΩΣ above, ΜΕΓΑΛΟΥ | ΑΡ ΣΑΚΟΥ r. downwards, ΦΙΛΟΠΑΤΟΡΟΣ | ΕΥΕΡΓΕΤΟΥΣ below, ΕΠΙΦΑΝΟΥΣ | ΦΙΛΕΛΛΗΝΟΣ on l. downwards. The founder Arsaces as archer seated r. on throne, holding out bow; before his legs, B.
  - At † 31 mm. 5. Wt. 14·17 grm. [Pl. XI.] Probably also from the "Teheran" find.

A similar specimen, from different dies, was in the Allotte de la Fuye collection (Florange and Ciani, 1925, lot 1222; J. de Morgan, Traité, III. i, p. 263, No. 101, Pl. X. 12).

Phraates IV.

 Obv.—Bust i., diademed, as on B.M.C., Pl. XVIII, XIX. Border of dots.

Rev.— $BA\SigmaI\Lambda[E\Omega\Sigma]$   $BA\SigmaI\Lambda E\Omega N$  above,  $AP\Sigma AKOY$ EYEPΓΕΤΟΥ on r. downwards, ΔΙΚΑΙΟΥ below, [Ε]ΠΙΦΑΝΟΥΣ | [ΦΙ]ΛΕΛΛΗΝΟΣ on downwards; in exergue ΔAI and monogram
 Phrantes IV seated r. receiving a palmbranch from Tyche, who holds in l. a sceptre.

Æ ↑ 32 mm. 5. Wt. 15.99 grm. [Pl. XI.]

This tetradrachm, which also probably comes from the "Teheran" find, is interesting as being struck (upside down) on a tetradrachm of Attambelus I. The flattened outline of nose and curls is plain on the obverse, and the head of Heracles, a monogram, and the letters BA - - - | ATTA on r. and \( \Sigma - - - \) \*AIEYE - on L are to be made out on the reverse. The date is unfortunately not to be seen, and the monogram (which apparently contains K and P) is not the same as any on other known coins of Attambelus.6 The coin of Phraates IV is not dated, except for the month Daisios; it belongs to the group of undated tetradrachms which Wroth assigns to about 28-26 B.C.

<sup>8</sup> Hill, "Attambelos I of Characene" in Num. Notes and Mon., No. 14 (1922). The date there established for this king is 46/5-29/8 B. c.; but there is a margin on each side of these dates.

Egypt. Ptolemy III.

- Obv. No inser. Busts r. jugate, diademed and draped, of Ptolemy I and Berenice I. Border of dots.
  - Rev.— ΘΕΩ[ΝΑΔΕΛΦΩΝ.] Busts jugate r. of Ptolemy II and Arsinoe II, diademed and draped; behind, oblong shield. Border of dots. Slightly concave field.
  - N ↑ 28 mm. Wt. 27-60 grm. [Pl. XI.] Formerly in the possession of Mr. Victor Adda of Alexandria.

Svoronos publishes (934) <sup>7</sup> two other specimens, and Mr. Victor Adda possesses yet another. All four seem to have the same obverse die; our new coin shares its obverse with Svoronos, Pl. XXVIII. 2, and Mr. Adda's second specimen shares its obverse with Svoronos, Pl. XXVIII. 1; the difference between the dies is extremely slight, and chiefly confined to the back hair of Ptolemy II.

Svoronos describes the shield as charged with a thunderbolt, but it has only the usual longitudinal rib, swelling in the centre.

G. F. HILL.

<sup>&</sup>lt;sup>7</sup> He regards the uninscribed side as the reverse, but the slight concavity of the inscribed side shows that the latter is the reverse.

# A FIND OF ROMAN COINS AT CLAPTON-IN-GORDANO, SOMERSET.

In the autumn of 1922, during ploughing, twentyeight Roman coins dating from A.D. 260-273 were unearthed in a field belonging to Mr. C. Williams at Clapton-in-Gordano, near Clevedon, Somerset. further search was made until July, 1924, when Mr. R. E. Godwin, to whose notice the find had been brought, returned to the locality. The same man was at work who had ploughed up the coins, and he pointed out the spot where, to the best of his recollection, they were discovered. Here Mr. Godwin searched without success, but at some little distance found twelve more coins scattered on the surface within a radius of several vards. Digging with a spade yielded occasional coins, and then Mr. Godwin came upon earth full of coins. and finally to the bulk of the hoard at about a foot below the surface.

"These", writes Mr. Godwin, "appear to have been buried in a wooden vessel, which was hooped with iron at the base, portions of which I found. Also directly under the coins were two fragments of wood, which evidently were a part of the bottom of the vessel. The coins appear to have been first wrapped in skin, as I found pieces of this on which were impressions of the coins. These I have still in my posses-

sion. The whole stood on two flat pieces of sandstone. Broken pieces of a shallow black earthenware dish I also found, which I concluded was put on the whole upside down to form the lid. Further digging within a few yards of the site of the hoard revealed a rough stone floor with quantities of broken pieces of pottery, coins, bones of animals, two bronze brooches, and spindle whorls lying amongst the stones. Evidences of iron smelting were everywhere, as the field lies under the shadow of Cadbury Camp."

The coins belong mostly to the reigns of Gallienus and Claudius II and the contemporary Gallic usurpers.

#### Summary of the Hoard.

Claudius I	1	Brought forward	3,291
Gallienus	541	Aurelian	28
Salonina	37	Severina	3
Saloninus	2	Tacitus	17
Postumus	47	Probus	38
Laelianus	1	Carus	1
Victorinus	706	Numerian	1
Marius	7	Carinus	1
Tetricus, sen.	1,010	Diocletian	3
,, sen. and jur	n. 1	Maximian	1
., jun.	408	Gallie (Victorinus or	
Claudius II	492	Tetricus)	38
Quintillus	38	Mainly Gallic	16
Carried forward	3,291	Total	3,438

The find presents some interesting features. Hoards strictly so called and consisting of accumulated savings may be expected to contain a stream of coinage reaching back through many reigns in gradually attenuated volume. The same is true of any sum of money collected indiscriminately from the general circulation, or of the total coinage found by digging on an ancient site. But the Clapton-in-Gordano find begins in bulk

with the coinage of Gallienus, and only contains a single piece of earlier date-a barbarous imitation of a middle brass of Claudius I. After Claudius II there is a slighter but fair representation of Quintillus, Aurelian, Tacitus, and Probus, with whom the hoard really closes, and then seven stragglers distributed among five emperors down to Maximian.

The explanation of these sharp boundaries in date, especially at the beginning, is no doubt to be found in the debasement of the Antoninianus by Gallienus. In type the new coinage was the same as its predecessor, but its value was so much less that the two were probably tariffed differently in popular use, though not officially, and were kept separate. The improvement of the coinage by Aurelian marks roughly the end of the hoard, and the coins of later date are less than three per cent. of the whole.

If this explanation is correct we ought to find a number of hoards that fall within these limits. Not only is this the case, but hoards which overlap these boundaries and begin or end in the middle of the period are relatively few.

Hoards of the Clapton-in-Gordano type from Britain include1:

> Blackmore Park (Hants), N. C., xxxvii, pp. 90 ff. Near Cambridge, N. C., xlix, pp. 332 ff. Carhayes (Cornwall), N. C., 1900, pp. 209 ff. Lutterworth, N. C., xxxi, pp. 169 ff. Luton Hoo, N. C., xxiii, pp. 112 ff. Nunburnholme, N. C., xli, pp. 24 ff. Westwood, near Caerwent, 1860.

<sup>1</sup> I am indebted to Mr. H. Mattingly for the references from which this selection is made.

Some of the types of Tetricus, sen, are noteworthy from their abundance. The preoccupation of Aurelian with the barbarian invasions of the Balkans and of Italy, and later the campaign against Zenobia, secured to the western usurper a tranquillity which perhaps justified the large proportion of coins with the legend Pax. The Hilaritas and Laetitia coins of Tetricus are relatively very numerous (out of 1,010 coins there are 119 of Hilaritas and 214 of Laetitia). ince he could not foresee the brevity of his reign, or know that within five years he would make his submission to Aurelian at Châlons and subside into the governorship of Lucania and a city house on the Caelian, it is possible that the types really represent the expectations of a sanguine temper. But the legends seem by their reiteration to protest too much, and these plentiful issues were perhaps designed to simulate a public confidence that was not really felt. There is an interesting passage in Seneca's Dialogues 2 bearing on this. He says in his Consolatio addressed to his friend Polybius: "Quod duces magni faciunt rebus adfectis ut hilaritatem de industria simulent et adversas res adumbrata laetitia abscondant, ne militum animi, si fractam ducis sui mentem viderint, et ipsi collabantur, id nunc tibi quoque faciendum est."

#### DESCRIPTION OF THE FIND.

Claudius I. C 84 barbarous imitation, M.B.

Gallienus. C 5 (22) sixteen with B and five with no mark; 20; 20 var. radiate draped; 24 (2); 25 in ex.

<sup>&</sup>lt;sup>2</sup> xi. 5. 4. J. D. Duff compares Tacitus, Ann. iv. 31. 3: "nec occultum est quando ex veritate, quando adumbrata lactitia facta imperatorum celebrentur."

VI; 38 (20) in ex. Γ; 38 (9) in ex. Γ; 38 in ex. MT; 38 (2) no mint mark; 55 var. undraped; 56 (2); 72 (12) with Z or Σ; 73 (12) with H; 76 (6) with Δ; 98 with MT; 116 (2) with MT; 143; 144 (3) one with XI and one XII; 153 (7) with E; 154 (6) three with E. one with C; 154 var. DIANE (sic); 155 with €; 157 (25) fourteen with XI, four with X, one with XII; 158 (46) thirteen each with  $\Gamma$ ,  $\frac{1}{X}$ , and  $\frac{1}{XII}$ ; 165 (2) one with XI; 186 with P, 229 (2) one with MP; 238 var. not draped; 246 (2) with H; 261; 269 (19) not draped with 5; 269 (9) var. not draped; 327; 331 (2) with XI; 342 (8) with \$\sigma; 344 (12) with \$\sigma; 361 (10) three with \$\mathbf{H}\$, four with N, one with X; 382 (9) one with IX, one with X, seven with XI; 403 (6) with 5; 423 (8); 424 (2): 562 (5) one with 5; 563; 586 (21) with B; 596 (5) three with XI; 617 (18) nine with A; 667 (13); 699 (10) seven with Z, one with 5; 719; 727 (16) six with V, three with SI, seven no mark; 728 (4) two with T, one with V, one no mark; 741 with 5; 746; 773 (2); 785 (3) one with P, two no mark; 851; 854 (3); 859 (8) five with MP, one with S, two no mark; 860; 862 (10) one with II, one with X, eight no mark; 928 (2) with MP; 929 with MP; 932 (2) one with X, one S; 934 (5) one with SI, four with P; 951 with VI: 961 (20) fifteen with H, four no mark; 979 (21) two with A, three with N, six with H, eight no mark; 981 with H; 983 (2) with XI; 1008 (39) twenty-three with €, one with SI, fifteen no mark; 1071 (12) seven with Z, three no mark; 1119 (5) one with V, four with T: 1162: 1225 (4) with P; 1232 var. not draped; 1236 (5) one with S, four no mark; 1322 (5) with X; 1339; unclassified (10).

The following coin is not in Cohen:-

- O/ GALLIENVS AVG. Bust radiate draped r.
- R/ FIDES MILITVM VG (sic). Fides standing?, holding standard and cornucopiae.

Salonina. C 17 in ex. MS; 18 in ex. S; 24; 39 (5)  $\Delta$  in field; 40 (4)  $\Delta$  in field; 56 (3) N in field; 60 (3); 70 (5)  $\Delta$  in ex.; 79; 92 (4) three with Q in field; 108; 129 (4); 143 (4).

Saloninus. C 12; 13.

Postumus. As C 19, but EQVIT[VM]; 31; 60 (3); 144 (9); 161 (4); 213 var. draped (2); 215 (22); 440 (4); 442 in ex. T.

Laelianus. C 4.

Victorinus. C 8 (7); 23 (2); 34; 36 (9); 46 (2); 49 (120); 79 (117); 83 (10); 90 (53); 91; 92; 101 (97); 102; 112 (84); 114 (2); 118 (92); 126 (6); 131 (86); 133 (3); unclassified (8).

The following three coins are not in Cohen:

- O/ IMP C VICTORINVS P F AVG. Bust radiate and draped r.
- R/ PAX AVG, but Lactitia type, standing with wreath and anchor.
- O/ DIVO VICTORINO PIO. Head radiate r.
- R/ PROVIDENTIA AVG. Providence I. with cornucopiae.
- O/ IMP C VICTORINVS P F AVG. Bust radiate draped r.
- R/ VIRTVS AVG. Valour I. with spear in I., and r. resting on shield.

One coin has an obverse type incused on the reverse. Marius. C 8; 13 (2); 20 (2); 22 (2).

Tetricus, sen. C 9; 17 (65); 18 (8); 37 (15); 39 (4); 40; 43 (28); 54 (119); 64 (2); ?70; 71 (95); 72 (5); 71 or 75 (45); 75 (67); 75 var. AVG NN; 95 (219) one

barbarous with C in field; 99 (5); 111; 131 (4); 131 var. IMP C(2): 148 (4): 149 var. with ? P.F.; 153 (34): 154 (41); 153 or 154 (5); ? 158; ? 163; 163 var. IMP TETRICVS: 163 var. ? IMP P ESV; 163 var. IMP C PIV ESV; 170 (65); 172 (3); 185 or 188 (39); ?186 (3); 187 (2); 200 (2); near 200 but barbarous; 207 (84); unclassified (31).

The following coin is not in Cohen:

- O/ IMP TETRICVS P F AVG. Bust radiate and mailed r.
- R/ ABVNDANTIA AVC. Abundantia r. emptying cornucopiae.

Tetricus, sen. and jun. C 5.

Tetricus, jun. C 5 (15); 34 (14); 48 (15); 48 var. CP or CPE; 50; ? 52; 53 (30); 58 (8); 60 (19); 62 (15); 88 (184); 97 (97); 106 var. AVGG; unassigned (6).

One coin SPES PVBLICA has obv. incused.

Claudius II. C 3; 6 (12); 6 var. bust draped (3); 9 (14); 10 (5); 10 var. cuirassed (4); 10 var. bust draped (3); 16 (4); 18; 21 (2); 21 var. draped (4); 21 var. cuirassed (12); 21 var. obv. DIVO CLAVDIO: 22 (2) cuirassed, A in field; 25 (5) two with H in field, one with N in ex.; 43 obv. failed; 44 (20) one with two impressions by slip in striking; 48; 50 but no letter in ex. (28); 50 Q in ex.; 53 (3); 54 (3); 74 undraped; 74 draped (9) TENPO is normal; 79 head only (6); 79 cuirassed (3); 80 (6); 84 (12); 86 cuirassed (4); 87 (9) cuirassed, except one draped; 87 var. IMP CLAVDIVS AVG (3); 88 (2); 92 (3); 98 (2); 102 (3); 104 (3); 109 (10); 110 (2); 114 (15); 115 (2); 124 (14); 129 (19); 131 (3); 138 (7); 140 (4); 144 (5); 147; 151 (17); 152 (4); 153 (3); 154; 159 (8); 160 (12); 185 (2); 202 (9); 203 var. [PA]X AVGI (sic); 204 (6); 209;

214 (4); 216 (3); 220 (2); 220 var. AVGG; 227 (3); 230 (8); 234 (3); 265 (19); 268 (7); 276 (2); 281 (4); 284 (6); 286; 293 (25); 294 (2); 302 (7); 304; 313 (28); 314 (8); 315 (5); 318 (4); unclassified (6).

The following coin is not in Cohen:

O/ . . . AVDIVS AVG. Bust radiate and mailed r.

R/ M(ars ult)OR. Mars l. with globe in r. and spear in l. I in r. field.

Quintillus. C 2 (2) one with N in field, the other with III in ex.; 5; 17; 25; 28 (5) in field €; 32 (3) Z in field; 38 var. ? IMP C Q; 39 (5) two with XII in r. field, two with XII in ex., one with X-II l, and r. in field; 47 spear transverse (2); 49 (3) two with X in l. field, one with X in ex.; 52; 57; 61 (2) with I in field of one, 5 on other; 63 (7); 73 (2).

The following coin is not in Cohen:

O/ IMP QVINTILLVS AVG. Bust radiate and draped r.

R/ VIRTVS AV[G]. Valour standing l. with branch in r. and spear in l. E in field.

Aurelian, C 19; 60 (3) Q \*, \*XIII, XXIT in exx., the last also with S in field; 61 (2) with S and \*T in exx.; 103 (2); 105 (4) in exx. H, \*P, S, \*S; 142 in ex. T: 153 in ex. QXXT: 154 in ex. T: 183 (3) in exx. PXXT, CXXT, XX; 189; 220 (2); 223; 232 star in 1. field and P in ex.; 234 in ex. SXXT; 261 in ex. T; 274; 285 in ex. T.

The following coin is not in Cohen:

O/ [IMP C L DOM] AVRELIAN VS AVG] R/. As C 115.

Severina. C 7 in ex. XXI; 12 in ex. MXXT; 14 in ex. r.

Tacitus. C 60 (2) var., Mars has both spear and shield, S in ex.; 74 star in r. field, III in ex.; 88: 90 var. PROVIDE AVG, Q in ex.; 100 in ex. XXIII; 124 in ex. T; 125 \* in field; 126 in ex. T; 131 in ex. Y; 137 (2) in ex. CA; 144 (4) in fields A-A, A-\*, A-\*. Δ-A: 145 in ex. Γ. in field \*.

Probus. C 39 obv. has Gorgon on breast, in ex. RUS; 105 in field A; ? 162 in ex. XXIS: 241 var. PF omitted, in ex. SISXXT; 256 var. (2) cuirassed only in ex. III; 305 (2) in ex. A fulmen B; 317 in ex. IIXXT; 334 (5) in ex. of two II, of three III; 337 (2) mailed, in ex. II; 352 in ex. QXXI; 399 in ex. EXXI; 401 in field D; 418 (2) one with T in I, field and XX in ex., the other T-\* in field and HXXI in ex.; 437 (3) one with more cramped rev. design has III in ex.; 531 in ex. R fulmen B; 563 but legend as 564 and in ex. XXIP; 611 in ex. SXXI; 617 in r. field I, in ex. IIIXXI: 650 in ex. R fulmen F; 724 in ex. I; 727 in 1. field B; 728 in ex. I; 819 in ex. QXXT; 900 in ex. XXIT.

The following four coins are not in Cohen :-

- O/ IMP C PROBVS P F AVG. Bust radiate and mailed r.
- R/ CONCORD MILITV. Emperor on l. facing r. and giving hand to Concord. In ex. PXXT.
- O/ [IMP C] PROBVS P F AVG. Bust radiate r.
- R/ PAX AVG. Peace standing I. with olive branch in raised r. and erect sceptre in l.
- O/ IMP C M AVR PROBVS AVG. Bust radiate l. wearing imperial mantle and medusa, and holding sceptre crowned with eagle.
- R/ VIRTVS AVG. Type of C 813 (spear). In ex. QXXT.
- O/ IMP PROBVS AVG. Bust radiate l., imperial mantle, sceptre crowned with eagle.
- R/ VIRTVS AVGVSTI. Mars to I. with erect spear in l. and r. on shield.

## 218 ROMAN COINS AT CLAPTON-IN-GORDANO.

Carus. C 69 mailed.

Numerian. C 21 in r. field C.

Carinus. C 24.

Diocletian. C 206 in ex. SXXIT; 494 (2).

Maximian. C 604 mailed, in field D.

Victorinus or Tetricus, 38 coins.

Mainly Gallic, 16 coins.

# COINS FROM CLEVEDON SITE.

At or near site of Find.

Gordian III. C 121.

Gallienus. C 361 (III in rev. field); C 563 (S in rev. field); C 617 (A in rev. field); C 667 N in ex. (2); C 1245; unclassified (1).

Victorinus. C 100 (2); ? C 118.

Tetricus, sen. C 99 (2); as 158; 170.

Claudius II. C 6; C 48; C 88; as 154; C 185; unclassified (2).

Constantius I. C 264.

Helena. C 4.

Urbs Roma. C 17.

Constantine II. C 122 (2).

Constans or Constantius. VICTORIAE DD AVGG Q NN.

House of Constantine. GLORIA EXERCITVS one standard (2).

F. S. SALISBURY.

# SESTERTIUS AND DENARIUS UNDER AURELIAN

THERE are two distinct problems confronting the numismatist in the third century of the Roman Empire—the determination of the facts of the coinage and the interpretation of those facts in relation to economic history. The uncertainty in which the whole question is still involved is largely due to the ease with which the two problems can become entangled. If excuse is needed for a new attempt at a solution, let it be that I hope to have a contribution of some importance to make to the former problem.

The historians tell us that Aurelian called in the old bad money and issued fresh, and that the "monetarii" in Rome rebelled under the "rationalis" Felicissimus and were only suppressed after serious bloodshed. Aurelian, then, made some sort of reform of the coinage, which was not entirely popular. The coins confirm the fact of the reform. No standard aureus, no true silver piece was struck; but, in place of the debased billon coin, with radiate head, of Gallienus and Claudius II, a piece of superior workmanship and finish was issued, 2

1 Cp. Zosimus LXI, Vopiscus, Life of Aurelian, xxxviii.

<sup>&</sup>lt;sup>2</sup> The weight is something like 53 gr. (3.43 gm.), the silver content less than 4 per cent.: cp. Rohde, Die Münzen des Kaisers Aurelian, pp. 306 ff.

very similar in surface appearance, though greatly inferior in metal value, to the "Antoninianus" (the double denarius) of Caracalla. On this piece the reformed system of Aurelian evidently rests; and, if we can interpret aright the marks of value (XX, XX-1, KA, &c.), which it bears, we shall have the key to a solution in our hands.

For the general meaning of these marks of value, we cannot do better than turn to Missong's pioneer article.<sup>3</sup> It is extremely probable that all variants of the mark have the same meaning and that that meaning is "twenty smaller units compose this one larger unit". It is conceivable, but very unlikely, that the theoretical tariff of twenty to one was normally raised to twenty-one to one and that the two tariffs remained in use side by side.<sup>4</sup>

Interpretations on different lines have been suggested, but cannot be accepted:

(1) "Twenty of these coins make up one larger unit." If this larger unit is taken to be the aureus, the value of our coin is improbably high; if the silver denarius, incredibly low. And Aurelian struck no aureus of standard weight and no pure silver coin at all. Where a mark of value on a Roman coin refers to a higher unit, that unit is normally the pound; and such marks are almost confined to gold and silver. The analogies

<sup>3</sup> N.Z., 1869, pp. 105 ff.

<sup>4</sup> The mark XX is peculiar to the mint of Ticinum.

<sup>&</sup>lt;sup>5</sup> Cp. P. H. Webb, "The Reform of Aurelian", Num. Chron., 1919, pp. 235 ff.

<sup>&</sup>lt;sup>e</sup> Cp. O and Ξ on aurei of Diocletian, XCVI on his silver, LXII on later solidi and, perhaps with the same meaning, on copper.

of the X, V, IIS on Republican denarii, quinarii, and sestertii, and of M, K, I, E (40, 20, 10, 5) on Byzantine copper, are strongly in favour of the contrary view. The marks of value 1 and € (10 and 5), found on contemporary Greek copper of Southern Asia Minor,7 clinch the matter: they are parallel to Aurelian's XX and cannot conceivably refer to a higher unit.

(2) XX equals "two denarii". The sign of the denarius, since the second century B.C., had been \*. That is the form found in inscriptions of the Empire. including the Edict of Diocletian "de maximis pretiis" of A.D. 301. XX can only mean "two denarii", if the denarius is again, in reality, a "ten piece": otherwise, XX-1 could never be rendered by Greek KA. To this possibility we shall come back in a moment.

(3) Dr. Brambach's ingenious view that XX-1 denotes the proportions of copper to silver in the alloy " will hardly command assent. Five per cent. is too optimistic an estimate of the silver content of these pieces and all the analogies of similar marks on Roman coins are against such a meaning.

Aurelian's XX.1 coin, then, is a unit containing twenty smaller units. What are these? Only three possibilities need be seriously considered:

(1) XX.1 denotes one double denarius containing twenty asses. Greek copper coins of Cilicia and neighbouring districts of the reigns of Valerian and Gallienus show, beside marks of value, 2, 3, 4, 6, 8, 12, the marks 10 and 5 also.9 10 is sometimes represented by I, sometimes by IA, while 5 (€) normally appears as

<sup>7</sup> See also below, p. 225,

<sup>\*</sup> Cp. Frankfurter Münzzeitung, April, 1920, pp. 197 ff.

<sup>3</sup> Cp. Imhoof-Blumer, Griechische Münzen, pp. 680 ff.

a countermark on pieces of the "ten" size. IA may well be read as "ten Assaria". Here we have a change from the familiar subdivisions of denarius and drachm to 16 and 12 asses respectively to a new subdivision of a larger piece into 10 and 5 parts. This evidence seems to suggest a new decimal division of the denarius, beginning well in advance of the reform of Aurelian.

But the objections to this theory are very serious:

- (a) The decimal division of the denarius had been obsolete for centuries. Why should it now reappear?
- (b) By A.D. 301 the denarius had dropped to the value of \$\frac{1}{50000}\$ of a gold pound. Since the reason for its fall can only lie in the debasement of the currency, the damage must have been already done by the reign of Aurelian. How then can we find a denarius in his reign, still expressing something like its old value?
- (2) XX\*I denotes a piece of twenty denarii. This view takes account of the devaluation of the denarius just noted, but blinks the fact that the old reckoning by sestertii is found as late as circa A.D. 295. This view, then, though it may be near the truth, cannot be literally true.

<sup>10</sup> i.e. the Rhodian drachm, three-quarters of the denarius in value.

<sup>11</sup> Cp. here Segre. Circolazione Monetaria e Prezzi nel Mondo antico ed in particolare in Egitto: especially pp. 124-5, prices of slaves, which in first, second, and early third centuries, range from 50 to 2,200 drachms, but rise to 14 talents in A.D. 291, 15 talents in A.D. 293; pp. 128-9, prices of camels, which in second and third centuries range from 250 to 800 drachms, but rise to 16½ talents in A.D. 289. The fall of the denarius, then, was an accomplished fact in Egypt before Diocletian's reform of A.D. 296. The prices of wine (pp. 138-9) and clothes (pp. 160-1) seem to show that the fall had not taken place in A.D. 264 but had begun in A.D. 270. P. Oxy. 1414 (A.D. 270) gives us a value of 21 denarii for a στιχάριοτ, later we find the price of 1½ siliquae.

The new explanation which I have to offer owes much to an article by Otto Seeck, written as long ago as 1896.12 He seems in fact to have found the key, but not fitted it properly in the lock. He points out that under Diocletian we find a sestertius of reckoning, obviously too valuable to be a subdivision of the denarius of the stood of a gold pound,13 and draws the certain conclusion that sestertius and denarius had changed their old relations by that time. He then proceeds to the hypothesis that the XX.I piece of Aurelian is a double denarius which is at the same time marked as the unit of account, the sestertius. Aurelian, in fact, gave the sestertius the new value of two denarii.

In the confusion produced by the extreme debasement of the coinage "the old reckoning by sestertii offered a firm foothold". This dictum of Brambach's 14 brings us yet a step nearer the solution. Only one more observation is still required, and this I can now add. The sestertius continued to be divided decimally into tenths, twentieths, and fortieths (libellae, singulae, teruncii) long after the denarius had been divided into its sixteen asses.15 The XX-1 piece then is nothing else than a double sestertius, containing twenty libellae. The word "denarius", now hopelessly degraded by association with the debased coin, the double denarius of Gallienus, was no longer suitable for use in naming the standard coin. Aurelian fell back on the unit of

11 N. Z., 1896, pp. 171 ff.

<sup>12</sup> Cp. the salary of Eumenius, a man high in the imperial service, 300,000, later 600,000 HS. (Paneg. ix. 11 and 14). Also C.I.L., viii. 5333, 350,000 HS. devoted to repair of a temple.

<sup>14</sup> Frankfurter Münzzeitung, April, 1920, p. 203. 13 Volusius Maecianus, Distributio, 65 ff.

reckoning, the sestertius; put a new coin, the double sestertius, in place of the double denarius; and divided the new coin into its normal divisions, tenths and twentieths. The old double denarius was practically demonetized, now that the denarius ceased to equal four sestertii. Under Diocletian we shall find the denarius fallen to be 1 (the "libella") of the sestertius.16 If this relation was already established under Aurelian, his XX-I piece was actually valued at twenty denarii, as Mommsen long ago suggested; only we must add that these denarii were reckoned as "libellae" of a double sestertius. It may be added that, from Aurelian down to Byzantine times, the reckoning by sestertius and libellae seems to have played an important part in the coinage. The 40, 20, 10, and 5 nummia coins of Anastasius were probably actually called "terunciani",17 because the unit, the nummion, was a teruncius, or fortieth part, of the new sestertius, the 40 (M) piece, now called the follis.

The numismatist is always hoping that Egyptian papyri will furnish just those critical pieces of information that are needed to fill in the gaps of our knowledge of the coins. Fortune has recently been kind to us, though, as often, her bounty has not been quite complete. An extract from an unpublished private letter runs: Προσέταξε ἡ θεία τύχη τῶν δεσποτῶν ἡμῶν τὸ Ἰταλικὸν νόμισμα εἰς ἡμισυ νούμμου καταβιβασθῆναι.

18 This drop of the denarius to a fortieth of its original value fairly corresponds to the actual debasement of the coinage.

The manuscripts have "terentiani", which, so far as is known, means nothing; the alteration to "terunciani" is very slight. Cp. Chronicon of Count Marcellinus, quoted in Wroth, B.M.C., Byzantine Coins, i, p. xiii, No. 3.

σπούδασον οὖν πᾶν τὸ Ἰταλικὸν νόμισμα ὁ ἔχεις ἀναλῶσαι. "The sacred fortune of our lords has ordered that the Italian money be reduced to the half of a 'nummus': be diligent, therefore, to spend all the Italian money you have." 18 The date assigned to the letter is the fourth century, but the reference to "Italian money" would be meaningless after the closing of the local Alexandrian mint in A.D. 296. An attribution to the reign of Diocletian and Maximian just before A.D. 296 is, therefore, very probable. In the context it seems certain that "νοῦμμος" must be a definite denomination, not merely an indeterminate name for any coin: and, if this is so, it can hardly be anything else than the "sestertius nummus". 19

The evidence of this papyrus is too definite to be neglected, gladly as we should welcome greater certainty about its date. The "Italian money" must be the coins of the reform of Aurelian, i.e. the pieces marked XX\*I. These are now to be reduced from two sestertii to half a sestertius. Under the new system of Diocletian, a coin, with radiate crown, in general

<sup>&</sup>lt;sup>18</sup> Quoted by Kubitschek in N.Z., 1920, p. 158, from Paul M. Meyer, Juristische Papuri, pp. 249 ff., No. 73, note.

<sup>&</sup>lt;sup>19</sup> My friend, Mr. H. I. Bell, tells me that "νοῦμμος" is a rare word in papyri, but can mean "sestertius". The usual reckoning is in drachms and denarii. My friend, Dr J. G. Milne, thinks that a change in the relation of denarius to Alexandrine tetradrachm is implied. It seems to be impossible to establish an exact date for the papyrus, despite the courteous help of Dr. Meyer.

<sup>&</sup>lt;sup>29</sup> Earlier attempts to reduce the value of the coin are suggested by the marks of value |A, X•I, X•ET•I, which occur in the reigns of Tacitus and Carus on rare pieces of much the same size and quality as the XX•I piece; cp. too the countermark € (5) on coins on which we should expect | (10) in the series of Southern Asia Minor (see above, p. 221).

appearance very like Aurelian's XX\*I piece, appears as an obvious subdivision of the new larger piece with the typical reverse of "Genio populi Romani". We now know that, whereas the larger piece was tariffed at 20 denarii and was the new double sestertius, the radiate piece was tariffed at 5 denarii and was the fourth part of the larger. The unit of Diocletian is the same as that of Aurelian, the tenth part of the sestertius, but, whether that tenth part had already been identified by name with the reduced denarius under Aurelian, is not yet certain. 22

The relation between the reform of Aurelian and that of Diocletian now becomes clear. Diocletian builds on the foundation of Aurelian, but reconstructs most of the superstructure. The weakness of the system of Aurelian had lain in the absence of standard coins of gold and silver and in the poor quality of the one billon piece in common use. It was not worth two sestertii  $(\frac{1}{2500}$  pound  $A)^{23}$  as metal, and must have tended to fall in actual purchasing power, dragging with it the sestertius, as the double denarius coin had dragged the denarius.<sup>24</sup> Diocletian saved the sestertius

Both coins have some slight admixture of silver, and weigh c. 160 gr. (10.37 gm.) and 60 gr. (3.89 gm.) respectively. XX appears as mark of value on the larger coin at Alexandria and Siscia. I had guessed at a relation of whole and half for these coins; the papyrus proves me wrong.

<sup>&</sup>lt;sup>22</sup> Perhaps this identification was only made in 296, when the old Alexandrian coinage came to an end. Its standard piece, the base tetradrachm, had always been equated with the denarius and presumably shared in its fall.

<sup>23</sup> i.e., taking the value of the sestertius after Caracalla, 100 of an aureus, of 10 lb. A.

<sup>&</sup>lt;sup>24</sup> We gather that by A.D. 296 10,000 double sestertii, instead of the normal 2,500, went to the gold pound. Diocletian saved the unit of reckoning by sacrificing the coin.

by degrading the XX.I to a quarter of its value and striking a new and worthier double sestertius. His system was, of course, buttressed by the regular gold and silver which he now issued. The sestertius reckoning is not abolished, but merges in that of the denarius. its tenth part.

The only coin of the system of Aurelian that really played a large part in commerce must have been the XX · I piece. We must, however, see how the other pieces fit into the system. There is no standard aureus, till Diocletian struck at 70 to the gold pound. The relation of the XX.I piece to gold probably varied in the market, though its normal tariff was 2,500 to the pound.

The second billon piece, weighing about 38 gr. (2.46 gm.), was probably half the XX.1, a sestertins of ten libellae. The letters VSV, in the exergue of coins of Aurelian and Severina, will then denote "usualis", the "coin in use", a fit name for the unit of reckoning,25 A smaller coin still, struck by the successors of Aurelian, may be identified as the 5-libellae piece. The Aes coinage of the reform is of four denominations -one of c. 300 gr. (19.44 gm.), one of c. 230 gr. (14.9 gm.). one of c. 120 gr. (7.78 gm.), falling away later towards 90 gr. (5.83 gm.), one of c. 30 gr. (1.94 gm.). We should naturally describe these pieces as sestertius, dupondius,

<sup>25</sup> Cp. Babelon, Notes sur quelques exagia solidi de l'époque Constantinienne: VSV is found on coin-weights of solidi as a variant of VSVALE(S), in the sense of "standard" coins. Attempts to interpret VSV in close relationship to XX+I are alluring but fatal. VSV is not the same as VVS, and VV needs explanation as a variant form of X. The brilliant suggestion of Sir Arthur Evans, VSV = Vota soluta V (quinquennalia), must be mentioned. though it is probable that we must now abandon it (see Num. Chron., 1919, p. 13, Proceedings).

As, and quadrans; but it seems probable—and the weights confirm it—that, with the decimal division of the sestertius, the old As of  $\frac{2}{5}$  of the sestertius was restored. The As will then equal 4 libellae and the quadrans will be identical with the libella.

We should then have the following system:

1 pound X=2,500 XX•1 pieces = 50,000 libellae

1 double sestertius (20 libellae) = 2 sestertii (10 libellae)

-"second billon" (VSV)

= 4 half sestertii (5 libellae)

-"third billon"

= 2 sestertii (10 libellae)

-"first brass"

= 2½ dupondii (8 libellae)

-"second brass"

= 5 asses (4 libellae)

-"third brass"

= 20 quadrantes (libellae)

="fourth brass"

In conclusion, a glance may be permitted at the vicissitudes of the Roman coinage in the third century. By the reign of Septimius Severus debasement of the silver had already reached dangerous proportions. The expenses of the army <sup>27</sup> and the poor of Rome were continually increasing, and there was no prospect of any large permanent additions to the revenue. There is no evidence of a permanent gold reserve and we are bound to regard the debasement of the silver as a slow movement towards bankruptcy. Caracalla, after the murder of Geta, plunged into fresh extravagance over

<sup>&</sup>lt;sup>25</sup> The terms "first billon", &c, are, of course, only used for convenience, not in any technical sense.

<sup>27</sup> Cp. Septimius's dying words to his sons, as quoted by Dio Cassius, lxxvi. 15: 'Ομονοείτε, τοὺς στρατιώτας πλουτίζετε, τῶν ἄλλων πύντων καταφρονείτε.

the army, and, in desperate need for money, was driven to "reform" the coinage.28 He reduced the aureus from 15 to 16 lb. N, and in place of the denarius struck a two denarius piece, the so-called Antoninianus. This coin was in weight not much more than a denarius and a half; the quality of the denarius was for the moment to be spared, while an attack was made on the quantity instead.

The system of Caracalla remained standing for over fifty years, but it was always tottering to a fall. There was a struggle for survival between the denarius and the new double piece, which ended in the complete victory of the latter. The weight and quality of the double denarius steadily declined, until under Gallienus it became a miserable piece of what was little more than copper. The gold was again and again reduced . in weight and struck less and less true to standard, till under Valerian and Gallienus it is scarcely possible to trace a system at all. The Aes coinage, being avowedly subsidiary, suffered less. But, even here, the distinction of weight between dupondius and As was obliterated, only the radiate crown now distinguishing the higher denomination. Everything points to the fact that the Roman government was straining to breaking-point the theory that coins are necessarily worth their official tariff

The break came at the crisis of the reign of Gallienus,

<sup>35</sup> It has been suggested that Caracalla raised the pay of the troops from 500 denarii to 750. The general fact of waste, at least, is certain. Cp. the coin types "Fidei exercitus" and " Moneta Aug." (Cohen 76, 165). The type of "Moneta" certainly refers to the Emperor as paymaster; cp. its frequent use by Domitian (cp. Cohen 323 ff.); Severus Alexander, as "restitutor monetae", is shown in military costume (Cohen 576).

when public credit gave way and the double denarius ceased to be taken at its old value.29 Something very like state bankruptcy ensued, in which debts of state and individuals melted like snow, while creditors lost their all. Aurelian found Rome not ruined indeed, but with her business in chaos and without a serviceable currency. He was not prepared to make a thorough reform and restore a coinage of good metal. But he at least restored a foundation, by abandoning the double denarius to its fate and building again with a double sestertius on the basis of the old unit of account. The weakness of his system lay in the low intrinsic value of his two sestertius piece, which could only retain its nominal value if supported by a reserve in gold. The sestertius had already begun to go the way of the denarius, when Diocletian abruptly arrested its decline by degrading the unworthy double sestertius to a fourth of that amount and issuing a much superior coin, backed up by regular coinage in gold and silver. in its place.30 But, however considerable we admit the

Finds show us conclusively that down to c. A.D. 258 the baser silver circulated with the better; the worst pieces of Gallienus and his successors, A.D. 258-71, are usually found by themselves; the coins of the reform of Aurelian again are usually hoarded apart. Exceptions, of course, occur, but the general rule is unmistakable. These facts confirm the unofficial devaluation of the debased coinage of Gallienus in the market from A.D. 258 on and its official devaluation by Aurelian in A.D. 271.

The refusal of bankers in Oxyrrhynchus to give small change (date A.D. 258 or 260) is probably a symptom of the distrust of the new bad money (cp. Pap. Oxyrrh. No. 1411, Kubitschek, N.Z., 1918, pp. 215 ff.).

<sup>30</sup> If this reduction of the old XX.1 piece led to a rush to spend money, as the papyrus, quoted above, suggests, we can see how prices would be bound to rise; Diocletian's new reform, then, would be handicapped from the start by those excessive prices, which be tried by his Edict of A D. 301 to correct.

new work of Diocletian to have been, it is probable enough that he was only carrying out, with better equipment and, therefore, better success, what Aurelian and his successors had already had at heart.

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E. A. Sydenham. The Roman Monetary System (Pt. II). Num. Chron., 1919, pp. 140 ff.

 Voetter. Römische Münzprägung in Alexandria. N.Z., 1911, pp. 171 ff.

— Die Kupferprägung der diocletianischen Tetrarchie. N. Z., 1917, p. 24.

P. H. Webb. The Reform of Aurelian. Num. Chron., 1919, pp. 234 ff.

#### VIII.

#### NOTES ON THE COINAGE OF ROMAN BRITAIN UNDER THE FIRST TETRARCHY.

(SEE PLATE XII.)

One of the provisions of the famous reform, initiated by Diocletian about the year A.D. 295, consisted in the use of mint-marks, for previously, as a general rule, only the numbers of the officinae or divisions of the mint had figured on the coins: quite exceptional, therefore, are the rare specimens of the follis with exergue and field entirely bare, that is to say, lacking both mintmark and number of officina.

These folles have been assigned in mass by British numismatists and others following them, on the evidence of finds, to the mint of London, which, however, has also very rare coins with LON, a mark in common use later under Constantine I. Recently, however, an entirely new view has been put forward by the late Otto Voetter, who has specialized with such great success on the period of Diocletian and Constantine. While editing a catalogue he has drawn in advance

<sup>&</sup>lt;sup>1</sup> Cp. "Die Kupferprägungen der Diokletianischen Tetrarchie", II. Band, in the Num. Zeitschrift, Vienna: Alexandria, 1911; Antiochia and Lugdunum, 1917; Treveri, 1918; Siscia, 1920; Aquileia, 1923; Roma, 1925.

<sup>&</sup>lt;sup>2</sup> Münzen der römischen Kaiser: Sammlung Gerin, Wien, 1921. This collection, all except the gold, is now in the Municipal Cabinet of Milan. Cp. article by Gerin himself, in N.Z., 1917, pp. 49, 50.

on that part of his work in progress which will treat of these folles, and has maintained that they are to be attributed in part to the mint of Camulodunum, which had already been at work on the coinage of Carausius and Allectus."

Such a contention may well surprise us coming from Voetter, who himself—in opposition to the British numismatists—has denied the existence of the mint of Camulodunum, assigning to London not only the Antoniniani marked L and ML, but also those marked C and CL.

The vast work of numismatic classification accomplished by Voetter has earned him the undying gratitude of scholars, even if, as often happens, it does not represent the last word on the subject. And, as a matter of fact, we have to recognize certain defects in his method, such as the inadequate appreciation of the elements of style and particularly of palaeography, and the limited range of judgement which controls his numismatic schemes, confined as they are to a study of the individual mints, to the neglect of the simultaneous working of all the mints during a given period.

If we take account of Voetter's method of working we can explain his conclusions about the folles of British mintage. In the chapter in the above-mentioned catalogue, which refers to the mint of Camulodunum (pp. 96, 97), he begins by abandoning his former view; quoting Webb, he accepts the idea of the two British mints under Carausius and Allectus,

<sup>&</sup>lt;sup>2</sup> See P. H. Webb, "The Coinage of Allectus", Num. Chron., 1906; "The Reign and Coinage of Carausius", Num. Chron., 1908.

signing one with C or CL, the other with L or ML.<sup>4</sup> But unlike Carausius, who was recognized by the lawful Augusti (cp. the Antoniniani with AVCGC.), Allectus maintained himself apart and did not accept the monetary reform, so that the follis of British mintage only begins after his death in 296.<sup>5</sup>

He then proceeds to an examination of this follis and declares that here, too, the characteristics of the two different mints may be seen. There are some dies in fine style and with large heads which, according to him, resemble the rare specimens with LON' others of coarse fabric, with small heads, which should belong to the other mint, which may be identified as Camulodunum.

To prove his case he reproduces the two sets in two lines, and then assigns to Londinium the folles with bust cuirassed and laureate heads of large size, with legends:

# IMP-DIOCLETIANVS P.F. AVG., IMP-MAXIMIANVS P.F. AVG.

#### CONSTANTIVS NOB . C., MAXIMIANVS NOBIL . C.

and to the other mint, Camulodunum, those with bust cuirassed and small heads, with legends:

<sup>\*</sup> Cp. "Die Kupferprägungen der Diokletianischen Tetrarchie", I. Band, in Num. Zeitschrift, 1901: Londinium.

<sup>&</sup>lt;sup>5</sup> Giovanni Costa in a careful article on "C. Valerius Diocletianus" in Dizionario Epigrafico di Antichità Romane, Roma, 1912, p. 38, argues for the date 297: the facts of the coins seem to me to be against him. I may also observe that the coins of Carausius with Vot. XX which he quotes refer to the Vota of Carausius himself, not to those of Diocletian and Maximian. The Vot. XX Susceptis Multis are already found at the beginning of the reign under Tacitus and Probus.

IMP. C. DIOCLETIANVS P.F. AVG., IMP. C. MAXI-MIANVS P.F. AVG.,

FL. VAL. CONSTANTIVS NOB. C., CONSTANTIVS NOB. C., MAXIMIANVS NOB. CAES.

All these have the well-known reverse, GENIO POPVLI ROMANI; to the second group Voetter further assigns an abdication issue:

D.N.DIOCLETIANO FELICISSIMO SEN. Triumphal bust with laurel-branch and mappa.

#### PROVIDENTIA DEORVM QVIES AVGG. Usual types.

The varieties already described above with large heads are placed earlier by him (pp. 150, 152), together with a specimen of Diocletian with LON and some denarii without mint-mark,<sup>6</sup> in the chapter dealing with the mint of Londinium.

Wishing in my turn to examine the problem and arrive at another conclusion, I must follow a plan that takes account of those factors which Voetter neglects and, above all, of considerations of style. I have, accordingly, reproduced on Pl. XII the coins of the two supposed mints (nos. 10, 11, 12, 13 Camulodunum; nos. 14, 15, 16, 17 Londinium) in the order adopted by Voetter.

The reader, examining them, will have no great difficulty in seeing that, except for the different proportions of the heads, everything else, modelling of features

As I shall prove in another paper, none of these denarii belong to Londinium: their style points to several mints. The "third brass" of Maximian, too (no. 6), belongs to Roma, not Londinium.

as well as lettering of the legends, points to a single origin; and this origin is the same as that of the rare issue with LON. There appears, then, to be no justification whatever for abandoning the old view that both groups are to be assigned to the one mint of Londinium. If we examine the coins, with a firm grip of the principle that numismatics means criticism of style, we find ourselves confirmed in our conclusion. The modelling of the portrait of Maximian on no. 7 reveals the same hand as no. 11; the profile, the expression of the eyes, the treatment of minor details. such as the arrangement of the ties of the wreath, admit of no doubt.

The portrait of Diocletian, lacking, as we know it did, any characteristic feature, was hard to differentiate; we find, therefore, a commonplace likeness (no. 6) which is followed by a second, nearer to the true (no. 10), which is repeated again-except in point of size-on no. 14. I pass over the likeness of Constantius and Galerius, the developments of which are almost exactly the same.

Passing on to palaeography, we must begin with a few words of preface. In coin-legends of the Empire the most characteristic letters, those, that is to say, which are the best evidence for differences of mint, are A. V. and M. If we study the earliest British coinsthose of Carausius-we see that the A and the V are very broad, being composed of two almost vertical strokes set well apart; later, when the marks that distinguish the two mints of Londinium and Camulodunum appear, this breadth decreases on the Antoniniani of both mints. Under Allectus, however, the evolution of the script progresses farther at Camulodunum; in the letters A and V the strokes meet, forming two acute angles; the letter M looks as if it were made by the juxtaposition of two A's, and is therefore broader at bottom than at top, as distinct from London, where even in A and V the strokes do not meet; I may add that at Camulodunum the strokes are distinctly apicated or splayed at the ends.

Contrasting the forms of letters we find:

### (1) IMP CALLE C T VS PAVC

# (2) IMPCALLECTVSPFAVC

Figs. 1 (Camulodunum) and 2 (Londinium). [Pl. XII. 1, 2, 3.]

These are just the differences that clearly distinguish the two mints; otherwise we might still be inclined to doubt, remembering that Voetter once denied the duality of mints on a priori grounds and, as we have seen, held that ML and CL are only variant marks for the one mint of Londinium—a use which can easily be paralleled.

Returning now to our main point, the British folles, we can easily see that if we are to admit for them, too, the simultaneous working of two mints, as Voetter in his later view would have us do, it is essential that we should find the difference of style, which we have been considering on the Antoniniani, transferred to the follis—a transference which takes place over the reform at all mints, e.g. at Lugdunum (Pl. XII. 4, 5).

An examination, however, of the coins attributed by the Viennese numismatist to Camulodunum upsets his conclusions, for it reveals on them the lettering peculiar to Londinium, whereas some folles with LON show the forms of Camulodunum. The obvious conclusion is that after the conquest of Britain by Constantius Chlorus the two mints were united in the one mint of Londinium

We have next to see that the theory of two mints for the unmarked folles proves to be quite correct-but not along Voetter's lines. We shall demonstrate that some of these folles are not of British mintage; the second mint must be looked for in a hitherto unsuspected quarter, and to it must be referred the coins we are now to consider.

Let us look at Pl. XII. 18, 19, 20, which Voetter7 considers British merely because they have no mint-mark: we have only to confront them with the specimens we have already examined to see how different the style and lettering are. In the first place, all the portraits in this group follow a conventional scheme, characterized by the distance between nose and chin, which gives the profile a lively expression of caricature: in the case of Maximian this is increased by the peculiarity of the snub nose, which is a genuine feature of Maximian, but is not seen on the London coins. As for the lettering, the lack of similarity to the other group is seen in the greater size of the letters, which are formed of thinner strokes, not always straight:

<sup>7</sup> Cat, Gerin: Londinium, no. 7 of Maximian and 7 of Constantins Chlorus.

marked peculiarities are seen in the letters M and B, which are clearly distinguishable from the British forms.

As we must, then, for these reasons deny the theory of a single origin in Britain, we can now easily find the true source of these folles if we confront them with those which, apart from the mint-mark, most resemble them. A decisive comparison can be made not only with the folles, but also with the Antoniniani of the mint of Lugdunum, of which Voetter has given us the best summary hitherto.

The last Antoniniani (Pl. XII. 4, 5) prior to the reform are eloquent witnesses to style from whatever point we regard them. Then come the first folles, of the years 295-296, with the marks  $\frac{1}{LA}$ ,  $\frac{1}{LB}$ ,  $\frac{A}{PL}$ ,  $\frac{B}{PL}$ ; these show on the obverse dies closely similar to those (Pl. XII. 18, 19) of the unmarked specimens. Lugdunum, then, is the mint of both groups, which are simply two groups of one and the same issue. Voetter's table must therefore be corrected by the addition of the unmarked Lugdunum series—for which arrangement we already have various parallels.

Voetter, we have seen, thought that he was faced with a problem of locality, whereas in fact the problem was one of time. His error was due to a defect of method; he studied the coin-history of the period separately mint by mint, instead of systematically following its development over the whole Empire, or at least over the whole sphere of one of the colleagues in Empire.

Voetter, op. cit., Lugdunum, Pl. XXI.

In the case of Maximian Herculeus and Constantius Chlorus the unity of plan which we can trace in the mints within their domain proves beyond possibility of doubt the local extent of those domains. Analogies of epigraphy, iconography, and types between Ticinum,9 Aquileia, Siscia, Roma, and Carthage prove that Maximian ruled Italy, Pannonia, and Africa, whilst the perfect agreement between Lugdunum, Treviri, and Londinium is evidence for the fact that the sway of Constantius extended over Britain, Gaul, and Spain. A brief reference to this agreement seems necessary to explain the particular position of Londinium in the general movement of the mints of Constantius.

For the mints of Treviri and Lugdunum we have the excellent lists of Voetter, already quoted. In both these mints, as over the whole Empire, the reform was introduced in A.D. 295, at a time when in Britain Antoniniani were still being struck for Allectus. The portraiture shows at the outset plain laureate heads as in all mints without distinction. During the years 295-296 follow issues characterized by the signs:

Ia. 
$$\frac{1}{TR}$$
; II a.  $\frac{A \mid}{TR}$ ,  $\frac{B \mid}{TR}$ ,  $\frac{C \mid}{TR}$  for Treviri.

Ia.  $\frac{1}{LA}$ , Pl. XII. 21,  $\frac{1}{LB}$ , —; IIa.  $\frac{1}{PLA}$ , PLB for Lugdunum.

It is at the second stage that the coins of Londinium

For this mint, see the articles by Monti and Laffranchi in Bollettino Italiano di Numismatica, Milano, 1903, 1904, 1905. Voetter has recently (Num. Zeitschrift, Vienna, 1926) tried to maintain the case of Tarraco, on the strength of the Ramón collection, which contained specimens, not found in Spain, but bought in Paris and in Italy, just because of the erroneous attribution to Tarraco made by Austrian and French numismatists.

appear. We have, therefore, in the second half of 296, the marks:  $\frac{1}{LON}$  for Londinium, Pl. XII. 7, 8, 9;  $\frac{A \mid \Gamma}{TR}$ ,  $\frac{B \mid \Gamma}{TR}$ ,  $\frac{C \mid \Gamma}{TR}$  for Treviri;  $\frac{A \mid}{PL}$ ,  $\frac{B \mid}{PL}$  for Lugdunum.

The fact that these issues are contemporary is proved not only by the feature of portraiture, the plain head, but also by analogies of legend: the legend IMP-MAXIMIANVS PI. FE. AVG. (Pl. XII. 7) of Londinium corresponds to a variety at Treviri with P.FE., and C. VAL. MAXIMIANVS CAES. is seen both at Londinium and Lugdunum.

In the succeeding year 297 the three mints begin to distinguish themselves from all the others in the Empire by inaugurating that "ostentaticus" style of portraiture in which the Emperor is represented at the beginning of a war, wearing cuirass, with or without paludamentum; at the end of a war, as returning victorious in the habit of Mars, helmeted, with spear and shield, of Hercules after his labours, with club and lion-skin, or of Sol extending his right hand in the attitude of the peacemaker. More rarely the Emperor is further

represented in consular robe, with the sceptre or globe. In the issue of 297 the mint-mark disappeared from the follis of Londinium, and its absence continued till the reign of Constantine: the marks of Treviri and Lugdunum are those of the previous issue. The cuirassed busts (Pl.XII.10,11,12) that appear in this year refer to the wars entered upon by the four Emperors: by Constantius against the Franks, by Maximian against the Moors, by Diocletian and Galerian against the Persians. In all three mints the busts are characterized by small heads.

In 298, after the victorious conclusion of the wars, the Emperors at all three mints adopted the attitude of the returning victor, which was to figure on all successive issues down to 305. From 298 to 302 we have issues with marks:

In 303-304, the period of the "Vicennalia" of Diocletian and Maximian, appear larger heads 10 with marks:

The last issues before the abdication of May 1, 305, have PTR at Treviri, PLG at Lugdunum, \_ | at Londinium—all three mints are reduced to a single officina each.

As the mint of Londinium issued far fewer coins than the other two, certain variants analogous to those of Lugdunum and Treviri are as yet unknown: but it is probable that they may come to light in future finds.

## LODOVICO LAFFRANCHI.

The same phenomenon is also observed for Nero, Vespasian, Titus, Domitian, Trajan, and Hadrian on the occasion of their decennalia.

## LEICESTER HOARD OF "TEALBY" PENNIES OF HENRY II.

During January, 1927, in excavating for new buildings just outside the Leicester city boundary, a labourer unearthed a small hoard of pennies of the first issue of Henry II. They were contained in a coarse earthenware jar of a yellow colour and unglazed. A few fragments of the jar were found and, when pieced together, formed the lower part of a vessel of the well-known class with sagging base,

The coins found were 240 in number and were all of Henry II, and all of the same general type, that now known as the Tealby type. There were no other coins of any other ruler, English or foreign.

The coins were sent to the British Museum for examination and study. They were remarkably free from corrosion, and the brown surface dirt on many of them was easily removed with water and a brush.

The condition of the coins was on the whole poor. Hardly a single coin was completely legible, but they were all of good metal and of an average weight of just over 21 grains apiece. The blanks as usual were very irregular except in the case of the four northern mints, coins of which are almost always circular.

The type of obverse is a bust of the king facing, that of the reverse a cross potent with a small cross in each angle. The coins, classified by obverse legends, read in place of the king's title:—

REX A	NO	L (o	r F	NO	) .			30 0	oins
REX A							774	7	#
REX A	R	Ex.	or	RE		7		107	**
R: AG		100						3	22
R: AN		68.5						3	22
R: A	4	4	8	41				9	11
R: .			10	-		1883		5	22
Illegible				=1,				76	17
							Tota	1 240	

There were a few coins of the class reading **LENRI RE** or **RE** which has smaller lettering and an unusual style of bust. These, in conformity with my classification in *Brit. Num. Journ.*, xiv, p. 13 ff., I have described as "late style".

The mints identified in the hoard were seventeen in number, viz. Bristol, Bury St. Edmunds, Canterbury, Carlisle, Durham, Exeter, Gloucester, Ipswich, Leicester, Lewes, Lincoln, London, Northampton, Norwich, Thetford, Winchester, and York. Some twelve other mints are known to have been striking coins during the period. The only rare mint in the hoard was Lewes, previously known by one coin. There were in the hoard two coins with an inner circle on the obverse, one by WARNIER of Northampton, and the other by TVRSTAIN of Thetford; these are very rarely found.

An examination of the detailed list of the hoard will show a few new spellings of moneyers' names; no. 46 gives **SAPVL** as the reading of the Gloucester moneyer Saul. Two coins in the hoard read **PIP** as the mint name; these are attributed to Ipswich. This hoard, as compared with others of which we have full particulars, throws no light on the classification. The hoards found at Lark Hill (Worcs.) and at Ampthill (Beds.) cover the same ground except that an obverse reading **LENRI** alone, present at Ampthill, is absent here and **LENRI** R AN was absent at Lark Hill though represented here.

All three moneyers, William, Henry, and Raul, of Bury St. Edmunds, were in the find. They were all present in the Lark Hill and Ampthill hoards, but only one moneyer, William, was found among the 110 coins of Henry II in the Awbridge hoard.

A glance through the "uncertains" in the list will show what a large proportion of coins of the period are illegible. Some coins show parts of moneyers' names not now known.

The museum retained 160 of the coins, including many incomplete readings, valueless as they stand, but possibly of help for identification in the future.

L. A. LAWRENCE.

## LIST OF THE COINS

Moneyers'

names

Tancard

Elaf

# LIST OF THE COINS

No.

Obverse.

#HENRI REX [ANGL]

W. NRI:R.A

BRISTOL.

Reverse.

TANE ARD:ON-F:ON:BRIST

BURY ST. EDMUNDS.

# WILLEM: ON: SE: ED: 8.4. FEENRI REX ANGL

(the two coins are from the same dies)

(bust unusual, similar in some respects to ANGL type,

6, 6. HIENRI REX AN

but coarser work)

Raulf

Henri

#HENRI:ON:S:EDM:

EDM:

(the two coins are from the same dies)

#IXA

7. FEENRI:REX

". Uncertain	Goldhavoe	Goldeep	Raulf	2 2	Ricard	
FR ON:S:EDM: ON:S:EDM: S:EDM:	CANTERBURY.  #GOLDLAV[E]:ON:EAN DLAVEE	-OLDEEP	#RAVIL TO	FRAVIL: ON: EANTO	FRIL - CAN:	PRIEAR AN DON:EA BOON:EA BOON:EAN
8.#henrire[*?] 9. #henr[irex?] 10. [#henrijrex	11. #KENRI REX ANG	18. 14. <b>FINE</b>	15. (ANGL type) 16. ENR	17. ——RE× AN		20. — KEX: 21. — REX: 22. — REX (small lettering, so-called "late" style)

Moneyers' Name? Ricard M

Rogier

Wiulf? Wiulf Wiulf

Uncertain

#WIVLF:ON:E-N-0

ON:EANTOR

# GIER:ON[:EA]NTO

ANTO

ANTO

ARD\_\_\_\_EA: -M-EA

#ROGIER:ON:E (?)

LN-

68

**EMENISTISEXA** HAE

REX

RIREXANGL ANGL type)

RI:REX A ("late style")

ON:LAN-

Reverse.

Obverse.

NISINE

FLENK FLENK

REX type)

LA

LENKI:R: PA REX

28.

RIREXANGL 30 68

HOARD OF	"TEALBY"	PENNIES	OF HENRY	п. 251
	William	Waltier	Guncelin	Saul
* ON:EAN ON:EAN ON:EAN ANT	CARLISLE. LLAME:ON:E	DURHAM.  **WALTIER:ON:DVN:	EXETER. #GVNEEE	GLOUCESTER. *SAPVL:
99REx 40REx 41REx 42. #ME	8. :REx	44. #benri rex angl	t5. (ANGL type)	6. EXANGL
39. 41.	430	4	10	.9

Moneyers' names.

Reverse.

Nicole

Rodbert

Turstain

IPSWICH.

#NICOLE:ON:GIPES PON:O

GIPES LE:ON:GIPE: OLE:ON:GIP

FRODBERT:ON:G-

\*RODBERT:ON:GIP

FRODB ER TON: 61 #I30

# FINISISE

FLENK

**FLENRIREX** 

THE RE

STAIN:0N:GIP\_ FTVRSTAIN:ON:GIP

N:GIP

FTVIR

**FHENRINEXA** 

FLENK

REX

FILE

REX

AIN:ON:GIP TAIN:ON:G

ENIX

ö

Obverse.

**FLENKIREX** 

**FLENRIRE**\* **FLENISIREX** 

REX

No.

Turstain Nicole

Uncertain Rieard ?

Rodbert

LEPIES

MISODBE INT.ONLERE

LEICESTER.

-R-:ONLE

LEWES?

FTVRB #TVIR

IS:N

IPSWICH or THETFORD

STAIN **HATURSTAIN** 

ENRIREX

FLENR

E:ON:PIP:

(Mint abbreviation PIP)

FLENISI:18

(INEx type)

FLEN

ANGL FUEN 70. FRENRI REX A

**FLENISI:RE** FLEN 68 Moneyers'

names.

Raulf or Raven?

Obverse.

LINCOLN.

Reverse.

M:ON:TIN

ANG

71. FLEN

120 78

#--AM:ON:LI:

#RAVLF:0\_0L #RAVL:ON:L

Raulf

-VEIN:ON:LINEOL

FLENRIREX

76.

NRI:R.A NISI:RE

LOL ON:LI

Uncertain

Svein

LINEOL

LI, LINE, NEO, &c., the only LOL visible letters

Lanfranc (Lafram)

(or E-?)

REX A

THEN-KEX

74. 75.

手で圧

#RAV-ON:LI-

RIREX

81-4. Uncertain

No.

Lefwine

Martin Pieres Pieres M

or S?

Pieres S

APIERES:S:

#LENRIRE XANG

INEX.

REXANGI

RIREXA

FLENKINEX:

RIREXA:

手に正

Rodbert

Godefrei

Alwin Geffrei

LONDON.

**ELENRIREXANGL** 

ANGL

FLENRINE XA

FLEMRIRAG

REX A

VNDE	L'LV_	CVND	VN:	VN		1			I.LVN:	UND	_V_	LVND:
AL WIN:ON:LVNDE	*GEFFREI:ON:LV	#GEFREI:ON:LVND	#GIFIREI:ON:LVN:	#GOD_I:ON:LVN	DEFR	DEFR	#LEPWIN	#LEFWINE:0	*MARTIN:ON:LVN:	ES:ON:LVND	ES:ON LV	*PERES .: ON:LVND:
												7

(from same dies as coin in L. A. Lawrence collection)

Moneyers' names.	Johan or	Swetman? Lefwine?	Uncertain				Swetman?
Reverse.	AN:ON:LV	#LEON:LV	ON:TO	- ON:TON-	T TAND:	GNILVND.	#SWED N.LVN
	100. *henidi:	101ENRIREX	102. KEX		105ENRI	107 <b>BEN</b>	108. ( <b>ANGL</b> type)

Engelram

Pieres

#PIERES:ON:NORLA RES:ON:N-LA

HINGELR

**FLEN RINEXANIGL** 

FLEN

109 110 IREXANG

NORTHAMPTON.

Warnier

**EWARNIER:**0

(¿)

inner circle

112.

Willam

Nicole

NORWICH.

THE REPORT OF THE PROPERTY OF #GILEBERT:ON:NOR THE VGO NOR WI

Herbert

Hugo Hue

Gilebert

#LVE:ON:NOR

from same dies as coin in L. A. Lawrence collection)

-1848 (?) #NILOL:ON:NOR **FPILLA** 

FLEN\_REX AN

INE:

THETFORD.

#TVRSTAIN:ON:TE A-E:ON:TET

FLENRI:RE: with inner circle

150.

EX

手下匠

FLENKI:RE:

MA:ON\_E

Turstain

Willem

Siwate ?

WINCHESTER

ON

Herbert or

ANGL

R:A

FLEMRIR.

ENRIREX

116. VII, SERIES V. m 122.

-NRI:R:A

Moneyers'

Uncertain Herebert Godwine Griffin names. EVER BERT:ON:EVE ON:EWE N:E Reverse. YORK. #GODP. FOI? NRI:REXA Obverse. T.REX FLENR 124. 126. 127. No.

UNCERTAIN MINTS.

ENRIRE

128

EAT:0 LWIN HOODDIN ANDR FANDR ANDR

(so-called "late" style)

手下田 FNE

181.

REX A:

Andrew struck at Chester, Lincoln, Winchester

Alwine?

Godwine, almost certainly

#GOD WIN

=

185. -RIREXANGL?

THE VINGE

133.

HOARD OF	"TEALBY" PI	ENNIES OF H	ENRY II. 259
Herbert struck at Norwich, Winchester, York Herebert Richard struck at 9 mints (mobably Canterbury)	Raulf struck at Bury,	Raven or Raul. Raven struck at Lincoln Struck at 6 mints	William struck at 13 mints Uncertain
#PEREBERT— #PEREB—E #RITAD:ON—	#RIEARD:— #RIN: #RIEART— #REARY—	#RAVL:ON:— #RAV—— #NIEOLE:ON—	# LLELM:ON: ENES:0VND:ONLEFWI-
186. — NRICR:A 185. — ENRICREX 187. — ENRIREX	189. REX 140. FLENR 141. (ANGL type) 142. PELENIRI:R:	148. <b>#hen</b> —— 144. <b>#henr</b> —— 145. —RIRE×A	146. <b>FLEN</b> — 147. — <b>ENRIRE</b> * 148. —— <b>RE</b> * 150. <b>PE</b> —— <b>RE</b> *

s 2

# UNCERTAIN MINTS AND MONEYERS.

Reverse.		* EVAS	E.ON.	EUL E.	T DG	reverse illegible	,,	:					
Obverse.	King's name has : before it (#: INE)	REX	-	REX ANG(?)	REXAN	157-8. (REXANGL type)	(R:A: type)	(REx type)		Type of bust found on REx, RE, REXA	<b>LENRI:R</b>	Busts and legends too uncertain to classify	240. Brockage of a reverse type
No.	151.	153.	164.	155.	156.	157-8.	159-61.	162-85.	186-96.	197-208.	204-6.	207-89.	240.

# ARTICLES OF THE MINT OF PESARO (1507-1510).\*

THESE ordinances were unknown to Olivieri, the diligent historian of the Mint of Pesaro, and their publication, with a brief examination of their content, besides serving to complement the information given by him, will not be without use as a contribution to the history of the last days of the Sforza lordship.

A brief of Julius II (published by Zanetti<sup>2</sup>) dated August 2, 1504, and addressed to "our beloved son" Giovanni Sforza, notifies to him that a new coin was to be struck with the object of serving to regulate the exchange and value of the ducat. It also expressly forbids him to coin any kind of money whatever without the previous sanction of the Pope and of the Apostolic Camera, under pain of the not inconsiderable fine of five thousand gold ducats. This prohibition was not long maintained; for there is a "bannum de quatrenis noviter fabricatis" of September 6, 1505, published by Olivieri. These ordinances begin by mentioning another prohibition imposed on Sforza in the second half of the year 1507, that of coining silver money.

<sup>\*</sup> Translated for the author by G. F. H.

Olivieri degli Abati, Annibale, Della Zecca di Pesaro e delle Monete Pesaresi dei Secoli bassi, Bologna, 1773, fol., and also in Zanetti, G. A., Nuova Raccolta delle Monete e Zecche d'Italia, Tom. i, Bologna, 1775, fol., pp. 179-246.

<sup>1</sup> Op. cit., Tom. iii, Bologna, 1783, p. 454.

<sup>3</sup> Op. cit., p. lix.

We have not the text of this prohibition, and do not know what inspired it; but we shall not be far from the truth if we suppose it to have been due to the fact that the coins at that time issued by the Pesarese Mint did not correspond exactly to the Papal prescriptions, and were consequently in conflict with that regulation of the coinage to which the Pope had devoted himself with an energy characteristic of the warrior that he was. However, whatever its motive may have been, there was the prohibition; and very curious, as it seems to us, is the open way in which Signor Francesco Scenti flattered himself that he could obtain its cancellation "with the help of his friends".

After this preamble, which has its interest, follows immediately the enumeration of the denominations which the mint-master could strike in virtue of the new concession, that is to say:

Gold ducats of the fineness of the broad ducats (24 carats), with a die of which the design will be given him by His Lordship, and of weight such that ninety make a Roman pound (3.767 grammes each).

Money of silver eleven-twelfths fine (916-66 thousandths) of three kinds: grossoni of the value of three old bolognini each, double grossoni of the value of six bolognini, and a third coin of the value of nine bolognini or three grossi, equal to two carlini. The weights of these three denominations, reduced to grammes, had to be 1-97, 3-96 and 8-52.

Soldini of inferior quality, five and a quarter fine (437-5 thousandths), of which 52 or 53 were to go to the ounce; each therefore of a weight varying from 53 to 54 centigrammes.

Finally, quattrini of a quality and design to be ordered.

I do not think it necessary to summarize and examine the remainder of the ordinances, containing the dispositions regarding the assaying of the coins, eventual alterations and forgeries, the forced value imposed on them, the dates for the delivery of coined money to those who deposited silver, and finally the privileges and exemptions which it was the custom to grant to mint-masters; for they vary little, if at all, from those found in similar contracts. I hasten instead to point out that the concession, signed by Giovanni Sforza with his own hand, was granted for five years on October 16, 1507, and nevertheless, on July 29, 1510, scarcely two days after the death of Giovanni, the mint-master made haste to obtain its confirmation or a fresh concession from Galeazzo Sforza, who had assumed the government of the state in the name of Costanzo II, son of Giovanni, who was hardly five months old.

What coins survive that can belong to the issues made in virtue of these articles?

Of Giovanni Sforza we know of but a single gold ducat, which was published by R. Chalon \* from the specimen, perhaps unique, which was in the de Coster collection:

Obv.—Bust r. IOANNES SFORTIA PISAVRI D

Rev.—St. Paul standing, with sword and book. ET CVSTOS ET VLTOR

Gold. Weight and diameter not recorded.

Revue de la Numismatique Belge, iv<sup>a</sup> série, Tome i, Brussels, 1863, 8vo, p. 300, Pl. XVI. 9. Chalon's article was reproduced in Rivista della Numismatica Antica e Moderna, Asti, 1864-6, 8vo, pp. 245-7.

The figure of St. Paul on the reverse is a certain indication that the coin was not issued before 1505, since it was not until January 24 of that year that Sforza issued the ordinance, quoted by Olivieri,5 prescribing that the Feast of the Conversion of St. Paul on January 25 should be particularly observed and solemnized from that time forward, "on account of the benefits and immense favours received by his illustrious lordship and by this city of Pesaro" on that day. Olivieri was unable to say what these favours and benefits were, but Betti, in the MS. history of Pesaro cited by Feliciangeli,6 when reporting this decree, adds that on January 25, 1500, the news reached Pesaro of the recall of the French forces which were in the pay of Cesare Borgia, who was thus prevented from pursuing his projected enterprise to acquire Pesaro at the expense of Sforza. Sanuto, again, in his Diaries,7 reports a letter from the Venetian Ambassador at Rome, dated January 24, 1503, Venetian style (1504), in which the writer says: "the Lord of Pesaro came to call at the house of the Ambassador. saying that he was the servant of our Signory, and that he had come to kiss the feet of the Pope and obtain the investiture . . ." We must believe that at the audience next day, January 25, Sforza obtained the assurance that his investiture with the state would be confirmed, although the bull relating thereto was not dispatched until the following May. This explains Sforza's ordinance for the solemnization of

<sup>&</sup>lt;sup>5</sup> Zanetti, Tom. iii, p. 451.

<sup>\*</sup> Feliciangeli, Bernardino, Sull' Acquisto di Pesaro fatto da Cesare Borgia, Camerino, 1900, 8vo, p. 31, note 1.

<sup>7</sup> Vol. v, col. 783.

the Feast of St. Paul, issued on the next anniversary, and also the use of the plural, seeing that at least two favours had been received on that day.

We may conclude, not only that this ducat is later than 1505, but also that it is the first gold coin to be issued from the Pesarese mint. In fact, although the lack of extant specimens of a given coin is not sufficient reason for denying that it was issued, yet, not only are no earlier pieces known, but we have no records of such from other documents, which would certainly have been adduced by Olivieri. He cites nothing that is not later than 1512.8 Moreover, the other mints of the Marches, or rather, the mints of the other lordships of the Marches, such as Urbino and Camerino, issue no gold coins before the first years of the sixteenth century. Another reason for regarding this as the first time that gold coinage was included in the concessions granted to the mint of Pesaro may be found in the actual text of these articles, where they speak of the prohibition of coinage in silver, not of the other kinds, in gold and copper. Hence the mintmaster, though showing himself so confident of obtaining the cancellation of the prohibition, would have thought it opportune to introduce into his articles the gold coin, to which the prohibition did not extend, and which perhaps, to his mind, could be for him an equal source of employment and profit. Some doubt there might indeed be on the possibility of profit, when we remember that the weight of the gold ducats, as fixed by the articles, was higher than that of the ducats struck contemporaneously in the mint of

Della Zecca, &c., op. cit., p. lxii.

Rome, which were normally one hundred to the pound, weighing therefore each 3-39 grammes.<sup>9</sup> But we have no means of knowing what profit the mintmaster could extract from his handling these coins of his, which, we may be sure, he would certainly not



have struck at a loss. The high weight explains why so few have survived, for they would naturally be bought up and melted down; add to which that the issues must have been restricted by the small quantity of gold to be found in the market of Pesaro.

Passing to the silver coins, we know of two which undoubtedly belong to issues made after these articles. They have been published by Zanetti with a letter

See the articles of the Mint of Rome of April 30, 1504, in Vettori, Il Fiorino d'oro antico illustrato, Florence, 1738, 4to, Document no. xxxiv, pp. 330-1.

of commentary by Olivieri.10 I repeat here his description and illustrate the specimens preserved in the Museo Archeologico at Florence.

Obv.-Bust r. of Giovanni Sforza, in armour, with beard and long wavy hair. Inscription around from r, above, within a double outer border consisting of a linear and a dotted circle:

+.IOANNES.SFORTIA.PISAVRI.D.

Rev.-St. Paul, nimbed, standing to front, with sword erect in r. and closed book in l.; at his feet to r. a small branch of quince; inscription from r. above: •PAVLO• •CVSTODI• Similar border.

Silver; diam. mm. 27, wt. gr. 6-52. Fig. 1.

Obv. - Bust r. as on preceding, but much smaller, within an inner circle between two linear circles; inscription from r. above, preceded by a quince branch: IOANNES-SF-CO-COTI-PISAV RI . D. Outer border as before.

Rev.-Figure of St. Paul, as on preceding, but smaller, and standing above a view of the city of Pesaro seen from the sea, whose waters are shown in the foreground 11; on l., the Rocca, followed by (from l. to r.) the Porta del Gattolo, the Rocchetta, and, in the background, the fortifications of the bridge; above all tower two high campanili, with flags flying from their tops, flanking the figure of the saint. Inscription from r. above : •ET•CVSTOS • •ET•VLTOR• Border as before.

Silver; diam. mm. 27, wt. gr. 6-52, Fig. 2.

In their weight, these two pieces correspond exactly to the third silver coin described in the articles, of the

<sup>16</sup> Zanetti, Tom. iii, pp. 450-3.

<sup>11</sup> Olivieri did not notice the water, which is clearly seen, and described the view of the city as taken from the hill Ardizio, explaining the situation of the rocca on the left as a mistake of the engraver, who he thought had cut the view in reverse.

value of three grossi or two carlini; but, finding two specimens with markedly different designs, we are led to suppose ourselves in the presence, not of two effective coins, but of two patterns. Our opinion acquires probability, not to say certainty, from their excessive rarity, for, as far as I know, no specimens are known except those in the Museum at Florence.<sup>12</sup>

Among the well-known coins of Giovanni there are no others which can reasonably be regarded as having been struck in accordance with these articles, apart from the quattrino or double denaro of copper already published by Olivieri; 13 its elegant design has great affinity not only with the copper denari, whose issue dates from 1498, but also with the two silver pieces just described. And indeed in none of the other silver coins do we find the difference of design which the tenor of the articles would lead us to expect, nor any correspondence with the statutory weight.

After the confirmation so eagerly sought and obtained, the mint continued active, as appears from the gold ducat of which I give the description, taking it from the specimen which, once again, belongs to the Museo Archeologico of Florence.

Archeologico at Florence for kindly providing me with impressions of these and of the ducat subsequently described. To my regret it was not possible for me to take into account another coin which must be referred to this period. It is summarily described in the Catalogo delle monete italiane componenti la Collezione del Cav. Giancarlo Rossi di Roma, Rome, 1880, 8vo, p. 258, thus: Mezzo Grosso. IO.SFORTIA.PISAVREN.PRIN. Brush. Rev. ET CVSTOS.ET.VLTOR. The Saint standing. It might be regarded as a proof of another of the coins contemplated in our articles, but of which of them? I have not succeeded in discovering where it now is.

<sup>13</sup> Della Zecca, &c., op. cit., pp. lix-lx, Pl. III, No. xxxix-

- Obv.—Modern shield: the impresa of the broken yoke between PATRIA in chief and RECEPTA in base; and a chief per fesse, (1) an eagle displayed, its head to dexter, (2) a lion rampant holding in his paws a branch of quince. Inscriptions around from 1. below: CON·SF·DO·P·Cable border.
- Rev.—Figure of St. Paul, nimbed, standing to front on the earth, sword reversed in r., closed book in l. which also holds his cloak together. Inscription from l. above: ET.CVSTOS ET.VLTOR.

Gold; diam. mm. 29, wt. gr. 3-85. Fig. 3.

The impresa of the broken yoke and the figure of St. Paul are indications which leave no doubt that this ducat belongs to Costanzo II, as Olivieri himself recognized in the letter to Zanetti cited above.<sup>14</sup>

The effigy of the baby Costanzo II is also found on the not uncommon denaro of copper. Olivieri indeed wished 15 to attribute to him some of the coins which he had already described as belonging to the first of the name, on the ground merely of the forms of the letters: an argument too weak in itself, and one which would lead to the result that nearly all the coins attributed to the first Costanzo would belong to the second. This would ill agree with the shortness of the period, hardly two years, during which the second Costanzo held the lordship by proxy. 16

At this point, however, we are bound to ask ourselves whether the mint-master really obtained the revocation

<sup>14</sup> Zanetti, iii, p. 453.

<sup>15</sup> Ibid., loc. cit.

<sup>&</sup>lt;sup>16</sup> Catalogo della Raccolta Numismatica Papadopoli-Aldobrandini, compilato da Giuseppe Castellani, Venice, 1925, 4to, vol. ii, pp. 133-4, note 3 on n. 13552.

of the prohibition against striking silver coin. The existence of only a few specimens, which may be considered rather as proofs than as current coins, would be sufficient reason to exclude the possibility of the revocation; but to this we may add another, derived from the consideration that the silver system, as established in the articles of Maestro Francesco, presents notable anomalies in the relations of various denominations between themselves and in respect of the papal coin. In fact, as we have seen, the second silver coin was in weight and value the exact double of the first, called grossone, while the third, which ought to be worth three grossi, weighed a good deal more than three times the first, and moreover, though it was to be equated to two carlini, it did not reach twice the weight of a Roman carlino, which at that time was fixed at three denari and eight and threequarters grains (grammes 3.96).17 This weight would be reached by the second denomination, double grosso or carlino; but none of the carlini known to us with the name of Giovanni or Costanzo Sforza reaches this weight; they are, instead, of the weight which the carlino had approximately before the reform of Julius II. It is rather difficult to believe that this system, which was perhaps intended to reconcile the new and the old weights of the carlino, could have been sanctioned by the Pope, who always showed himself inflexible in the application of his monetary reform; the more so, since the favour which he showed to Sforza in the first years of his pontificate began to cool rapidly from the moment that he conceived the

<sup>17</sup> Vettori, loc. cit.

idea of adding the lordship of Pesaro to the duchy of Urbino, with which he invested his nephew Francesco Maria della Rovere in 1508. The premature deaths of Giovanni and of his heir relieved the Pope of the necessity of using force to obtain his wish.

With the lack of the coinage of silver, what motive induced the mint-master, first to make his offer, apparently so disinterested, and then to demand with so much insistence the confirmation of the concession? Certainly not the very limited profit that he might derive from the coining of a few gold coins or of the copper, which, though more abundant, was always restricted to the needs of the little state.

I am induced strongly to suspect that Maestro Francesco, in view of the impossibility of an open and official revocation of the prohibition against striking silver coin, had to be content with obtaining, "through his friends" (and, I may add, by something in the way of a present), from the person whose business it was to oversee him, the promise to close an eye on what he had done in the mint of Pesaro. And then he, it would seem, must have struck coins in gold and copper in accordance with the prescription in his articles, and also have prepared the dies for the new silver, but, in fact, must have coolly continued to strike silver on the old system, using the dies of Giovanni as long as he lived, and after his death those of the first Costanzo, if indeed he did not use them before. This I say for the benefit of those who wish to find a link between this fact and the change of name, from Giuseppe Maria to Costanzo, which was imposed by Giovanni on his little son by his will made scarcely three days before he died.

This is no more than a suspicion, but, apart from what I have set forth, it is fully justified if we remember that the age of the Borgia was not over, and the times were fertile in similar intrigues and expedients, and if we consider the deceitful and fraudulent character of Giovanni. Of that we have no lack of proof, notably evidence of the duplicity which he employed to get Pandolfo Collenuccio into his hands and send him to his death.

The semi-clandestine coinage would easily explain why the coins with the name of Giovanni are not rare, but indeed relatively common, notwithstanding the sudden and turbulent interruption of his rule by Cesare Borgia; it would account still more for the eagerness of the mint-master, which is inexplicable except by this or some other similar motive.

I hope that fresh researches into the numerous Sforza documents which still remain unexamined may show whether my suspicion is well founded or not, but above all that they may reveal the name of the artist who made these gold coins and these proofs of the silver. They are linked up with the medals and the copper coins, so common but so interesting, which reveal the hand of an artist of the first order. It is a name which certainly deserves to be known, but unfortunately I have found no record of it. The only indication which I permit myself to point out to the student who desires to take up the matter is that reported by Feliciangeli, who obtained it from a MS. in the Biblioteca Oliveriana at Pesaro, written by Ronconi, who lived in the early years of the nine-

<sup>18</sup> Op. cit., p. 59, note 2.

teenth century, and that is that in his day, on a relief representing the device of the broken yoke which was in the rocca of Pesaro, there were the initials N. P. which might refer to the sculptor. The indication is very slight, because, even when we have found the name of the sculptor, shall we be able to believe that the medals and the coins are also his work?

### CAPITOLI SOPRA LA ZECCA.

In Christi nomine. Amen.

Havendo lo egregio M.ro Francesco di M.ro Pietro de Scenti di Pesaro inteso che per Breve Apostolico era stato inhibito et vetato al Illmo Signore Joanne Sforza Signore di Pesaro de potere far battere moneta d'argento in la sua Zecha de Pesaro se offerisse andare a Roma a tutte sue spese dandogli l'animo obtenere gratia per via de' suoi amici de havere licentia di poterla battere revocando la inhibitione già facta: et impetrando tal gratia... si offeri batter in dicta Zecha de Pesaro, volendo epso Illmo Signore, cum li capituli infrascripti v(idelicet):

In primis ch'l sia licito al sopranominato Francesco . . . batter oro et redure quello de bontà de Carratti secondo lordine de bonta et peso de li ducati larghi; et dicto oro redure a ducato sotto el cogno li darà il predicto Illmo Signore in designo, et di peso che novanta sopra dicti faciano una libra de oro a peso de ducati larghi correnti per tutto . . . et dicti ducati vadino a la valuta corrente.

Item ch'l sia licito al predicto Zechero battere argento de leghe undice . . . et de bontà de dicte leghe undice nette : et questo in grossoni quali non habiano differentia nel peso al più de un grano: de quali grossoni vadino cento septanta uno e mezo per libra romana: sotto il conio et stampa gli serà dato dal predicto Illmo Signore, quali grossi vagliano bolognini tre vechij luno. Simelmente gli sia licito battere moneta de argento de dicta bonta et legha sotto il conio gli serà dato ut supra: quali siano de valuta de bolognini sei vechi luna et sia differentia del peso da luna a laltra un grosso: de li quali vadino octantacinque e mezo per libra romana. Simelmente gli sia concesso batter moneta de argento de dicta bontà de valuta de bolognini novi vechij luno: o vero de carlini doi: senza differentia di peso da luna a laltra moneta excepto de un grano: de la quale moneta cinquanta doi faciano una libra romana: Et ancora gli sia concesso de batter soldi de leghe cinque e un quarto, et como gli serà ordinato: de li quali vadino cinquantadoi in cinquantatre per onza: quali soldi vagliano quatrini tre per uno. Et etiam battere quatrini de la bontà et conio gli serà

ordinato dal predicto Signore.

Item che si debbia elegere uno assagiator experto et practico nel arte: et doi soprastanti a la dicta Zecha quali insieme habbiano a tener conto de tutti li argenti quali vengono in mano del dicto Zechero. Ne si possa in alcun mo' poner in Zecha oro ne argento o vero altra materia da far moneta se prima per li predicti non sia pesata et tocato de che bontà sia quello se ha a zechar. Et similmente siano obligati tener un conto de le monete se cavaranno de dicta zecha. Et ancora siano tenuti farne assaggio per ceneracio et per copella de la moneta che se cava correspondente de bonta ale undice leghe como de sopra e dicto. Et lo assagiator debba portar piombo et copella per far dicto assaggio: quale possi far dicto assagiator cum li soprastanti dove li par : acioche cessi ogni fraude: et quella incorrendo, che Idio non voglia, se intendi de facto cascar in pena da la lege ordinata et statuita contra li falsatori de moneta: et qualunque sapesse o consentisse o vero non revelasse la dicta fraude, cio è che la moneta non se trovasse de la bontà predicta, sia obligato a la medesima pena et al arbitrio del predicto Signore. Et ch'l dicto Zechero sia obligato et tenuto dar bona et sufficiente segurtà : che tutti li argenti seranno posti in Zecha siano salvi et securi in mo' che a li patroni de epsi ne renda bono et fidele conto.

Item che dicto assagiator et soprastanti siano obligati tener peso legiptimo secundo che serà determinato: et ancora paragone cum li suoi tochi et quelli portar al bisogno accaderà a la predicta Zecha: et dicto assagiator habbia

grosso uno per assaggio.

Item che accadendo falsarsi dicte monete per qualunqua via o modo, o veramente sfogliarsi o tondersi oro o argento o altra materia che fusse como de sopra è dicto, exigendose pena pecuniaria per tale excesso secondo lordine de la ragione, la mitade pervenghi ala Camera fiscale, un quarto a lo accusator, et laltro al Zechero.

Item dicto Zechero dimanda che nullo altro sia o esser possa Judice competente ad epso ne ad alcuni suoi ministri se non el M.co Locumtenente del predicto Illmo Signore. Item chel sia licito al predicto Zechero sua famiglia et Ministri de la Zecha portar larme de di per sua difesa: et di nocte cum licentia... pena alcuna e contraditione. Et simelmente siano exempti... da ognj factione personale et maxime da la guardia.

Îtem che al dicto Zechero et suoi ministri de la Zecha sia facta ragion sumaria et expedita contra qualunqua persona

non obstante bolletini o salvi conducti.

Item che dicte monete siano fabricate et coniate como di sopra è dicto: et di quella bontà predicta habiano et havere se intendino nel stato del predicto Signore corso de la sopra dicta valuta singula singulis referendo: et che a nullo sia licito refutar la moneta predicta ala prenominata valuta sotto pena del quadruplo: da aplicarse la mitade ala Camera fiscale, un quarto al accusator et laltro al Zechero.

Item el dicto Zechero adimanda li prefati Capituli siano et esser se intendino in viridi observantia: et qualunque de qual stato e conditione se sia fusse negligente et contemptor de epsi, salve remanente le predicte pene, caschi in pena de ducati cento per ciascuno et ciascuna volta che contrafarà da

applicarsi como de sopra è dicto.

Item se il accadesse ad alcuno poner argento in Zecha: non possi astringere il Zechero a restituir moneta coniata secundo gli serà ordinato infra termine de quindeci di: computato il di che consignarà largento: et passato il dicto termine sia obligato consignar la moneta et obligato restituir senza dilatione alcuna di tempo.

Item se dia al dicto Zechero doi dinari de remedio: et per

questo no . . .

Attentis supra narratis concedimus praedicto Francisco Zecham nostram Pisauri cum suprascriptis Capitulis aliquibus in contrarium facientibus non obstantibus per annos quinque proxime venturos.

Datum Pisauri sub fide nostri majoris sigilli et manus

proprie subscriptione die xvi Octobris 1507.

(Loco sigilli) Jo Sfortia manu ppria.

Mattheus Perusinus de Mandato.

Galeaz Sfortia de Aragonia Comes Cotignole Pisauri Gubernator etc. Vidimus supra scripta omnia capitula suprascripti Magistri Francisci sibi ab Illmo Domino Fratre nostro honorande bone memorie ut supra fuerant concessa: Quae a nobis jure sunt approbanda: et confirmanda: Ideireo eadem Capitula n.o duodecim sibi ipsi Magistro Francisco approbando confirmamus: ac de novo si opus est, concedimus et impartimur: Mandantes ad unguem observari, prout scripta sunt ad literam:

Datum Pisauri sub fide nostri soliti sigilli, et manus pro-

prie subscriptione: die 29 Julii 1510:

(Loco sigilli) Gaz Sfortia m. pp. f. Bernardinus ser Gasparus.

(Biblioteca Oliveriana di Pesaro. Paper MS., from the Monte di Pieta, bound up with the Codice Oliveriano n. 439. Three sheets of 288×208 mm., the first two completely filled; on the third is only the rescript of Galeazzo Sforza; foxed, in bad state, some words being illegible. Attached is a transcript, with some notes, by Professor Giuliano Vanzolini.—The first seal, 50 mm., is broken, and it is hardly possible to make out the Sforza shield with the crest of a bearded head, and the beginning on the inscription: IOANNES SFORTIA....—The second, 26 mm., has the arms of Sforza impaling Aragon (?), and the inscription: GALEAZ SFORTIA DE ARAGONIA COTI: COMES.)

GIUSEPPE CASTELLANI.

## RECENTLY DISCOVERED ENGLISH HOARDS.

Pennies, temp. Edward I, found at Newminster Abbey, 1925.

The following coins were found during excavations at Newminster Abbey in 1925, in the ruins of the cellarium:—

Contract action 1	1000					
English pennies of	Edward	I				
Class I (1279) L	ondon					
(a) 1, (e) 8, on		RX	. (d)	5 .	14	14
Class II (early 1			102			
London	200)	102	109	-	14	
Bristol					2	
Durham					2	
York					2 4	
			. 61		_	22
Class III (1280-	1)					
London					95	
Bristol .		-		100	18	
Bury St. Ed	imunds				2	
Canterbury					10	
Durham					7	
Lincoln				-	10	
York .					8	
					-	150
Class IV (1282-1						
London					58	
Bury St. Ed	lmunds				1	
Canterbury					34	
Durham (Re	obert de	Insul	la)		2 3	
,, (B	ek) .				3	
					_	98
Class V (1290-?	)					
London					4	
Canterbury			1		6	
						10
Class VI (? date)						
(obv. of VI; r						
London					1	1

Brought forward	295
Class VII (?-1294)	
London	
Canterbury 1	
	3
Class VIII (1295-9)	
London 14	
Bury St. Edmunds 1	
Durham 1	100
Class IX (1299-1302)	16
London	
Bristol 2	
Bury St. Edmunds	
Canterbury	
Chester 1	
Durham (Bek) 4	
" (sede vacante) 7	
Kingston-upon-Hull	
Newcastle	
York 4	70
X (obv.), IX (rev.)	73
London (X a, 13; X b, 3) 16	
Durham (X a)	
전화하다로 나타되었다. 하	
IX (obv.), X (rev.) Newcastle	
Newcastle 2	00
Class V (1909 1907)	20
Class X (1302–1307)	
London: (a) 2, (b) 5, (c) 4	
Combanhames (a) O (1) O	
Newcastle (a) 1	10
Contemporary forgeries .	18
Brockage (obverse)	2
	1
Total of English pennies of Edward I	428
Continental imitations:	
Bishop William of Cambrai	
(1285–1296)	
Renaud I of Guelders	
(1272-1326)	
	2

Brought forward			430
Irish pennies of Edward I: (Dublin 12, Waterford 6) .			18
Scottish pennies: Alexander III John Balliol (1 of St. Andrews)		31 7	38
	Tota	1	486

It will be noticed that this hoard, which was buried within fifty miles south of Berwick at the end of the reign of Edward I, contained no Berwick coins. The Mellendean hoard (Num. Chron., 1913, pp. 57 ff.), buried half that distance south-west of Berwick, also contained none.

#### HALSALL TREASURE TROVE.

Thirteen gold nobles were found some years ago in the Parish Church of Halsall, Lancs. The removal of the flooring for repairs disturbed an old grave or vault, in which the coins were discovered lying on a coffin. The following is a brief identification of the thirteen nobles:—

in field	Flag at stern.						1
Henry IV.	Light noble.	Annulet	stops	on o	bverse	e	
Trefoil	in IhQ quarter	2					1
Henry IV.	Light noble.	Usual	type,	one	rope	at	
prow.	Trefoil in IhQ	quarter		10.00			1
Henry V.	Mullet at wrist, Trefoil between	broken	annul			let	3
on ship					7112		1
Henry VI.	Annulet issue	1.0				* . tr	4
,,		Flag at	stern				1
"	Rosette-Mascle	issue.	Flag	at ste	rn		1
						· B	13

#### SHEFFIELD TREASURE TROVE.

Coins found on October 17, 1913, during the demolition of old buildings at the corner of High Street and York Street, Sheffield:—

A STATE OF THE STA	
Henry VIII, groats of second issue	2
Edward VI, shillings 3, sixpences 2	ĕ
Mary, groat	1 5
Philip and Mary, shillings	5
Elizabeth, shillings 29, sixpences 29, threepences 2,	
half-groat 1	61
James I, gold sovereigns 2, Britain crown 1	3
" shillings 12, sixpences 4, Irish shillings 2 .	18
Foreign coins:-1 Spanish-Mexican dollar, half or	
quarter dollars of Johann, Friedrich, and Maurice	
of Saxony (1532-47), Volkmar-Wolfgang of	
Hohnstein (1564 and 1569) 2, Johann Casimir,	
Count Palatine (1576-92), Bishop Heinrich Julius	
of Halberstadt of 1596, West Friesland 1598,	
Gelderland 1606	8
	1000
	103

The majority of the coins were in extremely poor condition.

#### ITCHEN ABBAS TREASURE TROVE.

Coins found in the garden of Manor Farm, Itchen Abbas, in 1914:—

Philip and Mary shill	ing		4					1
Elizabeth, shillings					-			24
,, sixpences								63
James I, shillings		4	- 1					13
" sixpences		-		-				9
Charles I, half-crowns	8						9	33
" shillings								79
" sixpences.		4						12
4						- 8	100	-

234

All the coins were in very poor condition.

## ALLINGTON (NEAR DEVIZES) TREASURE TROVE.

Found under the corner of the capstone of an old well at Allington, about six miles from Devizes. All the coins were in poor state, and the half-crowns badly clipped.

Elizabeth.							
Shillings with	Martlet mark	1558-	-61			1	
	Crosslet ,,	1558-	-61			3	
	Escallop ,,	1584	-7]			1	
	Woolpack,,	1594-	-6		(0)	2	
	1	1601	-2		(+);	1	
	2	1602				1	
	uncertain	No.	2			1	
	(IIICOI CHIII				_	-	10
Sixpences with	Broad Arrow	dated	1565			1	
	Lion	**	1567			1	
	Crown	**	1567			2	
		***	1569	-		1	
	39.	,,	1570			1	
	Ermine		1572		100		
	Acorn	- 33	1578			2 1	
	Acorn	21	1574			1	
	TO Town time	- 27	1574		3	î	
	Eglantine	- 11	1577		*		
	. "	22			*	1	
	Cross	22	1580		0	1	
		22	1584		*		
	Hand	11	1592		10	1	
	Key	"	1595			1	
	Anchor	,,	1599		*0	1	1.0
					-	-	18
James I.							
Shillings with	Thistle mark		303-4			1	
1	Rose		305-6		*	1	
	Escallop	16	306-7			3	
	uncertain	11/20	1 4 3			1	
					-	-	6
Sixpences with	Thistle mark	dated	1603			2	
	Fleur-de-lys		1604			3	
	,, ,,	?	1604	or			
			1605	-	-	1	
	Grapes		1607			1	
					-	11/4	7

Brought	forward
---------	---------

41

-	~		- 4		T.
-	60	2.42	70.0	O.C.	

arles I.					
Half-crowns w	ith Portcullis mark	[1633]		1	
damain an entre en	Crown	1635		2	
	Ton	1636-	8]	1 1 1	
	Anchor	1638		1	
	Triangle	1639			
	Star	1640		2	
	Triangle in circle	1641	*	11	
	P in two semi-				
	circles	[1643]		6	
	R in two semi-	* SADE			
	circles	1644		8	
	Kelling		-	_	33
Shillings with	Fleur-de-lys mark	[1625]		1	
Citizando man	Portcullis	1633		1	
	Bell	1634		1	
	Crown	1635		2	
	Ton	1636-	8]	1 2 4 1	
	Triangle	1639			
	Star	1640		2	
	Triangle in circle	1641	*	6	
	P in two semi-				
	circles	[1643]		1	
	R in two semi-circles	[1844]		1	
	uncertain	[1044]		5	
	uncertain				25
717	n ( 111 1	[const		0	20
Sixpences with	Portcullis mark	1633		2	
	Bell	1684		1	
	Crown	[1635]	01	1	
	Ton	1686-	8]	2	
	Triangle	[1639]		1	7
				891	1
		Total			106
		LOUIL			100

The place of burial of these coins is within two or three miles of the site of the Battle of Roundway Down, which took place in July, 1643. The hoard was buried at least a year after the battle; the mint-mark "R in two semi-circles" did not come into use till July, 1644.

#### STEDHAM TREASURE TROVE.

Found at Stedham, near Midhurst, in 1926. All the coins in very poor condition.

Philip and Mary.			
Shillings	1554	2	2
Elizabeth.			
Shillings.			
Cross crosslet	1558-61	5	
Martlet	1558-61	5	100
A	1582-4	4	
Escallop	1584-7	8	
Crescent	1587-9	1	
Hand	1590-2	3	
Ton	1592-5	4	
Woolpack	1594-6	4	
Key	1595-8	3	
0	1600	1	
2	1602	1	
			34
Sixpences,			
Pheon	1561-5	10	
Rose	1565	3	
Portcullis	1566	4	
Crown	1567-70	18	
Castle	1571	3	
Ermine	1572-3	6	
Acorn	1578	3	
Cinquefoil	1578-5	9	
Cross	1578-81	6	
Dagger	1582	3	
Bell	1582-3	4	
A	1582-3	3	
Escallop	1585-6	3	
Crescent	1587-9	5	
Hand	1590	1	
Hand or Ton (?)	1592	1	
Ton	1592-4	6	
Woolpack	1594-5	3	
Key	1595-6	6 3 2 7 2	
2	1602	7	
Illegible		2	
		-	102

Brought forward			188
James I.			
Shillings,			
Thistle	1603-4	4	
Lis (1)	1604	i	
Lis (2)	1604-5	2	
Rose	1605-6	6	
Escallop	1606-7	3	
Coronet	1607-8	3	
Ton	1615	1	
Thistle	1621-3	î	
Slipped trefoil	1624	1	
	7070		22
James I.			
Sixpences			
N = 1 to the last	1603	9	
	1604 Exurgat	2 2 3	
	1604 Quae	9	
Lis	1605	8	
Rose	1605	2	
Escallop	1606	3	
Slipped trefoil	1613	1	
Thistle	1622	1	
Slipped trefoil	1624	2	
Supped treion	1024	2	19
			10
Charles I.			
Half-crowns, Tower			
Ton	1636-8	1	
Triangle	1639-40	î	
(P)	1643-4	î	
(R)	1644-5	3	
Sun	1645-6	2	
			8
ermin m			
Shillings, Tower	1000 -		
Feathers	1630-1	1	
Harp	1632-3	5	
Porteullis Bell	1633-4	5	
	1634-5	3	
Crown Ton	1635-6	18	
Anchor	1636-8	18	
Anchor	1638-9	6	

Brought forward			187
Shillings, Tower (con	td.)		
Triangle	1639-40	12	
Star	1640-1	16	
Triangle in circle	1641-3	36	
(P)	1643-4	11	
(R)	1644-5	23	
Eye	1645	5	
Sun	1645-6	9	
Obscure		16	
			185
Shilling, Aberystwy	th	1	
Sixpences			
Porteullis	1633	1	
Bell	1634	1.	
Coronet	1635	3 2 5 5 2 4 2 1	
Ton	1636-8	2	
Anchor	1638	5	
Triangle	1639	5	
Star	1640	2	
Triangle in circle	1641	4	
(P)	1643	2	
(R)	1644		
Sun	1645	1	
Obscure		4	
Sixpence, Scottish	1625	1	
		-	32
Charles II.			
Shillings, 3rd issue Mag. Bri. Fra. et	Hills	8	
Mag. Brit. Fr. et		1	
mag. Ditt. Fr. et	1110.		9
6: 0.1:			- 90
Sixpence, 3rd issue		1	1
			414

#### BRIDLINGTON TREASURE TROVE.

Found in Kirkgate in 1922, in ground formerly occupied by a dwelling-house.

Gold Coins.	0					
George II.	Guinea .			1		
George III.	Guineas .			33		
,,	Half-guineas			27		
				0.77		61
Silver Coins.						
Charles II. 3	Crowns, 8 H	alf-ero	wns	11		
William III.	2 Crowns.	15 H	alf-			
crowns, 1 S	hilling, 2 Six	pence	s .	20		
Anne. 2 Shi	llings .	- Control		2		
George I. 5	Shillings .			5		
George II. 1	Half-crown,	12 S	hil-			
lings, 9 Six	pences .			22		
1 Ecu of Loui	s XV.			1	De la	
			-	_		61
0 11.1 0 1		T	'otal			122
Condition of coin	as poor.					

#### ALFORD TREASURE TROVE.

Gold coins found at Alford, Lincolnshire, in 1918. All in worn condition.

George IV.	Half-sovereign	al.	*	1
	Half-sovereign	-	1	1
***	Half-guineas			67
George III.	Guineas .			100
George II.	Half-guinea			1

### KNUTSFORD TREASURE TROVE.

81 sovereigns (59 of George IV, 22 of William IV) were found in a farm near Knutsford in 1918. The dates of the coins were:—1821 (8), 1822 (8), 1823 (1), 1824 (4), 1825 (8), 1826 (15), 1827 (7), 1829 (4), 1830 (4), 1831 (2), 1832 (12), 1833 (2), 1835 (2), 1836 (4).

GEORGE C. BROOKE.

#### MISCELLANEA.

#### A FIND FROM THE PEIRAEUS.

A SMALL hoard of forty-two denarii found in the Peiraeus was recently shown in the British Museum. It consisted of the following coins:—

1. C·IVNI·C·F· (Grueber, i, p.	C•IVNI•C•F• (Grueber, i, p. 89, No. 660).			
2, 3. Elephant's head (symbol)	(G., i, p. 155, No. 1044).			
4. C.SVLPICI.C.F.	(G., i. p. 203, No. 1320).			
5. M•HERENNI•	(G., i, p. 198, cp. No. 1280, rev. •Q).			
6. C+FABI+C+F+	(G., i, p. 223, cp. No. 1600, rev K).			
7. AP.CL.T.MAL.Q.VR.	(G., i, p. 199, No. 1290).			
8. 9. C•ÄLLI•BÄLA "	(G., i, p. 200, No. 1293). (G., i, p. 240, cp. No. 1770, symbol, grasshopper).			
	100 1 011 37 1000			

10-17. D•SILANVS (G., i, p. 244, cp. No. 1772, rev. 1, p. 245, cp. No. 1776, rev. 1, cp. No. 1787, rev. VIII, p. 246, cp. No. 1814, rev. 1111, p. 247, No. 1822 cp. No. 1826, cp. No. 18

1823, cp. No. 1826, rev. XXI, cp. No. 1832, rev. XXV, p. 248, No. 1844). 18-21. L•PISO FRVGI (G., i, p. 258, No. 1905,

p. 264, cp. No. 1991, obv. V. V. rev. V XVII, No. 1997, p. 268, No. 2046).

22, 23. Q•TITI (G., i, p. 286, No. 2220, p. 287, No. 2225).
24-28. C•VIBIVS C•F•PANSA (G., i, p. 290, cp. No.

2244 ff., obv. branch (?), branch, \mathbf{Y} and uncertain symbol, No. 2256).

29. L•TITVRI (G., i, p. 297, No. 2322). 30. C•CENSOR• (G., i, p. 302, No. 2372). 31. CN•LENTVL• (G., i, p. 309, No. 2440).

82-84. L.RVBRI.DOSSEN.	G., i, p. 311, Nos. 2448,
35, 36. M•FAN•L•CRIT•	2452, p. 312, No. 2455). (G, i, p. 314, No. 2463).
37. No name	(G., i, p. 335, No. 2622).
38. CARB.	(G., ii, p. 247, No. 449).
39. TI-VET-	(G., ii, p. 281, No. 550).
40 Pel AFCA	(C # n 201 No 840

40. P\*LAECA (G., ii, p. 301, No. 649, –
brockage).
41. M\*CATO (G., ii, p. 303, No. 657).
42. L\* POMPON\*MOLO (G., ii, p. 311, No. 783).

The latest coin, according to Grueber, is the anonymous issue, with the types of GAR-OCVL-VER- (No. 37), assigned by him to c. 84 B.C. This date, however, is a few years too late. The place of finding compels us to think of Sulla in the East, and we presumably have here a characteristic handful of coins of the years immediately preceding 87 B.C., the year of Sulla's departure. Is it possible that it was the war of the factions in Rome that led the moneyers "Gar.", "Ocul.", and "Ver." to omit their names from a large part of this issue?

H. M.

#### REVIEWS.

The Roman Imperial Coinage, vol. ii. Vespasian to Hadrian. By Habold Mattingly, M. A., and Edward A. Sydenham, M.A. Pp. xvii+568 and 16 plates. London: Spink & Son, Ltd., 1926. £1 6s. sewed, £1 10s. bound.

We owe a debt of gratitude to Messrs. Spink and Son and to the authors for providing us so promptly with the second instalment of the new Corpus of Roman imperial coins. Vol. ii is in every way a worthy successor to vol. i. The reviewer of vol. i in this Journal complained that no attempt had been made to indicate the relative degree of rarity of the coins discussed. In vol. ii this deficiency has been supplied and page-headings have been added. As in the case of its predecessor the plates are the least satisfactory part of the book. It is not, however, with the authors' selection that we quarrel but with a certain lack of sharpness and distinctness in the reproductions and with their somewhat unpleasing colour.

The period of history covered by this volume—from the accession of Vespasian to the death of Hadrian-is one of the most interesting epochs in the annals of the Roman Empire. It is, moreover, a period for which the archaeological evidence plays a particularly important part, owing to the comparative poverty of our literary sources. Tacitus deserts us in A.D. 70, Suetonius at the death of Domitian, and although with the accession of Hadrian the Scriptores Historiae Augustae enter the field, for the reigns of Nerva and Trajan we have to subsist mainly upon the somewhat meagre fare provided by the Epitome of Cassius Dio and the correspondence of the Younger Pliny. Under these circumstances we turn to the coins for information with more than usual eagerness, and readers of vol. ii of The Roman Imperial Coinage will find that here they have been made to contribute their full quota to historical knowledge.

The introductions to the separate reigns form a veritable storehouse of valuable matter for the historian, and if some of the points there raised provoke queries and discussion that is all to the good. The suggestion made on p. 5 that, with the cessation of the provincial issues after the first few years of Vespasian's principate, the staffs of the local mints were transferred to Rome is interesting in view of the evidence that we possess from other sources for the gradual concentration of the artistic talent of the Empire at the capital from this time onward. On p. 10 it is suggested that the aureus showing on the reverse Vespasian as "Restitutor" of a towered city-goddess kneeling before him may belong to Alexandria, rather than to Antioch, the kneeling figure being a personification of the former, rather than of the latter, city. On the contemporary Greek coins of Alexandria, however, the personified city wears, almost invariably, the elephant head-dress and short chiton, whereas the turreted crown and long chiton are the traditional attributes of the personified Antioch from the Tyche of Eutychides onwards. Passing on to the reign of Domitian we find one point in particular that calls for challenge. On p. 149 it is categorically stated that Agricola was recalled from Britain in A.D. 85, in spite of the fact that the evidence, both literary and epigraphic, for 84 as the date of his recall is almost, if not quite, conclusive. The authors then proceed to interpret the type of Domitian greeting a general, issued during the vears 85-87 and 92-94, as Domitian welcoming Agricola on his return from Britain. The fact revealed by the spade that the Agricolan forts in Scotland were held for more than thirty years after the general's departure from the province may have vindicated Domitian from the charge of having recalled Agricola through jealousy of his achievements. But Tacitus (Agr. 40) can hardly have invented the story of Agricola's unobtrusive entry into Rome and of the distinctly cool reception accorded to him by the Emperor. and the authors themselves admit that the continuance of the type after the year 85 suggests a wider reference.

The standardizing of the legend S.P.Q.R. OPTIMO PRINCIPI on the coinage of Trajan may, as is stated on p. 238, make for dullness; but the appearance of the senatorial formula on the imperial gold and silver, as well as on the acs, is not, perhaps, without interest, in view of what we know of Trajan's policy of keeping on good terms with the Senate. It is not always easy to determine the sex of the figure representing Dacia in the numerous types alluding to Trajan's Dacian wars which are listed on pp. 238-9; but a careful comparative study of these types leads to the conclusion that the Province is personified in the "idealistic" Greek manner as an allegorical female figure in all the types, with the following four exceptions, in which Dacia appears as a male captive in the "realistic" Roman style—(1) denarii of 106-11, male Dacian captive.

bearded, standing with hands tied in front of him (no. 99); (2) denarii of 106-11, male Dacian captive, seated on shields, with hands tied behind back and indication of beard (no. 96); (3) aes of 106-11, Roma standing, with bearded Dacian captive kneeling before her (nos. 485-8), and (4) dupondius of 112-14, naked and bearded Dacian captive kneeling on pile of arms with hands bound behind back (no. 620). interpretation of one unique Dacia type calls for special comment. This type (p. 283, no. 556), issued in 106-11, represents Dacia as an allegorical female figure being forced to the ground by a river-god striding towards her and seizing her by the shoulder. The authors follow Cohen in identifying this river-god with the Tiber. But a connexion between Dacia and the Tiber can only be established by supposing that we have here a quite unparalleled instance of the personification of Rome and of the Roman army under the guise of the Tiber-god. More probably the figure represents, not the Tiber, but the Danube, to whose portrait on Trajan's DANVVIVS denarii it bears a close resemblance. The type would then commemorate the building of Trajan's famous stone bridge across the Danube, by which that river was transformed from being an obstacle to Rome into being her ally, co-operating with her in the work of reducing Dacia. On p. 240, in connexion with the AQVA TRAIANA type, it is stated that Trajan's aqueduct was a branch of the Anio Novus carried over the valley between the Caelian and the Aventine, across the Via Appia and the Porta Capena, to the Piscina Publica. But an inscription of A.D. 109 (C. I. L. vi, 1260) found near the road leading from Bracciano to Rome and stating that the Emperor "Aquam Traianam pecunia sua in urbem perduxit" rather suggests the alternative view of Trajan's aqueduct as the one which brought water from Lacus Sabatinus (L. Bracciano) in Southern Etruria to the Janiculum. One of the most instructive things in the book is the account of the restored coins of Trajan (pp. 302-4), in which the authors make out a very good case for their view that Trajan was influenced in his choice of types for restoration by the desire to compile an illustrated epitome of Roman history. We may add that for the inclusion of the unconsecrated Tiberius among the Emperors whose types are restored we have an interesting parallel in the Lex de Imperio of Vespasian, in which his name is not omitted, along with those of Gaius, Nero, Galba, Otho, and Vitellius, in the list of precedents. Clearly it was not his successors on the imperial throne who were responsible

for placing Tiberius upon the "black list". Trajan's restoration of Galba's coins, in spite of the omission of his name in the Lex de Imperio, can be accounted for by the authors' very credible theory (pp. 221 f.) of the deliberate Domitian = Nero, Nerva = Galba equations suggested by Nerva's choice of

types.

But it is on turning to the coins of Hadrian that we realize most fully the extent of our debt to the authors. The COS · III coins are arranged in chronological sequence in accordance with a scheme that readily commends itself to our acceptance. The acceptable portions of Laffranchi's article on the subject in Rivista Italiana di Numismatica, 1906, pp. 329 ff., are thus brought within the ordinary student's reach, but the changes and modifications contributed by the authors' own original researches are many and important. Naturally the feature of their scheme that has provoked the most controversy is the attribution to the early months of Pius' principate of the coins with the obverse legend HADRIANVS AVG . P . P . and reverse legend COS · III. One of their arguments for making this series posthumous instead of assigning it to the years 128-32, the only possible alternative, would have been greatly strengthened had they followed Weber (Untersuchungen zur Geschichte des Kaisers Hadrian), Henderson (Life and Principate of the Emperor Hadrian), and Laffranchi (Die Daten der Reisen des Kaisers Hadrian auf Grund der numismatischen Zeugnisse neu behandelt), who place Hadrian's return to Rome in 131-2, instead of Dürr (Die Reisen des Kaisers Hadrian), who does not bring him home until 134. The 128-32 dating for these coins is rejected on the analogy of the cessation of minting during Hadrian's first journey, but the force of this analogy is weakened if it is thought that during the second journey the coinage was resumed while the Emperor was still absent from the capital, two years before his return. In the case of the coins of Sabina the writers themselves perceive this difficulty, and are inclined to reject, in favour of a posthumous date, the 132-4 dating for the SABINA AVGVSTA HADRIANI AVG.P.P. series because "it is unlikely that the issues of Sabina began in her absence from Rome". Hadrian's presence at the "front" during one winter of the Jewish war (A.D. 131-4) seems to be proved fairly conclusively by the Gerasa inscription (J. R. S., iv. pp. 13-16). But might he not have returned to Rome direct from Egypt in 131-2, set the mint working again and paid his visit to the theatre of war at some date during the

years 132-4, celebrating his final return to Rome in the latter year by the inauguration of his last issue, the coins of 134-8, with obverse legend HADRIANVS AVG.COS. III P.P.? The types of the 132-4 series seem to fit in quite as reasonably with this theory as with the other. On p. 326 we are told that the Fortuna Redux of this issue "has especial reference to Hadrian's absence abroad". But on p. 325, in connexion with the types struck during Hadrian's sojourn in Rome from 125-8, we read of "Neptunus Redux, who has brought the Emperor home". There, too, we find Fortuna Redux, keeping Neptunus company, and we have also met the lady still earlier on p. 320 among the types of 118, celebrating Hadrian's entry into the capital in that year, and we meet her again on p. 327 among the types of 134-8 that "bear directly" upon the Emperor's final return to Rome. Similarly, on p. 326 the FELICITATI AVG. and galley reverse of 132-4 is made to refer to the Emperor "travelling happily from shore to shore of the Empire". Might it not equally well refer retrospectively to those travels as completed, as it does when it occurs among the types issued in 125-8 (nos. 195, 196, 673, 674) and 134-8 (nos. 239, 240, 351, 352), and just as on p. 321, where it is mentioned as occurring in the 119-22 series, it is made to anticipate them? The existence of Liberalitas coins in the 132-4 series would appear to be a further argument for Hadrian's presence in Rome for some part, at any rate, of this period. None of the other six Liberalitates occur at times when Hadrian is known to have been abroad, and it seems improbable that any of these largesses should have taken place during the Emperor's absence. One more point as to dating. On p. 318 it is put forward as a possibility that the DIVIS PARENTIBVS coins are posthumous, since Hadrian himself struck no consecration coins for Plotina. But C.I.L., vi. 966, containing fragments of the inscription from the temple dedicated by Hadrian in Trajan's Forum PARENTIB VS SVIS |, seems to militate against this view. The superiority of the chronological arrangement of the coins over the alphabetical order followed by Cohen is especially evident when we come to the four great series of "Province". "Adventus", "Restitutor", and "Exercitus" types struck in 134-5, which now, of course, we find placed all together, instead of having to hunt for them among all the coins of the reign. The present reviewer hopes to publish shortly a special study of these types and will reserve until then discussion of the points raised by the descriptions of them in Roman Imperial Coinage.

It may be felt that in this review minute points have been unduly laboured. But it will be remembered that it is often through the investigation of minutiae that the study of coins has been made to yield its choicest fruit. We have not, we hope, failed to see the wood for the trees, or to appreciate the larger aspect of the book as a permanent contribution to our knowledge of the Empire and its destiny as a comrade with whom no serious student of the subject will be able to dispense.

J. TOYNBEE.

Common Chinese Coins. By John G. Watson, London: Spink & Son, Ltd., 1924. Pp. 27 with 61 illustrations. 2s. 6d,

This handy little volume fills a gap in the literature of Far Eastern Numismatics. There are several excellent large works on Chinese coins for the collector who is seriously interested in the subject, but one can buy a representative lot of Chinese coins for the price of one of these books. Mr. Watson's book contains all that the general collector requires to enable him to identify such Chinese coins as are likely to come his way. It contains illustrations of typical Chinese coins from the institution of round money, with explanation of their commendably brief legends, short historical remarks, notes on the mints, and information about coins of special interest.

The book is ridiculously cheap when one remembers that it gives inscriptions not only in Chinese but in Manchu also, and we commend it to every one who has a few Chinese coins with the hope that it will stimulate interest in the

subject.

J. A.

Der Chalifenmünzfund von Kochtel (Acta Universitatis Dorpatensis B. VII. 2). By Walter Anderson and Richard Vasmer. Pp. xx+149, 6 plates. Dorpat, 1926.

In July 1923 some labourers found a hoard of some 500 Arabic coins (mainly Omayyad and 'Abbasid) of the eighth century at Kochtel (Kahtla) in Esthonia. Of these, 470 came into safe keeping and are catalogued in this work. They cover the period A. н. 97-223—A. D. 715-838, and were

therefore buried about A. D. 850, or a century earlier than most of the Kufic hoards from this region, and nearly 200 years before the trade which brought so much Arab silver to Baltic lands had definitely ceased. Mr. Anderson has catalogued the coins from the find most elaborately, and has been fortunate in having the assistance of Mr. Richard Vasmer, the learned Curator of Oriental coins in the Ermitage Museum, Leningrad, whose historical, geographical, and numismatic notes make the book one of great value to the student of Arab history in the second and third centuries A. H. Interesting tables are given, analysing the finds in various ways, chronologically, by mints and rulers. The student who has to deal with hoards of undated and anonymous coins may find some interest in studying these tables. Would he expect, for example, nearly half the coins to be of Haran al-Rashid, who falls in the middle of the period covered ?-it is, however, just the proportion one should expect on other grounds. Unusually few of the coins are pierced or ringed, which suggests that they were still used as currency and not as ornaments.1

The hoard presented a feature very usual in these Baltic hoards, namely, the large proportion of coins broken; it seems well established that broken coins are rare in hoards of the same coins found in their country of origin, so that the breaking or cutting must have been done by the barbarians,

probably for small change.

The hoard was remarkably rich in rare coins, and it is the publication of these with Vasmer's notes, with many references to coins acquired by the Ermitage in recent years, that justifies the find being treated at such length; among important points we may note his remarks on the mints of Hārūniya and Hārūnābād, the reading of the name Saif al-Ṭārābī on dirhems of Zerenj A. H. 187, which settles an old puzzle, the coin of Wāsiṭ of A. H. 200, and the discussion of al-Mu'taṣim's dirhem of Ard al-Khair A. H. 223. Mr. Vasmer's suggestion that this is really to be read Ard al-Khazar is not to be rejected off-hand.

Appendices contain descriptions of a hoard of 30 'Abbāsid and Sāmānid dirhems of the tenth century found at Wolde (Valjala) in 1922, and of another of 4 Sāmānid and 1 Byzantine silver (Constantine VII and Romanus II) found in 1924

Jacob has pointed out (Nordisch-Baltischer Handel der Araber, Leipzig, 1887, p. 59) that the pierced or ringed coins frequent in such hoards were probably so prepared in the east before they came north, not as ornaments but as amulets on account of the religious quotations on them.

near Leal (Lihula). The book has very full indices and six good plates. It is to be hoped that hoards discovered in this region in the future will fall into equally good hands.

J. A.

Los Reyes de Taisas. By Antonio Prieto y Vives. Madrid, 1926. Pp. 279. 16 plates.

The period of the minor Muslim dynasties in Spain known as the Reyes de Taifas or "kings of parts" is a difficult one from the historical and numismatic point of view. These dynasties. covering roughly the fifth century A. H. or the eleventh A. D., formed a transition between the Omavyad Caliphate of Cordova and the Almoravids. A little over half a century after the death of the great 'Abd al-Rahman III, the Omavvad Caliphate rapidly broke up, and Spain passed into the hands of a number of petty dynasties, the later Omavyads, Hammudids, Zīrids, Hudids, Tojibids, &c., which in the course of the eleventh century were gradually overthrown by one of their number, the Abbādids of Seville; the latter had ultimately to appeal to the Almoravids for assistance in their struggle against the Christians, when faced with the choice between "driving camels in Africa or feeding pigs in Spain". The result was that their dangerous allies conquered Muslim Spain for themselves and made it a province of their African kingdom. Señor Prieto y Vives deals very fully with the rather confusing history of this period in the first section of his book, and in the second part we have an essay on the numismatics of the period and the special features of the coins of the different dynasties. In the third part a very fine collection of these rare coins is catalogued. The sixteen plates are very good, especially when we remember the low relief of these often poorly preserved coins. An excellent feature of the book is an Appendix giving the essentials of Arabic for coin collectors, which will enable the collector who is not an Orientalist to read his coins of the Moors of Spain after a little trouble. Señor Prieto y Vives has given us a valuable commentary on the history of the eleventh century in Muslim Spain.

J. A.

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#### XII.

# COINS OF THURIUM FROM THE COLLECTION OF THE MARCHESE GINORI.

[SEE PLATE XIII.]

THE Marchese Ginori has very kindly granted me permission to publish some coins of Thurium from his collection remarkable for their interest or rarity. In preparing the article I have had the advantage of discussing them with him personally and also the use of valuable notes which he had put together.

- Obv.—Head of Athena r., wearing necklace of beads, in crested Athenian helmet, the bowl of which is decorated with an olive wreath; the hair is waved along the forehead, looped over the temple, and falls in formal loops beneath flap of helmet; above peak of helmet A.
  - Rev.—Bull standing l., with lowered head; on hind-quarter A; above ΘΟΥΡΙΩΝ; dotted exergual line; in exergue fish l.; trace of circular incuse.

At 21.5 mm. 7.86 grammes. [Pl. XIII. 1.]

The example given by Jörgensen (Corolla Numismatica, p. 170, No. 12) of this beautiful issue is from a different obverse die. The present is remarkable for its high relief. The reverse has a dotted exergual line, an unusual feature. The Imhoof coin (W. Lermann, Athenatypen, Pl. I, 6, obv.; Imhoof and Keller, Tier- und Pflanzenbilder, iii, 29, rev.) appears to be from the same dies, and the same obverse die is combined with the normal reverse in Hirsch, xxxi, 77; otherwise I cannot trace either die.

 Obv.—Similar, the bowl of the helmet decorated with a griffin; no letter (?).

Rev.—Similar, no letter on hind-quarter (?); plain exergual line, with fringe of short parallel strokes beneath.

R 19-0 mm. 7-63 grammes. [Pl. XIII. 2.]

An unusually good example of this variety, which, for some reason, is generally in poor state. The dies are those of the Copenhagen (Jörgensen, ibid., p. 169, No. 10) and Luynes specimens (J. Babelon, Cat., i, 607) of Naville, xii, 477, and Sambon Sale, 26. vii. 27, No. 389; the Bement specimen (Naville, vi, 224) has a different reverse. The griffin, though common enough as a decoration of the helmet elsewhere (e.g. especially at Velia), is very rare at Thurium; it does not occur again for nearly a century (B.M.C., Nos. 97-8), and then only on one or two dies. The variety cited by Jörgensen from Garrucci's Monete dell' Italia Antica (p. 142, T. cvi, 17), on which the griffin's wing is raised, I cannot trace. The coin in Naples which Garrucci (l. c.) cites from Avellino (R. Mus. Borb., v, Pl. XV, 11, not 12) appears to have the hippocamp.

 Obv.—Similar, without necklace (?); the bowl of the helmet decorated with olive wreath and sphinx.

Rev.—Similar type, r.; between forelegs Γ (doublestruck).

R 21.0 mm. 7.86 grammes. [Pl. XIII. 3.]

Other examples are in the McClean (Grose, Cat., i, No. 1210), Jameson (Suppl. 1877), and Luynes Collections (J. Babelon, Cat., i, No. 606), and Hirsch, xxx, 231. Jörgensen (ibid., p. 175, No. 38) published a coin in Berlin from the same obverse die, but with charging bull on the reverse. The  $\Gamma$  between the animal's

forelegs (indistinct on some specimens) links the coin, which its style shows must come late in the wreathed helmet series, to other reverse dies with Γ between the forelegs of a charging bull. These are combined with an obverse head of the same slightly sulky cast of features (e. g. Hirsch, xxi, 396; Ratto Sale, 25. i. 1926, lot 544).

- Obv.—Similar, with necklace (?); flap of helmet decorated with a griffin, the bowl with Scylla, wearing necklace (?), three-quarter r., head in profile, her r. hand lowered, her l. raised to shade her eyes; both hounds in front of her body.
  - Rev.—Bull charging r., on the hind-quarter to L of tail \(\mathbb{E}\); above \(\mathbb{O}\mathbb{O}\mathbb{P}\mathbb{I}\mathbb{N}\); ground line composed of a plain over a dotted line inscribed \(\mathbb{E}\mathbb{T}\mathbb{O}\mathbb{O}\mathbb{E}\); in exergue fish r.

At 26.5 mm. 14.10 grammes. [Pl. XIII. 4.]

Other specimens in Luynes Coll. (J. Babelon, Cat., i, 581 = Imhoof, Mon. Gr., p. 7, Pl. A. 4), and Naville, v, No. 551, from the same dies.

 Obv. - Similar, with necklace; helmet-flap without ornament; Scylla without necklace, and one hound behind, one in front of her body; on bowl of helmet I €; above peak of helmet E.

Rev.—Similar, E on hind-quarter to l. of tail; trace of circular incuse.

At 22.5 mm. 7.85 grammes. [Pl. XIII, 5.]

Same dies as Hirsch, xxxiii, 207 and Hartwig Sale, No. 294, on which the I₹ was not noticed.

6. Obv.—The same die.

Rev.—Similar, E on hind-quarter to r. of tail; plain exergual line.

At 21.5 mm. 7.67 grammes. [Pl. XIII. 6.]

Schulman, 16. xii. 1926, lot 54 = Bement Coll. (Naville, vi, 226) = Feuardent Sale, 26. v. 1914, lot 57.

Other examples: Naville, xii, 486; Luneau Sale, No. 147; Sambon and Canessa Sale, 24. iii. 1902, No. 11. The monogram on the bull's hind-quarter on the tetradrachm may be resolved as EY, and presumably represents the same name as the initial E which appears in that place on the didrachms. The same obverse die is also found in conjunction with a reverse die with an olive leaf under the bull, in publishing which Mr. A. H. Lloyd first drew attention to the letters on the helmet,1 and identified them as the initials of the name which appears at length on the tetradrachm No. 4. As Histor is the engraver (this must, I think, be admitted), and as he signs the obverse die of the didrachms as well as the reverse die of the tetradrachm, it follows, in view of the identity of their style, that both pairs of dies are from his hand; further, that the letters on the bull's hind-quarter and (in the didrachm) above the peak of the helmet are official mint-marks, and have nothing to do with the artist, and that therefore the artist was not the moneyer, as he appears to have been at Tarentum (Evans, Horsemen, p. 28). Another early tetradrachm (B.M.C., No. 26; Head, Guide to the Coins of the Ancients, Pl. XXV. 17) has the same monogram on the flank of the bull, but \$\Phi\$ above the peak of the helmet, where No. 4 is blank. The style is Histor's, with the same richness and sophistication of detail (griffin on flap of helmet, Scylla with necklace of pearls), and since in view of Nos. 5-6 there is no reason to regard \$\Phi\$ as the engraver's initial,

Num. Chron., 1924, p. 135, No. 13; from the Ferruccio Brandis Collection (Naples Sale, Canessa, 22, v. 1922, lot 98); Paris Sale, Sambon, 27, vi. 1927, lot 390, is apparently from the same dies. Owing to the condition of the reverses it is impossible to say whether there was a letter on the bull's haunch.

this coin too may reasonably be attributed to his hand. The same applies to an unsigned didrachm with E on the obverse and on the hind-quarter (B.M.C., 52).

- Obv.—Similar, head of Athena r., without ear-ring or necklace (?); Scylla, without necklace, poising stone in raised r. hand and carrying steering-oar above l. shoulder, hounds as before; between helmet-flap and crest E.
  - Rev.—Bull butting r., head three-quarter face, no letter on hind-quarter; above ΘΟΥΡΙΩΝ; bevelled exergual line inscribed MOΛΟξΟξ; in exergue fish r.; dotted circle (impinging on which trace of undertype (?) with letters ξΑ).

    R 28-0 mm. 7-45 grammes. [Pl. XIII. 7.]

Other examples in Hunter (Macdonald, Cat., i, 108, No. 42), and Jameson (No. 365), and with a different reverse, H. Weber (Forrer, Cat., i, 880).

8. Obv.—Similar, Athena with plain necklace; Scylla with I. hand raised to her eyes and lowered r., both hounds in front; no letter.

Rev.—Similar, bull's head in profile; GOYPI♠N]
(sic); on exergual line MO∧OS∭SS EP®E

At 21.0 mm. (plated). 5.91 grammes. [Pl. XIII. 8.]

Overstriking (helped perhaps by a die-flaw) seems the simplest explanation of the curious marks and letters in the exergue of No. 7, nothing of which appears on either of the other examples; nothing obvious suggests itself as the undertype. This obverse, the only die of Molossus with E, was probably his first; it differs from the others, and resembles the earlier coinage in the larger head, the position of the hounds, and the action of Scylla. The plated coin (No. 8) follows this early die in the size and general style of the head, but the later dies in the position of Scylla

and the hounds. Its especial interest lies in the reverse inscription, of which the only possible completion is MOΛΟ≪Ο≪ΕΓΟΕΙ, a form of signature which, so far as I know, never occurs on the dies of Magna Graecia and Sicily. Parallels may be found, however, on official coins of Clazomenae and Cydonia, ΘΕΟΔΟΤΟ≪-NEYANTO≪ΕΓΟΕΙ (B.M.C., Ionia, p. 19, No. 19, and Svoronos, Crète, p. 100, No. 3). This is direct and contemporary evidence that Molossos was the engraver and not merely (if at all) moneyer or magistrate.

9. Obv.—Similar (small head), the hair curling back over the helmet-rim and hanging loose beneath the flap behind; single-pendant ear-ring and plain necklace; Scylla, with both hounds in front and l. hand outstretched, poising stone in raised r.; on flap of helmet ≤1; in field on r., below chin, trace of symbol (palmette or aphlaston?) more than half off the flan.

Rev.—Similar, bull's head three-quarter face; above NI; exergual line; in exergue coiled serpent r. At 20-5 mm. 7-71 grammes. [Pl. XIII. 9.]

Other specimens (obverse symbol always off the flan) in the Lloyd Collection (Num. Chron., 1924, p. 136, No. 14), Hunter (Macdonald, i, p. 110, No. 72), and a Paris Sale (Sambon, 27. vi. 1927, lot 408). A tetradrachm also exists of identical style with the same letters and symbols (B.M.C., No. 41, with traces of obverse symbol, and Lugano Sale, Ratto, 21. i. 1926, lot 550, with none). The existence of a symbol on the obverse of this very rare coin does not appear to have been noted before; in fact in nearly all examples it is off the flan. Symbols

<sup>&</sup>lt;sup>2</sup> Unless Sir A. J. Evans is right in interpreting ∃N on the reverse of a coin of Rhegium as Κρατήσιππος ἐπόει (Num. Chron., 1926. p. 8).

in this position are otherwise unknown at Thurium, though they are occasionally found elsewhere in Magna Graecia, e.g. at Velia (a crab on B.M.C. 50).

Obv.—Similar, with triple-pendant ear-ring and necklace
of beads; Scylla holds steering-oar over 1.
arm and raises r. hand to her eyes; between
flap of helmet and crest ΚΑΛ.

Rev.—Similar, above ₹1; between the bull's lega KAA; in exergue Nikê flying r. with wreath held in both hands.

At 22.0 mm. 7.90 grammes. [Pl. XIII. 10.]

Other specimens in the British Museum (B.M.C., No. 85), Weber (Forrer, Cat., i, 887), McClean (Grose, Cat., i, 1308), and, with a different obverse, Luynes (J. Babelon, Cat., i, 602). The letters beneath the bull are far from clear and have sometimes been misread (e.g. in the McClean specimen as  $A \wedge \Omega$  on obverse and  $A \wedge \Omega$  on reverse). The present coin shows them unmistakably.

E. S. G. ROBINSON.

#### XIII.

#### THE REFORM OF AURELIAN.

MR. MATTINGLY'S last contribution 1 to our knowledge of this difficult subject is extremely able and interesting, but it may be doubted whether the evidence adduced by him is sufficient to support all the assumptions which he desires to base on it.

He has to show that the improved coinage of Aurelian (which, in every respect except actual silver content, exactly resembled the coinage of Caracalla), was based on an entirely new tariff scheme, which altogether displaced and disorganized the coinage in circulation, and that this drastic change was made at a time when the empire was only beginning to emerge from misfortunes which almost brought it to ruin. The difficulties of the time were very great.

He has also to negative the much greater probability that the change was actually made by Diocletian, who, in the height of his power and in a time of tranquillity, reformed the whole conditions of Roman life, and struck a new series of coins which, with one exception, were totally dissimilar from those of Caracalla and Aurelian. He attempts to discharge this onerous liability by putting forward certain assumptions and by publishing two interesting and valuable pieces of new evidence. They are:

(1) That certain Greek copper coins of Cilicia bear marks which tend to show that such a monetary system as he desires to attribute to the reform of Aurelian actually existed at or before the time of its inception. Accepting his interpretation of the marks, I venture to

<sup>&</sup>lt;sup>1</sup> See above, p. 219.

think that what occurred in Cilicia (but apparently in no other part of the Roman Colonial Empire), does not go far towards showing what was happening in Rome.

Again, the date of the coins, which he places in the joint reign of Valerian and Gallienus, seems to be too early to allow them to be good evidence, for under no theory did the change from the system of Caracalla take place until the degradation of the coinage had become effective, and this degradation only commenced in the last days of Valerian.

(2) That a private individual wrote to a friend in Egypt that "the sacred fortune of our lords has ordered that the Italian money be reduced to the half of a nummus".

It is admitted that this letter cannot be exactly dated and that the coin to which it refers is doubtful. It may well have been written at the commencement of the reform of Diocletian, before the edict which established it had reached Egypt. The use of the words "our lords" seems to accord with that period and to be inconsistent with the reign of Aurelian. Mr. Mattingly himself says that such a date is probable and, if it is accepted, the letter can hardly be evidence against Aurelian. Indeed, I submit that it becomes positive evidence that the change was only in the course of making when it was written.<sup>2</sup>

So much for the two new points, and I feel that both the editors of this *Chronicle* <sup>3</sup> and my friends Messrs. Mattingly and Sydenham in *Roman Imperial Coinage* <sup>4</sup>

May I suggest that this letter in fact records the step which I think Diocletian took to include the existing XXI piece in his new scheme at its then debased purchasing value. Cf. R.I.C. vol. v, pt. i, p. 12.

<sup>&</sup>lt;sup>2</sup> Num. Chron. 1919, pp. 235 ff. <sup>4</sup> R.I.C. vol. v, pt. i, pp. 3, 8 ff.

have already given me such full liberty to explain and support the view which I still hold, that my further remarks must be very brief. Still there are one or two other points in the paper to which I should like to demur.

I find it impossible to accept the view that, however practice may have fallen short of theory in individual coins, any Roman mint struck gold without having a standard of weight which it was supposed to observe. The disorder of the mint and the reform of Aurelian have confused the issue in his reign, but his post-reform aurei suggest a standard of fifty to the pound of gold. Gallienus, when he debased his antoniniani, increased the weight of his aurei to a standard which appears to have been seventy-two to the pound. Diocletian himself, though he always struck to standard, yet varied that standard so often that any one examining a mixed collection of his aurei might well conclude that he worked without one. Also I think that the coins marked XI, X-ET-I, &c., are too lightly regarded.

Lastly, I personally doubt if the antoninianus was a double denarius, for I seem to discover in both gold and silver series considerable evidence that there was a relation of one, two, and three, e.g. that a denarius was a piece of two quinarii (as I suppose is agreed), and that the antoninianus was in fact a piece of three quinarii. The weights in both metals seem to favour this theory. I venture to submit that, in view of these and other considerations, Mr. Mattingly's interesting and attractive theory is as yet 'not proven' as regards Aurelian. As a contribution to the history of the reform of Diocletian it is most valuable.

PERCY H. WEBB.



Specimens of the Hakon coin (in the Numismatic Cabinet, Oslo).

#### THE OBVERSE LEGEND ON THE OLDEST NORWEGIAN COIN.

C. I. Schive says in his work, Norges Mynter i Middelalderen, that the coin of Olav Trygvesson is "the oldest coin known in Scandinavia" on the assumption that Svein Tjugeskjegg and Olav Skotkonung did not have any coins made prior to the year 1000.

This assumption breaks down, however, as soon as the question is examined when the coins found were buried. Thus the coins of the well-known Næs Find were certainly buried towards the end of the tenth century,<sup>2</sup> and they include the coins struck for Svein

<sup>1</sup> p. 5.

P. Hauberg, Myntforhold og Udmyntninger i Danmark indtil 1146, Copenhagen, 1900, pp. 43 and 164; B. E. Hildebrand, Anglosachsiska mynt, Stockholm, 1846, p. xxxiii.

Tjugeskjegg and Olav Skotkonung. It is reasonable to assign the date of their manufacture to about 994, i.e. to the campaign of Svein against England. The coins of Olav Trygvesson must also originate from a time just after this campaign,3

Older than these coins is one with the obverse-legend +AACTINE · IGNVNDEI: 4 (see illustration) of which the Næs Find contained many specimens. The date of the find, the coin-type (Æthelred's crux-type), the workmanship, weight, and fineness, prove that this coin also belongs to the last decennium before the year 1000. The name AALIINE on the obverse indicates the king's name and assigns the coin to Hakon Sigurdsson Jarl.5 As a relatively large number of the Hakon coins have been found, it is probable that the Earl's coinage had been going on for some length of time.6 It is reasonable to suppose therefore that the first coins of this series were struck soon after the appearance of Æthelred's crux-type, i. e. about 990, and thus they

<sup>3</sup> Hauberg, loc. cit., p. 42 f.

The Numismatic Cabinet of the University of Oslo possesses one specimen with the obverse-legend as above, and another which probably has : (two pellets) after AALINE (as have both the specimens illustrated by Schive, loc. cit., Pl. I, 13-14).

<sup>&</sup>lt;sup>5</sup> C. A. Holmboe, Das älteste Münzwesen Norwegens, p. 34 f., and Hauberg, loc. cit., p. 43 f. Schive (loc. cit., p. 12 f.), Gabriel Gustafson (Bergens Museums Aarbog, 1896, no. xv. p. 31 f.), and B. Morgenstierne (Vort mynt- og pengeræsens udvikling, p. 1) attribute this coin to Hakon Eriksson Jarl, Earl in Norway, 1015; Ramus (Skand. Litt.-Selsk. Skr., vol. xxi, p. 307 ff.) assigns it to Hakon the Good; Keder (Nummi aliquot diversi, p. 52) and others to Hakon the Red (see also D. Holmberg, Auktionskatalog, no. 138, Stockholm, 1927, p. 1); Georg Galster (L. E. Bruuns Doubletsamling of Monter og Medailler, Copenhagen, 1925, p. 108) to Olav Skotkonung. 4 Hauberg, loc. cit., p. 44.

are the oldest specimens of Norwegian coins known at

present.

The obverse-inscription on the coin in question has been read and interpreted differently by numismatists both earlier and in recent times. With the exception of Galster, loc. cit., who is of opinion that the text of the legend is wholly confused, all have interpreted the first part of the inscription, AALINE, as the name Hakon. But here the unanimity ends.

The rest of the legend IGNVNDEI has given rise to many different conjectures. Keder, loc. cit, and others conjecture I(G)IMVNDI with the assumption of the letter F, i.e. FILIVS. This conjecture is, as Schive, loc. cit., p. 11, has shown, entirely untenable from a numismatic point of view.

H. Alexander Parsons, in his little sketch, The Earliest Coins of Norway, has also put forward a view which is quite untenable. The history of coinage tells us that the Hakon coin is a barbarous imitation of an Æthelred penny, whose obverse legend has the title and name of the nation written in Latin. It is not easy to prove that the old Norwegian title Jarl has been substituted for the Latin Rex on the Anglo-Saxon prototype. Old Norwegian is not used in the legends of the earliest coins of Norway before the time of

<sup>&</sup>lt;sup>7</sup> Cf. Hacon, Hacun, Acun, Hakene, and the place-names Haconby, Haconesbi, Hacunesbi, Hakenesho, &c.; see Erik Björkman, Nordische Personennamen in England, Halle a. S., 1910, p. 60 f. See also Ch. W. Bardsley, A Dictionary of English and Welsh Surnames, London, 1901, p. 346, and E. H. Lind, Norsk-isländ-ka Dopnamn, Uppsala, 1915, art. "Håkon".

<sup>\*</sup> Numismatic Notes and Monographs, no. 29, New York, 1926.

Parsons, loc. cit., p. 13.

Harald Sigurdson (1047-66) and his sons.<sup>10</sup> Parsons's conjecture of **ĐRVNDELAW** is quite impossible from an epigraphic and linguistic point of view.<sup>11</sup>

Alfred von Sallet has put forward a very attractive conjecture, 12 in that he reads SIGNVM DEI. He explains that this inscription refers to the cross on the reverse of the coin. F. Friedensburg has made use of von Sallet's conjecture in his book Die Symbolik der Mittelaltermünzen, 13 where he regards the coin-legend as a magic inscription. He quotes the Apocalypse ch. ix, ver. 4, where certain plagues are proclaimed against those "qui non habent signum Dei in frontibus suis". Coin-legends where the word SIGNVM occurs are for instance SIGNVM DEI VIVI, SIGNVM CRVCIS, SIGNVM SALVTIS, SIGNVM ECCLESIAE. 14

Well founded as this interpretation is, it cannot be said to be convincing for the period to which Hakon's coin belongs. Nor is the conjecture of Ramus, confirmed by Schive: IN NOMINE DEI, 15 altogether satisfactory.

It is natural to expect a title after AACINE; Parsons is right thus far. The usual title on coins of that period is REX or letters which indicate this word. It is therefore reasonable to try whether IGNVNDEI contains letters indicating REX before committing

<sup>16</sup> Cf. L. B. Stenersen, Myntfundet fra Græslid, Christiania, 1881.

<sup>&</sup>lt;sup>11</sup> See the words proendir, proendalog, and prondheims in the grammars and dictionaries of the old Norwegian language, e.g. Cleasby-Vigfusson, An Icelandic-English Dictionary, Oxford, 1874.

<sup>12</sup> Zeitschrift für Numismatik, vol. xvi, p. 21.

<sup>&</sup>lt;sup>13</sup> Vol. i, p. 102 f.

<sup>&</sup>lt;sup>11</sup> Engel et Serrure, Traité de numismatique du moyen âge, vol. ii, p. 576, and vol. iii, pp. 994, 1148, 1160, 1209.

<sup>18</sup> Norges Mynter i Middelalderen, p. 11.

oneself to mere guesswork. Which group of letters in the legend has most in common with REX, phonetically or etymologically? This is the first question to be answered. The answer must be: the two first letters IG. The second question is whether the letters IG on contemporary coins stand for REX. It is an important point if such is found to be the case on Anglo-Saxon coins dating from the last decades of the tenth century, as the Scandinavian coins of that period, and of the beginning of the eleventh century, were only a barbarous variation of the Anglo-Saxon.

When we examine the legend on Æthelred II's coins, we find several irregular forms of REX, e.g. IL, I+, REX, REX. 15 Of these forms it is the IC that especially interests us, as it is not unlikely that the inscriptions IENVNDEI and IGNVNDEI are both found on the Hakon coins. 17 But even if this is doubtful, as Schive thinks, the variation of £ and 5 is so common on Æthelred's coins 18 that it can only be a matter of accident that both forms are not represented on the specimens found. It is therefore hardly too much to suppose that IE on the Hakon coin stands for REX, the more so as E can be defended on linguistic grounds. 19

After the title one would expect the name of the nation in the genitive. It is probable that NVNDEI

<sup>&</sup>lt;sup>16</sup> B. E. Hildebrand, Anglosachsiska mynt, 2. ed., Stockholm, 1881, p. 34.

<sup>&</sup>lt;sup>17</sup> Cf. Schive, loc. cit., p. 10, note 6, and Die Reichelsche Münzsammlung, v, St. Petersburg, 1842, p. 269.

<sup>&</sup>lt;sup>18</sup> Cf. besides RCX and RGX different irregular forms of ANGLORVM, e.g. ANE, ANELO for ANG, ANGLO, and so on.

<sup>19</sup> Genitive regis, &c.

is a corrupt abbreviation of NORMANNORVM; there are just as irregular forms of ANGLORVM on the coins of Æthelred, e.g. ANGMENI, AIGMI, &c.<sup>20</sup> It is, however, also possible that I5 has been produced by haplography, so that it stands both for REX and for IN. If such be the case Ramus's conjecture of IN NOMINE DEI is still possible.

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<sup>50</sup> Hildebrand, loc. cit., p. 35 f.

## THE FIRST COINAGE, OR "TEALBY" TYPE, OF HENRY II.

[SEE PLATE XIV.]

A RECENT find of 240 pennies of the first coinage of Henry II (see Num. Chron., 1927, p. 244), though it does not add much to our knowledge of this coinage, affords an opportunity to examine the detailed classification which was made by Mr. Lawrence during the War, and published in vol. xiv of the British Numismatic Journal. It presents many difficult problems, and it is therefore desirable to examine it critically, and, in view of the hesitancy which the author showed in drawing his conclusions, to obtain his help and cooperation in a revision of the subject. The extent of the help which he has given me will be apparent throughout this paper.

It is not unnatural that the very minute detail with which Mr. Lawrence classified the varieties has in some points rather obscured than elucidated the important features of his work. In the tables his praiseworthy insistence on leaving no varieties unchronicled has unfortunately led to confusion. The numbered columns represent in some cases types in chronological succession, in other cases they are varieties which he himself regarded as contemporaneous; thus, columns 1 to 7 were intended as successive coinages, but 7 to 10 should have been marked as one block of four varieties that were not regarded as separate issues. Column 13 is noted, on evidence avail-

able after the tables were constructed (see p. 29), as being closely related to column 4; and the remainder, columns 14 to 18, are rare varieties of doubtful position, of which 14 and 15 show an affinity with 16 and 17. On the epigraphical evidence the rather bald statement (p. 23) that the later coins revert to the early lettering after an interval in which a taller style is adopted seems to leave room for more detailed analysis. Again, in classifying the busts of the king that are so crudely designed on the obverse, Mr. Lawrence, on pp. 16, 17, lays bare a weak point when he puts himself to the necessity of describing as No. 5 a bust most closely resembling that described as No. 1, and, again, Nos. 7 and 8 resemble Nos. 2 and 3.

Some, at least, of the apparent confusion may be removed by using as a starting-point the two main groups, namely, those reading LENRI REX ANGL or ANG (Lawrence, columns 1, 2), which we will call Group A, and those reading LENRI REX and LENRI RE (Lawrence, columns 7, 8, 9, 10), which we will call Group C. His evidence shows pretty clearly that, with the possible exception of a few rare coins, these are the earliest and latest classes of the issue; the remaining varieties, which are all comparatively rare, may for the present be put together as Group B for further classification at a later stage; the chief varieties are those reading R:A:, R:AN:, and R:AG (Lawrence columns, 3, 4, 5).

The two busts that have the most strongly marked characteristics are those commonly used on the numerous coins of Groups A and C; it will therefore be convenient to label them as Bust I and Bust III respectively: in the varieties which form Group B it is not easy to find characteristic features which identify a particular bust with coins bearing a particular form of obverse legend; there is throughout the varieties of Group B a strong similarity of bust, and at the same time some slight variety on almost every individual coin; I think, however, that within Group B two fairly characteristic busts may be differentiated, which I will call Bust II a and Bust II b. I will give as clear a description as I can of the essential features of these busts.

Bust I [Pl. XIV. 1, 2; Lawrence, Bust No. 1].

The narrow face and absence of hair are characteristics which appear also, though rarely, on a few coins in Group B. The outstanding feature peculiar to Bust I is the form of drapery; the bust is narrow and displays nothing beyond the sceptre-arm except a band (i. e. a row of pellets between two lines) running down from the side of the chin to the edge of the coin, the space between this band and the sceptre-hand being filled by a trefoil ornament.

On the coins which read **LENRI:R:A:**, **LENRI:R:AM**, and **LENRI:R:AG** there is not in my opinion any material difference in the bust, though on individual coins there is variety in the width and in the modelling of the face. The coins of Cristien of Durham (the three specimens known are from the same obverse die) have come to be regarded as characteristic of this class [Pl. XIV. 8], probably because those coins are better struck and better preserved than

the majority; but it is unfortunate because their very rare feature, absence of hair, gives a strange appearance to the portrait. The drapery is characteristic, falling away over the free shoulder (i.e. not the sceptreshoulder) in a series of rather angular folds which contain one or two trefoils of pellets. There is usually, but not always, a collar-band. The hair is sometimes a small annulet broken and incurved spirally at the top [Pl. XIV. 6], more usually crescent-shaped with horns outward from the head.

### Bust II b [Pl. XIV. 9-13; Lawrence, Bust No. 9].

A larger bust with no modelling of the features. The drapery falls in rounder and longer curves over the free shoulder, and the trefoils are usually absent. The collar-band is, I think, always shown. The hair is either the single crescent-like curl of Bust II a [Pl. XIV. 9, 10], or a bunch of curls similar to the ringlet variety of Bust III [Pl. XIV. 11-13].

### Bust III [Pl. XIV. 14-18; Lawrence, Bust No. 6]

Large and coarse with heavy features and big bust. The hair is either a round curl with a stroke down the centre of it, or, more rarely, a ringlet composed of small crescents [Pl. XIV. 16]. The drapery has a broad collar-band, which on a few coins is continued over the shoulder and free arm [Pl. XIV. 17, 18]. A double fold runs obliquely across the breast either left to right (i.e. from the sceptre-hand downwards), or right to left (i.e. from the free shoulder to the bottom of the hand); there is a trefoil ornament both above and below this double fold (cf. nos. 15 and 18 on the plate).

Though Busts I and III are very clearly distinguishable, the rather gradual development of those of the

intervening groups, together with the bad condition in which the coins are usually found, makes the Busts II a and II b sometimes difficult to determine. But there are certain points of importance which appear from a study of the busts on individual coins.

The coins reading LENRI RE\* A [Pl. XIV. 18] always have Bust III; they are clearly associated with the RE\* and RE group. These coins of Group C have, with very rare exceptions, Bust III; the excepted coins are those noted by Mr. Lawrence as "late RE\*" coins, and these have the bust which I have described as II b. Bust III, then, covers the RE\* A, RE\*, and RE coins (excluding the so-called "late" coins); it is also found on some coins reading LENRI:R [Pl. XIV. 14]. Bust II b is found on the "late" Rex coins and on the remaining LENRI:R coins; one or two coins reading R:AG have a bust which seems nearer this than II a [Pl. XIV. 9]. Bust II a embraces the coins reading R:AG, R:AN, and R:AG.

Bust I is confined to the coins reading **LENRI**REX ANGL or ANG.

There can therefore be very little doubt that the coins must be placed in the following order:

Group A REX ANGL or ANG,
Group B (i) R:A:, R:AN, and R:AG,
" " (ii) henri:R and "late REX",
Group C REX, RE, and REX A,

or else in the reverse order. Group A begins or ends the series with Group C at the other end, and the BENRI:R coins come in proximity to Group C. This is the crux. Has the series been stood on its head or its feet?

To turn to the external evidence, there are four possible sources from which we might expect to obtain evidence. Firstly, there is always hope of the moneyers of Bury St. Edmunds throwing light on the coinage, as we know that the Abbot was allowed one moneyer only, and the moneyer had one set of dies at a time.

Secondly, help might reasonably be expected from the names of moneyers of Stephen continuing on coins of the "Tealby" issue, and similarly from names of "Tealby" moneyers appearing also on Short-Cross pennies.

Thirdly, can any information be obtained from the finds of coins of this issue?

Fourthly, the Pipe Rolls of this period have all now been published; they contain a fairly large number of entries of moneyers' debts, which should presumably throw light on the question which are the earliest and which the latest coins of the issue.

Bury St. Edmunds. There are three moneyers, but as none of them is at present known to have been at work during the reign of Stephen or in the Short-Cross issue, it is obvious, as Mr. Lawrence points out, that either sequence Raulf-Henri-Willem or Willem-Henri-Raulf will conform to the limitation of one moneyer only being allowed to the Abbot. Either sequence confirms the placing of Group B as the middle group, but it throws no light on the problem whether A or C should be the first group, unless we may assume that the Awbridge find, which seems to be of an early date

in the reign of Henry II and contains coins of Willem only, gives the clue to their sequence.

Willem struck coins of Group A and also of Group B with the readings R:AN and R:AG; Henri also has coins reading R:AG and coins of Group C. Raulf's coins are of Group C only; he alone has the reading RE\* A. If, then, we may place Willem as the first moneyer, the coins reading R:AN precede those reading R:AG. The RE\* A coins are presumably the latest of the series. No Bury coins are yet known of the R:A: or LENRI:R: classes.

Moneyers. The following list shows the groups of "Tealby" coins on which moneyers' names are found that also occur on coins of Stephen:

	Group A	Group B	Group C
Canterbury, Rogier	+	+	+
Gloucester, Radulf	+		
London, Geffrei	+	400	+
,, Ricard	+	+	
,, Rodbert	+	+	-
Norwich, Willem			
Wilton, Willem	#		

The following names occur on Short-Cross pennies:

Exeter, Ricard Rogier	+++	1	+
London, Iohan Pieres Pieres M	++++	+	++++
Northampton, Waltier	++	+	
Oxford, Aschetil Winchester, Willem York, Willem	+ +		

A coin so described in Mr. Lawrence's tables is probably not a Bury coin: both mint and moneyer are hopelessly illegible.

It is not possible to draw any conclusion from these moneyers. The Stephen moneyers favour the series A-B-C, but those of the Short-Cross coinage favour the reverse order. In fact, only one moneyer's name in either set fails to appear on coins of Group A, namely, William of Norwich. The explanation may perhaps be found in the greater frequency of legible coins of Group A than of Group C; our knowledge of names on Group A coins is more extensive than on any other coins of this issue.

Finds. The only hoards of which the necessary details are available are the following (the numbers are approximately correct, but exclude a large number of illegible coins):

	Group A	Group B	Group C
Awbridge (34 of Stephen)	37	17	1?*
Rome * (69 Short-Cross)	1	2	8
Lark Hill, Wores. 5	57	18	51
Ampthill, Beds.	18	14	43
Leicester 7	30	22	107

Awbridge is the only hoard in which coins of Stephen have been found with "Tealby" coins, that of Rome the only one containing both "Tealby" and Short-Cross. The evidence of the two finds is strongly in favour of the arrangement A-B-C. The Rome find has only one coin of Group A and eight of Group C,

<sup>&</sup>lt;sup>1</sup> Num. Chron., 1905, pp. 354 ff.

The London coin of Ricard, now in the British Museum, reads R:A:, not REX. I cannot now trace the other coin described as having the REX legend.

<sup>4</sup> Brit. Num. Journ., xiv, pp. 39 ff., and ibid., p. 20.

<sup>&</sup>lt;sup>5</sup> Num. Chron., 1919, pp. 45 ff.

<sup>&</sup>lt;sup>6</sup> Num. Chron., 1920, pp. 166 ff. Num. Chron., 1927, p. 244.

with sixty-nine Short-Cross pennies, which are all of Class I, but too much stress must not be laid on these few stragglers which, in a foreign treasure, have survived the demonetization of the "Tealby" type. The Awbridge find is more decisive; at most one coin only (perhaps not even one) of Group C was found and thirty-seven of Group A in a hoard in which coins of Stephen numbered about a quarter of the total coins examined.

The remaining finds give no indication of the order of the types. But all the finds, apart from those at Awbridge and Rome, appear to have been deposited within a short period of time. Probably they owe their burial to the same disturbances, just as the numerous hoards of Edward pennies found on both sides of the Border are due to the Scottish wars of Edward I and Edward II. The most likely circumstances are the baronial wars of 1173-4, when the eastern midlands especially were the scene of movements of troops and sieges of castles (see below, pp. 323-324). It is true that this would leave an interval of six years before the new coinage of 1180, but probably the same type continued, and there was presumably less activity at the provincial mints in the years immediately following the civil wars and immediately preceding the new coinage. This is perhaps the reason for the paucity of entries against moneyers in the Pipe Rolls of these years.

The Pipe Rolls. The entries relating to the coinage as far as the twenty-third year of the reign (1176-7) have been extracted by Mr. Carlyon-Britton in *Brit*. Num. Journ., ii, pp. 135 ff. The later Pipe Rolls have

now been published, and from them I have extracted the entries which are briefly summarized below.

24 Henry II (1177-8).

Canterbury (p. 123). Under heading "de misericordia monetariorum Cantuarie": Radulfus de Ria monetarius Cantuarie and his wife, account rendered £600, paid £180, owing £420.

Johannes filius Roberti, account rendered 400 marks (= £266 13s. 4d.), paid £186 13s. 4d., owing £80.

Ricardus Corbeille, account rendered 500 marks (= £333 6s. 8d.), paid £126 13s. 4d., owing £206 13s. 4d. Salomon, account rendered 300 marks (= £200), paid £160, owing £40.

Ricardus Deodatus, account rendered 300 marks (= £200), paid £153 6s, 8d., owing £46 13s, 4d.

Lincoln (p. 2). Account rendered by the sheriff of the fine of the old moneyers of Lincoln.

Worcester (p. 45). Wulfric and Alard the moneyers, account rendered £6 8s. 8d., paid 3s., owing £6 5s. 8d. Cumberland (p. 126). Account rendered by the sheriff of

the fine of the men of William the moneyer.

25 Henry II (1178-9).

Canterbury (p. 118). Similar entries "de misericordia monetariorum Cantuarie": Ralf de Ria has reduced his debt by £26 13s. 4d.; John by £33 6s. 8d.; Richard Corbeille by £21 6s. 8d. paid by himself, and £40 by his son acting as his surety; Salomon and Richard Deodatus are now quit.

Worcester (p. 93). Wuluric and Alard have reduced

their debt by 6s. 8d.

Norwich has six moneyers in default, Thetford three, Ipswich four (and two in the Honor Comitis Conan).

26 Henry II (1179-80).

Canterbury (p. 145). Similar entries (de mis. mon. Cant.): Ralf has reduced his debt by £66 13s. 4d., John is quit (in thesauro liberavit de veteri moneta per manum Iohannis filii Viviani); Richard Corbeille still owes £145 6s. 8d.

Lincoln (p. 49). Account of fine of old moneyers, as before.

Worcester (p. 78). Wulfrie and Alard have reduced their debt by 12 pence. Still owing, 118 shillings.

Norwich has six moneyers in default, Thetford four Ipswich four (and two in the Honor Comitis Conan).

Bedford (p. 123). "In carreagio 4 monetariorum a Bedeford ad Hurtford' et ad Hunted' 3s. et 3d. per idem breve [Rannulfi de Glanuill'] . . . et in carreagio Baldewini aurifabri a Bedef' usque Lond' 14d. per

idem breve."

Northampton (p. 82). "In carreagio Roberti monetarii de Gipeswic a Norh' usque Lincol' 6s. per breve regis. Et pro 1 domo locanda monetario Regis antequam fabrica fieret 10s. per idem breve [regis]. Et pro nova fabrica facienda £15 per idem breve et per visum Henrici filii Tihardi et Radulfi filii Godwin."

Oxford (p. 25). "In custamento ducendi monetarios de Cantuaria per diversa loca 3s. et 6d. per breve regis. Et pro thesauro ducendo et reducendo multis itineri-

bus per totum hunc annum 27s, et 2d."

Winchester (p. 136). "In custamento ducendi archam monetariorum cum cuneis primo apud Oxinef' et postea Norhant' et reducendi Wintoniam 7s. et 10d. per idem breve [regis]."

All the above entries, with the exception of the last four, which have been copied in full, are of balances outstanding from previous years. These four entries are interesting; they are for payments due in the year preceding the new coinage on account of movements of moneyers. Four moneyers have travelled from Bedford to Hertford and Huntingdon; the Ipswich moneyer Robert has travelled from Northampton to Lincoln; Canterbury moneyers from Oxford to various places; a moneyers' chest containing dies has gone from Winchester to Oxford, thence to Northampton, and back to Winchester. It is evident that these movements have some connexion with preparations for the new issue; possibly they imply the reopening of mints recently closed.

I have already suggested (p. 321 above) that most of the hoards of "Tealby" coins which have been recovered in modern times were buried at the time of the baronial wars (1173-4). Of the places at which they were found

Leicester, Royston, Ampthill, and Tealby were certainly in the centre of the fighting or of the passage of the king's troops in 1174; Leicester in 1173 was besieged and burnt, and in the following year Henry brought his army to join the forces besieging Huntingdon Castle, and was there joined by reinforcements collected by the Bisliop of Lincoln; the king's army then moved east against Bigod's Suffolk castles at Bungay and Framlingham, then to Northampton, where the king received the submission of the remaining rebel leaders. Again, the visitations of moneyers in the Pipe Roll of 1179-80 are in this same district of the Eastern and Central Midlands-Bedford, Hertford, Huntingdon, Northampton, Lincoln, and Oxford. Perhaps these mints were destroyed or abandoned in 1173-4, and were to be reopened in 1180 (if so, the intention to reopen did not materialize at Bedford, Hertford, and Huntingdon). I think that from 1174 till 1180 there was probably but little coinage going on, and that the mints were very few, and it is even possible that work was entirely suspended in the period immediately preceding the new coinage.

The usual Pipe Roll entry recording a moneyer's debt is not, if it stands alone, good evidence for dating coins that bear the same name; but if, as is here found, a large number of such entries agree in corresponding with a particular group of coins, these have the weight

<sup>\*</sup> It should be noted that the Bedford entry does not necessarily imply that the moneyers are Bedford moneyers (that there were four moneyers of Bedford in this reign, if ever, is extremely improbable). By comparison with the next entry, where Northampton pays for an Ipswich moneyer to go from Northampton to Lincoln, we may conclude that four moneyers from elsewhere visited Bedford and were sent on to Hertford and Huntingdon.

of cumulative evidence. Below are set out the names of moneyers, with Pipe Roll dates, which appear (a) in Group A only, (b) in Groups A and B, (c) in Groups B and C, (d) in Group C only.

(a) Coins of Group A only of:

Exeter, Ricard (1157-8).

London, Pieres Mer and Me, and Pieres Sal 9 (1167-8; in Jerusalem, 1168-9; dead, 1171-2).

Norwich, Gilebert (1158-9 onwards; in Essex from 1162 onwards).

Norwich, Ricard (1161-2 onwards; fled to Scotland in 1162).

Shrewsbury, Warin (1159-60). Stafford, Colebrand (1159-60).

Wilton, Aschetil (1164-5 and two following years).

Willem (1158-9 onwards; from 1162-3 no longer in this country).

(b) Coins of Groups A and B of:

London, Accard (1167-8; in Jerusalem, 1168-9).

Alwine (1167-8; in Jerusalem, 1168-9).

.. Geffrei (1158-9, 1159-60).

", Iohan (1167-8; in Jerusalem, 1168-9; dead, 1171-2).

Rodbert (1162-3).

Northampton, Engelram (1173-4, 1174-5).

(c) Coins of Groups B and C of:
Canterbury, Raul (1176-7 onwards). Late coins only
of Group B.

Ipswich, Robert (1164-5, and visiting Northampton in
1179-80).

(d) Coins of Group C only of: Worcester, Alard (1162-3 onwards).

In Group A only there are five moneyers whose names are found in Pipe Rolls prior to 1160, one of

<sup>&</sup>lt;sup>9</sup> If Pieres Mer and Me may be distinguished from Pieres M, which is found on coins of Groups A and C and on Short-Cross pennies, and Pieres Sal from Pieres S, which occurs on the latest variety of Group C.

the Pipe Roll of 1161-2, two of 1164-5, and two of 1167-8, these two being Peter Merefin and Peter de Salerna, crusading moneyers, who no doubt, like Accard and Iohan, struck coins of Group B, though they have not yet been found.

The moneyers that occur in Groups A and B are found in Pipe Rolls of the period 1158-68 with one exception, Engelram of Northampton (1173-4 and 1174-5).

Of the two moneyers of Groups B and C one, Raul of Canterbury, is in a late Pipe Roll, the other, Robert of Ipswich, in a comparatively early one (1164-5).

The weight of evidence is therefore very strongly in support of the arrangement A-B-C. Only Engelram of Northampton requires the opposite arrangement.

If we narrow the inquiry down to the more positive information contained in the Pipe Rolls such as a moneyer's death or removal, which gives us a *terminus* post quem, the evidence is stronger.

Peter Merefin, Achard, and John Peucier, three of the five crusaders of 1168-9, are known in Group A (Achard and John also in B), but not in Group C. 10

Gilbert of Norwich, who from 1162 onward is in Essex, strikes Norwich coins of Group A only.

To these should be added Peter de Salerna (Group A only); coins reading Pieres S, formerly assumed to be a variant of Pieres Sal, must belong to a different moneyer, as one such is found reading **RE**\* A, which, on Bury St. Edmunds evidence (see above, p. 319), is the latest variety of the "Tealby" issue, certainly later than 1168, when Peter de Salerna was in Jerusalem. The fifth crusader is Ailwin Finch: it is not unlikely that the coins reading Alwine (groups A and B) should be attributed to him (see note in list, p. 338).

Ricard of Norwich, who is known only by coins of Group A, had fled to Scotland in 1162.

Willem of Wilton, who in 1162 left the country, is also found on coins of Group A only.

It is worth while to draw attention to entries of debts for redemptio, that is, for fees payable on a change of the coinage. Redemptiones (Richard of Exeter, p. 160, and Eadred of Warwick, p. 26) and payments for dies (passim) in the Pipe Roll for the fourth year (Michaelmas 1157-8) confirm the date 1158 for the beginning of the "Tealby" issue, which some chroniclers place to 1156. Worcester has the redemptio charge in the Roll for the fifth year, 1158-9.

In Norfolk and Suffolk redemptio is charged to Wiger in the fifteenth year (1168-9), and at York Gerard owes for a die in the thirteenth year (1166-7). Neither of these moneyers' names is found on the coins.

It is interesting to note that in two Pipe Rolls, 1168-9 and 1169-70, the form Nicholescire is used instead of Lincolescire. This seems as arbitrary as the corresponding use for a short period on the coins of Henry I and Stephen and, again, on Short-Cross pennies (see *Num. Chron.*, 1922, p. 55).

In the list of coins appended to this paper a note is made of any Pipe Roll entries that correspond with names of moneyers on the coins.

The external evidence, then, of the Pipe Rolls, of finds, and of the moneyers of Bury St. Edmunds is almost decisively in favour of placing Group A as the earliest and Group C as the latest class of "Tealby" coins. We must now return to the coins themselves, and examine in detail the lettering of the different classes of coins.

The lettering of coins of Groups A and C is quite characteristic, and there is no difficulty in distinguishing the small, neat style of Group A from the large and rather clumsy lettering of the **RE**\* coins. A style intermediate in size is used on most of the coins of Group B. For convenience these three styles of lettering may be labelled A, B, and C, though the use of each is not limited to the corresponding group of coins.

Series A [see Pl. XIV. 1, 2] varies between 1.9 and 2.2 mm. 11 in height. It is used not only on coins of Group A, but also on many of the coins reading R:AN, R:A:, and R:AG [see Pl. XIV. 7, 9]. A few of the so-called "late REX" coins have this very small lettering [see Pl. XIV. 12], but their usual style is Series B.

Series B [see Pl. XIV. 8, 10] measures about 2.4 mm. The finish of the lettering is rather careful, the sides of the letters are usually straight, and the letters rather thin. It occurs on most of the "late REX" and **BENKI:R** coins; also on some coins of the other varieties of Group B. A peculiarity to be noted is the wide and even spacing of the letters on a few coins of the **BENKI:R** and "late **REX**" varieties [see Pl. XIV. 11].

Series C [see Pl. XIV. 14-18] has usually an obverse lettering of about 2.8 mm. in height. The reverse lettering measures about 2.6 to 2.4 mm.; occasionally the large obverse lettering is used on the reverse also.

Measurements are taken of the ordinary serifed uprights, not of such letters as A. L. V.

The finish of the letters is somewhat clumsy and irregular; they usually have convex sides, but occasionally they are straight or even concave [see Pl. XIV. 16]. There seems to be a gradual tendency either to increase or to diminish in size, so that on some coins the lettering can hardly be distinguished from that of Series B except by its thicker and rounder uprights. Usually the obverse inscription marks the series quite clearly. It occurs on the coins of Group C, and also on some of the coins reading **LENRI:R**.

The consideration of the lettering presents a serious difficulty. The heavy, large lettering described as Series C is reminiscent of the lettering of the last type of Stephen's reign, and, in common with those coins. coins of Group C have the peculiar feature of a larger lettering on the obverse than on the reverse. In addition to this, the small lettering of Series A is not distinguishable from that of the earliest Short-Cross pennies (i.e. those that have the square form of C and E); as soon as this square letter is abandoned (Class I b) a slightly larger lettering, about 2-4 mm., is used; in fact, the change of the C and E and the change of lettering are so close in point of time that the "muled" coins almost invariably have the smaller lettering, 2-1 mm., on the side bearing the square form and the larger, 2.4 mm., on the side bearing the round form of C and E.

One would naturally conclude that Series C, which seems identical with the lettering in use at the end of Stephen's reign, is the first lettering of the "Tealby" issue, and that Series A, continuing on Short-Cross coins, is the last. In other words, the epigraphical evidence is directly opposed to the arrangement suggested, namely, Groups A-B-C; the lettering appears

to require the arrangement C-B-A. But it is hardly possible to ignore the strong evidence in favour of the grouping A-B-C, which comes not only from the Awbridge find, but also from the comparison of moneyers' names in the Pipe Rolls with those on the coins. Perhaps one might suggest, in explanation of the anomaly, that the change from large to small lettering and vice versa comes deliberately at the change of the coinage. Thus, in the reign of Stephen, the larger lettering, with even larger obverse style than reverse, appeared on the first type of the reign; it was followed by small lettering, and appeared again on the last type of the reign. Since the introduction of serifs in the reign of Henry I, the measurement of height is no longer the same accurate test, and one can only distinguish with certainty large and small styles that differ widely. For this reason there is difficulty in determining the intermediate series on "Tealby" coins. Intermediate differences of lettering are scarcely recognizable, but the sudden jump from the very large to the very small style at the beginning of the "Tealby" issue, and again at the beginning of the Short-Cross issue, is quite likely to have been devised to make stronger contrast in the new coinage. One point to be considered is Mr. Lawrence's conclusion that the "Tealby" lettering goes from small to large and back again to small. This is due to his placing the hENRI:R and the "late REX" coins at the end of the issue, after the ordinary REx group. There does not seem to me to be adequate reason for this; in fact both the lettering and the style of bust require an arrangement which places these two varieties immediately before Group C.

The use of the English instead of the Roman form of the letter M is not, as Mr. Lawrence thought, promiscuous. The round English form does not occur on any coins, so far as I can find, of Group A or of Group C; its use is invariable in all the varieties of Group B, with the exception of one coin by Swetman of London (Lawrence coll.), reading R:AG. It came into use, therefore, at the end of the issue of the REX ANGL coins, and disappeared again when the REX type came in, though it survived in the so-called "late REX" and LENRI:R varieties at the end of Group B. This incidentally is a good reason for placing these two varieties before Group C, and not at the end of the series.

The letters wand P are used in all groups, but in Group C only is found except on Newcastle and Lewes coins reading RE\* A.

To summarize:

Group A [Pl. XIV. 1, 2] LENRI REX ANGL, or ANG, is closely connected with Stephen's coins by the Awbridge find, and with the early years of Henry II by Pipe Roll entries. It is therefore the earliest group. Its lettering is of the small style, Series A; the 2.4 mm. lettering of Series B occurs, if at all, very rarely on these coins. Willem is the only moneyer of Bury St. Edmunds who strikes coins of this type.

Group B contains five distinct varieties:

(a) [Pl. XIV. 3, 4] R:AN, or occasionally R:ANG. This group has usually the small lettering of Series A, though Series B occasionally occurs; this is one of the types of Willem at Bury St. Edmunds.

### (b) [Pl. XIV. 5, 6] R:A:.

This variety is placed, tentatively, after the R:AN coins because a larger proportion of the coins in the R:A: group bear the 2.4 mm. lettering. No Bury St. Edmunds coins are yet known of this type.

### (c) [Pl. XIV. 7, 8, 9] R:AG.

Here again we find lettering of both Series A and Series B in use, with the latter more frequent, but the position of this variety is determined by the appearance of the names of both Willem and Henri on the Bury St. Edmunds coins; it is the latest group of Willem and the first of Henri. The bust on one or two of the R:AG coins seems closely allied to Bust II b, which is found on LENRI:R and "late REX" coins.

# (d) [Pl. XIV. 10, 11, 14] I-ENRI:R. Bust II b, that is to say, that of the "late RE\*" coins, but occasionally also Bust III (the RE\* type) is found. Lettering is Series B.

(e) [P1. XIV. 12, 13]. So-called "late REX" coins, which should be regarded as the earliest issues of REX, or RE, coins. In all particulars, except obverse legend, similar to variety (d); Bust II b, lettering Series B (on one or two examples there seems to be a survival of the small lettering of Series A). The use of the round form of M on coins of varieties (d) and (e), as on the other varieties of Group B, shows

that these two varieties cannot be placed after Group C. No Bury St. Edmunds coin is yet known of either variety (d) or (e).

Group C [Pl. XIV. 15-18] REX, RE, or REX A.

Bust III; lettering C, but with occasional use of
lettering B. Both Henri and Raulf struck coins
of this group at Bury St. Edmunds; as coins
reading REX A are known only of Raulf,
we may conclude that that title came into vogue
quite late.

Further varieties noted by Mr. Lawrence are:

- REX AN (Lawrence, column 6). I take this to be a nondescript group; one at least (Hosbert of Winchester in B.M.) is of Group A, some of Group B, and others of Group C with large letters.
- REX AG (Lawrence, column 12). This is apparently a Canterbury variety of B (c), the R:AG group.
- R:ANG (Lawrence, column 13). A variety of R:AN. It has the small lettering and bust of the early coins of Group B. Only known of Willem of Thetford and in an Awbridge reading of a Winchester coin. [Pl. XIV. 4].
- **LENRI** (Lawrence, column 15). A variety of **LENRI**: R. These coins have the widely spaced lettering peculiar to the **LENRI**: R and "late **RE**\*" coins, varieties B (d) and (e).

REX S (Lawrence, column 18) seems to be a variety of Group C with large lettering.

The geographical position of the majority of finds and its coincidence with that of the mints which, in the Pipe Roll of 1179-80, are charged with costs for visits of moneyers is, I think, important. It suggests a connexion with the movements of troops in that district in 1173-4, which might cause both the burials of coins and the closing or disorganization of mints. I do not think too much emphasis is laid on this coincidence by inferring that we may date these hoards, at Royston, Tealby, Ampthill, Leicester, to the years 1173-4. If this is a correct deduction, it follows that the coins of the latest group must have been struck at an earlier date than would be deduced from assigning to each group a proportionate period in the years 1158-80. In any case, Group B had probably only a short life; the coins are comparatively rare, and their large variety, contrasted with the more stable types of Groups A and C, suggests a somewhat experimental period of short duration.

The Pipe Roll entries give the impression that Group A continued till approximately 1162 (the date of the removal of Gilbert and Ricard from Norwich and of William from Wilton) or 1164 (the date of the debt of Aschetil and Lantier of Wilton), and that Group B came to an end in, or soon after, 1167, when the five moneyers went to Jerusalem, of whom Achard, and perhaps Alwine Finch also, struck the latest variety of coins of Group B.

The mint of Durham is of interest. A gap in the coinage from group B (c) of the "Tealby" issue until

class III of the Short-Cross coinage (that is, approximately, 1165 to 1195) is explained by Longstaffe (Num. Chron., 1863, p. 164) quoting from the Boldon Book. Henry II, by establishing dies at Newcastle, diminished the revenue of the Durham dies from 10 marks to 3 marks; later (unfortunately the date is not given) he removed the dies from Durham. The dies were restored in the last quarter of the year 1196 to Philip de Poictiers on his election to the bishopric (see Ruding, vol. ii, p. 165, quoting Henry of Hoveden and Pipe Roll 8 Richard I).

I have already mentioned how much I owe to Mr. Lawrence for his help. The use of his large collection of coins has been no small part of the assistance which I gratefully acknowledge.

I have appended to this paper a list of the coins arranged in accordance with the classification which I have suggested. In the column representing Group B the letters denote the particular varieties represented (see above, pp. 331-332); the coins of this group are either in the British Museum or in the Lawrence collection, unless otherwise noted. The letters St. and SC. (followed by the number of the type or class) denote that the moneyer's name is found on late coins of Stephen or early Short-Cross pennies. Notes have been added of the Pipe Roll entries which correspond with names on the coins.

I have also added an alphabetical list of moneyers, showing the mints at which their coins are known, in the hope of assisting others whose misfortune it may be to attempt the reading of inscriptions on "Tealby" coins.

G. C. Brooke.

THE STATE OF THE S			100	
	A	В	C	
	ANGL	(various)	REX	A CARLES TO SERVICE AND A SERV
	type)		type)	
Bedford				Carlotte Street
Tomas (St. VI)	35.14			P.R.1160-1 to 1174-5; 1164-5 onwards in Scotland; 1167-8
Bristol				dead. Lord Grantley's coin
Elaf	BM		?	(Carlyon Britton Sale, lot
Tancard	BM	b	BM	1510) is neither of Tomas
n o n	-020180			nor of Bedford; it reads
Bury St. Edmunds Raulf			DM	#IONAT
Henri		c	BM BM	
Willem	BM	a, c	DM	The R:A: coin in Mr. Law-
	76.0	,		
Canterbury				rence's list is of uncertain
Adam	3			moneyer; the mint also is doubtful.
Alfehg	LAL	100	2.32	The second of th
Goldhavoc	BM	a?	BM	The uncertain coin of Group B
Goldeer (?)		b, c, e		(in Mr. Lawrence's list R:
	100			AN) is probably Ba or
	1	200		Bb (L.A.L. coll.).
Raul		e	BM	P. R. Radulf de Ria 1176-7 to
	10000	The state of		1179-80.
Ricard	BM	b, c, d	BM	P. R. (Kent) 1172-3, 1174-5 Q
		F 1971		(no surname).
		IN COLUMN		Richard Corbeille (1174-5 to
				1179-80) and Richard Deo- datus (1176-7 to 1178-9 Q)
	TO STATE OF THE ST	10		are moneyers of Canterbury.
Ricard Me	BM	ь	BM	are moneyers or currency.
Rogier (St. VII)		b, c, d, e	BM	P. R. Abp's moneyer 1172-3
Wiulf	BM	a, d	BM	to 1174-5; not so specified
Carlisle	1	1 7		1175-6 Q (acting then for
Willelm	BM	b, d, e	BM	king's receiver?).
wineim	Date	u, u, e	Diff	P. R. passim.
Chester	A SHILLS		TOTAL B	Manual Royal Control of the Control
Andrew	BM	18 18	1	The state of the s
Willelm	BM		LAL	
Colchester		1. 6		
Alwine	BM	1 3 -	?	P. R. 1160-1 Q.
Elwine	BM-		A COLUMN	100
Nicole Pieres	Dar.	1500   10	BM	
Fleres		4	19381	Market State Committee Com

	ANGL	B (various)	C REX	
	type)		type)	
Durham Cristien		e		Hugh de Puiset was conse-
Iohan Waltier	BM BM			crated Bishop of Durham in December, 1153, and died March, 1195. See above,
Exeter	the same of the	1000	D 10	р. 335.
Edwad	BM	d?	TAT	Trivo
Guncelin	BM	ь	LAL	
Ricard Rogier	BM BM		BM	SC. I. P. R. 1157-8. SC. I. P. R. ?Roger Pech', "moneyer of Cornwall"
Gloucester	The second second	100	LAL	1157–8 Q.
Nicole Radulf (St. VII)	LAL BM		LAL	Co. Co. III Co. III
Rodbert	BM	N. Collinson	2	
Sawle	BM			
		100 32		
Hereford				E-LAND - SCHOOL ST
Driv (?) Osbern	Conta	ь	1000	
Stefn	Coats	b2		
Rodbert	2		?	Perhaps not a Hereford
				moneyer.
Willem	9			25.
Ilchester			19601	The state of the s
Adam		e?	BM	
Ricard	LAL	b		
Rogier	BM		1	
Ipswich				The second second
Nicole	BM	b, d	BM	Anna Carlon Carlon Carlon
Robert		d	BM	P.R. Nort, and Suff, 1164-5Q;
Turstan		d	ВМ	(Ipswich) 1179-80 visiting other mints.
Launceston		A COLUMN	1	A WITCH STATE OF STAT
Willelm	BM	1000	1000	
COLUMN TO THE	I W Service	date	1000	English tests
Leicester	DAL	13 3	15-1-	
Ricard Robert	BM BM	1-5	1 7 1	
Hobert	27.00			THE RESERVE TO SERVE THE PARTY OF THE PARTY

	A	В	c	
	ANGL	(various)	and the same	
E William Tol	type)	ALIE	type)	
Lewes				Water and the second of the se
Wulwine				P.R.1159-60 to 1174-5; 1167-8 onwards, "nowhere to be
Lincoln		J W. 8		found". The coin in Mr.
Andreu	BM	4	BM	Lawrence's list (now Lord
Godrie	BM	b	BM	Grantley's) does not read
Lanfram Raven	BM BM	e?	BM	Wulwine.
Raulf	LAL	e?	DM	
Swein	BM	6.1	BM BM	
		-4-0	27.00	
London		1.80		
Accard		e		P. R. 1167-8 onwards; 1168-9
	DOM:			gone to Jerusalem. (This
100425	2 10 10			coin reads RE but is of the
		201., "		"late REx" type.)
Alwine	BM	b, d?, e		
		o, u ., c		P. R. (Ailwin Finch) 1167-8 onwards; 1168-9 gone to
				Jerusalem. I do not think
				the reading "Alwin Fine"
ALCOHOLD IN THE		000	11.01.9	occurs on a coin. The Aw-
THE RESERVE AND	Electrical	MIRIT		bridge coin so read (Num.
A STATE OF THE PARTY OF THE PAR		100		Chron., 1905. p. 357) reads
The same			1000	PIRES:ME (now in
TRANSPORT OF THE PARTY OF THE P	100	157		B.M.). Nor is there any other
	16 b 500	2 3 3	1000	coin in B. M. reading Alwine
Edmund	BM	100	BM	Fine as stated (ibid., p. 862).
are mentaled	Dat	b, c	Dat	P. R. 1167-8 Q (Edmund Seintier).
Geffrei (St. VII)	BM	c		P. R. 1158-9, 1159-60 (still
				owing five marks, not men-
0.10	200		1 540	tioned again).
Godefrei Humfrei	BM BM	b	BM	P. R. 1167-8 Q (Godefrid de
Iohan	BM	b	3	Castello).
- Communication	Din	.0		SC. I. P. R. (John Peucier) 1167-8 to 1171-2, 1168-9 in
	1 0000	392 = 5		Jerusalem, 1171-2 dead.
Lefwine	BM	d?	BM	P. R. 1167-8 Q.
Martin	BM	The second	?	SC. L
Pieres Mer, Me	BM BM	a, b, e	BM	P. R. (Peter Merefin) 1167-8
racios mer, me	27.00	14 4 8	1 1	to 1171-2. 1168-9 in Jeru- salem, 1171-2 dead.

The second	A	В	C	
	ANGL	(various)	REY	
	type)	(**************************************	type)	
	(5 pc)		rype	
Pieres M	ВМ		ВМ	SC. I. Pieres M. in Short-Cross and on late "Tealby " coins cannot be Merefin, who died in 1171.
Pieres Sal	BM			P. R. (Peter de Salerna) 1167-8 to 1174-5. 1168-9 in Jeru-
Pieres S.	1.565	41 113	BM	salem, 1171-2 dead.
Ricard (St. VII)	BM	ь		SC. I. The REX coin in
				Mr. Lawrence's list is taken from the Awbridge list. It reads R:A:
Rodbert (St.VII)	BM	ь		P. R. 1162-3.
Swetman	BM	b, c		
Wid(t)	BM	A A S		
Lynn (?)			300	
Rogier	5			Probably not correctly attri-
Newcastle				buted.
Willelm	BM	a, b, c, e	BM	P.R. passim (as moneyer 1168-
Northampton	100.00	4		9).
Engelram	BM	d	-	P. R. 1173-4, 1174-5 Q.
Ihosep Pieres	LAL BM		0.00	Carlotte and the North Control
Reimund	BM	d		THE RESERVE OF THE PARTY OF THE
Waltier	LAL	DA STORY		SC. I.
Warnir	BM		100	
Ste[fne?]	BM		100	
Norreich	2 1	1000	199	V
Gilebert	BM			P. R. 1158-9 onwards; 1162-3
Herbert	BM	b	BM	onwards sued in Essex.
Hue	BM	b, d	BM	
Nicole Picot	BM BM	a 2, b	DM	
Reinier	BM	u	LAL	
Ricard	BM		1	P. R. 1161-2 to 1175-6 Q;
Willelm (St.VII)		1447	BM	1162-3 onwards in Scotland.
	MAN STATE	PART	144.8°	Shipping of the orange
Oxford Adam	BM	0.31	LAL	P. R. 1174-5 Q; 1176-7 Q.
Aschetil	BM	100	17771692	SC. I.
Rogier	BM	1:03.3	Mars In	

	A	В	C	
	ANGL	(various)	REX	
	type)		type)	
Salisburg				The state of the s
Daniel	BM	(88.88)		
Levric	BM	201		
		W		
Shrewsbury	600 m	- SVIII		
Warin .	BM			P. R. 1159-60 (still owes, but
Stafford				not mentioned again).
Colebrand	BM	18 3 A 18		L. E. Supplement
Willem	DM	e		P. R. 1159-60 Q.
	111111111	.6		WATER STREET
Thetford				
Siwate	BM	a	BM	
Turstan	BM	a, d	BM	P. R. 1167-8.
Willem	BM	n.	BM	P. R. 1157-8 (Norf. and Suff.);
Willem Ma	BM		BM	(William f. Dere-)
Wallingford	The state of the s		n-Te	(Thetford) wold
Fulche	BM	n.?		1167-8 William f. W
	A. A. A.	10.2	1814	Awada
Wilton				SCOTO DE LOS DE LOS
Aschetil	BM			P. R. 1164-5 and 1165-6 instal-
7.0	200			ments, 1166-7 Q.
Lantier	BM			P. R. 1164-5 and 1165-6 instal-
Willem (St.VII)	BM			ments, 1166-7 Q.
(20111)	2.00			P.R. 1158-9, instalments paid to 1161-2; 1162-3 no longer in
	1000			this country; 1165-6 onward
Winchester	200			is "nowhere to be found".
Herbert	BM	a, b, e	BM	P. R. 1166-7 Q.
Hosbert Ricard	BM		BM	
Willem	BM BM		BM	
	DM			SC. I.
Worcester				
Alard		S	BM	P. R. 1162-3, instalments to
V	Marie Control			1179-80 (for "ransom", i.e.
York Cudberht	PM	3000		new dies).
Godwine	BM BM	3 133	TAT	State of the state
Griffin	BM		LAL	
Herbert	BM	a?, b?, d	BM	P. R. dead or outlawed in
lordan	BM		27.575	1174-5 (chattels in hands of
Nor[ma?]n	BM		- Date	the sons of Grossus the priest,
Willem	LAL	1 5/2/4	180.00	1175-6 Q).
Wulfsi	BM	No. 1		SC. I.
AL MITTOL	0.7.656	A CONTRACTOR	1	

### ALPHABETICAL LIST OF MONEYERS.

III anecomo aco	20 100	D: 31	
Accard	London.	Pieres, Mer	London.
Adam	Canterbury, Ilches-	or Me	Landon
200 0	ter, Oxford.	Pieres S	London.
Alard	Winchester.	Pieres Sal	London.
Alfehg	Canterbury.	Raulf	Bury St. Edmunds,
Alwine	Colchester, London.		Canterbury,
Andrew	Chester, Lincoln.		Gloucester, Lin-
Aschetil	Oxford, Wilton.	Dames	coln. Lincoln.
Colebrand	Stafford.	Raven	The state of the s
Cristien	Durham.	Reimund	Northampton.
Cudberht	York.	Reinier	Norwich. Canterbury, Exeter.
Daniel	Salisbury.	Ricard	Ilchester, Lei-
Driv?	Hereford.		cester, London,
Edmund	London.		Norwich, Win-
Edward	Exeter.		chester.
Elaf	Bristol.	Ricard Me	Appear of the Control
Engelram	Northampton.	Rodbert	Canterbury. Gloucester, Here-
Fulche	Wallingford.	Rodoere	ford, Ipswich,
Geffrei	London.		Leicester, Lon-
Gilebert	Norwich.		don.
Godefrei	London.	Domer	Canterbury, Exeter,
Godrie	Lincoln.	Roger	Ilchester,
Godwine	York.		Lynn?, Oxford.
Goldeer?	Canterbury.	Sawle	Gloucester.
Goldhavoc	Canterbury.	Siwate	Thetford.
Griffin	York.	Stefne	Hereford, North-
Guncelin	Exeter.	Sterne	ampton.
Henri	Bury St. Edmunds.	Swein	Lincoln.
Herbert	Norwich, Winches-	Swetman	London.
	ter, York.	Tancard	Bristol.
Hosbert	Winchester.	Turstan	Ipswich, Thetford.
Hue	Norwich.	Waltier	Durham, Northamp
Hunfrei	London.	Waterer.	ton, "PAIN".
Ihosep	Northampton.	Warin	Shrewsbury.
Iohan	Durham, London.	Warnir	Northampton.
Iordan	York.	Wid, or	THE RESERVE OF THE PARTY OF THE
Lanfranc	Lincoln.	Wit	London.
Lantier	Wilton.	Willem	Bury St. Edmunds,
Lefwine	London.	Willem.	Carlisle, Chester,
Levric	Salisbury.		Hereford, Laun-
Martin	London. Colchester. Glou-		ceston, New-
Nicole	Colchester, Glou- cester, Ipswich,		castle, Norwich,
	cester, ipswich,		Stafford, Thet-
A CONTRACTOR	Norwich.	1	ford, Wilton,
Norman	York.		Winchester,
Osbern	Hereford.	-	York.
Picot	Norwich.	Willem Ma	
Pieres	Colchester, London,	Wiulf	Canterbury.
District Pr	Northampton.	Wulfsi	York.
Pieres M	London.	Tr. Marie	

#### XVI.

## UNPUBLISHED SEVENTEENTH-CENTURY TOKENS.

### IN THE COLLECTION OF WILLIAM GILBERT.

(Continued from page 155.)

[SEE PLATE XV.]

LONDON (continued).

New Crane.

186. Obv. IOHN · KNIGHT · AT = A sugar loaf.
Rev. NEW · CRANE · IN · WAPPIN = I, E, K.

Newgate.

187. Obv. ROBERT · CARRINGTON = A swan. Rev. WITHIN · NEWGATE = R. L. C.

Mary Hurst issued tokens from the White Swan in Newgate Market in 1668 and 1670 (W 2024, dated 1658 in error, and 2025).

188. Obv. IOHN · HYDE · NEXT · DORE · TO · YE =
HIS · HALF · PENY · 1669.

Rev. ROSE · TAVERN · IN · NEWGATE = MAR ·
KETT, I. M. H.

There was a Rose Alley in Newgate Market.

- 189. Obv. AT · THE · KINGS · HEAD = The King's head. Rev. IN · NEW · GATE · MARKET = C. I. T.
- 190. Obv. AT · THE · WHIT · BEARE = I. M. W. Rev. WITHIN · NEWGATE = A bear walking to the left.

This token is struck in lead. W (2042) describes a farthing of Mary Wingfield of this house. The above token was probably issued by her husband, and, when he died, she issued her own token.

New Exchange.

191. Obv.  $AT \cdot THE \cdot TAVERN \cdot VNDER = A$  view of the Exchange.

Rev. THE · NEWE · EXCHAINGE = R. P. H. [Pl. XV. 7.]

New Market.

192. Obv. IAMES · HILL · IN · THE = OYLE · MAN. Rev. NEW · MARKET = I. M. H. 1657.

New Street.

193. Obv. ROBERT · BROCK · IN = A fleur-de-lis. Rev. NEW · STREET · 1656 = R. A. B.

194. Obv. IOHN · GOODE · IN · NEW = An elephant and castle.

Rev. STREET · IN · SHOOE · LANE = HIS · HALFE · PENNY · 1669.

Old Bailey.

195. Obv. SYMON · LEE · AT · YE · LYON=A lion with a ball,

Rev. AND · BALL · IN · YE · OLD · BAYLY = S. A. I. [Pl. XV. 1.]

Old Change.

196. Obv. AT · THE · BLACKE · BOYE = A negro holding a dart.

Rev. IN · THE · OLDE · CHANGE = H. P. [Pl. XV. 2.]

Old Fish Street.

197. Obv. WILLIAM · ROBINSON · AT · YE = A castle.
Rev. IN · OVLD · FISHTREET · 1668 = HIS · HALFE · PENY.

Pall Mall.

198. Obv. EDWARD · OWENES · AT · THE · COCK = A cock.

Rev. IN · PELL · MELL · HIS · HALF · PENY = E. G. O. between entwined flowers. [Pl. XV. 14.]

Pauls Chain.

199. Obv. EDWARD·WOODWARD·AT=Crossed swords.
Rev. PAVLES·CHAYN·HIS·HALF·PENY =
E. A. W. between entwined flowers.

W (2195) describes a farthing of this man, on which he is stated to be a cook. I also have an unpublished heart-shaped token of his—see No. 254.

Pauls Wharf.

200. W (2199) describes a token of I·H issued at the Ball near Pauls Wharf with 3 in centre of obverse and in a note to it he says "a singularity attached to this token is the figure 3 on the obverse. Query, threepence?" I have a fine specimen of this scarce token but with 3<sup>D</sup> in centre, so it was, doubtless, a threepenny token.

Piccadilly.

201. Obv. RICHARD · GORSE · IN = The Grocers' Arms.

Rev. PICKADILLY · GROCER · 1671 = HIS · HALFE · PENY.

Pudding Lane.

202. Obv. ACBART · GOODSPEED = A shield of arms. Rev. IN · PVDDIN · LANE = A cross.

This token is struck in lead.

Puddle Dock.

203. Obv. WILL · WEST · AT · YE · GREEN = HIS · HALFE · PENY.

Rev. DRAGON · NEAR · PVDLE · DOCK = A dragon.

Queenhithe.

204. Obv. IOSIAS · COOPER · AT · 1658 = A ship. Rev. QVEEN · HITH · LONDON = An anchor.

Ratcliffe.

205. Obv. GEORGE · BVLMOR · AT = A castle.

Rev. RATLEF · CROSS · 1666=HIS · HALF · PENY.
G, E. B.

206. Obv. GEORGE • BVLMOR • AT = A castle. Rev. RATLEF • CROS • 1658 = G. E. B.

This is a farthing token.

207. Obv. THE · WHEAT · SHEAF · AND=A wheatsheaf surmounted by a sugar loaf.

Rev. SVGER · LOAFE · IN · RATLIF = HIS · HALF · PENY. H. D. B. [Pl. XV. 10.]

W (2337) describes a farthing of this house and issuer,

208. Obv. IAMES · GOODWYN · IN · = A ship and gun. Rev. RATCLIFE · HIGH · WAY = HIS · HALFE · PENY. 209. Obv. NICHOLAS · HAYMAN · AT = A man with a telescope.

Rev. RATLIFF · CROSS · 1666 = HIS · HALF · PENY, N. A. H.

He may have been a mathematical instrument maker.

- 210. Obv. ANNE · HOW · NEARE = HER · HALF · PENY. Rev. RATLEFE. CROS · 1667 = A. H. between entwined flowers.
- 211. Obv. EDWARD · IEAFFERIS = E. I. I. Rev. AT · YE · IN · RATLIEF = Three foxes.
- 212. Obv. RICHARD · LECHFORD = A sugar loaf. Rev. IN · FOX · LANE · RATLIF = R. M. L.
- 213. Obv. WILLIAM · NEALE · AT · YE = A crown. Rev. IN · RATCLIFFE · 1668 = HIS · HALFE · PENY.

Red Cross Street.

- 214. Obv. ROBERT · PRICHARD = The Skinners' Arms. Rev. IN · REDCROS · STRET = R. R. P.
- 215. Obv. THE · RED · CROSS · TAVERN = A cross upon steps. Rev. IN · RED · CROSS · STREETE = F. W.

The cross on this token probably represents the one erected near the end of Golden Lane and from which Red Cross Street derived its name.

Rosemary Lane.

216. Obv. EDMVND · MEARE · AT · THE = An angel. Rev. IN · ROSEMARY · LANE · 1670=HIS · HALF · PENY. E. L. M.

217. Obv. WILLIAM · SKINNER · IN · = W. A. S.

Rev. ROSMARY · LANE · 1671 = HIS · TO · KEN.

The word token is interesting.

Round Court.

218. Obv. IOH · SHERRED · BACKE=Three horseshoes.

Rev. SIDE · YE · ROVND · COVRTE = I. A. S.

The three horseshoes are the Arms of the Farriers' Company.

Russell Street.

Obv. IAMES · MAGNES · STATIONER = A horse running.

Rev. IN · RVSSEL · STREET · COVENT · GAR · = HIS · HALFE · PENNY,

Saffron Hill.

220. Obv. THO · GIBBS · AT · YE · NEW · ENGLAND = A ship and two boats.

Rev. ONE · SAFERON · HILL · 1667 = HIS · HALFE · PENY. T. L. G.

This sign is not mentioned by Larwood.

St. Alban's Street.

221. Obv. Iohn | Hill in St | Albans Street | on St Iames | 1668 (in five lines).

Rev. HIS · HALF · PENY and a girl milking a goat.

[Pl. XV. 12.]

This token is octagonal.

St. Anne's Lane.

222. Obv. IOHN · PERROT · TOBACONIST = A roll of tobacco and ½.

Rev. IN · ST ANNS · LANE · 1671 = I. A. P. between entwined flowers.

St. Clement Danes.

223. Obv. Samuell Haw att the = A hand holding a vine spray.

Rev. 1670. | behind | S<sup>t</sup> | Clements | Danes | his ½D | (in six lines).

224. Obv. WORRALL · MAYO · AT · THE = An angel.

Rev. BEHIND · ST CLEMENTS · DAN · = HIS ·

HALFE PENNY.

W (2471) describes a farthing of this house of 1657 issued by T. S.

St. Clement's Lane.

225. Obv. THO · FOX · IN · ST CLEMENTS = Three foxes. Rev. LANE · NEAR · LVMBER · STREET = HIS · HALF · PENY · 1669.

St. Giles in the Fields.

226. Obv. WILLIAM · BOOTEY · IN · = Two men carrying a barrel.
Rev. ST · GYLES · IN · YE · FEILDS = W. S. B.

227. Obv.  $AT \cdot THE \cdot ROSE \cdot BRVHOVS = A$  rose. Rev.  $IN \cdot GILES + = G$ . R. L.

228. Obv. WILLIAM · POWELL · IN · ST · = The Drapers' Arms.

Rev. GYLES · FEILDS · VPHOLSTER = W. B. P.

W (2504) describes a token of Henry Powell, of St. Giles in the Fields, cheesemonger.

229. Obv. WILL · · · · NEW · KING · STR · = A bull (?). Rev. ST · GILESES · IN · THE · FEILDS = HIS · HALFE · PENNY.

A poor specimen.

St. Katherine's.

- 230. Obv. AT · THE · ROYALL · OKE = A tree. Rev. AT · ST · KATHERNS · MIL = I. M. S.
- 231. Obv. IACOB · VANDEBOCK = I. M. V.
  Rev. AT · S · KATHERNES · DOCK = I. M. V.
- 232. Obv. BRIGET · WHITE = A dolphin. Rev. IN · KATHERINS · COVRT = B. W.

St. Martin's Lane.

233. Obv.  $GOD \cdot SPEED \cdot YE \cdot PLOW = A plough.$   $Rev. THE \cdot | PLOW \cdot IN \cdot | ST \cdot MARTIN | S \cdot LANE |$   $\cdot I \cdot \cdot H \cdot \text{ (in five lines).}$ 

A wreath encircles each side.

234. Obv. IO · LOVELL · AT · THE · KINGS · ARMES =
The royal arms.

Rev. IN · SAINT · MARTINS · LANE · VINTNER =
I. A. L. 1668 HI · 2.

St. Martin-le-Grand.

235. Obv. WILL · MASON · IN · ST · = A hand holding a bird.

Rev. MARTINS · LE · GRAND = W. A. M.

236. Obv. IOHN · WALLER · HIS · HALF · PENY =
An angel.

Rev. IN · ST MARTINS · LEGRAND · 64 = I. I. W.

St. Mary Axe.

287. Obv. THE · BLACK · BOAY · IN · = A negro holding a dart.

Rev. S · MAREY · ACTS · AXYEARD = W. E. H. 58.

St. Nicholas Shambles.

238. Obv. IOHN · FAREL · IN · ST · = A bull's head.

Rev. NICHOLAS · SHAMBLES = I. A. F.

The Savoy.

239. Obv. WILLIAM · HAYTER · AT · THE = A goat.

Rev. NEARE · THE · SAVOY · GATE · STRAND =

HIS · HALFE · PENNY. W. H. [Pl.XV.6.]

240. Obv. RICHARD · HVLL · NEARE = A unicorn. Rev. YE · SAVOY · IN · YE · STRAND = R. H. H. between branches.

W (2742) describes a farthing of this house issued by R. M. D.

Seething Lane.

241. Obv. ANN · BABINGTON = HER · HALF · PENY.
Rev. IN · SEATHING · LANE = A crown.

Shire Lane.

242. Obv. Ierom | Powell | Tobacconist | in Sheare | Lane. (in five lines).

Rev. HIS · HALF · PENY. A man with a pipe in his mouth and a roll of tobacco under his arm.

Shoe Lane.

243. Obv.  $IOHN \cdot FOX \cdot AT \cdot YE \cdot GEORG = St$ , George and the Dragon.  $Rev. \ IN \cdot SHOWE \cdot LANE = I$ , A. F.

244. Obv. RICHARD · LOVE · AT · THE = A plough. Rev. PLOW · IN · SHOOE · LANE = R. D. L.

245. Obv. IAMES · OLIVER = A pair of shears.

Rev. IN · SHOOE · LANE = I, M. O.

Smithfield (West).

246. Obv. THO · ADAMS · WITHOVT = The Butchers' Arms.

Rev. SMITHFEILD · BARRS = T. A. A.

247. Obv. FRANCES · BVRTON · AT = A bear with a chain.

Rev. IN · WEST · SMITHFELD = F. C. B.

W (2845) describes a halfpenny token of this issuer of the Black Bear, 1668.

- 248. Obv. THE · ANTLOP · TAVERN = An antelope. Rev. IN · WEST · SMITHFEILD = S. C.
- 249. Obv. IOHN · GOVLDINGE · IN · = HIS · HALFE · PENY.

  Rev. WEST · SMITH · FEILD · 1668 = A man and a lion.
- 250. Obv. THO · IONES · AT · THE = A pascal lamb. Rev. BY · SMITHFEILD · PENS = T. E. I. 59.
- 251.  $Obv. IOHN \cdot PORTER \cdot AT \cdot THE = A$  horse.  $Rev. IN \cdot WEST \cdot SMITHFEILD = I. M. P.$
- 252. Obv. ABRAHAM · SMITH = A man of war. Rev. IN · SMITHFEILD = A. M. S.
- 253. Obv. GEORGE · SMITH · CHEESMONGER = HIS · HALF · PENY.

  Rev. OVER · AGAINST · YE · SHIPPENS = IN · SMITH · FEILD (i.e. against the sheep pens).
- 254. Obv. EDWARD · WOODWARD · IN = Crossed swords.

  Rev. SMITHFEILD · HIS · HALF · PENY = E. A. W. within entwined flowers.

  [Pl. XV. 18.]

This token is heart-shaped. He issued a token at Pauls Chain, see No. 199. Southampton Buildings.

255. Obv. NICHOLAS · YATES · IN · SOVTH = HIS · HALFE · PENY.

Rev. HAMPTON · BVILDINGS = The Bakers' Arms.

Sprusens Island.

256. Obv. THE · SIGNE · OF · THE · COCK = A cock.

Rev. IN · SPRVSENS · ILELAND = T. A. H.

This is in Wapping. The present Prusom Street was originally called Sprusen Street.

Strand.

257. Obv. THOMAS · KIRBYE · IN · = Five Bells. Rev. THE · STRAND · VINTNER = T. D. K.

Thames Street.

258. Obv. ROB · HELLOW · AT · YE · BAYNORDS = HIS · HALFE · PENY. R. E. H.

Rev. CASTL · THAM · STREET · CHANLR =

Tothill Street.

259. Obv. YE · KATHERN · WHEELE = A Catherine-wheel.

 $Rev. \text{ TAVERN} \cdot \text{TVTTEL} \cdot \text{STRET} = \text{E. A. B.}$ 

260. Obv. AT · THE · GROCERS · ARMES = The Grocers' Arms.

Rev. IN . TVTTLE . STREETE = R. S. M.

Tower Ditch.

261. Obv. EDWARD · SANDS · IN · = Crossed trumpets.

Rev. TOWER · DITCH · 1655 = E. I. S.

Tower Hill (Great and Little).

- 262. Obv. THE · HORSHOW · TAVERN = A horseshoe.

  Rev. ONE · TOWER · HILL = C. R. A.
- 263. Obv. IOHN · DAIVIS · ON = TRY · THE · BOVL. Rev. GREAT · TOWER · HILL = I. A. D.
- 264. Obv. WILLIAM · DVRBVRN = HIS · HALF · PENY. Rev. ON · GREAT · TOWER · HILL = A rose.

W (3197) describes a token issued from this sign by Ja. Godfrey.

- 265. Obv. NERE · THE · POSTERNE = E. F.—S. F. Rev. ON · GREAT · TOWER · HILL = A jackboot.
- 266. Obv. WILLIAM · MALLETR · AT = Seven stars. Rev. LITTILL · TOWER · HILL = W. K. M.
- 267. Obv. SAMVELL · MOREHOVSE = An angel.

  Rev. VPPON · LITTLE · TOWER · HIL = HIS · HALF · PENY. S. A. M.
- 268. Obv. AT · THE · BLACKE · BOYE = A negro holding a dart. Rev. ON · TOWER · HILL = W. P.

Tower Street.

269. Obv. MARY · CHILD · 1666 = The Grocers' Arms. Rev. IN · TOWER · STREET = M. C.

W (3210) describes a token with this sign issued by Stephen Earle in 1666—probably a different shop.

270. Obv. RICHARD · HARISON · AT = THE · COFFE · HOVSE.

Rev. IN · TOWER · STREET · 1666 = HIS · HALF · PENY. [Pl. XV. 9.]

271. Obv. AT · THE · GOLDEN · HELMET = A helmet.

Rev. IN · TOWER · STREET = S. A. L.

W (3213) describes a token from the "BLEW · HELMET" in this street.

Vere Street.

272. Obv. WILLIAM BRVCE = Arms:—A harp and three leopards quarterly. Rev.  $IN \cdot VERE \cdot STREET = W. D. B.$ 

Wapping.

- 273. Obv. AT · THE · DOLPHIN · IN = A dolphin.

  Rev. NEW · STAIRS · WAPPIN = G. M. B.
- 274. Obv. GORG · CARPENTR · IN = A wheatsheaf. Rev. WAPING · MELL · MAN = G. S. C.
  W (3285) describes another farthing of this issuer.
- 275. Obv. WILLIAM · GRIGREY · IN · WEL = An angel.

  Rev. ALY · IN · WAPING · 1667 = HIS · HALF ·

  PENY. W. E. G.
- 275a. Obv. PHILLIP · IOHNSON · AT · YF = A pelican in its piety.
  Rev. IN · WAPPEN · 1666 = P. A. I.
- 276. Obv. TIMOTHY · RAMAN · AT . YE = A black jack. Rev. AT · WAPIN · DOCK · 1668 = HIS · HALFE · PENY. T. E. R.
- 277. Obv. THOMAS · THEKEST · · · · · AT = A barrel.

  Rev. THE · TVN · IN · WAPPING · · · · = HIS · HALFE · PENNY. T. R. T.
- 278. Obv. NATHANIELL · WARNER · AT · THE = An idol.
  - Rev. AT · WAPPEN · NEW · STAIRS · 69 = HIS · HALFE · PENNY. N. I. W.

279. Obv. IAMES · WATERS · AT · YE · 3 · SVGER = L. W. 1670. ½.

Rev. LOFES · ON · WAPPING · WALL = Three sugar loaves braced.

W (3294) describes a token issued from this sign in 1650 by T. E. DRY.

Westbury Street.

280. Obv. DAVID · COVNCELL = A castle. Rev. IN · WESTBERY · STREET = D. R. C.

This street is not mentioned by Williamson. It was in Spitalfields and is now named Quaker Street.

Whitechapel.

281. Obv. THOMAS · HEPWORTH = Three cloves. Rev. IN · WHITE · CHAPPELL = CHAN · DLER.

282. Obv. IOHN · READ · IN = A tulip.

Rev. WHITCHAPPELL · 1671 = HIS · HALFE · PENNY. I. I. R.

Whitecross Street.

283. Obv. IOHN | GARDINER | OYLEMAN | HIS · HALF | PENNY (in five lines).

Rev. IN · WHITECROSS · STREET = I. A. G. 1668.

This token is octagonal.

284. Obv. ROBERT · GIFFORD · 1667 = A Turk's head. Rev. IN · WHITE · CROSS · STREET = HIS · HALFE · PENNY.

285. Obv. AT · YE · GOLDEN · KEY · IN = I. S. S. Rev. WHITECROSS · STREET = A key.

286. Obv. NICHOLYS · WARE · AT · YE · LIONS = HIS · HALFE · PENY.

Rev.  $\text{HEAD} \cdot \text{IN} \cdot \text{WHITECROS} \cdot \text{STREET} = A \text{ lion's}$  head. N. M. W.

White Hart Yard.

287. Obv. ANN · BARRET · IN · WHIT · HART = Three birds.

Rev. YARD · NEARE · THE · STRAND = A. B.

Wood Street.

288. Obv. THOMAS | COOPER | HIS · HALF | PENY (in four lines).

Rev. IN · GREAT · WOODSTREET · 1670=A signboard with a bell on it.

W (3506) describes a farthing from this house, issued in 1663, by John Bell.

289. Obv. MICKAELL · FRANCIS = A bell. Rev. IN · GREAT · WOOD · STRET = M. A. F. See note to the preceding token.

Wych Street.

290. Obv.  $AT \cdot YE \cdot RED \cdot COW = S$ . I. P. Rev.  $IN \cdot WICH \cdot STREETE = A$  cow.

291. Obv. IOHN · SHAW · AT · YE · LYON = A lion rampant.

Rev. RAMPANT · IN · WITCH · STREET = HIS HALFE · PENY. I. M. S.

## MIDDLESEX.

Bow.

292. Obv. HENRY · MILFORD · OF · BOW = A shuttle.

Rev. HIS · HALF · PENNY · 1668 = H. E. M.

Chelsea.

293. Obv. ADRIAN · WESTERBAN · AT · YE = Bust to right surrounded by · PRINC · OF · ORANGE. Rev. IN . CHELSEY · 1667 = HIS · HALF · PENY.

W (29) gives a partial description of this token from a worn specimen.

Edmonton.

294. Obv. THO · SANDERSON · AT · YE = A bell. Rev. IN · EDMVNTON · HIS . OB = T. A. S.

A halfpenny token. The mint-marks are fleurs-de-lis. It is interesting a token should have come to light of an inn which afterwards became so famous in legend, and which is still standing. The OB signifies Obolus, the old name for the half denier or halfpenny.

295. Obv. IOHN · TABARAHAM · AT = A fleur-de-lis. Rev. IN . EDMONTON . 1668 = The Blacksmiths' Arms. Pl. XV. 8.

Hammersmith.

296. Obv. ELIAS · HIRONS · MILLENER = A hand holding a bird.

Rev. IN · HAMERSMITH · 1667 = HIS · FAR · THING (in three lines).

W (70) describes a halfpenny of this issuer.

Highgate.

297. Obv. IOHN · HILTON · COACHMAN = I. I. H. Rev. OF · HIGHGATE · 1669 = HIS · HALF · PENY. Pl. XV. 16.

This token is octagonal. W (97) describes a circular token of this issuer without the initials on obverse.

Hounslow.

297a. Obv. ABRAHAM · BONIFEILD = A. L. B.

Rev. CHANDLER · IN · HOVNSLOW = HIS · HALFE · PENY.

This man issued a token in Staines (W. 207) which I have.

Islington.

298. Obv. ABRAHAM · MEKCOM · IN = The Blacksmiths' Arms.

Rev. ISLINGTON · HIS · HALFE · PENY = A. I. M.

W (122) gives a partial (and incorrect) reading of this token from a worn specimen.

299. Obv. WILL · SAVIDG · AT · YE PECOCK = A peacock in its pride.

Rev. IN · ISLINGTON · 1670 = HIS · HALF · PENY. W. E. S. [Pl. XV. 17.]

The Peacock Inn is still flourishing there.

Limehouse.

300. Obv. NICHOLAS  $\cdot$  BLAY  $\cdot$  BAKER  $\cdot$  AT = The Bakers' Arms.

Rev. LIMEHOVSE · BRIDGE · 1668 = HIS · HALFE · PENNY. N. I. B.

W (136) gives a partial description of this token.

301. Obv. FRANCS · ZACACY = A wheatsheaf.

Rev. BREWER · IN · LIME · HOVS = F. E. Z.

W (151) describes a similar token, but reading FRANCES, of which I also have a specimen.

Ponders End.

302. Obv. THOMAS · BENNETT = 1659. Rev. IN · POVNDERS · END = T. B. B.

W (163) describes a similar token, but dated 1664; this I also have. He probably used up the 1659 supply after five years of trading.

Potters Bar.

303. Obv. WILL · CLARKE · AT · YE RED = A lion rampant.

Rev. LYON AT POTTERS BARR HIS HALFE PENY - 1667. Pl. XV. 15.

This is the first token recorded for the place.

Shadwell.

304. Obv. RIC · BLACKMAN · ATT = Crossed guns. Rev. IN · VPPER · SHADWELL = R. E. B.

305. Obv. FRANCIS · DIER · AT · COALE = F. E. D. Rev. STAIRS · IN · LOWER · SHADWELL = HIS · HALF · PENY.

306. Obv. MEALEMAN · AT = 1662. Rev. SHADWELL · DOCK = H. P.

A mealman was the old name for a corn-chandler.

307. Obv. AT · NOAH'S · ARKE = Noah's Ark. Rev. SHADWELL · DOCK = I. A. R.

W (190) describes a farthing of Michaell Parkes of the Noah's Ark at Shadwell Dock. This I have.

308. Obv. NICHOLAS · THORY · IN = A dog. Rev. VPPER · SHADWELL = His Halfe Penny. N. S. T.

W (201) describes a farthing of this issuer, which I also have.

308a. Obv. ROBERT · WELCH · 1668 = A glove.

Rev. IN · VPPER · SHADWELL = HIS · HALFE ·

PENNY ·

Andrew Welch issued a token in Upper Shadwell (W. 205), of which I have a specimen.

Staines.

309. Obv. RICHARD · BARNATT · IN = The Bakers' Arms.

Rev. STANES . MALLSTER = R. E. B.

His wife was Elizabeth, as in the Parish Register of Staines from 1654 to 1660 there is mention of the births of Mary, Joseph, James, and Sarah, children of Richard and Elizabeth Barnet.

Stepney.

310. Obv. ROBERT · BECKITT · IN · WHITE = A horse. 1668.

Rev. STREET | IN · STEPNY | HIS · HALF | PENNY | R. I. B. [Pl. XV. 19.]

This token is heart-shaped. I have an exceedingly fine specimen struck in brass, from the Hodgkin Collection; and another specimen struck in copper.

Uxbridge.

311. Obv. EDMVND · NICHOLAS · IN · = E. E. N. Rev. VXBRIDG · CHANDLER · 58 = Three birds.

The three doves form part of the Tallowchandlers' Arms.

Westminster.

312. Obv. IOHN · FROST · IN · YE BOWLIN = An

Rev. ALLY · WESTMINSTER = I. M. F.

W (244) describes a similar token but having a coat

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of arms in centre of reverse. I have not seen that token.

312a. Obv. EDWARD · ROMAN · IN · THE · BOVLING = HIS · HALFE · PENY ·

Rev. ALLEY · WESTMINSTER · 1671 = E. E. R.

## NORFOLK.

East Dereham.

313. Obv. THOMAS · MOORE · OF = Two tobacco pipes. Rev. EAST · DEREHAM = T. M.

Pulham St. Mary.

314. Obv. THOMAS · FLATMAN · = 1664.

Rev. OF · PVLHAM · ST MARY = T. F.

W (234) describes a token of this issuer reading OF.PVLHAM. MARKET. I have a specimen of it.

Stratton.

315. Obv. SAMVEL · GAYER = 1660. Rev. IN · STRATTON = 1660.

Walsingham.

316. Obv. IOHN · PARTINGTON · IN=The Haberdashers' Arms.

Rev. LITTLE · WALSINGHAM = I · P · NOR · FOLK.

W (274) describes a similar token, but without the IN on obverse. I have a specimen of it.

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#### NORTHAMPTONSHIRE.

Lowick.

317. Obv. LEWES · SVLCH · IN · 1666 = A hart.

Rev. LVFWICK · ALIS · LOWICK=HIS · HALFE ·
PENNY.

W (59) describes a token of this issuer reading LVKWIK. I have had a specimen.

## OXFORDSHIRE.

Oxford.

318. Obv. WILLIAM · WALKER = A stag. Rev. IN · OXON · 1668 = W. M. W.

W (180, 181) describes two other farthings of this issuer, each quite different to the above.

Watlington.

319. Obv. NICHOLAS · LANGFORD = A man poleaxing a bull.

Rev. IN · WATLINGTON · 1670 = HIS · HALF · PENY. N. G. L. [Pl. XV. 13.]

# SOMERSET.

Godney.

320. Obv. ANNE · ORGAINER = HER · HALF · PENY. Rev. OF · GODNYE = 1665.

This is the first token recorded for the place.

# SOUTHWARK.

321. Obv. AT · THE · BEARE · AND · RAGED = A chained bear and ragged staff.

Rev. STAFE · IN · SOVTHWARKE = Three sugar loaves between A. I. B.

This token is omitted in Williamson, but is No. 3 in the first edition of Boyne.

322. Obv. AT · THE · THREE · CRANES = Three cranes.

Rev. TAVERN · IN · SOVTHWARKE = N. I. H.

322a. Obv. WILLIAM · HAMOND · IN = 1659.

Rev.  $\overset{E}{\mathbf{Y}} \cdot \mathbf{MINT} \cdot \mathbf{SOVTHWARK} = \mathbf{W}. E. H.$ 

The mint-marks are hearts.

Horsley Down.

323. Obv. REBECKAH · BAKER = A ship.

Rev. ON · HORSLY · DOWNE · 1668=HER · HALF ·

PENY. R. B.

Maid Lane.

324. *Obv.* IOHN · HARRISSON · IN=A sugar loaf between 16-63.

Rev. MAID · LANE · SOVTHWARK = I. H. H.

W (299) describes a token of this issuer with the Bakers' Arms in centre of obverse.

Margaret Hill.

325. Obv. WILLIAM · BORNEFATHAR = Two men carrying a barrel on a pole.

Rev. AT · ST MARGRETS HILL = HIS · HALFE · PENY.

St. Thomas's.

326. Obv. HIS · HALFE · PENY · IN · ST = G. M. C.

Rev. THOMAS · IN · SOVTHWARKE = A castingmould between 6—8.

Stoney Lane.

327. Obv. RICHARD · NEWNHAM · AT · YE = A rose.

Rev. IN · STONEY · LANE · 1668 = HIS · HALFE ·
PENY.

Three Crown Court.

328. Obv. Edward | Iones in 3 | Crowne Court | in Southwark | E. M. I.

Rev. HIS · HALFE · PENNY 1666 = A still.

This is the first token recorded for the Court.

Tooley Street.

329. Obv. BRYON · BOWLER = HIS · HALF · PENY.

Rev. IN · TOOLIS · STREETE = An anchor and a buoy.

W (424) describes a token of BRIAN BOWDLER of this Street.

#### SUFFOLK.

Aldborough.

329°. Obv. SAMVEL · STANNARD · OF = The Grocers' Arms.

Rev. IN · ALDEBVRGH = I. A. M.

The reverse is evidently that of John Murdocke's token of Aldborough (W. 2).

Brandon.

330. Obv. WILLIAM · BREWSTER · = W. P. B.

Rev. IN · BRANDON · 1667 = W. P. B.

W (29) gives a different farthing of this issuer, of which I also have a specimen.

Bures.

331. Obv. THOMAS · DANIELL = The Grocers' Arms. Rev. IN · BEWERS · 1659 = T. D. [Pl. XV. 5.]

This is the first token recorded for the place. It may be an Essex token—a large portion of the parish being in that county.

Mildenhall.

331a. Obv. IOHN · ABBOTT · 1668 = A chandler. Rev. IN · MILDENHALL = I. M. A. Stratford.

332. Obv. IOHN · CLARKE · 1670 = HIS · HALF · PENY.

Rev. IN · STRATFORD = Three diamond panes of glass.

W (319) describes a similar token of this issuer, but dated 1667. He was probably the John Clarke who was overseer of the poor there in 1664.

Yoxford

332a, Obv. WILLIAM · SMITH · 1666 = W. S. Rev. YOXFORD · IN · SVFFOLK = W. S.

W (375) describes a similar token, but reading SVF-FOLKE. I have a specimen of it.

SURREY.

Capell.

333. Obv. DAVID · COOPER = 1666. Rev. OF · CAPELL = D. C. [Pl. XV. 3.] This is the first token recorded for the place.

Croydon.

333a, Obv. DORATHE · EATEN = A tankard. Rev. AT · CROYDEN · 1666 = D. E.

Egham.

834. Obv. STEPHEN · HALL · AT · YE = The king's head crowned.

Rev. IN · EGGHAM · 1667 = HIS · HALFE · PENY. [Pl. XV, 11.]

Kingston-on-Thames.

335. Obv. WILLIAM · LIDGOWLD · OF = A crowned rose.

Rev. KINGSTONE · HIS · HALPENY = W. M. L.

Rotherhithe.

336. Obv. IVDITH · DAVIS · IN · LOVE = A star. Rev. LANE · IN · REDRIFE · 1666 = I. D.

This is the first token recorded for Love Lane, Rotherhithe.

#### WALES.

Machynlleth.

337. Obv. WILLIAM · OWEN · MERCER = W. O. 1D.

Rev. OF · MACHVNLLETH · 1672 = A cock.

#### WARWICKSHIRE.

Birmingham.

338. Obv. WILLIAM · BRIERLY = HIS · HALF · PENY.
Rev. IN · BIRMINGHAM = The Mercers' Arms.

Coleshill.

339. Obv. RICHARD · IOHNSON · OF = The Apothecaries'
Arms.

Rev. COLESHIL · APOTHECARY = R. I. ‡.

Stratford-on-Avon.

340. Obv. SAMVEL · PHILLIPS · = The Ironmongers'
Arms.

Rev. IN · STRATFORD · 1652 = S. I. P.

## WILTSHIRE.

Corsham.

341. Obv. WILLIAM · GIBBONS = W. G. and a true lover's knot.

Rev. IN · CORSHAM = 1669.

W (59) gives a partial reading of this token from a worn specimen.

Troubridge.

342. Obv. WILLIAM · SMITH = Two pipes crossed. Rev. IN · TRV · BRIDGE = W. S.

W (251-4) gives four other farthings of this issuer with different spellings of the place-name.

### WORCESTERSHIRE.

Alvechurch.

343. Obv. ELIZABETH · BALDWIN = DEALL · WITH · MEE · AS · I · WITH · THEE.

Rev. IN · ALLCHVRCH · 1669 = HER · HALF · PENY.

W (1) gives an incomplete description of this token.

Droitwich.

344. Obv. ROGER · ALLEN · IN · DRO· = Arms : checky. Rev. YTWICH · MERCER · 57 = R. E. A.

# UNCERTAIN PLACES.

The Backe.

345. Obv. IOHN · BRADWAY · AT · THE = A mermaid. Rev. MREMAYD · ON · THE · BACKE = I. B.

This token is not mentioned by Williamson, but is described in the first edition of Boyne, being Uncertain No. 15. I think it is a Hampshire token, as the only other known token of this surname (one of Nicholas Bradway) is of Gosport; also I purchased it in a lot of six tokens, three of which were Hampshire ones.

Suche.

346. Obv.  $MORROW \cdot DOBBS = M. D.$ Rev.  $IN \cdot SVCHE \cdot 1660 = A$  goat's head, erased.

Wantlet.

347. Obv. IOHN · BRITTEN · TALLOW = A man making candles.

Rev. CHANDLER · IN · WANTLET = I. B.

Windmill House.

348. Obv. MATTHEW · NAW · AT · THE = A horseshoe.

Rev. WINDE · MILNE · HOVSE = HIS · HALF · PENY.

[Pl. XV. 4.]

#### WITHOUT LOCALITIES.

349. Obv. CRISTOPHER · FLOWER = A fleur-de-lis.

Rev. Arms (a chevron between three garbs).

A small but well-struck token in lead.

350.  $Obv. IOHN \cdot HALL \cdot 1656 = I. A. H.$ 

Rev. A bear walking to the left. I. H. over.

Another well-struck token in lead.

351. Obv. A bust to left with ruff, between H. A.

Rev. A pellet within a double circle between T. G., a rose above, and three leaves below.

Lead.

352. Obv. C. H. and a merchant's mark between two trefoils.

Rev. Shield with four lozenges conjoined in fesse, in chief a small crescent, apparently a mark of cadency.

Octagonal-brass.

353. Obv. Arms: a cross on a shield.

Rev. A boar walking to left, above W. I.

Brass.

854. Obv. I. B. P. and two mullets.

Rev. An anchor between 16-59.

Copper.

# ADDENDA.

Buckingham.

8a. Obv. IOHN · RENNALS · 1668 = A lace.

Rev. OF · BVCKINGHAM = HIS · HALFE · PENNY ·

W (36) describes a similar token, but with the initials I. E. R. on the obverse. I have a specimen of it, and a specimen of each of these tokens is in the Aylesbury Museum.

### HAMPSHIRE.

Ringwood.

59b. Obv. BENIAMIN · HIGHMORE = A shield charged with a cross-bow between three birds.
Rev. OF · RINGWOOD · 1668 = HIS · HALF · PENY.

LONDON.

Blackwall.

95°. Obv. THE · COMPANIES · ARMS = H. E. A. Rev. AT · BLACK · WALL · STAYRES = H. E. A.

Grub Street.

141a. Obv. EDWARD · POTTER · AT · THE = A crown. Rev. CROVN · IN · GRVB · STREET = E. S. P.

Lincolns Inn.

161°. Obv. WILL : IONES · IN · LINCOLNS = The Royal
Oak with three crowns.

Rev. INN · FEILDS · IN · ST GILSES = W. K. I.

W. GILBERT.

## XVII.

# TWO FINDS OF ANCIENT BRITISH COINS.

(SEE PLATES XVI, XVII.)

# I. WESTERHAM, KENT.

An interesting little find of a hollow flint containing fourteen gold coins (two Gaulish and twelve probably British) was made in July, 1927, on the Squerries Estate, near Westerham. I am indebted to Captain Streatfeild, who is agent to the estate, for the following details of the place and circumstances of the find. He writes:

"The Wastes of the Manor of Westerham lie some two miles south of the Pilgrims' Road on the top of the range of hills overlooking the Weald. One portion of this Waste, known as Hosey Common, lies on the East side of the road running from Westerham to Edenbridge, and it was on the southern boundary of this Common that the find was made. There is an extremely old bridle-path at this part of the Common, running North and South, and it is considered by those who should know, that the north and south bridle-roads through the old forest of Anderida were comparatively few and far between. It is assumed that this old path is one of these old bridle-paths.

"Living on the Common in cottages which in most cases have obviously been erected by themselves as squatters, are several families, all related and all bearing the name of Bateman, who have dug the gravel on the Common (of which there is an enormous quantity about two feet below the surface) for uncounted generations.

"About six weeks ago [i.e. early in July, 1927] one of these gravel-diggers, working with two of his family, in digging gravel for the Local District Council, unearthed a flint receptacle with the point of his pick, about eighteen inches below the surface, embedded in the top spit, which chiefly consists of the peat, naturally formed on the Common over the gravel. Flint is a foreign material at that spot, though a good many flint implements have been found there from time to time.

"The flint was at first thrown aside, but at lunch time one of the diggers noticing the flint picked it up and observed a hole in it. He started idly picking at the hole with a stick and a coin fell out. I understand that his next action was to pour tea into the hole and shake the receptacle, whereupon the remaining coins fell out. He handed the whole find over to the officials of the Council for whom he was working. They in due course handed the find to the Police, a Coroner's inquest was held and the coins were found to be Treasure Trove by a duly constituted jury."

It was the wish of Mr. J. O'Brien Warde, the owner of the Squerries Estate, that the find should remain intact, and a generous gift from him has enabled the British Museum to retain all the coins, and so carry out his wish. There are two indisputably Gaulish coins, one of the Bellovaci and the other of the Atrebates. The remaining twelve coins are of the type (Evans, Ancient British Coins, pl. B 4 and 6) which has the Atrebatic coin (Evans, B 7) as its immediate forbear, but, by reason of its frequent English and rare French

provenance, was probably struck on this side of the Channel, and is perhaps the earliest native coinage of Britain. The approximate date of the deposit may be put at the close of the second century B.C. The coins are all illustrated on Pl. XVI; the weight and specific gravity of each coin is given below. One obverse die only was used for the twelve British coins; the letters a to g denote the reverse dies. The numbers correspond with the numbers on the plate.

1.	(Bellovaci)	wt. 112-5 gr.	sp.g. 15-06
	(Atrebates)	86-5	14-04
3.	reverse die a	97-6	14.50
4.	a	100-5	14-12
5.	a	98-7	13.85
6.	a	97.5	13.91
7.	ь	99-6	14.31
8.	b	102-2	13-86
9.	c	99-4	14.75
10.	d	98-3	13-61
11.	d	97-2	14.54
12.	e	99-1	13-67
13.	f	96-0	13.45
14.	g	98-0	13-82

Three of these coins, Nos. 1, 2, and 5, have been analysed with the following result:

	No. 1.	No. 2.	No. 5.
Gold	69-02	69-70	59-51
Silver	22.83	18-62	28-22
Copper	8-15	11.68	12.27
	100-00	100-00	100-00
	-		-

The weight of the Atrebates coin, No. 2, is very low, and its flan unusually small. The eleven coins of this type found at Higham, near Rochester, in 1912 (Num. Chron., 1923, p. 156), were all over 98 grains, nine of them between 100 and 102-5 grains. A comparison of

the two hoards is interesting; in both cases a hollow flint was used as the receptacle, as again in the Chute Find described below; the Rochester treasure is certainly the earlier, that of Westerham containing the British coins derived from the Gaulish type of the Rochester find.

It is interesting to find only one obverse die used, with seven reverse dies, for the twelve British coins. A comparison of Nos. 3 and 14 on the plate would hardly suggest identity of obverse die; but, though for some time I was doubtful whether there were not two obverse dies, I am now satisfied by a careful comparison of the coins and examination of the gradual wearing of the die that the same die may be traced throughout (it should be noted that No. 9 is out of place, and should be placed earlier, perhaps after No. 6). At the end of the series almost all traces of engraving have disappeared from the die, and it may well be that the class of coins classified as B 8, 10, &c., in Evans's work are the result of this and other worn dies being used, and are not due to a custom of striking with an unengraved lower die. A coin in the British Museum (Montagu sale, 1895, lot 7, found at Portsmouth) perhaps shows in fresh condition the obverse die that struck the Westerham coins, but there is some doubt if the die is identical. The die also appears in late state, similar to that of No. 10, on the coin mentioned by Evans as found at Horne, near Reigate (now in British Museum, wt. 96-0 gr.); it is there used with a reverse die that is not found on the Westerham coins. Another specimen of an early stage, with reverse a, is in the British Museum (wt. 98-8 gr.).

Thus there are not less than eight reverse dies known to have been used with this one obverse; probably the dies were used regardless of their condition until they broke; the reverse dies, receiving the direct blows of the hammer, would break more quickly than the better protected obverse dies.

The flint money-box has, by the gift of Mr. O'Brien Warde, been acquired by the British Museum for exhibition in the Iron Age Gallery. Both the holes seen in the illustration are natural; there are slight traces of chipping at the edge of the large hole. It is illustrated on Plate XVII.

# II. CHUTE, WILTSHIRE.

In September, 1927, a boy picked up a hollow flint in Chute Forest, Wiltshire, smashed it into fragments, and found that it contained sixty-five gold coins.

The coins are ancient British, of the type figured in Evans, Ancient British Coins, B 5. They are struck from seven obverse and twenty-eight reverse dies. The highest weight is 97-4 grains, the lowest 91-6. The weight-frequency is shown below:

97·1-97·5 g	rains	1.0	coin.
96-6-97-0	**	0	***
96-1-96-5		1	**
95-6-96-0	**	3	11
95-1-95-5	99	4	99
94-6-95-0	11	6	***
94-1-94-5	**	16	"
93-6-94-0	**	20	22
93-1-93-5	22	9	99
92-6-98-0	**	3	
92-1-92-5	**	0	22
91-6-92-0	**	2	"
***	27		. 11

This suggests a standard weight of about 95 grains. Four coins of this type already in the British Museum weigh 95, 94-7, 94, and 93-4 grains. The metal is pale; the specific gravity of eight coins is between 11-42 and 12-31.

One coin, dies 2/D, wt. 94-0 grs., sp.g. 12-19, has been analysed by Mr. E. C. Padgham and is found to contain:

Gold 37-92 Silver 40-06 Copper 22-02 100-00

In the following list detail is given of die-combinations, weights, &c., of the Chute coins. The numbering and lettering of the dies must not be taken to indicate a chronological precedence. The weights, &c., of the coins retained by the British Museum (twenty-nine in number) are given in italics:

Obv. and Rev. dies. Weights.

```
95.0, 94.6 (Sp.G. 12.24)
Obv. 2
          Rev. A
               B
                     96.2
     222444444444
                C
                     95.7
                     95-1, 94-6, 94-4, 94-0, 94-0 (Sp.G. 12-19)
                D
                     94.6, 94.5, 94.5
                E
                F
                     93.8 (Sp. G. 11.83), 92.6
                G
                     94.1
                     94.0, 93.8
                \mathbf{H}
                J
                     94.3
                     94.2, 94.0, 94.0, 93.2
               K
                L
                     91.8
               M
                     93.1. 93.0
                     93-7, 93-7, 93-5, 93-5, 93-3, 92-8, 91-6
                N
     4
                0
                     93.8
                В
                     97.4
     1
     1
                P
                     95.6, 94.3, 94.1
                     93.9 (Sp.G. 12.12)
     1
                Q
                R
                     94.4 93.6
     1
```

Obv. and	Rev. Dies	Weights.
Obv. 5	Rev. S	94-8, 94-5 (Sp.G. 12-31), 94-3, 93-7, 93-2
5	T	95-4
3	U	95-9 (Sp.G. 11-42)
3	D	95-1, 94-7, 94-3
6	V	95-3, 94-2
6	W	94-3 (Sp.G. 12-07), 93-9
6	X	93-7
6	Y	94-3
6	Z	94.0, 93.8, 93.8, 93.8, 93.1
6	а	93.2
6	b	94-0
7	c	94-5, 93-8 (Sp.G. 11-93)

In design there is slight difference between these coins and those of the Westerham hoard (Evans 4 and 6). The obverses of the two groups have no distinguishing feature so far as I am aware; both have the curious bulge representing the face. On the reverse the Chute group has the following differences: the crescent- or oval-shaped mark immediately above the horse's back is set at a slope towards the withers and has sprouted "whiskers" at either end of it (Evans described it as having the shape of "a sort of threebeaked head which appears to be pecking at the horse's shoulder"); these "whiskers" at one end attach it to the horse's withers and at the other end look like a pair of thin curved horns. The pellet below the crescent which forms the horse's belly has four members flung out from it in irregular fashion, usually with a lefthanded curve suggestive of rotatory movement counterclockwise. Below the horse's snout an ornament is added in the field, four curved limbs united in a small central pellet, which may perhaps be a more adequate rendering of the sort of four-limbed whirligig which the artist was trying, in the cramped space at his

disposal, to make of the large pellet below the horse's belly. The exergual line and the meander pattern below it are curved.

The most marked contrast between the two groups is in the alloy in which the coins are struck.

The hollow flint in which the coins were buried was broken into fragments; it has been repaired and is illustrated on PI. XVII. The small depression visible on the left is shallow and does not pierce through the flint. There are no traces of artificial working round the hole at the top of the vase; the hole is natural and has not been broadened. I understand that this flint is to be kept at the Devizes Museum.

I have also illustrated on Pl. XVII two obverses and two reverses of Chute coins; the dies are: obverses 6 and 2, reverses L and G.

G. C. BROOKE.

#### REVIEWS.

Money and Monetary Policy in Early Times. By A. R. Burns. Pp. xiii + 517. With 16 plates, 1 map, and 4 figures in the Text. Kegan Paul. 25s. net.

This ambitious volume is one of a series on the History of Civilization, edited by Mr. C. K. Ogden. On turning its pages one is sadly reminded of the fact that a writer on the history of money who is familiar at one and the same time with economics, with the soul of money as well as with its dead body, as Knapp put it, has yet to be found. author's knowledge of economics may be sound; of that this journal is not the place in which to speak. But in spite of the considerable amount of reading of which the foot-notes are evidence, it is impossible to say that he shows any real mastery of the numismatic aspects of his subject. The reading, to begin with, has evidently been very patchy. not neglected the most modern writers, at any rate in English; and certain articles on ancient numismatics in the Numismatic Chronicle and certain chapters in the Cambridge Ancient History seem to have been fairly thoroughly gutted. But his knowledge of foreign books and periodicals is evidently meagre; the Numismatische Zeitschrift of Vienna and the Revue Numismatique are not, it would seem, among the chief periodicals consulted, though the Rivista Italiana is (one wonders how many articles bearing on the subject he found there); and names such as Kubitschek, Lehmann-Haupt, Regling, Reinach, Seeck (to mention only a few who have dealt with economic or metrological questions) are absent from his bibliography. His acquaintance with the original sources (not to mention the knowledge of the Latin tongue) may be gauged from the fact that he writes throughout of as grave and as signatum. His account of the quality of ancient coins is written without reference to Hammer, whom he appears to know from an occasional reference by Sydenham; his description of the methods of coining is grotesquely inaccurate, and he evidently has not the most rudimentary idea of how coins were made. "During the 4th century the Ionic Greeks of Miletus introduced a further notable improvement in the replacement of incuse types by types in relief; the Lydian punch was replaced by an engraved die which produced

on the coins an artistic type in relief" is a typical sentence. Throughout the book one gets the impression that the author has come upon article after article, made his notes, and inserted them where it seemed most convenient, without digesting them or considering their relation to other parts: hence considerable confusion and repetition. This is the more to be deplored because he is not always uncritical, and deals soberly, for instance, with the fantastic theories which some anthropologists have spun about the beginnings of coinage; nor is he inclined to be fanciful himself. One dislikes to condemn a book as amateurish, which is often the professional's word of abuse for a light-handed touch of which he is incapable himself; but nobody could call this book light, and the author has clearly taken up a weight much too heavy for his capacities. The map is a curiosity. "Grygnum" and "Lysimachs "areamong the names which occur in it: the former also in text and index. Selinos (sic) in Cilicia is marked, and Selinus, a tiny place, near Sparta; but the Sicilian city, to which reference is twice made in the text under the novel form "Selenus", has escaped the cartographer.

We have perhaps criticized the book at too great length;

but its size and price ask for such treatment.

G. F. H.

A Guide to the Exhibition of Roman Coins in the British Museum. By Harold Mattingly. Pp. 80. 8 Plates and 11 figures. London, 1927. 28.

The electrotypes to which this book is a guide illustrate the whole series of the Roman coinage from its beginnings in the fourth century B.C. to its ending with the fall of the Eastern Empire. For many centuries, at least, of this vast period the coins afford a continuous commentary to history, often indeed preserving, as it were, a gloss from which in the right hands the mutilated original text can be reconstituted with certainty. It has been Mr. Mattingly's task in this welcome Guide to render the lessons of the coin available to students, and he has performed his task with supreme skill. The book is a marvel of compression, but leaves one with no sense of incompleteness in its treatment of any aspect of its subject. The information given is just what is

wanted and no more than is necessary. The first half of the book deals with the republican period—the expansion of the Empire, the growth of individualism, and the establishment of the principate. Here incidentally many an obscure corner of Roman numismatics is lighted up, and types, once baffling, are seen to be pregnant with meaning. The second half of the book covers the remaining fourteen or fifteen centuries, which admit of more concise treatment, though room is found for an adequate discussion of the problems which occur. The long series of Emperors is given as no mere list, but each is portrayed as a personality in a few well-chosen words and brought into connexion with the coin-type by which he is represented. If one expects that economy of words must result in a mere catalogue, he will be agreeably mistaken.

The story as told here by Mr. Mattingly is of vivid and fascinating interest; and a complete, if necessarily small-scale, picture of the rise, progress, and decline of the Roman Empire as illustrated in its coinage is left on our minds as the result. No other series even remotely approaches the Roman in its many-sided appeal to our interest, and by this Guide the student is equipped to derive the fullest benefit

from its study.

This Guide, though primarily intended for use as a companion to the exhibition-cases in the British Museum, has a permanent value independently of these. No VI Form master, who has not mistaken his vocation, will omit to use this book as an indispensable help to his Roman history lesson. A word of praise should be added for the well-chosen excellent illustrations.

J. W. E. P.

Staatliche Museen su Berlin. Die Münzen von Priene, mit Benutzung der Vorarbeiten von Heinrich Dressel, bearbeitet von Kurr Regung. Pp. x + 218. 27 Text Illustrations and 5 collotype Plates. Berlin, Hans Schoetz, 1927.

From about 1899 to 1902, as we are told by Dr. Regling in the Preface, Heinrich Dressel worked steadily at this monograph on Priene, practically completing the catalogue of the specimens at Berlin, adding more or less systematically the silver and imperial bronze from other collections, with occasional autonomous bronzes from the same sources, arranging the whole in relative chronological order; but he left only sporadic short notes on the actual chronology, denominations, and standards, meaning of types and symbols, magistrates and hoards. All this Dr. Regling has faithfully completed and put together in good shape in the fine publication before us. There seems little to be said except that it is a model of its kind, and contains everything that is

known about the coinage of Priene.

This coinage is, on the whole, not very exciting, but there are two issues of outstanding interest. The first is represented by the unique electrum stater in the Jameson Collection-one of the most important additions made to numismatic science during the last two decades, says Dr. Regling, who after an analysis of its style confirms the attribution to the period of the Ionic Revolt, 500-494 B.C. The other remarkable issue is the tetradrachm struck by Orophernes in 158-157 B. c. Of this coin seven specimens are identified. There are more about. One, it will be remembered, was lost by Sir Charles Newton soon after he bought it at Priene, and it is not certain whether it has turned up again and is to be identified with one of the seven above mentioned. In 1923 a good specimen (weight 17-01 grm.) was offered to the British Museum, where a cast has been preserved.

To the census of coins Dr. Regling adds valuable chapters on the currency-system in Priene, extant weights, standards and denominations of silver and bronze, types, symbols, countermarks, technique, inscriptions (he pillories no less than thirty-six misreadings of magistrates' names, more than half the number of names which are actually recorded); finally he gives lists of coins found in Priene, with a careful study of finds, find-spots, and foreign coins. In this connexion he points out that some of the coins of Augustus with CA in a wreath on the reverse (of which one was found at Priene) are of Asia Minor fabric and provenance (they were represented in the excavations at Pergamum and Magnesia), while others are clearly of the same Syrian fabric as the coins of Antioch with SC. This proves that CA does not mean Commune Asiac, and he continues to interpret the abbreviation Consensu Augusti. He regards Mattingly's objection that the formula should be Permissu or Indulgentia Aug. as invalid, because, if two formulae were allowed, a third might well have been. But it may be observed that Concessu Augusti would probably be better Latin than Consensu, which is almost invariably used of the agreement of a number of people, not of the licence granted by a single person. Commune Asiae certainly seems to be put out of court by the difference of fabric. It remains only to praise the thorough indexes and the admirable plates.

G. F. H.

The Coinage of Siam; The Coins of the Bangkok Dynasty, 1782-1924. By R. S. Le Max (reprinted from the Journal of the Siam Society, vol. xviii, 1925). Pp. 70. 11 Plates.

This is the first monograph written on the coinage of Siam, and covers the period of the present dynasty. Most numismatists are familiar with the bullet-shaped coins of Siam, formed of a short thick bar of silver or gold, with both ends pressed inwards so that they almost meet, and popularly called "ticals", which is, however, a denomination. It is not generally known that the two stamps on them enable them to be attributed to a definite ruler. One is the mark of the dynasty, a chakra or discus, which has recently been revived on the nickel coinage struck in Birmingham, and the other is the mark of the reigning sovereign. The first flat silver coins were issued in 1860, gold in 1863, and tin and copper in 1862; the "bullet" type was henceforth only struck on ceremonial occasions or for presentation purposes. Western influence soon made itself felt, for example, in the introduction of the king's bust on the obverse, and we even find the "Britannia" type of the English copper coins copied in an allegorical figure of Siam holding a sceptre. The plates of Mr. Le May's book form an interesting study in the evolution of coin-types.

The author has collected much material from official proclamations and other sources regarding the coinage; his detailed notes on the particular issues are a feature of the book. He has been fortunate in having had access to several fine collections of coins in Siam, notably that of H.S.H. Prince Piya. We hope Mr. Le May will find time to deal with the earlier coinages, or rather currencies, of Siam.

# MISCELLANEA.

# THE NEW BRITISH COINAGE.

# BY THE KING. A PROCLAMATION.

DETERMINING NEW DESIGNS FOR CERTAIN SILVER COINS OF THE REALM.

#### GEORGE R.I.

Whereas under section eleven of the Coinage Act, 1870, We have power, with the advice of Our Privy Council, from time to time by proclamation to determine the design for any coin:

AND WHEREAS it appears to Us desirable to determine new designs for the silver coins hereinafter specified, being certain of the silver coins mentioned in the First Schedule to the

Coinage Act, 1870:

WE, THEREFORE, in pursuance of the said enactment and of all other powers enabling Us in that behalf, do hereby, by and with the advice of Our Privy Council, proclaim, direct, and ordain as follows:—

The designs for the said silver coins shall be as follows:

 (1) Crown.—Every Crown shall have for the obverse impression Our Effigy with the inscription "GEORGIVS V DEI GRA: BRITT: OMN: REX" and for the reverse the Royal Crown with the date of the year encircled by a wreath composed of the national emblems of the rose, thistle and shamrock, with the inscription "FID. DEF. IND. IMP" together with the word "CROWN". The Coin shall have a graining upon the edge.

(2) Half-Crown.—Every half-crown shall have the same obverse impression and inscription as the crown, and for the reverse the Ensigns Armorial of the United Kingdom contained in a shield having on each side the initial letter of Our Name in duplicate and interlaced surmounted by the Royal Crown with the inscription "FID. DEF. IND. IMP" together with the words "HALF-

CROWN" and the date of the year interspersed with the national emblems of the rose, thistle and shamrock. The Coin shall have a graining upon the edge.

(3) Florin.—Every florin shall have the same obverse impression and inscription as the crown and for the reverse the initial letter of Our Name in the centre interlaced by four crowned Sceptres in the form of a cross; in the angles the Ensigns Armorial of the United Kingdom contained in four shields, with the inscription "FID. DEF. IND. IMP" together with the words "ONE FLORIN" and the date of the year. The Coin shall have a graining upon the edge.

(4) Shilling.—Every shilling shall have the same obverse impression and inscription as the crown and for the reverse Our Royal Crest with the inscription "FID. DEF. IND. IMP" together with the words "ONE SHILLING" and the date of the year. The Coin shall have a graining upon the edge.

(5) Sixpence.—Every sixpence shall have the same obverse impression as the crown with the inscription "GEORGIVS V D.G. BRITT.: OMN: REX F.D. IND: IMP:" and for the reverse six acorns growing from interlaced oak branches with the words "SIX PENCE", and the date of the year. The Coin shall have a graining upon the edge.

(6) Threepence.—Every threepence, not being a coin of the King's Maundy monies, shall have the same obverse impression as the crown, with the inscription "GEORGIVS V D.G. BRITT: OMN: REX F.D. IND: IMP" and for the reverse three acorns growing from interlaced oak twigs, with the words "THREE PENCE" and the date of the year. The Coin shall have a plain edge.

2. The King's Maundy Monies.—Every Maundy silver fourpence, threepence, twopence and penny shall have for the obverse impression Our aforesaid effigy, with the inscription "GEORGIVS V D.G. BRITT: OMN: REX F.D. IND: IMP:" and for the reverse the respective figures "4", "3", "2", "1" (according to the denomination or value of the p ece), in the centre, with the date of the year placed across the figure, and encircled with an oak wreath surmounted by the Royal Crown. These Coins shall have a plain edge.

This Proclamation shall come into force and have effect as from the first day of December, one thousand nine hundred

and twenty-seven.

Given at Our Court at Buckingham Palace, this Third day of November, in the year of our Lord One thousand nine hundred and twenty-seven, and in the Eighteenth year of Our Reign.

#### GOD SAVE THE KING.

By kind permission of the Deputy Master of the Royal Mint, we reprint the following extract from his fifty-seventh Annual Report, pp. 11-13. The references are to the illustrations which accompany the Report.

The meetings of the Standing Committee on Designs were resumed in June shortly after my return from Australia. In the interval we had sustained serious loss by the death of Mr. F. Derwent Wood, R.A., to whose invaluable services I referred in my last Report. In July, however, I had the pleasure of welcoming Mr. R. Anning Bell, R.A., LL.D., whose appointment as a member of the Committee had been approved by His Majesty on the recommendation of the President of the Royal Academy. Six meetings were held

during 1926.

An especially interesting and satisfactory feature of the year in connexion with the work of the Advisory Committee was the culmination of their efforts to achieve an improvement in the reverse designs of the existing British silver coinage. The designs at present in use, which-with the exception of the Maundy pieces-were introduced either in the reign of Edward VII or that of His present Majesty. have failed to secure the suffrages of judges of Artistic Design, and, moreover, have presented difficulties in manufacture which have frustrated the production of really presentable coins. It is not only desirable that a coin design shall be pleasing and suitable in a pictorial sense; the technical difficulties in securing a well-struck coin under the exigencies of mass production are considerable and depend to no mean extent upon the modelling of the design engraved upon the dies. At the beginning of a new reign, with pressure for the appearance in circulation of the new coinage and with the resources of the Mint strained to the utmost for fresh work in every direction, it is perhaps inevitable that insufficient attention can be paid to this very special combination of technical and artistic requirements of

the coins of new design.

The Advisory Committee shortly after their appointment came to the conclusion that the existing designs were quite unworthy and unsuited to give good impressions from the dies. Particularly was this so as regards the half-crown. the centre of the shield on the reverse of which invariably During the last three years or so showed weakness. endeavour has, therefore, been made to arrive at some new designs which could be recommended. In 1923 eight artists, who had already proved their capacity as medallists by preparing medals which had been issued with the approval of the Committee, were invited to submit drawings for reverses of the silver coinage. A selection from these drawings was made and suggestions in detail were made by the Committee. models being subsequently prepared by the artists. Of the modelled series submitted two were considered sufficiently promising to warrant the actual preparation of dies therefrom, subject to certain further suggestions which were conveved to the modellers for their consideration. From the amended models dies were then engraved.

Pattern pieces struck from the dies were carefully considered by the Committee, who were unanimously of the opinion that the series by Mr. G. Kruger Gray were, from the artistic point of view, a very distinct improvement upon the existing coinage, while a majority of the Committee held strongly that they were so good as to justify their approval for immediate adoption. Technically the designs are certainly well adapted for easy and economical minting, the impressions taken being sharp, and, therefore, likely to be more durable in circulation than are the existing pieces.

The Committee's recommendation, together with the series of patterns, were accordingly submitted to the Master of the Mint and subsequently to the King, and in the summer of the current year I received His Majesty's gracious approval to strike coins of the new designs. Working dies are now being prepared, and it is hoped that by the time this Report is published the new coinage will have been issued for circulation.

The Committee much hope that their issue will give a greatly needed stimulus to the slowly awakening interest in coinage and cognate work, not only among the public generally, but also among the rising generation of artists. Mr. G. Kruger Gray himself is, of course, an heraldic artist of considerable repute, who, among other recent work executed under the auspices of the Advisory Committee, has produced the designs for the existing silver coinage of the Union of South Africa, as also the revised version of the Royal Arms used on Government publications, the Collar for the Knights Grand Cross of the Order of the British Empire, and the Badge for gentlemen of the degree of Knight Bachelor.

The pattern pieces prepared from his designs are illustrated on Plate A. It will be seen that the age-long traditions of our British silver coinage designs have not, generally speak-

ing, been departed from.

A Crown piece has, however, not hitherto been authorized during His Majesty's reign, it having been found by experience that this large piece was not popular in circulation. with the result that it became a source of embarrassment to the Banks. Nevertheless, the silver Crown is a historic piece in the tradition of British numismatics, and its absence in the present reign has been a great disappointment to collectors, who have deplored the break in a long and especially interesting series. Furthermore, from an artistic point of view, the large surface of the piece offers a particularly favourable field to the artist. It is not anticipated, therefore, that this piece will recover its lost vogue in circulation. indeed there is less chance of this than ever, now that the shopping sex have no pockets owing to lack of material in which to conceal them. But at least its authorization will enable numismatists to add a George V Crown piece to their cherished collections and a noble link with the spacious past is thus reprieved from extinction. Mr. Kruger Grav's design (fig. 5) is, it will be seen, a simple treatment of the Imperial Crown within a wreath composed of the three National emblems-the Rose, the Thistle, and the Shamrock.

The Half-crown (fig. 1) bears a shield having quartered thereon the Royal Arms of England, Scotland, and Ireland. On either side of the shield is a crowned cypher of 'Gs' which will recall the treatment of the initials of the monarchs on the coins of Charles II and William and Mary. Both the Florin (fig. 3) and Shilling (fig. 2) are modified treatments of the existing designs, the former bearing on four shields the Royal Arms of England, Scotland, and Ireland, with a sceptre having an Imperial Crown above it between each shield, and in the centre the Royal initial letter, and

the Shilling bearing the Royal Crest. For the Sixpence (fig.4) and Threepence (fig. 6) a composition of six or three acorns growing from interlaced oak branches has been adopted. No change has been made for the present in the design of the minor coins issued solely in connexion with the Maundy ceremonies.

# OBITUARY.

# HERBERT APPOLD GRUEBER.

HERBERT APPOLD GRUEBER died on 21 November, 1927, at Bembridge in the Isle of Wight, where for the last fifteen

years of his life he had lived in retirement.

He was born in 1846, the son of a Somerset vicar, and after private education entered the administrative branch of the British Museum at the age of twenty. He soon transferred to the Department of Coins and Medals, of which he became Assistant Keeper in 1893 and Keeper in 1906.

Nearly fifty years of his life were devoted to his professional work and kindred antiquarian subjects. As a Fellow of the Society of Antiquaries he took keen interest in the work of that Society, and for some years he was Treasurer to the Egypt Exploration Fund. He also frequently assisted in the arrangement of the exhibitions and the compilation of the catalogue in the old days of the Grosvenor Gallery. Beyond this, he had few interests outside the sphere of his own Department. He consequently acquired a wide range of knowledge in numismatic studies. His first Museum publication, in 1874, was a Catalogue of Roman Medallions; his last, in 1910, and perhaps his most important, was the Catalogue of Roman Republican Coins. In the meantime his energies were diverted to co-operation with Franks in the publication (1885) of the Medallic Illustrations, prepared originally by Hawkins and refused for publication by the Trustees in 1854. After this he was again, through the ill health of Keary, occupied in completing work begun by another, and in 1893 brought out the second volume of the Catalogue of Anglo-Saxon Coins with an introduction written by Keary. He then remained for

a time at work on the English series and published in 1899 the Handbook of English Coins which served the purpose of a Guide to the Museum Exhibition and remains still a useful work of reference. During the last decade of his Museum life he completed his work on English medals by the publication of the magnificent volumes of plates. He also did much of the preliminary work for the Catalogue of Oriental Coins. He had a working knowledge of Arabic and was familiar with the Oriental series.

His publications in the Numismatic Chronicle, which are many, give little idea of the extent of his work on behalf of this Society, of which he was Hon. Secretary from 1874 to 1909, Vice-President from 1909 to 1911, and an Editor of the Chronicle from 1885 to 1912. The Society honoured him with the award of its Medal in 1909, shortly before the publication of his Roman Catalogue. He was devoted to the work of the Society and played a very prominent part in its activities during the difficult period when the science of numismatics was in the process of development from the pioneer stage to the specialized study. Himself one of the older school of numismatists, a cautious student rather than a progressive one, his conservative tendencies were emphasized by the peculiar circumstances of his official work, which compelled him so often to devote his energies to the completion of work begun and planned by others.

Though the outstanding quality of his work was the painstaking and untiring patience of compilation, it would be wrong to suppose that he lacked the gift or the inclination for original research. His magnum opus on the coins of the Roman Republic, he is at pains to explain in his introduction, was based upon the scheme of classification built up by De Salis: but that does not mean that he followed De Salis unquestioningly. Indeed, it must have been a very difficult task to probe into the mind of a student who had left behind him in writing such scanty traces of his views and methods. At the present time it is impossible to ascertain with certainty to what extent the Catalogue represents the plan of De Salis revised by Grueber; probably it is correct to regard the work of De Salis rather as the inspiration than as

the material of Grueber's work.

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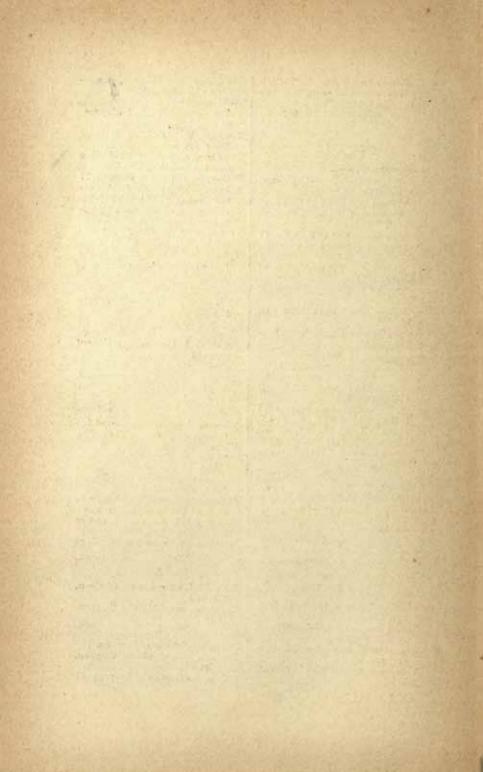
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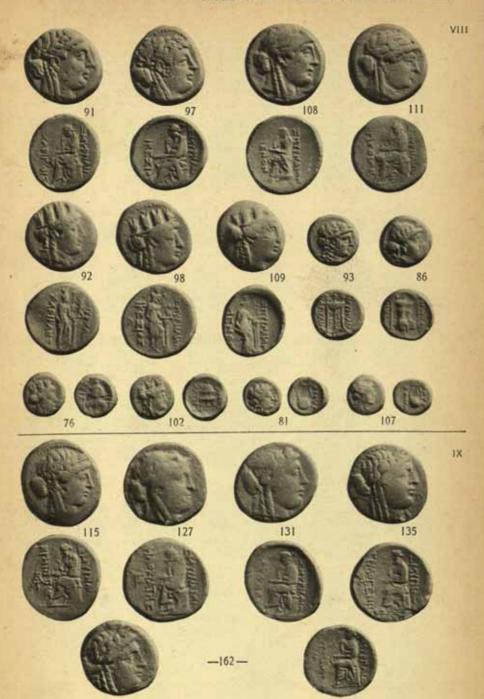
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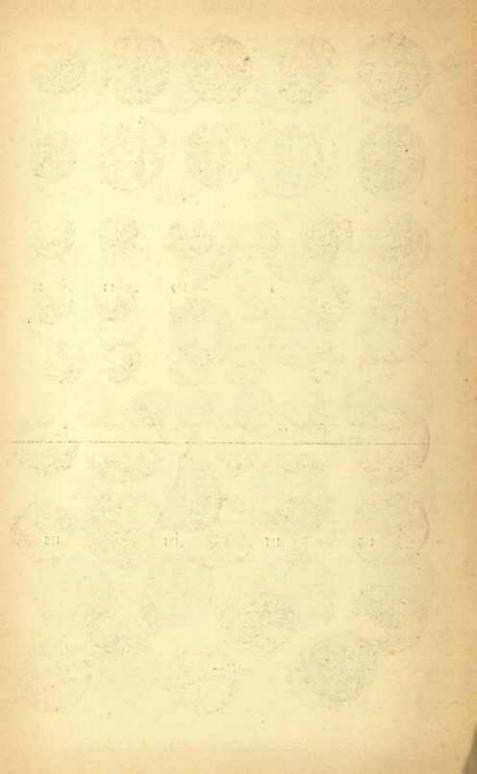
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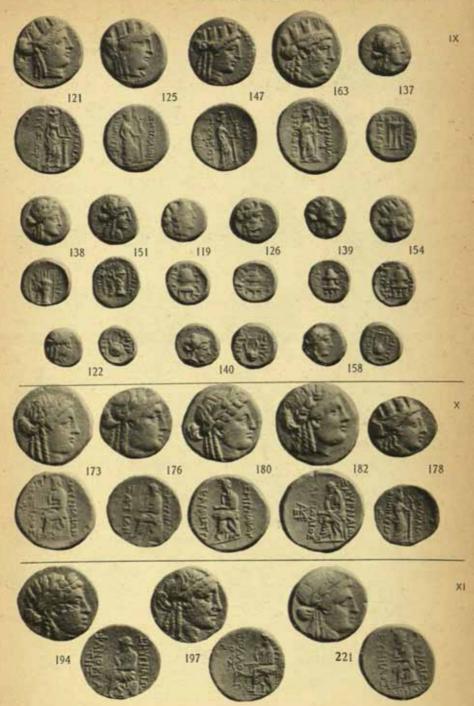
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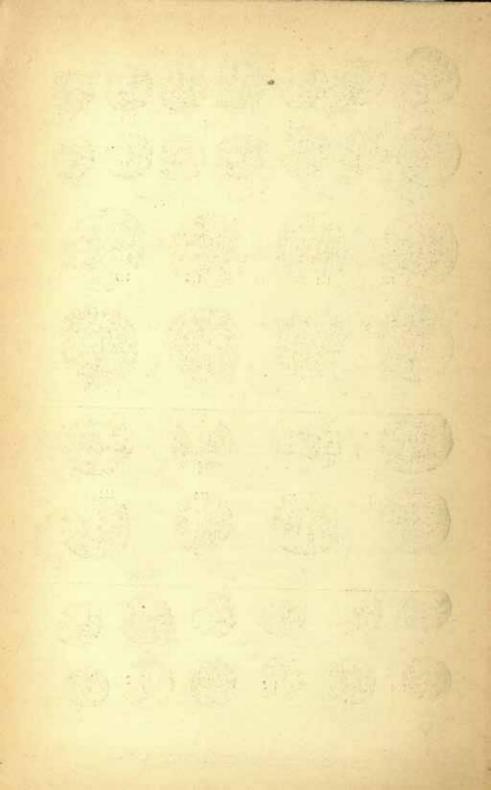


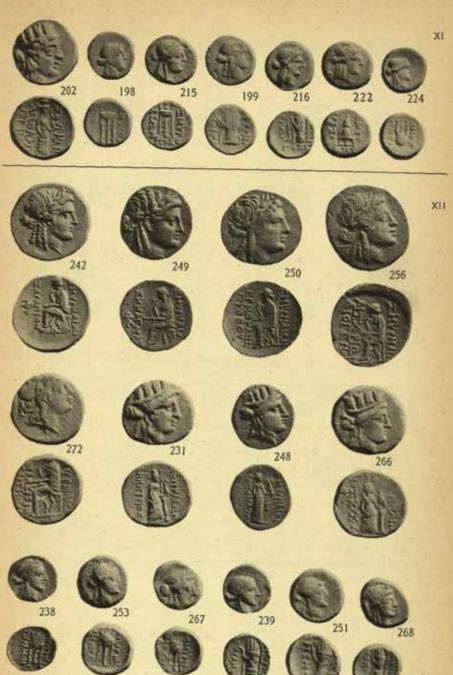
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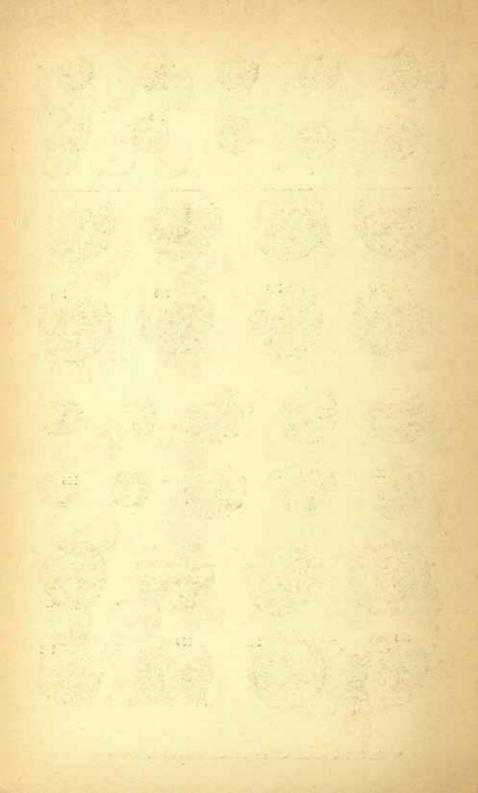


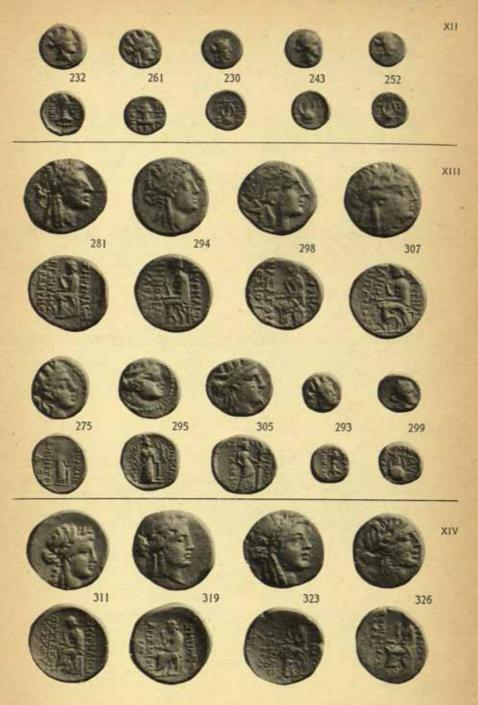


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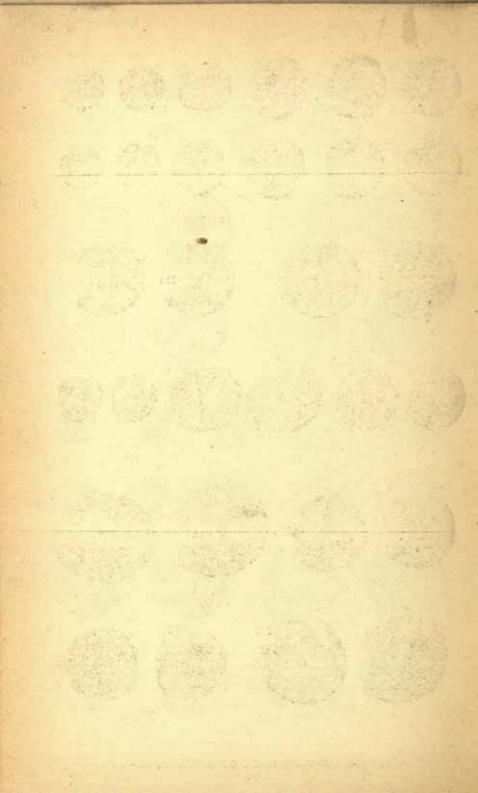


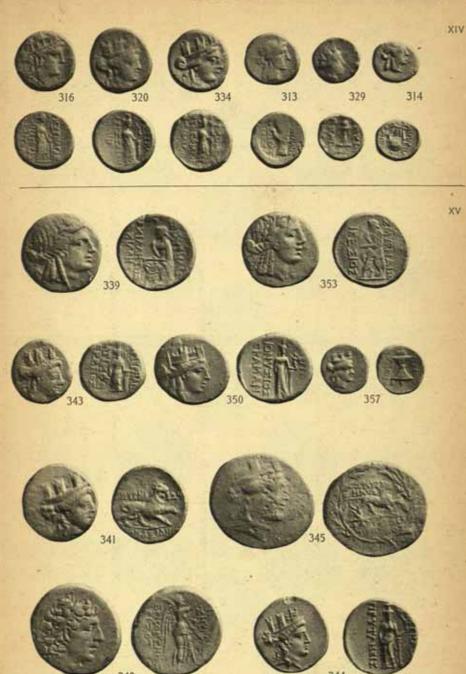




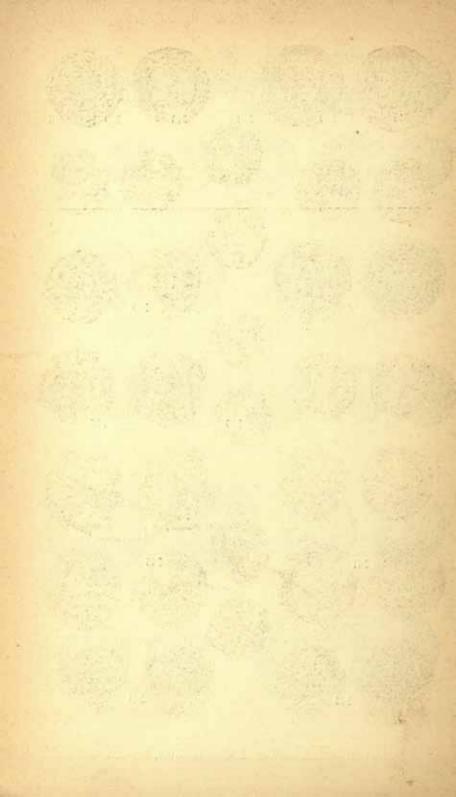


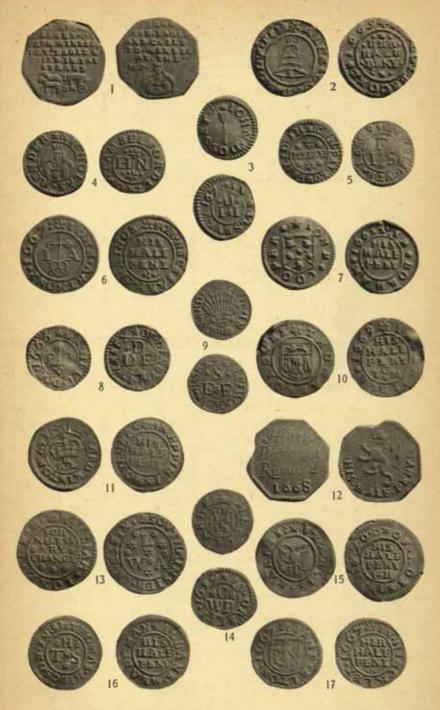
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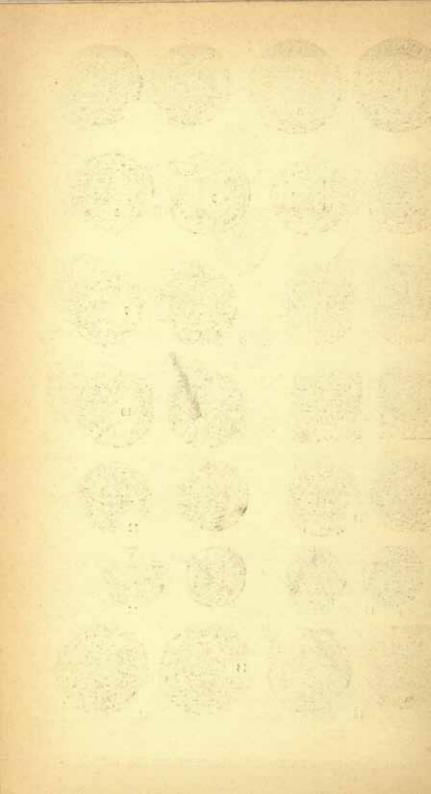


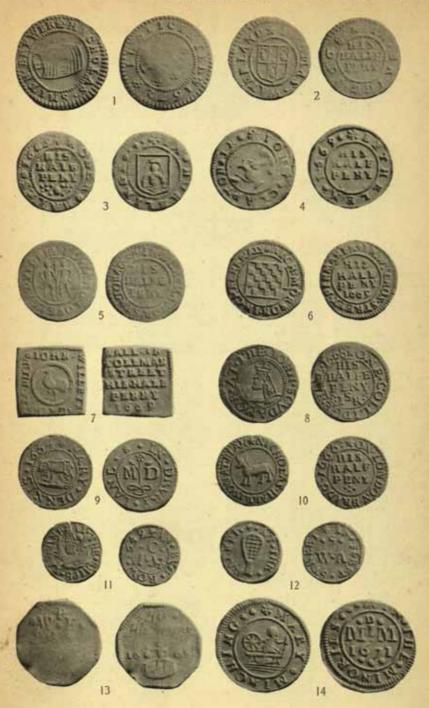
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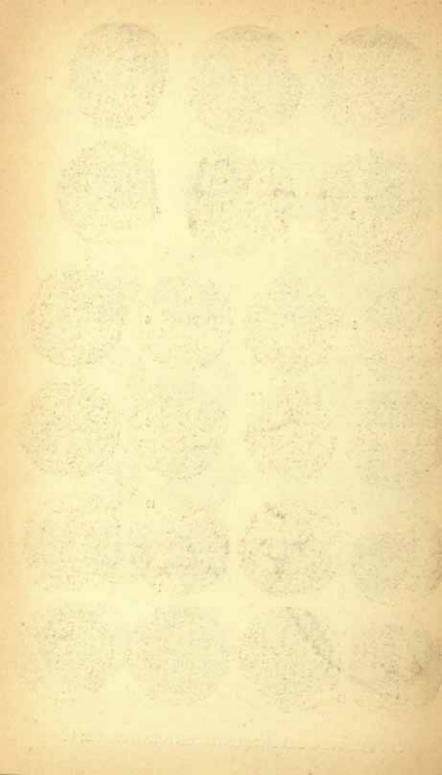




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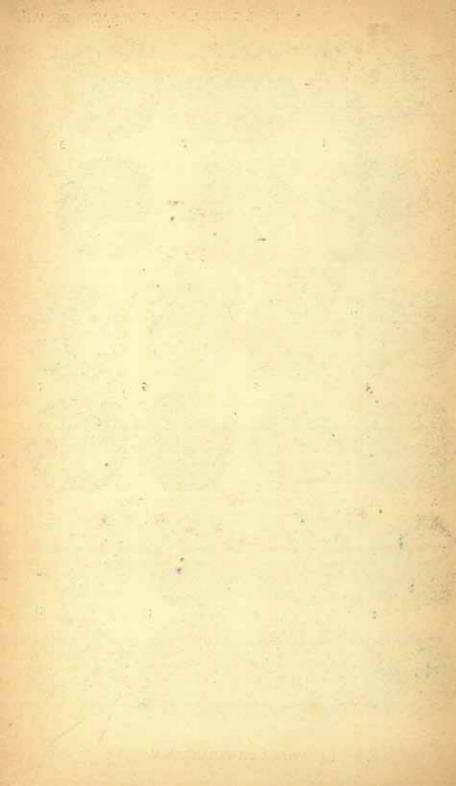


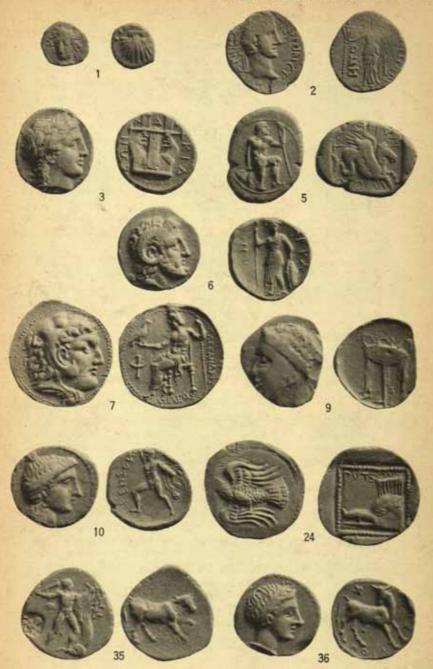


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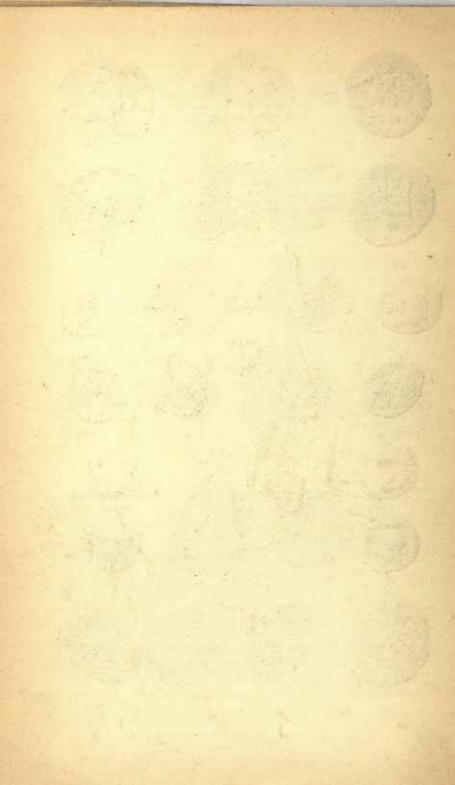


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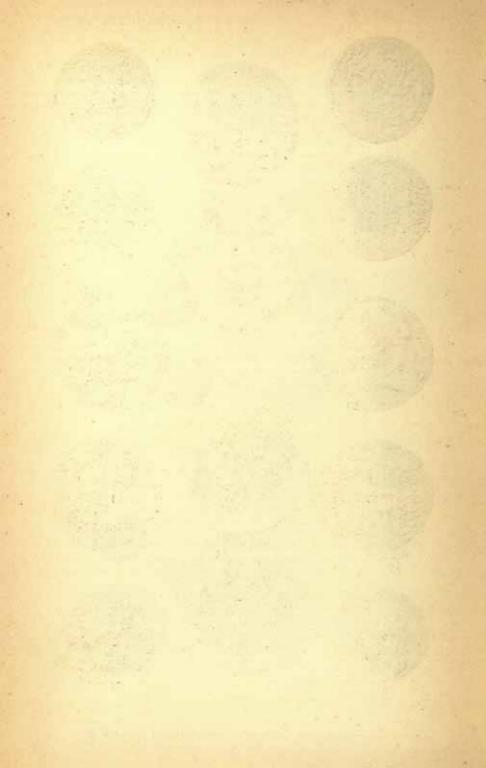




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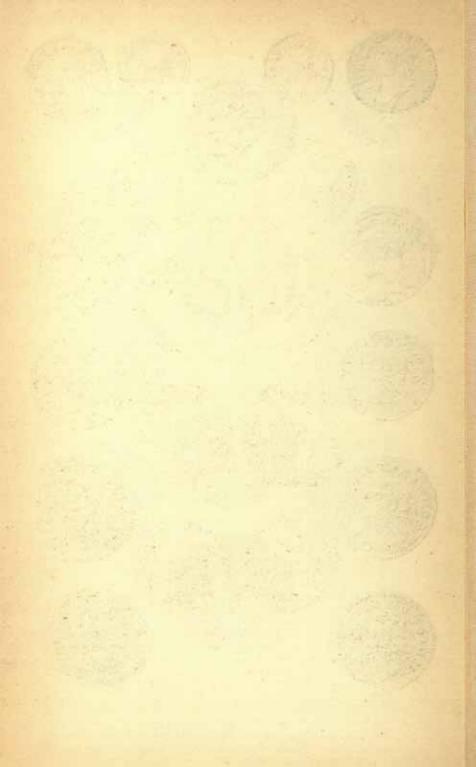


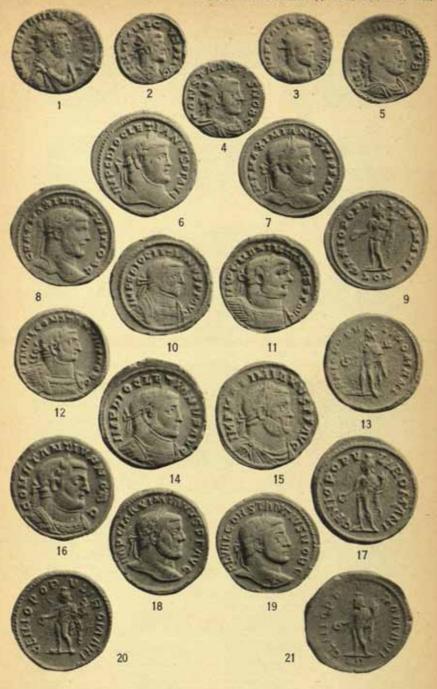


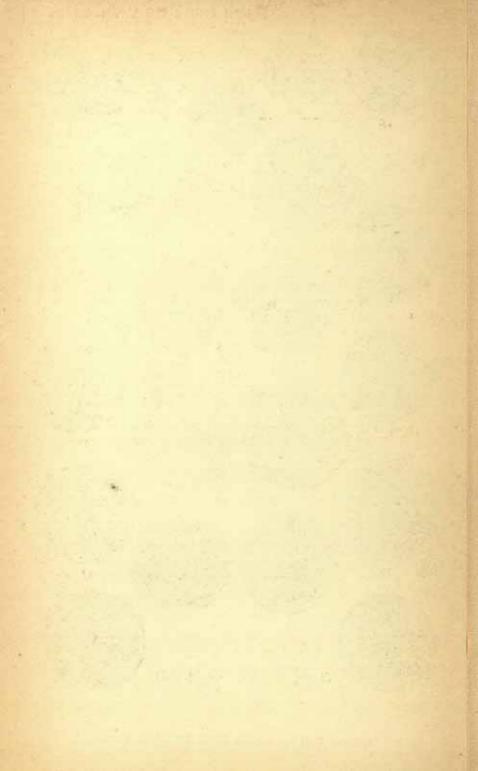


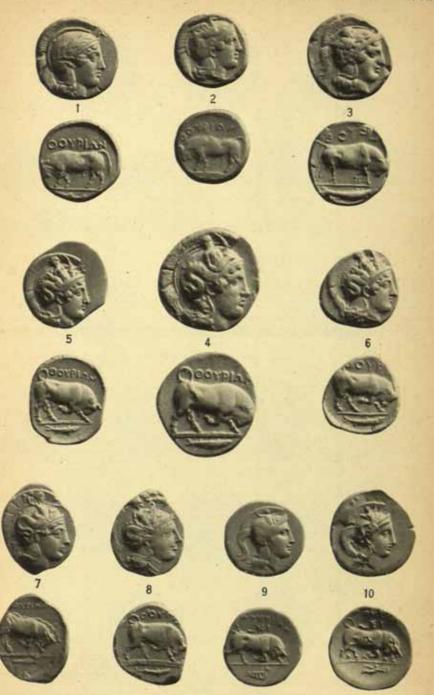


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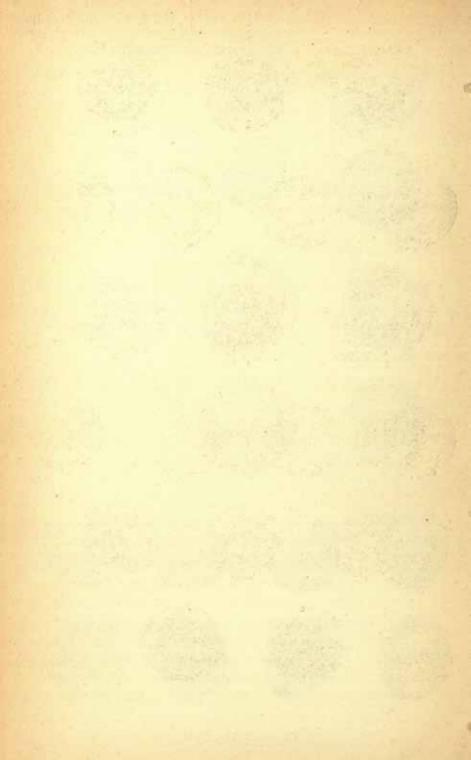


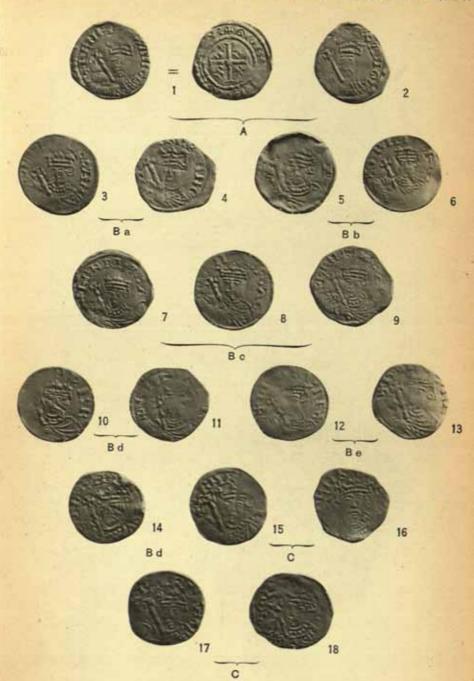




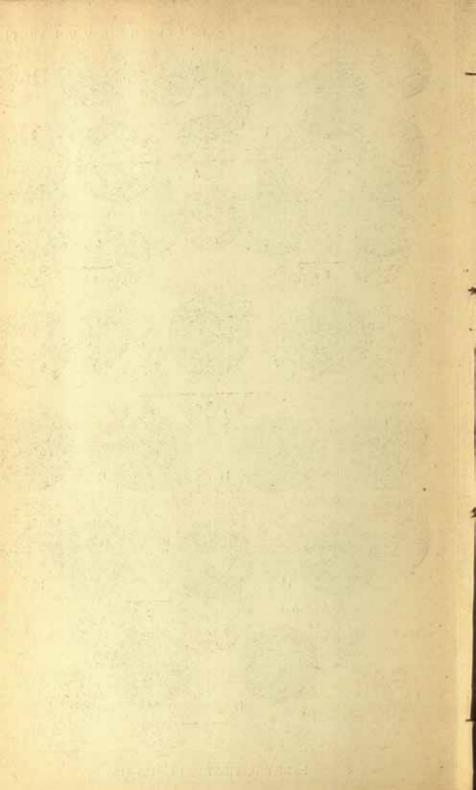


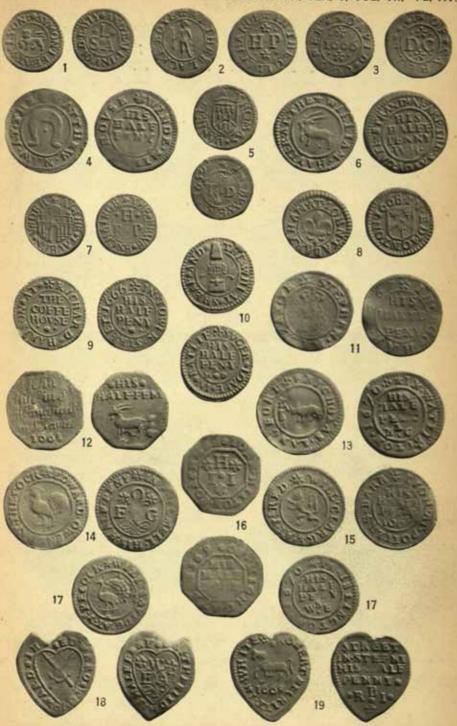
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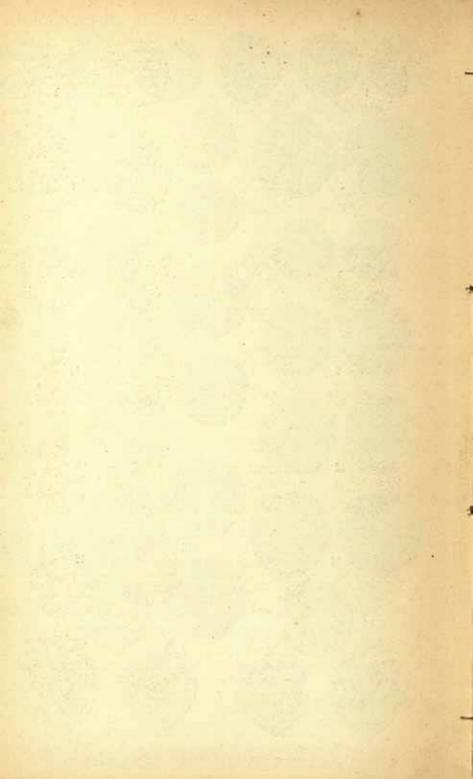


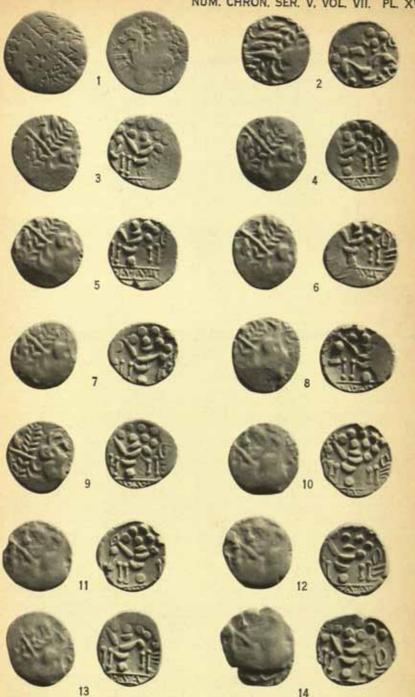
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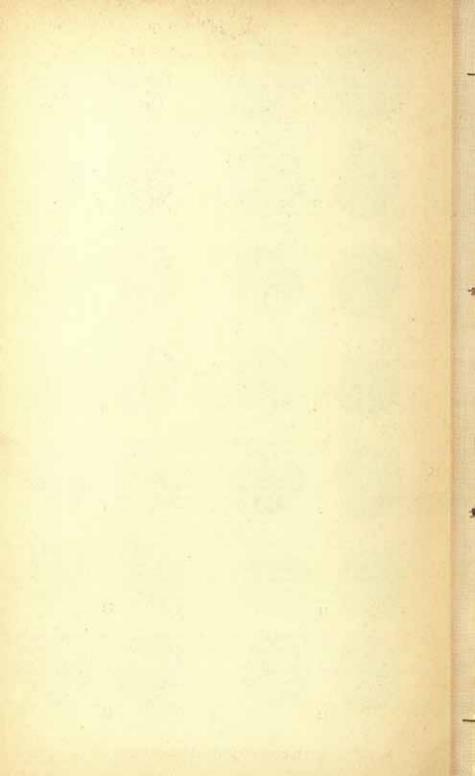


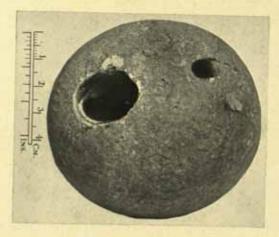
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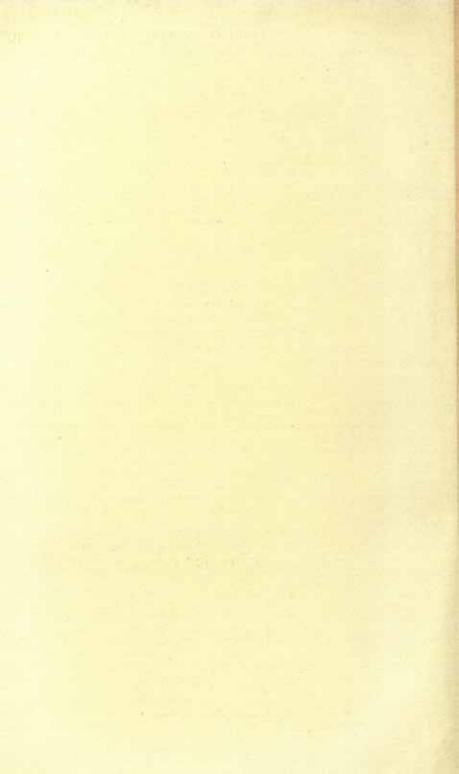
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Chute money-box



Specimens of Chute Find coins



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- 1871 GARDNER, PROF. PERCY, M.A., D.Litt., Litt.D., LL.D., F.S.A., F.B.A., 12 Canterbury Road, Oxford.
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- 1889 GARSIDE, HENRY, Esq., 46 Queen's Road, Teddington, Middlesex.
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- 1922 GILLINGHAM, HARROLD E., Esq., 432 West Price St., Philadelphia, U.S.A.
- 1920 GINORI, MARCHESE ROBERTO VENTURI, 75 Via della Scala, Florence, Italy.
- 1906 GLOUCESTER, THE RIGHT REV. THE LORD BISHOP OF, The Palace, Gloucester.
- 1894 GOODACRE, HUGH, Esq., Ullesthorpe Court, Lutterworth, Leicestershire.
- 1904 GRAHAM, T. HENRY BOILEAU, Esq., F.S.A., Oxford and Cambridge Club, Pall Mall, S.W. 1.
- 1891 \*Grantley, Lord, D.L., J.P., F.S.A., Weeke Manor, Winchester, Hants.
- 1914 GROSE, S. W., Esq., M.A., 18 Hobson Street, Cambridge.
- 1871 TGRUEBER, HERBERT A., Esq., F.S.A., Bembridge, Isle of Wight.
- 1910 GUNN, WILLIAM, Esq., 19 Swan Road, Harrogate.
- 1920 GUNTHER, CHARLES GODFREY, Esq., Nicosia, Cyprus.

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1916 HAINES, GEOFFREY COLTON, ESQ., Green Gable, Balmuir Gardens, S.W. 15.

1899 Hall, Henry Platt, Esq., Pentreheylin Hall, Llanymynech, Montgomeryshire.

1912 HARDING, NEWTON H., Esq., 110 Pine Avenue, Chicago, U.S.A.

1917 HARRIS, B. WILFRED, Esq., Lynwood, Boldmere, Erdington, Birmingham.

1904 HARRIS, EDWARD BOSWORTH, Esq., 5 Sussex Place, N.W. 1.

1904 Harrison, Frederick A., Esq., F.Z.S., Sunnyside, Fourth Avenue, Frinton-on-Sea.

1916 \*HART, R. EDWARD, Esq., M.A., Brooklands, Blackburn.

1914 HAYES, HERBERT E. E., Esq., C.M.S. House, Menouf, Egypt.

1886 \*Henderson, James Stewart, Esq., F.R.G.S., M.R.S.L., M.C.P., 1 Pond Street, Hampstead, N.W. 3.

1900 HEWLETT, LIONEL M., Esq., Greenbank, Byron Hill, Harrowon-the-Hill, Middlesex.

1903 Higgins, Frank C., Esq., 579 East 17th Street, Flatbush, Brooklyn, N.Y.

1898 HILL, CHARLES WILSON, Esq. (address not known).

1893 HILL, GEORGE FRANCIS, ESQ., M.A., LL.D., Litt.D., F.S.A., F.B.A., Keeper of Coins, British Museum, W.C. 1, Vice-President.

1895 Hodge, Thomas, Esq., Fyning House, Rogate, Petersfield, Hants.

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1922 Jameson, M. R., 8 Avenue Velasquez, Paris.

1922 JOHNSON, LIEUT.-COL. ROBERT A., C.B.E., Deputy-Master, The Royal Mint, E. 1.

1911 Johnston, Leonard P., Esq., The Cottage. Warningcamp, Arundel, Sussex.

1911 Jones, Frederick William, Esq., 22 Ramshill Road, Scarborough.

1926 KENT NUMISMATIC SOCIETY, THE, Brewer Street, Maidstone.

1874 \*KENYON, R. LLOYD, Esq., M.A., J.P., D.L., Pradoe, West Felton, Salop.

1914 \*Kerr, Robert, Esq., M.A., Royal Scottish Museum, Edinburgh.

1920 King, Colonel E. J., C.M.G., The Old House, East End Road, N. 2.

1901 Kozminsky, Dr. Isidore, 20 Queen Street, Kew, near Melbourne, Victoria.

1922 KRISHNA IYENGAR, PROF. M. H., M.A., D.Litt., M.R.A.S., The University, Madras.

1917 LAMB, MISS WINIFRED, Holly Lodge, Campden Hill, W. 8.

1920 Last, H. M., Esq., M.A., St. John's College, Oxford.

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1883 \*LAWRENCE, RICHARD HOE, Esq., Fifth Avenue Bank, New York, U.S.A.

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1924 DE LOREY, M. EUSTACHE, Institut Français, Damascus, Syria.

1921 LUCKNOW MUSEUM, The Curator of the, Lucknow, India.

1893 Lund, H. M., Esq., Waitara, Taranaki, New Zealand.

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1901 McDowall. Rev. Stewart A., 5 Kingsgate Street, Winchester.

1905 McEwen, Hugh Drummond, Esq., 13 Lovelace Road, West Dulwich, S.E. 21,

- 1916 Meigh, Alfred, Esq., Dole Spring House, Forsbrook, Stoke-on-Trent.
- 1924 \*Merritt, Ferris P., Esq., 25 West 43rd Street, New York, U.S.A.
- 1905 Messenger, Leopold G. P., Esq., 151 Brecknock Road, Tufnell Park, N. 19.
- 1924 MILLER, HOYT, Esq., East Shore Road, Great Neck, Long Island, New York, U.S.A.
- 1897 MILNE, J. GRAFTON, Esq., M.A., 20 Bardwell Road, Oxford.
- 1921 MILNE, MRS. J. GRAFTON, 20 Bardwell Road, Oxford.
- 1910 MITCHELL LIBRARY, THE, Glasgow, The Librarian.
- 1898 \*Monckton, Horace W., Esq., F.L.S., F.G.S., 3 Harcourt Buildings, Temple, E.C. 4, and Whitecairn, Wellington College Station, Berks.
- 1920 MONTAGU, ALFRED C., Esq., 8 Essex Villas, W. 8.
- 1888 Montague, Lieut-Col. L. A. D., Penton, near Crediton, Devon.
- 1905 MOORE, WILLIAM HENRY, Esq. (address not known).
- 1879 Morrieson, Lieut.-Col. H. W., R.A. (reid.), F.S.A., F.R.S.A., 42 Beaufort Gardens, S.W. 3, Honorary Secretary.
- 1904 Mould, Richard W., Esq., Newington Public Library, Walworth Road, S.E. 17.
- 1916 \*MYLNE, EVERARD, Esq. (address not known).
- 1909 NAGG, STEPHEN K., Esq., 1621 Master Street, Philadelphia, U.S.A.
- 1906 NEWBERRY LIBRARY, The Librarian, Chicago, U.S.A.
- 1905 \*Newell, E. T., Esq., President of the American Numismatic Society, 156th Street, West of Broadway, New York, U.S.A.
- 1924 NORDHEIM, E., Esq., 86 Heimhuderstrasse, Hamburg.
- 1916 OGLE, CHRISTOPHER, Esq., M.A., Austin Friars House, E.C. 2.
- 1897 \*O'HAGAN, HENRY OSBORNE, Esq., Riverhome, Hampton Court.
- 1882 OMAN, PROF. SIR CHARLES, M.P., K.B.E., M.A., D.C.L., LL. D., F.S.A., F.B.A., All Souls College, Oxford, *President*.
- 1925 OMAN, CHARLES CHICHELE, Esq., B.A., Victoria and Albert Museum, S.W. 7.
- 1911 OPPENHEIMER, HENRY, Esq., F.S.A., 9 Kensington Palace Gardens, W. 8.
- 1904 Orbeliani, Col. Roman, F.R.G.S., Foreign Dept., National City Bank, Madison Avenue and 42nd Street, New York City, U.S.A.

RLECTED

- 1922 PAKENHAM, Ivo R. R. L., Esq., St. James' Club, 106 Piccadilly, W. 1.
- 1903 Parsons, H. Alexander, Esq., Dalmuir, Cedar Avenue, Rickmansworth.
- 1926 Pearce, J. W. E., Esq., M.A., 10 Cromwell Place, S.W. 1.
- 1917 PHIPPS, LIEUT.-COL. P. RAMSAY, F.R.G.S., 17 St. James's Court, S.W. 1.
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- 1927 POND, SHEPARD, Esq., 258 Boylston Street, Boston, Mass., U.S.A.
- 1915 POYSER, A. W., Esq., M.A., 64 Highfield Street, Leicester.
- 1923 Prague, Bibliothèque de l'Université, Czecho-Slovakia.
- 1903 PRICE, HARRY, Esq., Arun Bank, Pulborough, Sussex.
- 1911 PRICHARD, A. H. COOPER-, Esq. (address not known).
- 1913 Rao, K. Anantasami, Esq., Curator of the Government Museum, Bangalore, India.
- 1890 Rapson, Prof. E. J., M.A., M.R.A.S., 8 Mortimer Road, Cambridge.
- 1923 RAVEL, MONSIEUR O., 7 Bd. de Lorraine, Pointe Rouge, Marseilles.
- 1909 RAYMOND, WAYTE, Esq., 489 Park Avenue, New York City, U.S.A.
- 1903 Regan, W. H., Esq., 17 Queen's Road, Bayswater, W. 2.
- 1876 \*Robertson, J. Drummond, Esq., M.A., Comrie Lodge, Higher Warberry Road, Torquay.
- 1911 "Robinson, E. S. G., Esq., B.A., 23 Upper Phillimore Gardens, W. 8.
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- 1919 Rose, Edward E. Pilkington, Esq., I.C.S., Loughton, Essex.
- 1924 Rowe, Captain F. G. C., Oakwood House, Barnet Wood Lane, Ashtead, Surrey.
- 1903 RUBEN, PAUL, Esq., Ph.D., Alte Rabenstrasse, 8, Hamburg, Germany.
- 1919 RYAN, V. J. E., Esq., Grand Hôtel des Avants, Montreux, Switzerland.
- 1916 SAINT LOUIS NUMISMATIC SOCIETY, Washington University, St. Louis, Mo., U.S.A.
- 1872 \*SALAS, MIGUEL T., Esq., 247 Florida Street, Buenos Ayres.
- 1916 \*Salisbury, F. S., Esq., M.A., Limbrick Hall, Harpenden, Herts.

1919 SAVAGE, W. LISLE, Esq., 11 Faith Street, Maidstone, Kent.

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1922 STARKEY, W. BEAMONT, Esq., Lyonsdown, Ilfracombe.

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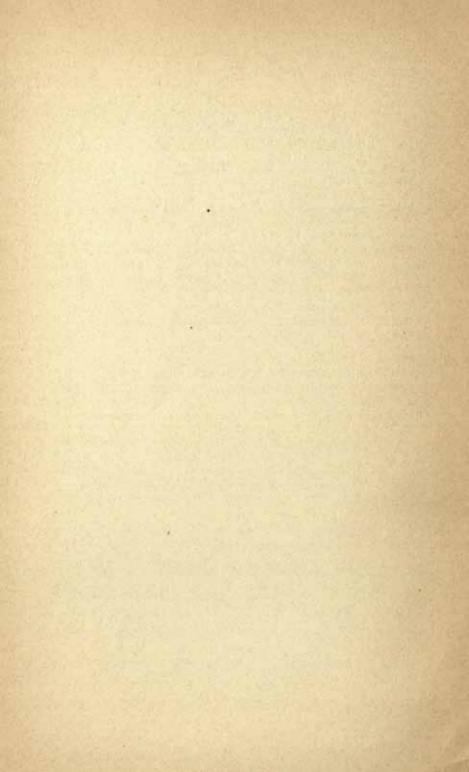
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- 1916 VANES, REV. J. A., Wesleyan Tamil Mission, Cleveland Town, Bangalore, India.
- 1899 VLASTO, MICHEL P., Esq., 12 Allée des Capucines, Marseilles, France.
- 1923 Wales, The National Museum of, Cardiff.
- 1883 WALKER, R. K., Esq., M.A., J.P., Watergate, Meath Road, Bray, Ireland.
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- 1897 WALTERS, FRED. A., ESQ., F.S.A., 28 Great Ormonde Street, W.C. 1, and St. Mildred's, Temple Ewell, Dover.
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- 1885 \*Weber, F. Parkes, Esq., M.D., F.S.A., 13 Harley Street, W. 1.
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- 1927 WILLS, L. E., Esq., 52 Church Street, Falmouth.
- 1906 WOOD, HOWLAND, Esq., Curator of the American Numismatic Society, 156th Street, W. of Broadway, New York, U.S.A.

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- 1920 WYMAN, ARTHUR CRAWFORD, Esq., 29 Place Dauphine, Paris I.
- 1922 Yoanna, A. DE, Esq., B.A., M.D., 111 Pierreport Street, Brooklyn, N.Y.
- 1880 Young, ARTHUR W., Esq., 12 Hyde Park Terrace, W. 2.
- 1919 ZIEGLER, PHILIP, Esq., Lilly Villa, Victoria Park, Manchester.



#### HONORARY FELLOWS

- 1898 His Majesty Victor Emmanuel III, King of Italy, Palazzo Quirinale, Rome.
- 1903 BAHRFELDT, GENERAL DER INFANTERIE A. D., PROFESSOR MAX VON, Dr. Phil., Zinksgarten Strasse 2, Halle (Saale), Germany.
- 1898 BLANCHET, M. ADRIEN, Membre de l'Institut, 10 Bd. Émile Augier, Paris XVI.
- 1926 DIEUDONNÉ, MONSIEUR A., Conservateur des Medailles, Bibliothèque Nationale, Paris.
- 1899 GABRICI, PROF. DR. ETTORE, S. Giuseppe dei Nudi 75, Naples.
- 1904 Kubitschek, Prof. J. W., Pichlergasse, 1, Vienna IX.
- 1893 LOEBBECKE, HERR A., Cellerstrasse, 1, Brunswick.
- 1904 MAURICE, M. JULES, 15 Rue Vaneau, Paris VII.
- 1899 PICK, DR. BEHRENDT, Münzkabinett, Gotha.
- 1895 REINACH, M. THÉODORE, Membre de l'Institut, 2 Place des États-Unis, Paris.
- 1926 TOURNEUR, M. VICTOR, Conservateur des Medailles, Bibliothèque Royale, Brussels.

## MEDALLISTS

#### OF THE ROYAL NUMISMATIC SOCIETY

1883 CHARLES ROACH SMITH, Esq., F.S.A.

1884 AQUILLA SMITH, Esq., M.D., M.R.I.A.

1885 EDWARD THOMAS, Esq., F.R.S.

1886 Major-General Alexander Cunningham, C.S.L. C.I.E.

1887 JOHN EVANS, Esq., D.C.L., LL.D., F.R.S., P.S.A.

1888 DR. F. IMHOOF-BLUMER, Winterthur.

1889 PROFESSOR PERCY GARDNER, Litt.D., F.S.A.

1890 Monsieur J. P. Six, Amsterdam.

1891 Dr. C. Ludwig Müller, Copenhagen. 1892 PROFESSOR R. STUART POOLE, LL.D.

1893 M.W. H. Waddington, Sénateur, Membre de l'Institut, Paris.

1894 CHARLES FRANCIS KEARY, ESQ., M.A., F.S.A. 1895 PROFESSOR DR. THEODOR MOMMSEN, Berlin,

1896 FREDERIC W. MADDEN, Esq., M.R.A.S.

1897 Dr. Alfred von Sallet, Berlin.

1898 THE REV. CANON W. GREENWELL, M.A., F.R.S., F.S.A.

1899 M. Ernest Babelon, Membre de l'Institut, Paris. 1900 PROFESSOR STANLEY LANE-POOLE, M.A., Litt.D.

1901 S. E. BARON WLADIMIR VON TIESENHAUSEN, St. Petersburg.

1902 ARTHUR J. EVANS, ESQ., M.A., F.R.S., F.S.A.
1903 M. GUSTAVE SCHLUMBERGER, Membre de l'Institut, Paris. 1904 HIS MAJESTY VICTOR EMMANUEL III, KING OF ITALY.

1905 SIR HERMANN WEBER, M.D.

1906 COMM. FRANCESCO GNECCHI, Milan.

1907 BARCLAY V. HEAD, Esq., D.Litt., D.C.L., Ph.D., Corr. de l'Inst.

1908 PROFESSOR DR. HEINRICH DRESSEL, Berlin.

1909 HERBERT A. GRUEBER, Esq., F.S.A.

1910 DR, FRIEDRICH EDLER VON KENNER, Vienna. 1911 OLIVER CODRINGTON, Esq., M.D., M.R.A.S., F.S.A.

1912 GENERAL-LEUTNANT MAX VON BAHRFELDT, Hildesheim.

1913 George Macdonald, Esq., M.A., LL.D.

1914 JEAN N. SVORONOS, Athens.

1915 GEORGE FRANCIS HILL, Esq., M.A.

1916 M. THÉODORE REINACH, Membre de l'Institut, Paris.

1917 L. A. LAWRENCE, Esq., F.S.A.

1918 Not awarded.

1919 M. ADRIEN BLANCHET, Membre de l'Institut, Paris. 1920 H. B. EARLE-FOX, Esq., and J. S. Shirley-Fox, Esq.

1921 PERCY H. WEBB, Esq.

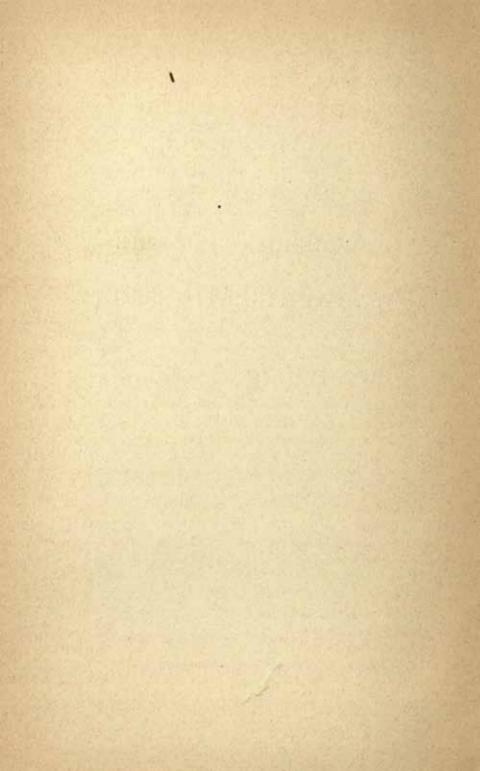
1922 FREDERICK A. WALTERS, Esq., F.S.A. 1923 Prof. J. W. Kubitschek, Vienna.

1924 HENRY SYMONDS, Esq., F.S.A.

1925 EDWARD T. NEWELL, Esq., New York. 1926 R. W. Maclachlan, Esq., Montreal.

1927 M. A. DIEUDONNÉ, Paris.

# PROCEEDINGS OF THE ROYAL NUMISMATIC SOCIETY.



## PROCEEDINGS OF THE

## ROYAL NUMISMATIC SOCIETY.

SESSION 1926-1927.

OCTOBER 21, 1926.

PERCY H. WEBB, Esq., M.B.E., Treasurer, in the Chair.

The Minutes of the Meeting of May 20 were read and approved.

The following Presents to the Society were announced, and thanks ordered to be sent to their donors:

- Antiquaries Journal, 1926, Pt. 3.
- 2. Archaeologia Aeliana, 1926.
- 3. British Museum Quarterly, Vol. i, Pts. 1 and 2.
- 4. Finska Fornminnensföringens Tidskrift, xxxv.
- 5. Kathleen Freeman: Life and Work of Solon.
- 6. Journal of Hellenic Studies, 1926, Pt. 1.
- Journal of the Royal Society of Antiquaries of Ireland, 1926, Pt. 1.
  - 8. L. Laffranchi: L'Imperatore Martiniano.
  - 9. Revue Numismatique, 1926, Pts. 1 and 2.
  - Report of the U. S. National Museum, 1925.
  - 11. Syria, 1926, Pt. 2.
  - 12. Suomen Museo, 1925.
  - Zeitschrift für Numismatik, 1926, Pts. 1 and 2.

Miss Mildred Seaby and Monsieur Claudius Côte were elected Fellows of the Society.

Mr. A. H. F. Baldwin exhibited a 20 peso gold piece of Guatemala of 1878 with an unpublished type of obverse (by Frener). Mr. Fredk. A. Walters, F.S.A., showed two medallions of Probus (one in electrotype) and three second brass and four quinarii all in very fine condition.

Mr. L. A. Lawrence, F.S.A., showed a "Sulla's dream" denarius of L. Buca showing the reverse type in fine detail; a Henry VI noble of the annulet coinage of ordinary type with a trefoil in the second quarter of reverse, close in front of the lion's head; and 'an unidentified silver medal with a head of Mephistopheles and the legend "Praemium exercitationis scientia est: A R." on both sides, which he desires to have attributed.

Mr. William Gilbert showed a second brass of Faustina Junr. (Cohen 123), with reverse, a brockage before the reverse type was struck on it, and a second brass of Manlia Scantilla from the Feuardent Sale (Sotheby, 24 Nov., 1925), lot 166.

Mr. P. Thorburn exhibited a farthing, obverse head George II, reverse George III, 1771, hollowed out to hold a \( \frac{1}{3} \) guinea of 1762.

Mr. B. A. Seaby exhibited a series of large gold and silver coins of Salzburg in Austria and a badge of Gustavus Adolphus.

Mr. V. J. E. Ryan exhibited some rare and unpublished Roman coins, including an aureus of Vespasian and Titus, from the Helbing Sale of Oct. 12, 1926, lot 1445, and two medallions of Hadrian.

Mr. L. A. Lawrence showed a series of Roman coins to illustrate the types of "Hilaritas" and "Laetitia" in connexion with Mr. Mattingly's paper.

Mr. Webb showed a series of coins of Probus to illustrate the classification of his issues to their mints.

He then read a short paper on the difficulties of the attribution of the coins of Probus to their correct mints.

He referred to the enormous number of varieties of Antoniniani of the reign which have been recorded, and pointed out that the variation did not, to any great extent, arise from the use of numerous reverses, as, taking all the personifications of one deity, virtue, &c., as comprised in one main type, there are only about 40 different types. The variations arise rather from the considerable number of obverse legends and busts employed during the reign and from the numerous issues which were made by several of the mints during the period of six years for which it lasted. The difficulties of attribution are much increased in consequence of the abandonment by the central mints of their former practice in mint marking.

In Rome the mark of value XXI disappeared. Ticinum, which had used T or TI in the previous reign, without a mark of value, abandoned that mark, reverted to its older system, and used XXT during the early part of the reign, but afterwards employed the mark XXI. At Siscia, Greek numerals combined with XXI were introduced, and an even more startling innovation took place, owing probably to some temporary closing of the mint of Serdica and the transfer of some of its officers to Siscia. The mark of value, KA, which had hitherto been confined in Europe to Serdica, now appears at Siscia, coupled with Latin numerals in field or exergue indicating the officinae. Mr. Webb gave reasons for agreeing with Professor Alföldy and others on this point. He also discussed the attribution sought to be made to Ticinum of a series bearing Greek numerals preceding XXI but was unable to accept the correctness of this attribution.

## Mr. H. Mattingly read a paper on "Hilaritas".

He began by examining the type of Hilaritas, with its companion type, Laetitia, and rejecting the view of Froehner that Hilaritas and Laetitia were not Roman goddesses of minor rank. The sporadic occurrence of Hilaritas on coins suggested something more than a vague general significance, and a more particular reference was found to the Hilaria, the great spring festival of rejoicing in the cult of Cybele. The special appropriateness of this reference was then pointed out for particular issues of Hadrian, Commodus, and Didia Clara. The excesses of Elagabalus involved the worship of Cybele in disgrace and led to the banishment of Hilaritas from Roman coins. She only reappears on coins of the Gallic and British Emperors whose subjects, as inscriptions prove, were devoted to the worship of Cybele. A more summary review of the "Laetitia" type suggested that sometimes, at any rate, references to festivals of rejoicing in honour of Ceres or Isis (the

sea festival of March 5th) are in view. The emotional Eastern religions may, then, have left a deeper mark on Roman coins than at first appears.

#### NOVEMBER 18, 1926.

PROF. SIR CHARLES OMAN, K.B.E., M.P., LL.D., F.S.A., F.B.A., President, in the Chair.

The Minutes of the Meeting of October 21 were read and approved.

The following Presents to the Society were announced, and thanks ordered to be sent to their donors:

- 1. Annual of the British School at Athens, 1925-6.
- 2. Rivista Italiana, 1925.
- 3. Syria, 1926, Pt. 3.

Mr. William Gilbert exhibited a fine aureus of Constantine the Great (Cohen, 105), from the Ponton d'Amécourt and Montagu (Lot 799) Collections. He also showed an unpublished as of Vitellius (Cohen 74, Mattingly and Sydenham 24, but variety with draped bust) from the Rome Sale, Jan., 1924 (lot 168).

Mr. Webb read a note on the possibility of dating the coinage of Allectus.

A few days ago Mr. Lawrence suggested this question and led me to look at the coins which are exhibited.

Allectus commenced his reign in 293 and was killed about the middle of 296, a short period for much variation in the work of mints which, in the former year, were well established, and had been doing creditable work for his predecessor.

It will be remembered that, although the early coinage of Carausius is as irregular and barbarous as any produced in Gaul, his later issues are as good as the best continental work of the period, and his system of mint marking was complete.

This system was well maintained under Allectus: it is almost impossible to find a coin that bears no mark, and by far the greater part of his Antoniniani bear both city and office marks. The smaller coins with galley types bear the letter Q with the city mark only.

Examination of the coins may lead others to different conclusions, but I fail to see any indication of earlier or later date, though it is true that some pieces are of much lower relief than others. That variation is, however, found in coins which bear the same marks, e.g.  $\frac{S|A}{ML}$ , and are therefore, it may be assumed, of the same series. It seems to me to arise from the employment of different engravers with varying styles of art.

There are no reliable dated coins of either British Emperor to assist us; those which are published of Carausius are mostly so published on the authority of Stukeley (who was very prone to read what he desired to find), and are in no case reliable. None are published of Allectus. It is rather remarkable that though Carausius appears in many respects to have imitated Postumus he did not follow that emperor in his assumption of regular periods of consular power.

Mr. F. S. Salisbury gave an account of his analysis of late Roman coins from Richborough and traced the origin of the Anglo-Saxon "dragon" sceattas to a barbarous imitation of the FEL. TEMP. REPARATIO type of Constans and Constantius with a legionary spearing a horseman on the reverse. (This paper is printed in the *Numismatic Chronicle*, 1927, pp. 108–20.)

## DECEMBER 18, 1926.

PROF. SIR CHARLES OMAN, K.B.E., M.P., LL.D., F.S.A., F.B.A., President, in the Chair.

The Minutes of the Meeting of November 18 were read and approved.

The following Presents to the Society were announced, and thanks ordered to be sent to their donors:

- 1. Antiquaries Journal, 1926, Pt. 4.
- Annuaire de l'Académie Belge, 1926. Beaux-Arts, 1-3.
   Lettres 1-4.

- 3. S. W. Grose, Catalogue of the McClean Collection, Vol. n.
- 4. Proceedings of the Royal Irish Academy, xxxvii, 4-6.
- Sotheby's Coin Sale Catalogues, 1925-6; presented by Messrs.
   Sotheby, Wilkinson, and Hodge.
  - 6. Schweizerische Numismatische Rundschau, xxiv, Pt. 1.

Mr. William Gilbert exhibited a beautiful aureus of Julia Domna (Coh., 193), formerly in the Evans Collection. He also showed an unpublished seventeenth-century token, the first token known of Horbling in Lincolnshire.

Obv. ROGER HALES 1669: HIS HALF PENY.

Rev. IN HORBLINGE: The Mercers' Arms.

Mr. Percy H. Webb showed a series of 19 fourth-century siliquae and double siliquae including a barbarous piece of Eugenius and specimens of the three ages of Julian II.

Mr. G. C. Haines exhibited some rare later Roman silver coins including Procopius, Valentinian II, Constantine II, and Jovinus.

Mr. L. A. Lawrence, F.S.A., on behalf of a friend, showed a penny of Harthacnut, probably of Danish origin, with legends blundered, but in type very like an English issue.

Mr. Fredk. A. Harrison exhibited four coins of Ferdinand IV of Naples and Sicily showing him as Ferdinand IV (1759-1806), Ferdinand III (1801-14), Ferdinand IV (1815-19), and Ferdinand I (1819-25).

Among the coins exhibited in illustration of Sir Charles Oman's paper, along with many interesting pieces shown by Messrs. Webb and Lawrence was a unique large silver coin of Constantine II as Augustus (cf. p. 13).

Sir Charles Oman's paper on the Roman silver coinage from A.D. 335 to A.D. 413 was devoted to an attempt to arrange in chronological sequence the various denominations which have been candidates for the name of *miliarensis* and *siliqua*, and to trace the gradual decadence of their weights, which ends in complete chaos during the long and disgraceful reign of Honorius.

There had been no silver coinage at all in the empire between about 312 and 335, the middle years of Constantine showing no such issues whatever: and his contemporaries the two Licinii, Valens, Martinianus, Crispus, and Fausta having no regular silver currency, and at the most a few medallic pieces of great size, not intended for circulation. There was practically nothing but gold and bronze, the latter often covered with a white plating, produced in these twenty-three years. The only exceptional issue is a rather scarce set of billon-coins of Constantine, Maximinus Daza, and Licinius, all uniform, and showing half-length portraits of the three emperors, which was apparently issued from the Treves mint only, in the year 312.

A regular silver currency only started in 335, when Constantine, on producing his project for a partition of the empire at his death, issued a commemorative set of uniform types for himself and for his three sons, and his nephew Delmatius, the destined heirs. All these coins have no inscription on the side of the portrait-head, the imperial name being placed on the reverse. The issue is apparently a new denomination, as its weight, varying from 50 to 56 grains, is appreciably greater than that of the old silver coins of the Diocletian Epoch, of which none had been struck for some 25 years.

When Constantine died in 337 his sons murdered their relative Delmatius (and several other kinsmen), but continued the issue of silver with no inscription round the head on the obverse, which had been current for the last two years, only changing their style on the reverse of each piece from Caesar to Augustus. But within a short time they also began to coin pieces of a larger denomination, ranging from 60 up to over 70 grains in weight, and with inscription on the obverse as well as the reverse. Of these of Constantine II of the heavy standard only one piece is known, that exhibited by Mr. Sydenham at this meeting. Of Constans and Constantius II they are not quite so rare.

After Constantine II had perished in battle in 340, his two brothers continued to issue both sizes of silver coin—that which averaged 52 grains and that which averaged 66 grains—for ten years, often issuing identical types, so that two silver coins with the inconvenient relation to each other of 1 to 1½ were current simultaneously. When Magnentius and Decentius rose in the West and destroyed Constans, they also issued both sizes of silver coins. Not so the rebel Vetranio in the Balkan Peninsula, who struck only the smaller denomination.

When rid of these rebels and left sole emperor, Constantius II for some years continued to issue coins of both sizes, as did his nephew and colleague Constantius Gallus, but in 355 he revolutionized the whole currency of the empire by commencing the issue in enormous quantities of a new denomination weighing about 35 grains and obviously the half of the larger of the two then existing silver pieces. These siliquae, mostly bearing the reverse inscription VOTIS XXX MULTIS XXXX, are the most common of all fourth-century silver coins, and nearly superseded the larger silver in common use. From 355 down to the reign of Honorius they were the real currency of the empire, but a few of their double, the original 66-70 grain piece, continued to be struck right down to 410. They are found mixed in very small numbers with the siliquae in all late fourth-century finds-e.g. 3 to 290 in the Groveley Wood hoard, 15 to 1,400 in the last East Harptree hoard. So they were evidently still common currency, though excessively rare. The 52 grain silver coin which had been usual between 335 and 355 "petered out" in the time of Julian, and is no more found.

The siliqua kept up its weight of 30-5 grains very well down to Magnus Maximus, whose last issues run rather light, but went to pieces under Honorius. After the rebellion of Constantine III (407), and Jovinus (411), weights became irregular, and kept sinking, till the last siliquae of Honorius had gone down to 16 grains. His successors in the west practically stopped issuing silver altogether; such few pieces of emperors such as Libius Severus or Nepos as are found being as deficient in weight as they are difficult for the collector to procure. There was practically no silver currency after 430 in the West.

#### JANUARY 20, 1927.

PROF. SIR CHARLES OMAN, K.B.E., M.P., LL.D., F.S.A., F.B.A., President, in the Chair.

The Minutes of the Meeting of December 18, 1926, were read and approved.

The following Presents to the Society were announced, and thanks ordered to be sent to their donors:

- 1. Annual Report (56th) of the Royal Mint.
- 2. Archaeologia Cantiana, Vol. xxxviii.
- 3. British Museum Quarterly, Vol. i, Pt. 3.
- 4. P. Nolan: Monetary History of Ireland.
- Revue Belge de Numismatique, 1926, Pts. 1 and 2.
- 6. Zeitschrift für Numismatik, 1926, Pts. 3 and 4.

The evening was devoted to exhibitions.

Mr. William Gilbert showed a very fine specimen of the silver coin of Maximus, tyrant in Spain A. D. 409-11, a piece of the greatest rarity, from the Vautier collection.

Sir Charles Oman showed a fine series of 20 Early Tarentine staters of the horseman type.

- Mr. F. A. Harrison exhibited silver coins of the Emperors Iturbide (1822-3), and Maximilian (1864-7) of Mexico, and a series of Chinese coins from the tenth century to the present day, including an interesting series of Republican portrait-pieces.
- Mr. C. J. Bunn showed a selection from his collection of Byzantine coins,
- Mr. F. A. Walters, F.S.A., exhibited a very rare type of groat of Edward III (1369-77), with all four titles, England, France, Ireland, and Aquitaine, and a chain-mail hauberk, indicated on the bust.
- Lt.-Col. H. W. Morrieson, F.S.A., exhibited a Spanish dollar which formed part of the treasure lost in the sinking of H.M.S. Lutine off the coast of Holland in 1799, and Spanish (dollar) 8, 4, 1, and ½ Reals countermarked with head of George III in oval; and 8 Reals, 4 and 2 Reals, countermarked with head of George III in octagon.
- Mr. A. H. F. Baldwin showed an Angel of the First Coinage of Henry VII, Mm. Rose on obverse only.

Obv. reading ends DNS IB trefoil stops.

Rev. PER CRUCEM TUAM SALVA NOS XPE RE-DMPTOR, pellet stops: Ropes 3 and 1. And an oval copper box-top: or badge of William Duke of Cumberland WILLIAM: DUKE: CUMB. Born 15 Apr.: 1721. Bust to right (unpublished),

## FEBRUARY 17, 1927.

PROF. SIR CHARLES OMAN, K.B.E., M.P., LL.D., F.S.A., F.B.A., President, in the Chair.

The Minutes of the Meeting of Jan. 20 were read and approved.

The following Presents to the Society were announced, and thanks ordered to be sent to their donors:

- 1. Antiquaries Journal, 1927, Part 1.
- Harrold E. Gillingham, Spanish Orders of Chivalry; from the Author.
  - 3. Journal of Hellenic Studies, 1926, Pt. II.
  - Numismatische Zeitschrift, Vol. 59, 1926.
  - Revue Numismatique, 1926, Pts. 3 and 4.

Mr. L. E. Wills was proposed for election as a Fellow of the Society,

Mr. William Gilbert exhibited an Alexandrian coin of Annia Faustina with a fine portrait from the Levis collection (lot 797).

Mr. Fredk. A. Walters, F.S.A., showed a series of coins of Caracalla, Gallienus, Aurelian, &c., to illustrate Mr. Mattingly's paper. Sir Charles Oman exhibited a similar series.

The Rev. E. A. Sydenham showed the double siliqua of Constantine II on which he read his paper.

Mr. H. Mattingly read a paper on "Sestertius and Denarius under Aurelian".

The main argument was that the XX.I piece of Aurelian is a double sestertius, containing twenty libellae. Caracalla had in A.D. 215 introduced the "Antoninianus", a double denarius in value though only about one and a half denarii in weight. It was a desperate measure of inflation, forced on the government by the great increase in military expenditure. A continuous decline in the weight and quality of the double denarius led at last to the crash under Gallienus. The government had exploited to the full the false doctrine that a coin can mean what the government wishes it to mean, without reference to its intrinsic value or to reserves covering it. Aurelian on his accession certainly wished to restore the coinage, but had to be content to base his new coinage on a coin of lower value, double sestertius in place of double denarius. That his XX . I piece is a double sestertius is rendered extremely probable by the facts (1) that the sestertius was regularly divisible into ten, twenty, and forty parts, while the denarius was divided into sixteen; (2) that the sestertius can be proved to have lost its relation to the denarius of one-fourth by the end of the third century: the most probable occasion for this to have happened is the reform of Aurelian. Diocletian incorporated the XX I piece in his reform as a division, probably one-fourth of his chief piece of silvered bronze, the "Genio Populi Romani" coin, thus completing and extending rather than annulling the work of his predecessor. [This paper is printed in the Numismatic Chronicle, 1927, pp. 219-32.]

The Rev. E. A. Sydenham read a note on an "unpublished Double Siliqua of Constantine II". The coin, which was found at Icklingham, was shown to belong to a series of double siliquae, struck for the sons of Constantine I at the mint of Thessalonica and beginning before the death of their father. The new coin gives Constantine II the title of Augustus and seems to have been struck in the period just after the murder of Delmatius and Hanniballianus, before the three brothers had met and redistributed the Empire. (This was printed in the Numismatic Chronicle, 1926, pp. 472-5.)

MARCH 17, 1927.

PROF. STR CHARLES OMAN, K.B.E., M.P., LL.D., F.S.A., F.B.A., President, in the Chair.

The Minutes of the Meeting of February 17 were read and approved.

The following Presents to the Society were announced, and thanks ordered to be sent to their donors:

- 1. Annual Report of the Smithsonian Institute, 1926.
- 2. A. H. Brindley; A Bronze Age Anchor.
- 3. Proceedings of the Cambridge Antiquarian Society, Vol. 28.
- Mitteilungen des Deutschen Archäologischen Instituts, 1925.
   Pts. 3 and 4.
  - 5. M. P. Vlasto: Alexantler, son of Neoptolemos.

Mr. L. E. Wills was elected a Fellow of the Society.

Mr. W. Gilbert exhibited a third brass of Julian the Tyrant in very fine condition, from the Vierordt Sale (no. 2514).

Mr. F. A. Walters, F.S.A., showed a silver penny of Malcolm IV of Scotland from an old collection, now belonging to Douai Abbey; obv. Head to right, MALCOLM REX (not described in Burns).

Dr. Fairbairn showed four very fine large Roman brass, and a specimen of the "Descente en Angleterre" medal of Napoleon as actually issued with legend altered to "Toto Divisos Orbe Britannos".

Mr. Lawrence gave the first part of his paper on the coinage of Edward III, covering in this section the years 1351-4. He traced the connexion, by muled coins, of the earlier coinage of the reign known as "Florin type" issue with this period which begins the groat coinage. Lantern slides illustrating the different forms of initial crosses and of lettering showed the framework of the series into which he divided the issues. Important evidence was available from the York Royal Mint, which was in operation for two years from the middle of 1353, closing in May 1355. Privy marks, differentiating periods for the trials of the pyx, were also valuable in this coinage, as in some cases they could be detected in curious forms of letters made with punches deliberately broken for this purpose. The mint accounts throw some light on the date of the issues by comparison

of the various amounts coined with the rarity of certain varieties. (This paper was printed in the *Numismatic Chronicle*, 1926, pp. 417-69.)

#### APRIL 21, 1927.

PERCY H. WEBB, Esq., M.B.E., Treasurer, in the Chair.

The Minutes of the Meeting of March 17 were read and approved.

The following Presents to the Society were announced, and thanks ordered to be sent to their donors:

- 1. Antiquaries Journal, 1927, Pt. 2.
- 2. British Museum Quarterly, Vol. i, Pt. 4.
- 3. Bulletin de l'Association Hellénique, 1926, Pts. 1-12.
- 4. Bonner Jahrbücher, Vol. 131.
- 5. Fornvännen Meddelanden, 1926, Pts. 1-6.
- 6. E. T. Newell: Coinage of Demetrius Poliorcetes.
- 7. Revue Numismatique Tchécho-Slovaque, 1927.
- 8. Proceedings of the Society of Antiquaries of Scotland, 1926.
- 9. Syria, Vol. viii, Pt. 4.
- 10. History of Nickel Money. From the Mond Nickel Co.

Mr. Shepard Pond was proposed for election as a Fellow of the Society.

The evening was devoted to exhibitions.

Mr. Henry Garside exhibited a British Imperial silver Half Crown, Shilling, and Sixpence, and bronze Penny, Halfpenny, and Farthing, all dated 1926, and bearing on the obverse the remodelled effigy of His Majesty King George the Fifth, by Sir Bertram Mackennal, R.A.

Mr. C. J. Bunn showed a series of medals of the Wyons.

Mr. Fredk. A. Harrison exhibited 10 coins of Modern Spain showing the change of unit, real, escudo, peseta, and peso. Mr. H. W. Taffs showed a series of English patterns and proofs from Elizabeth to Victoria, and a set of the London penny tokens (17th cent.), with London buildings.

Mr. P. H. Webb exhibited a series of Roman brass in very fine condition and a series of early Roman Colonial bronze.

Dr. S. Fairbairn showed a fine sestertius of Nero of the Port of Ostia type and another of Hadrian with reverse ADV. AVG. IVDAEAE.

Mr. Gilbert read a short paper on the Hog-money of Bermuda and showed specimens of the shilling and sixpence.

Lt.-Col. H. W. Morrieson, F.S.A., exhibited a series of countermarked coins.

1. A shilling of William and Mary countermarked with the arms of Zeeland. 2. A Charles II half-crown, 1670, with a cross fleury on face. 3. A Queen Anne half-crown, 1706, with a crowned F on the face. 4. A Queen Anne shilling, 1704, with M.C. in a rectangle on the face. 5. A George II shilling, 1758, with an E.S. crowned in rectangle on the neck. 6. A George III shilling, 1787, with king's head in an oval on face.

Mr. A. H. F. Baldwin exhibited a remarkably fine denarius of Domitilla (Cohen 3), an unpublished aureus of Caracalla (wt. 105 grains), with rev. Circus, and a siege crown of Charles I of Pontefract Castle (weight 362-25 grains).

On behalf of Messrs. Spink and Son, Mr. M. S. Spink showed:

- 1. Penny of Henry I, Hawkins type 4, struck at Wallingford.
- The extremely rare Half Groat of Richard III, with mm. Boar's Head.
  - 3. Charles II Crown of 1662, struck in gold.
  - 4. Charles II Crown of 1664, struck in gold.
- 5. Utrecht Noble, imitated from the Noble of Edward III of England.

Obe. MONE NOVA ORDIN. TRAIECTEN.

Rev. RES , PARVAE , CRESCUNT , CONCORDIA.

Ghent. Half Noble, imitated from the coinage of Edward III
of England; dated 1582, about the time of the revolt of the City
from the Spanish Dominion.

#### Obe. MON. AUREA. METROPOL. GAND. FLAND.

- A Louis XVI d'or, imitation struck in silver gilt at Birming ham for distribution in France at the time of the Revolution with a view to embarrassing the Jacobin Government.
- 8. A Napoleon five-franc piece countermarked by the Royalists of the Vendée. This party was self-styled the Chouans—a corruption of Chat-huant (owl), whose screech was adopted as warcry by their first Chief. It prevailed among his followers long after his death in 1794. With one blow they put Napoleon's eye out, and with another stamped the owl over his head.
- 9. Second Republic five-franc piece countermarked by Napoleon III.
- 10. Early Roman Coinage. The excessively rare Dupondius of the semilibral standard, issued probably for only two years, between 271 and 269 B.C. It was equivalent to one-fifth of the silver denarius.

#### Messrs. B. A. Seaby, Ltd., showed:

- 1. An Antoninianus of Dryantilla.
- A William I penny, type VII of London; from the Rashleigh and Watters Collections. One of the finest known of this type.
  - 3. A William I penny, mule of types VII and VIII.
- A William I "PAXS" penny, of very coarse work attributed to St. Davids.
- 5. A very poor "Reddite" crown, which is really rarer than the "Petition" crown.
- 6. A Victoria pattern half-crown, with bust from the dies of the halfpenny.
- A Victoria penny, halfpenny, and farthing, in silver. Of the highest rarity.
  - 8. A large gold medal of Cromwell.
  - 9. A gold and enamel memorial badge of Gustavus Adolphus.
  - 10. An interesting Liverpool badge.
  - 11. An early engraved badge.
  - 12. An early Stuart badge of Shakespeare's centenary.
  - 13. Brunswick 5 taler of Augustus; unusually fine.

- 14. Brunswick 5 taler of Frederick Ulrich; unusually fine.
- 15. Hexagonal taler of Michael Apafi of Transylvania; very
- 16. An interesting "schautaler" of Maximilian of Austria. Apparently struck, if so, of colossal size.

#### MAY 19, 1927.

PROF. SIR CHARLES OMAN, K.B.E., M.P., LL.D., F.S.A., F.B.A., President, in the Chair.

The Minutes of the Meeting of April 21 were read and approved.

The following Presents to the Society were announced, and thanks ordered to be sent to their donors:

- 1. Annual Report of U. S. National Museum, 1926.
- 2. British Museum Catalogue of Greek Coins: Cyrenaica.
- 3. British Museum Guide to the Exhibition of Roman Coins.
- 4. Suomen Museo, Vol. xxxiii.
- 5. Syria, Vol. viii, Pt. 1.

Messrs, H. Garside and L. G. P. Messenger were appointed auditors.

Mr. Shepard Pond was elected a Fellow of the Society.

Mr. I. R. R. L. Pakenham exhibited three varieties of Henry VI, 1422-61, restored 1470-1. 1. Calais ½d. Mule. I-III "Annulet-pine-cone-mascle", annulet obverse, pine-cone mascle reverse. An extremely rare instance of two non-consecutive dies being used together. (Unique (?), unpublished.) 2. London half-groat. Class III variety "Roseleaf" issue, leaf on breast, another after "HENRIC", another after "DI", two more, one turning each way, after "GRA" on obverse. Rev. Leaf after "DON" overlapping beaded outer circle. (N. C., iv. 2, Pl. V, No. 18, from this coin.) (From the Walters collection, lot 352, 1913.) 3. London Restoration groat "HENRIC DI GRACIA ANGL ET FRANC, very curious, reading "GRACIA" in full, with

"REX" omitted. (Raymond Carlyon-Britton collection, part lot 125. Unpublished.)

Mr. F. A. Walters, F.S.A., showed ten half-groats of Edward IV of the London Mint, with mint-marks, sun, crown, long cross fitché. Rev. Sun, short cross fitché, pierced annulet, rev. rose, cross over annulet, cross over one pellet, cinquefoil early and later varieties. All are more or less rare, particularly the short cross fitché pierced and the annulet and rose, the former being unpublished.

Lt.-Col. H. W. Morrieson, F.S.A., exhibited a set of 1, ½, ¼, 1, Hanoverian Death Talers of George I, 22nd June, 1727.

Mr. W. Gilbert showed a very rare second brass of Balbinus (rev. CONCORDIA) and a first brass of Antoninus Pius (Cohen 39), rev. ANNONA, the latter from the Morcom collection.

The Rev. E. A. Sydenham, Messrs. Lawrence, Pearce, and Webb, showed series of coins to illustrate Mr. Mattingly's paper.

Mr. Mattingly read a paper on "Annona and Liberalitas", the symbolical representations on Roman coins of the dole of corn and money.

He traced the history of the corn-supply in the Republic and showed how, from the time of Gaius Gracchus onwards, the supply of corn by the State, either free or for a reduced price, was one of the main planks in opposition policy. The elaborate arrangements for the corn-dole made by the Emperors were then described and instances were given of the importance of the corn-supply on several critical occasions of Roman history. The doles of money, or "liberalitates", were next considered. Reasons were given for thinking that the Emperors of the second century A. D. by these doles aimed at encouraging the poor of Rome to bring up larger families. References were made to the numerous coins that illustrate these themes and interpretations of some difficulties were attempted.

A discussion followed in which the President, Dr. G. F. Hill, Mr. Percy H. Webb, Mr. F. S. Salisbury, and the Rev. E. A. Sydenham took part.

#### June 16, 1927.

#### ANNUAL GENERAL MEETING.

PROF. SIR CHARLES OMAN, K.B.E., M.P., LL.D., F.S.A., F.B.A., President, in the Chair.

The Minutes of the Annual General Meeting of June 17, 1926, were read and approved.

Messrs. H. W. Taffs and W. H. Valentine were appointed scrutineers of the ballot for the election of office bearers for 1927–8.

The following report of the Council was laid before the Society.

The Council have again the honour to lay before you their Annual Report on the state of the Royal Numismatic Society.

It is with deep regret that they have to announce the deaths of the following Honorary Fellow of the Society:

Dr. R. Münsterberg

and of the following seven Fellows of the Society:

J. T. Bennet-Poë, Esq.

G. Hamilton-Smith, Esq.

Miss Cornelia E. Harcum.

Rev. A. W. Hands.

F. G. Lawrence, Esq.

A. H. Lyell, Esq.

Henry Perry, Esq.

They have also to announce the resignation of the following four Fellows:

R. T. Andrews, Esq.

J. W. Brooke, Esq.

Surgeon-Commander E. S. G. Wilkinson.

G. C. Williamson, Esq.

On the other hand they have to announce the election of the following four Fellows:

M. Claudius Côte.
Shepard Pond, Esq.
Miss Mildred Seaby.
L. E. Wills, Esq.

The number of Fellows is therefore:

June, 1926 . Since elected						Honorary. 12	Total. 273 4
					265	12	277
Deceased		1	3	(40)	7	1	8
Resigned	v		100		4	-	4
					254	11	265

The Council have also decided to award the Society's Medal to Monsieur A. Dieudonné, Keeper of the Department of Coins in the Bibliothèque Nationale, in recognition of his services to numismatics, notably his Manuel de Numismatique Française, vol. ii, and his Catalogue des Monnaies Capétiennes de la Bibliothèque Nationale.

The Treasurer's Report which follows was then laid before the Meeting.

The Reports of the Council and of the Treasurer were adopted on the motion of the President.

# STATEMENT OF RECEIPTS AND DISBURSE-

FROM JUNE 1st, 1926,

Ør.			SI.	144		Тн	ES	OCIETY	IN	Accoun
		-			345			£	я.	d.
To cost of Chronicle .		14						454	13	0
,, Rent of Rooms .				5.				50	0	0
, Bookbinding .	11	10						12	14	6
" Refreshments .	-	-	-				+	6	7	2
" Lantern Expenses								8	8	0
" Insurance	100	+12			4		-	1	10	0
, Sundry Payments	9	45					1	70	18	8
,, Research Account		100	4	Val.	4			4	7	0
" Balance carried for	ward	_			£	8.	d.			
General Account	1000		100		255	16	3			
Research Account					27	0	11			
					- 200	300	3	282	17	2
								£828	5	6

# MENTS OF THE ROYAL NUMISMATIC SOCIETY to May 31st, 1927.

WITH PERCY H. WEBB,	Hor	. Tn	EASU	REEL.		30					Er	
	1	1		1501	F		£	8.	d,	£	s.	d.
By Balance in hand, Jun	e 1,	1925 -										
General Account .	*		1.7				241	6	9			
Research Account					10		30	8	8			
							-		-	271	15	5
By Subscriptions—												
Ordinary				+:	***		301	12	6			
Entrance Fees .		-	30	91			3	8	0			
							-		+	304	15	
, Sales of Chronicles			-	160			51%		T.	200	18	1
, Sale of Coins .		7.					13		*	6	0	(
" Dividends and Interest				22					(0)	40	0	10
										£823	5	

PERCY H. WEBB, Hon. Treasurer.

Audited and found correct,

LEOPOLD G. P. MESSENGER, Henry Garside,

June 9, 1927.

Sir Charles Ofnan then handed the Society's Medal to Mr. Walters, to be forwarded to M. Dieudonné, and addressed the Meeting as follows:

It is with the most heartfelt pleasure that I hand over to Mr. Walters the silver medal of the Society for transmission to our Honorary Member Monsieur A. Dieudonné, to whom the Council has just awarded this token of our appreciation of numismatic merit.

M. Dieudonné is not only a writer of distinction on the topics which fall within our sphere, but has served for more than twenty years in the difficult post of editor of the Revue Numismatique. How much tact is required in an editor of a learned periodical, what a broad scope of knowledge he must possess, and how indefatigable he must make himself in the search for good contributors, is known to many of us, who have from time to time discharged similar duties. To have edited for a quarter of a century such a magazine as the Revue, with success and general approbation, is in itself no mean achievement.

But M. Dieudonne has not only been an editor, he has also been an untiring writer in the columns of his periodical, to which he has given many and valuable monographs on various subjects, sometimes on Greek and Roman coins but more frequently on the issues of Medieval France, of which his volume of the Manuel de Numismatique Française shows that he possesses a complete grasp, and displays him as a master of that prolific and interesting series. His papers have been for the most part reprinted in his Mélanges Numismatiques of 1909 and 1921, and well display the width of his interests.

The most important works of M. Dieudonné, and those by which his name will be preserved among the list of eminent numismatists, are his Catalogue of the Coins of the House of Capet, from Hugh to Louis VIII, in the Paris Cabinet—a volume full of minute research—and his volume of the Manuel mentioned above: both are permanent acquisitions for numismatic science.

In 1924 M. Dieudonné succeeded dur late lamented honorary Fellow, M. Babelon, as director of the Cabinet des Médailles, the French national collection. We may indeed say

> uno avulso non deficit alter Aureus, et simili splendescit virga metallo.

The succession is worthily maintained, and the English collector may congratulate himself on the perfect example of the Entente Cordiale exhibited in every dealing of the rulers of the Cabinet des Médailles with their correspondents on this side of the Channel. I have myself often had reason to thank the Paris authorities for casts of coins, and items of information, most liberally supplied. Our vote of the silver medal to M. Dieudonné is (among other things) a practical testimony of our gratitude for many favours received. And we are most anxious to emphasize appreciation of personal obligations, as well as of services to the science of numismatics.

Mr. Walters then read the following letter of acknowledgement from Monsieur Dieudonné:

Monsieur le Président,

La Grande Bretagne est le pays du monde où la numismatique est le mieux appréciée, et la distinction que vous réservez à cette science, au nom de la Société Royale, fait partie de votre tradition bien connue; mais, que vous ayez jeté les yeux sur ma personne pour décerner un pareil honneur, voilà ce qui me surprend agréablement, et dont je suis confus, et fier aussi, autant que reconnaissant.

Vous avez fait allusion à mes travaux sur la numismatique grecque: si j'ai mérité l'attention de ceux des membres de la Société qui s'intéressent particulièrement à l'antiquité, qu'ils sachent bien que je garde à la numismatique grecque la plus grande dévotion. Appuyé sur les traces de mon éminent prédécesseur M. Ernest Babelon et sur les beaux catalogues du British Museum, j'entreprends de publier dès ce mois de Juin les notes que j'avais réunies sur la numismatique de

cette province de Syrie où Anglais et Français combattirent naguère côte à côte.

La période du Moyen Age, dont je continue à m'occuper, m'engage à me tenir en communion avec l'histoire monétaire de la Grande-Bretagne; la bonne organisation du monnayage sous les premiers rois anglais, qui a précédé la nôtre, éclaire l'histoire de nos origines. Vous avez parlé du Catalogue des monnaies des premiers rois Capétiens; l'honneur qui m'est fait m'encourage à en préparer la suite; et quant au Manuel, je le reprends sur un plan plus vaste, de façon à le transformer en un traité où vous trouverez, je l'espère, des notions générales de nature à vous intéresser.

Ce que vous dites de l'empressement avec lequel les dirigeants du Cabinet de France ont toujours répondu aux demandes de MM. les collectionneurs anglais m'a beaucoup touché ainsi que mes collègues, je n'ai eu en cela qu'à continuer une tradition qui n'est pas près de s'éteindre, et il m'est doux de penser que l'établissement auquel je suis attaché reçoit sa part de félicitations.

Je suis on ne peut plus sensible à celles que je recueille de Vous, Monsieur le Président, et j'en conserverai, croyez-le bien, M. le Président, MM. les membres du Conseil, et vous tous, MM. les membres de la Société, avec une inaltérable reconnaissance, le souvenir ému.

A. Dieudonné,
Conservateur du Cabinet des Médailles et
Antiques à la Bibliothèque Nationale,
Paris.

The President then delivered the following Address:

### THE PRESIDENT'S ADDRESS.

Following the custom of my predecessors in the chair, I commence with an obituary. Of the seven ordinary fellows of the Society whose loss we have had to deplore since our last Annual Meeting five were unknown to me, and I think have never been frequenters of our monthly gatherings or contributors to the *Chronicle*. But of the other two I must say a few words, since they were members of mark.

The Rev. Alfred Hands was an old friend of mine, and was (I doubt not) equally well liked by many others of his colleagues. He was a man of a singularly mild and genial disposition, a good companion, and full of knowledge of various sorts. His Manuals on Greek coins must be known to every one here, and bear witness to his wide reading, and his powers of condensation and exposition. He had collected an immense amount of numismatic information, and made it available for the young collector. At our meetings he was often present and always welcome, and more than once he contributed small monographs to our Chronicle.

Mr. G. Hamilton-Smith had a world-wide reputation as the owner of a magnificent series of British war-medals, and was also the happy possessor of many fine coins of the Tudor and Stuart series. He was also a very patriotic Bristolian, and had accumulated an interesting collection of pictures, engravings, and books relating to the ancient city by which he dwelt. His collections were sold at Glendining's during the last month, and proved to be of a surprising richness. Foremost among his military antiquities were the Sword of Honour of Sir Thomas Picton, the famous and rough-tongued Commander of Wellington's 3rd Division during the Peninsular War,-with all his many-barred British and Portuguese decorations. There was also one of the three known specimens of the silver Indian General Service Medal given to British officers for the small but gallant action at Korygaum, in the Old Mahratta War, and many other similar rarities. The English coins comprised many beautiful pieces, and sold for prices that far exceeded the average. A specimen of the well-known but seldomseen Oxford Crown of Charles I, with the view of Magdalen Tower behind the king, fetched the record price of £400. Of the other deceased members Mr. Bennet-Poë's interest lay (I believe) in Italian medals, and Mr. Lawrence's in English Tokens.

One honorary member was lost to us during the past year—not much over six months after his election—Dr. Münsterberg of Vienna, known not only as an official of the Vienna Museum of Antiquities, but as the compiler of some most laborious pieces of numismatic work, such as the catalogue of the names of all magistrates found on Greek autonomous coins, and that of the exact succession of titles used from time to time by each of the Roman emperors.

I note also the resignation of four ordinary fellows—two of them were among our most senior members, Mr. Williamson having been elected as far back as 1881, and Mr. Andrews in 1884. We are sorry to lose them.

These deaths and resignations bring down our members by twelve, and I regret to see that the influx of new members is not nearly sufficient to fill the gap—since only four have been elected. This is a sad feature of my recent reports on the condition of the Society—its total membership tends very slowly to decrease.

I have heard many suggestions as to the causes of this undesirable phenomenon-such as that the doubled subscription to the Society since the war proves too much for the purses of young collectors of moderate means, or that possible members not resident in London, whose sole touch with the Society would have to be through their receipt of the Numismatic Chronicle, may have been deterred by the late and irregular appearance of that much esteemed periodical. Excellent though its contents are, it must be confessed that punctuality of issue is not its strong point-we are still waiting patiently for the advent of the last number of 1926. I do not myself think that either of these alleged causes suffices to account for our slow recruiting, and am inclined to go back to a remoter origin. It is much more difficult in these days for the boy-antiquary—the raw material for our membership-to start his modest collection by diligent search among the coin-bowls which used forty years ago to be found in the windows of so many local silversmiths and curiosity dealers. When I was young every town, however small, had some shop where coins were displayed to tempt the young beginner. It is true that the bowl often contained nothing more than shillings of 1787 or much-worn sixpences of Elizabeth. But on the other hand there were glorious chances, when diligent search was rewarded by finding a new type of Carausius, a Saxon sceatta, a half groat of Philip and Marv, or a siege piece of Charles I. All these flashes of luck happened to myself as a boy. But now you may search round a small English town without seeing a single coin displayed, and inquiry for them only leads to a slighting answer to the effect that they are not worth stocking. If a country jeweller does buy a bag of coins by some chance at a sale, he seems to send them up to London at once, and to sell them blindfold and en masse. Even in comparatively large towns, which used to be good coin-centres, like Bath, Cheltenham, and Bristol or Birmingham, there are not a quarter as many places where it is worth looking for a coin as there were in 1880, or even 1899. My son-a diligent hunter-bears out my own observations in this line. I presume that the increased rapidity of communications in England probably explains the phenomenon-just as it does the similar fact of the general decadence of small-town jewellers and silversmiths, who are notoriously a less well-provided race than they were in the last generation. Buyers, it is said, run to London or some other great centre, instead of patronizing local sellers. Hence supposing that the well-intentioned boy has the collector's instincts, and is started with a gift of coins miscellaneous from some benevolent uncle, he finds it hard to go on accumulating, for sheer want of the chance-and may decline on to Philately (horrid word !) or some other line of collecting, which cannot be compared for merit with our own noble science.

I must congratulate Mr. Treasurer on the flourishing state of the finances of the Society, despite of our slight fall in membership. It will be noted that there is an unusually large item on the credit side due to the sale of the back-numbers of the Chronicle at very moderate prices. For the benefit of those members whose only touch with us is by the circulation of

that excellent periodical, I should like to explain the situation. A gallery in the coin-room of the British Museum contains the stock of unsold copies of the Chronicle, going back to years as remote as the 1850's. Now, many of these numbers contain nothing that is of any importance. Numismatic science has gone far ahead in the last fifty years. But there are others, of which many or few copies are still on the shelf, which contain matter of excellent quality, and our members have now the chance of purchasing for 6d. or 1s. parts containing useful monographs on subjects to which no appreciable new knowledge has come to hand since they were written. There are also records of great finds, both of English and of Roman coins, useful for dating purposes, which can never cease to have some value-such as those of the Blackmoor Carausius hoard, the East Harptree, and the "City of London" Anglo-Saxon find of many thousand pieces. All these are worth having from the point of view of the scientific numismatist, and I commend the file of "remnants" to the attention of all members of the Society who are short of early numbers, or wish to have duplicates for "binding up" of articles on their own particular line of studies. I see that Mr. Treasurer has already obtained £50 from this sale of surplus copies-if the opportunity is realized by every one, that sum ought to be doubled.

For the last three years in succession I have had something to say about the condition of the English silver currency. "Hope long deferred maketh the heart sick", and I have predicted the early appearance of a new issue so often that I fear that the Society may have grown tired of the topic. However, I think that I ought to inform my colleagues that this spring I have seen, by the courtesy of the Deputy Master of the Mint, not only designs for the new coinage, but early strikings of the actual pieces which the Committee of Taste appointed by the Chancellor of the Exchequer has selected for issue. They will not be put into circulation till January 1, 1928, so that we shall not be able to use the fine big crown piece for Christmas Boxes, as I had hoped might be the case. The appearance of this long-desired

crown of George V, making complete the series of coins of that denomination from Elizabeth downward, will be a source of gratification to every collector-even though the general public may grumble a little (as of vore) at its portly dimensions. St. George and the dragon have disappeared from itfor the first time since 1887-but I think that the new reverse-type will be generally accepted as handsome and dignified. All the other devices, except that of the shilling. are much varied from those of the earlier issue of King George V. The head on the obverse is a finer portrait, and gives the hair in a much more satisfactory fashion than the coins of 1911-27. Some of the reverse-types are, in my humble opinion, much more satisfactory than others. But all may be regarded as great improvements on the banal types of the issue hitherto current. I wish that I could add that the new coinage was to be in good metal-at least as good as that of the Irish Free State or the rouble of the Soviet, but apparently Sir Austen Chamberlain's unhappy 50-50 amalgam is still to be preserved. This is a thousand pities. for (as every one who looks at a handful of mixed silver coins knows well) the various base metals introduced into the currency in 1920 are still playing tricks-the vellow or dusky-red splotches on the royal portrait are becoming more frequently visible as the coins of 1920-7 get more worn. The present issues of 1926-7 will undoubtedly all show red patches as the silver coating-thick though it has now become-is rubbed down by the attrition of a few years. We are reminded of the "Antoniniani" of Gallienus or the parti-coloured coins of Aurelian's restored coinage, where the copper invariably crops up through the thin silver coating.

I was in Italy in April, and was glad to see that Signor Mussolini, when restoring the metallic currency of his country, has used good-quality silver for the newly issued high denominations, the 5 lire and 10 lire pieces. The smaller values from the 2 lire downward remain pure nickel. But it is a very interesting thing to note that the modern Italian RESTITUTOR MONETAE has adopted

the same device as Protector Northumberland in the English re-coinage of 1551-i.e. restoration of quality is accompanied by reduction of weight. The new fine-silver 10 lire coin is not much larger than a 2 lire piece of 1913, nor the 5 lire coin than an old I lira of pre-war days. This looks as if the theory of permanent stabilization of monetary values-of which the new coinage forms an important item-was designed to arrive at an ultimate ratio of about four units for every one of the former currency. It is a pleasure to see that the new Italian silver-very handsome coins with classical reverses-is rapidly driving the crumpled and tattered 5 lire note out of circulation, and even causing an appreciable diminution in the number of the only less war-worn 10 lire notes now current. I wish that I could hear of any similar reform in France, where the gilt base-metal franc is rapidly losing all its surface, and becoming a very obvious piece of copper.

To revert from these general numismatic topics to the actual work of our Society during the past year, I may state that we have held the usual ten meetings, of which one was (as always) statistical and official, and two "exhibition meetings": at seven papers were read. It is rather surprising to find that only one of these papers was on Greek coins, and that only one long and one short communication dealt with English coins, all the others being concerned with the issues of the Roman republic and empire. This lack of Greek papers is, however, atoned for by very important articles printed in the Chronicle, though they were not read as papers before the Society. The strong predominance of communications on Roman topics which were actually read. and followed by discussion (sometimes of considerable length), shows where the interests of the majority of our really active members are tending at present. Not that I mean to assert that Greek and English numismatic studies are by any means languishing, but that it is obvious that the Roman problems are being studied with an attention that was not visible a few years back.

Our papers on Roman subjects read and discussed comprise three by Mr. Mattingly, and one each by Mr. Salisbury.

Mr. Webb, and myself, with one short communication on a unique coin by Mr. Sydenham. Two of Mr. Mattingly's monographs were on those rather impersonal divinities "Hilaritas" and "Annona"-apparently actual goddesses of the fifth class, and not mere convenient allegorical figures. There was at any rate a festival of the Hilaria over which Hilaritas apparently presided—it had something to do with the rejoicing of nature at the return of Spring. The type was uncommon, only starting with Hadrian and ending with Carausius. Mr. Mattingly shows that Annona, too, can hardly be denied a personality, though she only assumes it at a somewhat late date. The care of the State for corndistribution had many commemorations on the coinage before a patron-goddess for the function was invented. Under the early Republic the corn-dole was originally a sporadic thing, only called for in times of actual dearth. Occasions when magistrates were set to cope with a famine are recorded on the early denarius with the column of Minucius, and the later ones which show Fannius and Critonius, and Piso and Caepio, seated on their curule chairs before ears of corn, not by representation of any divinized abstraction. Annona as a definite female figure, carrying corn-ears, or with a cornbasket at her feet, or occasionally with her hand on a ship, only appears for the first time under Nero, though from his time down to A.D. 250 she is one of the most common types in the whole Roman series. Does the cessation of the familiar representation mean that the corn-dole fell out entirely during the troublous days of Gallienus, and was not resumed when times grew better under Aurelian and Probus? Or was it merely the commemoration of the gift that ceased, not the gift itself. "Liberalitas" seems to represent distributions of money as opposed to distributions of corn. This wretched demoralizing custom seems to have gone on increasing all through the second and third centuries, the number of denarii per head that was given to the citizens always mounting up. Apparently it was killed by the swift fall in the value of the actual coin after the wholesale debasement of the silver currency between 250 and 270. However,

many denarii, running up to thousands, Gallienus might distribute, the purchasing value was so trifling as to be negligible. Why Liberalitas has a ticket in a frame, or some such object, as her special attribute, rather than a purse, I cannot think. Was there some regulation as to the use of tickets, when drawing the donation, which made them particularly typical and important?

Mr. Webb when dealing at our October meeting with the coinage of Probus, explained the great difficulty of arrangement of that emperor's pieces under their places of issue, owing to the tiresome fact that many of the mints dropped their custom of putting their initials in the exergue during this reign. He also produced possible explanations for the odd behaviour of certain mints which substituted XX for XXI in the value-statement on their coins, or used the Greek numerals KA instead, or in a few cases inscribed both the Latin and the Greek figures on the reverse of the coin. This practice, it would seem, could only have been useful in bilingual districts, such as were to be found in some parts of the Balkan Peninsula. Serdica was in such a district-Siscia was not. If then some KA marks appear upon a few coins of Siscia-it was apparently the result of the suppression of the mint of Serdica, and the moving on of its plant and staff to the more northern city.

When dealing with the XX and XXI value-marks Mr. Webb got upon the same ground that was covered by Mr. Mattingly's third paper, which was wholly devoted to an elucidation of those puzzling numerals. He was inclined to think that they meant a valuation of the coin at twenty libellae or two sesterces, making this normal denomination of Aurelian and his successors a coin of \( \frac{1}{2500} \) gold pound. This theory met with criticism in the debate; Mr. Webb holding that in appearance and type the silvered coin of Aurelian was intended to resemble an "Antoninianus" of Trajan Decius or Philip, and that piece represented not 20 libellae but 60 or perhaps 80—according as the antoninium was valued at \( \frac{1}{2} \) or 2 denarii, a point on which specialists are not agreed. Moreover, there is no sign that

the libella was ever used as a unit of calculation during the third century. The question of what unit was represented by the XX figures must still, therefore, be held to be subjudice. Conceivably it was twenty depreciated denarii, of the sort that had been circulating in the chaotic years before Aurelian's reform.

My own paper was an attempt to arrange chronologically the silver issues of Constantine the Great and his sons, between A.D. 312 and A.D. 360, which display many difficulties of denominations and of names:—at least, three separate sizes of silver coin with inconvenient relations to each other were circulating during the long reign of Constantius II, and matters were not simplified till the joint reigns of Valentinian and Valens. Mr. Sydenham's interesting note consisted in the publication of a hitherto unknown large silver piece of Constantine Junior, whose existence (since its striker was so short-lived) suffices to fix the dates of similar pieces of his brothers Constants and Constantius.

Mr. J. G. Milne printed, but did not read, a contribution on the currencies of Roman Egypt in the fifth century A. D., containing curious details as to the chaotic state of the circulating medium in this age, when many pieces were absolutely rubbed flat and became illegible, while others were local forgeries of the rudest kind, apparently accepted when mixed in the mass of very small denomination coins.

Mr. Salisbury's very interesting paper was on the deductions to be drawn from the distribution of the coins found in the recent excavations at Richborough. The finds showed that this famous port was held down to the very last retention of the Roman hold on Britain, pieces of the Arcadius-Honorius period being very strongly represented. There was no evidence for any later occupation of the place after Constantius III and the date a.d. 410—a few coins of this usurper were found, but nothing later. Defenders of the theory that the Roman connexion persisted for some quarter of a century after 410 would find nothing to support their views. But they might perhaps plead that early fifth-century Roman copper and silver coins are rare in all denominations.

in France and Italy no less than in England, while the gold of emperors like Valentinian III and Theodosius II is common indeed, but gold coins of all dates were very rare at Richborough. Mr. Salisbury made an interesting suggestion that the "dragon" type on many early Saxon sceats may conceivably have been a degraded imitation of the "overthrown barbarian horseman" type, frequent on coins of Constantius II and his successors, and a series of reproductions of degenerate and degraded types made the idea look quite plausible.

On the Greek side by far the most important contribution that has been made to the Society's records this year is Mr. Vlasto's long paper on the coinage of Alexander, son of Neoptolemus, King of Epirus, the brother-in-law of Philip of Macedon. His money, as all collectors know, is very beautiful but very scarce, no single collection possessing more than a very few specimens of his silver and gold. It was therefore no mean task that Mr. Vlasto has accomplished, in collecting from more than a score of cabinets all over the world photographs of all the known coins of this monarch. When placed together they fall into several well-marked classes, and Mr. Vlasto has succeeded in showing good reasons for ascribing the earliest and rarest group to the first years of Alexander's reign in Epirus, the central, finest, and most numerous group to the period of his compaigns in Italy (334-330) as being struck at Tarentum and another mint-probably Metapontum-west of the Ionian sea. There remains a third class, probably issued at the home mints of Epirus during Alexander's last two years. The head of Zeus upon these last has an unmistakable resemblance to that on some triobols of the Aenianes of contemporary date. Was this the result of the chance employment of the same artist for both issues? Or were the Aenianes in close alliance with Alexander at this time?

Our Vice-President, Sir Arthur Evans, has now printed the important paper read last year on rare or unpublished coins of Magna Graecia and Sicily from his own cabinet. They include not only some very rare, and apparently unpublished.

early "horsemen" of Tarentum, but one or two tetradrachms from Sicily, of the first importance. The most surprising of them, for its art even more than for its rarity, is the tetradrachm of Gela, with a full-faced head of the local river-god of the Gelas,-early for a full-faced coin, since it must have been struck before the destruction of the issuing city by the Carthaginians in 405 s.c. But it is paralleled by the full-face of Apollo on a very rare stater of Catanaillustrated by Sir Arthur for comparison-signed by the artist Choirion. The group composed of these two coins and a small full-faced Heracles drachm from Selinus well deserves minute study. There is another magnificent coin. of a somewhat later date, in the plate which contains those pieces of Gela, Catana, and Selinus, viz. the three-quarterface Syracusan tetradrachm showing Pallas, from the Benson collection, of which the only other specimen is the wellknown example in the British Museum. This is the richest in treatment of detail of all large Syracusan coins, though perhaps not the most artistic: it is signed by Eukleidasmany prefer the style of his contemporaries Euainetos and Kimon, though all three were great masters. On several others of the coins illustrated in this article, the neverfailing keenness of Sir Arthur Evans's eye has discovered minute signatures of artists which previous savants had failed to note.

The Keeper of Coins has given us his usual—and always much appreciated—annual article on Greek acquisitions of the British Museum cabinet. The pieces illustrated include three new types of staters of Mende, from the recently discovered hoard which has made the tetradrachm of that Chalcidian city no longer so rare as of yore. But much more exciting to the enthusiast for novelties is the archaic tetradrachm of Scione, with a very odd head of its founder Protesilaus, one of those heroes of the Trojan War who became by shipwreck enforced founders of new cities. Most fortunately the artist has inscribed AAIRATOST on the crest-holder of the hero's helm, and thus enabled us to identify the queer portrait with certainty. It had been

misread on the only other known example of this extremely rare coin. Students of Greek money will note several other curious coins among the British Museum novelties-the archaic Aeginetan stater of a Thracian king called apparently Eminakos, an iron piece of the small currency of Argos, a new type of late drachm from Cos, and a Seleucid tetradrachm of Antiochus V, struck in Phoenicia, with the wellknown type of the eagle on its reverse. It had hitherto been thought that this series of low weight and eagle type started with Alexander Bala, but this coin proves that we must put back the first issue of "Phoenician weight" tetradrachms of the Seleucidae by some twelve years. But perhaps the most historically interesting coin in Dr. Hill's article is the gold piece of the Egyptian king (or pretender) Tachos, who raised Egypt in the great general revolt of the East against Persia in 361 s.c. The types are purely Athenian-the Pallas head and owl in incuse, -a fact which would seem to prove that Attic gold was in more common circulation in the Levant in this age than has generally been supposed. King Tachos must obviously have chosen this type and weight because it would secure universal acceptance among his mercenaries.

Mr. C. T. Seltman gives us this year an interesting paper on "Aegean Mints", in which he endeavours to elucidate the places of origin of the heavy dumpy Aeginetan-weight didrachms of the most archaic style, which have caused so much trouble by their entire want of inscriptions. He divides them, according to the style of their incuse reverses, into three distinct groups. The first centres in Aegina, whose earliest "Union Jack" incuse is copied by Athens, Siphnos, Seriphos, Ceos, Melos, and (this is a new attribution) Megara. The long-desired archaic issues of Megara Mr. Seltman would find in the well-known coins with two dolphins swimming in different directions, which have hitherto been attributed to various other cities. The idea seems well worth study, for surely Megara must have had coins of her own in the days of her early importance. The second group with what Mr. Seltman calls a "St. George's Cross" incuse

of straight lines, he attributes to Delos, Paros, Naxos, and Tenos: the third group with the odd incuse of two juxtaposed indents, one large and one small, he ascribes to Cos, Thera, and Caunus. This division of types enables us to make useful deductions as to the character of seventh-century trade-routes in the Ægean.

My own contribution on the Greek side this year was a paper on the later issues of the Corinthian Pegasus-staters, in which I tried to bring some little order into a series which has been rather neglected by recent writers. I endeavoured to show that the regular series of these famous staters probably came to an end about 300 g.c., with the issues bearing the initials of the mint-master AY. Those of very rough style and poor execution, with unreadable monograms, I was inclined to place at a long interval after the rest, and to ascribe to the time of the restoration of Corinthian liberty in 243 g.c.—before the establishment of the regular inter-state currency of the Achaian league.

On English numismatics this year our great contribution was Mr. Lawrence's paper, read in March, on the sequence of the gold and silver money of Edward III in the central years of his reign 1351-4-after Cressy and before the Treaty of Bretigny. He traced the connexion, by means of " mule-coins" of the earlier issues of the king, the so-called "Florin-type" pieces, with this period of the great coinage. Lantern-slides illustrated the different forms of initial-crosses and of lettering, by which a framework could be constructed for the arrangement of sequences. Important evidence was discoverable from the York royal mint, which was working for the two years between the middle of 1353 and May 1355. Privy marks could also be found, differentiating various periods for the Trial of the Pyx, often made by the employment of curious letter-shapes, caused by deliberate defacing of some detail of the inscription. The mint-accounts throw some light on the dates of different emissions-quarters when very little money was struck being apparently identifiable by the fact that certain varieties of privy marks are extremely rare. This paper was a very typical example of

Mr. Lawrence's acute powers of deduction, and patience in searching through innumerable small features of hundreds of coins, in search of differences which the casual observer would never notice. The "joint method of agreement and difference", as the logician calls it, leads, when skilfully applied, to broad generalizations and established results.

We have also had, during the year, a paper by Mr. H. Symonds on Mint-accounts of Edward IV, which adds something to our knowledge of the dates of his provincial mints. Apparently those of Norwich and Coventry were very short-lived, having been at work for less than a year, in 1465,—the rarity of their issues is not inconsistent with this deduction. The royal mint of York was much longer in existence, but coined very little either of gold or of silver—sometimes only 5 or 6 lb. weight of gold and less than 100 lb. of silver in a month. It seems to have stopped in 1471. Bristol was the only long-lived and really prolific provincial mint.

I may almost count as a contribution on the English side of our studies a paper communicated by Mr. Fonahn, concerning a hoard of pennies, found at Stein in Norway, as the majority of the pieces were of Anglo-Saxon origin. But the real interest of the article lies in the publication of a perfectly new type of St. Olaf, King of Norway, 1016–30, representing the Holy Ghost in the form of a dove, obviously copied from the well-known but excessively rare penny of Ethelred the Unready which bears that same device. Uncommon though the original coin is, it was evidently sufficiently well known in its day to beget imitations.

The Keeper of the Coins gives us two papers on Renaissance Medals—the first is an interesting bronze of an Italian diplomatist and soldier, Giaffredo Carles, who long served Charles VIII and Louis XII of France, and died President of Dauphiné in 1516. His career had never before been properly elucidated. The second adds three items to the short list of medals of Turkish Sultans hitherto known—pieces of Mohamed II, Selim I, and Soliman the Magnificent—not the happiest products of Italian Medallic Art, but interesting as showing the way in which every one—friend

or foe—was recorded by some one of the busy tribe of Renaissance Medallists—who seem to have been as omnivorous in their tastes as the modern kodak-snapper.

The Society indulged during the past year in two "Exhibition Evenings". At one of them I was unable to be present—being that day at Foggia in Apulia—but I understand that it was as fertile in objects for admiration and envy as was the January meeting at which I was fortunate enough to preside. There were, as I understand, many pieces of exceptional rarity or beauty on view—ranging from Mr. Gilbert's aurei and siliquae—always things very exceptional in quality—to Reddite crowns and the strange dollars of the ephemeral War-Lords of Modern China. Such meetings are excellent stimulants for all collectors, and often open our eyes to the existence of rarities of which we had no previous knowledge.

In conclusion I wish the members who have been good enough to present themselves here this afternoon a pleasant Summer holiday fertile in Numismatic acquisition—and when holidays are over a Christmas or New Year joy from the appearance of the promised complete new issue of coins of George V—long desired, and, let us hope, satisfying in artistic merit if not in complete purity of metal!

Lt.-Col. H. W. Morrieson proposed and Mr. William Gilbert seconded a vote of thanks to the President for his address.

The result of the ballot for office-bearers for 1927-8 was announced as follows:

#### President.

Professor Sir Charles Oman, K.B.E., M.P., M.A., D.C.L., LL.D., F.S.A., F.B.A.

#### Vice-Presidents.

SIR ARTHUR J. EVANS, M.A., D.LITT., LL.D., Ph.D., F.R.S., F.S.A., F.B.A.

GEORGE F. HILL, Esq., M.A., D.LITT., LL.D., F.S.A., F.B.A.

Treasurer.

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Secretaries.

John Allan, Esq., M.A., F.S.A., M.R.A.S. Lieut.-Col. H. W. Morrieson, R.A., F.S.A., F.R.S.A.

Foreign Secretary.

George C. Brooke, Esq., M.A., F.S.A.

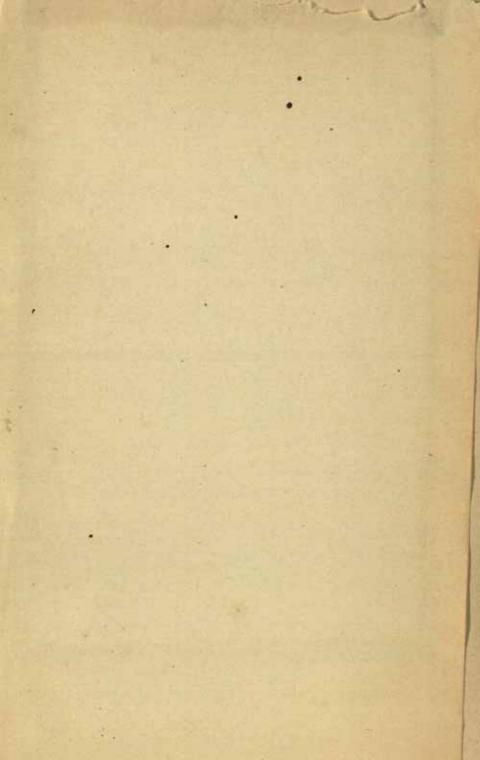
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L A. LAWRENCE, Esq., F.S.A.

Members of the Council.

V. B. Crowther-Beynon, Esq., M.A., F.S.A., M.B.E. Lady Evans, M.A.
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William Gilbert, Esq., M.S.A.
Harold Mattingly, Esq., M.A.
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Rev. E. A. Sydenham, M.A.
Fredk. A. Walters, Esq., F.S.A.
H. Nelson Wright, Esq., I.C.S. (retd.).

The President then proposed a vote of thanks to the auditors and scrutineers of the ballot and adjourned the Society till October 20.





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