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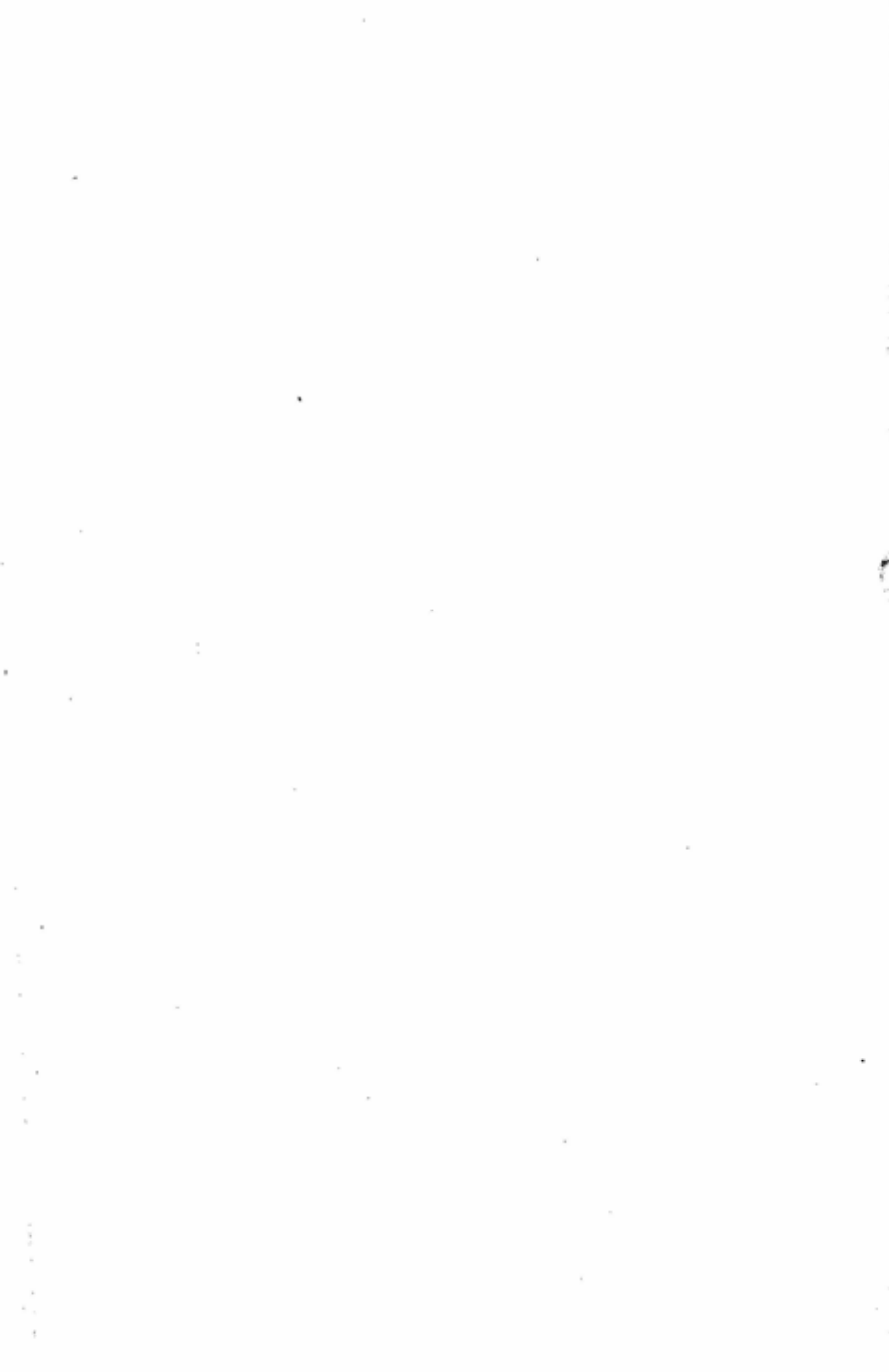
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AND
JOURNAL OF
THE ROYAL NUMISMATIC SOCIETY

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THE
NUMISMATIC CHRONICLE
AND
JOURNAL
OF THE
ROYAL NUMISMATIC SOCIETY

EDITED BY

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I.

GREEK COINS FROM THE DARDANELLES.

(SEE PLATE I.)

THE following coins have been lately acquired by the British Museum from a collection formed during several years' residence in the Dardanelles. Most of them are of imperial times, but some possess considerable interest, and there are several apparently new varieties, while others do not seem to have been described since Mionnet. The opportunity has also been taken to describe one or two other coins already in the National Collection, where they help to elucidate the coins under notice. Such coins are marked B. M.

THRACE: COELA.

1. *Obv.*—**IMPVIBTREBCALLVSAVG** Bust of Treb. Gallus r., laur., wearing paludamentum; dotted border.

Rev.—**AELMVNICI PCOEL** Bust of City I., wearing modius, at her shoulder cornucopiae; dotted border.

Æ. 0.95. 123.7 grs. (8.02 grm.).

The reverse type also occurs on a coin of Gallienus in the Berlin collection.¹

¹ *Beschreibung*, i, p. 262, No. 15.

BITHYNIA *in genere.*

2. *Obv.*—ΑΥΤΝΕΡΤΡΑΙΑΝΟΣΑΙΣΑΡΣΕΒΑΣΓΡΜ(*sic*)
Head of Trajan r., laur.; dotted border.

Rev.—ΕΠΙΓΙΟΥΒΑΣΣΟΥΑΝΘΟΥΠΑΤΟΥ Eagle
standing to front on globe with wings open and
head r.

Æ. 0.90. 116.3 grs. (7.54 grm.). [Pl. I.] B. M.

3. *Obv.*—ΑΥΝΕΡΤΡΑΙΑΝΟΝΚΑΙΣΕΓΕΡΔΑ Head of
Trajan r., laur.; dotted border.

Rev.—Eagle exactly as on No. 2; no inscription.

Æ. 0.90. 88.9 grs. (5.76 grm.). [Pl. I.]

The first of these coins, which has long lain in the cabinet of uncertain coins in the British Museum, is unknown to the authors of the *Recueil général*. They give, however, two other types with the name of the same proconsul (*R. G.*, i, 2, p. 239, Nos. 27, 28). A similar reverse type occurs on a coin (also with the name of a proconsul) of Vespasian at Bithynium (*R. G.*, *ibid.*, p. 269, No. 5) and of Domitian at Nicaea (*R. G.* *ibid.*, p. 406, No. 63). Bassus left the province about A.D. 102 (Trajan is not yet called 'Dacicus').² It is remarkable that no proconsul is mentioned on the reverse of No. 3: the addition 'Dacicus' shows that the coin is subsequent to 102, while the absence of Optimus or Parthicus suggests that it is before 114, and it may be proposed that the coin should be assigned to the years 111–113, when the province was taken over from the Senate by the emperor and governed by Pliny, not as a senatorial proconsul but as the *legatus pro praetore* of Trajan.

² See *Prosopographia Imp. Romani*, ii, p. 171.

PRUSIAS AD HYPIUM.

4. *Obv.*—ΜΑΥΡΗΛΙΟΣΟΥΗΡΟΣΚΑΙΣΑΡ Bare-headed bust of M. Aurelius r.

Rev.—ΠΡΟΥΣΙΕΩΝ ΠΡΟΣ ΥΠΙΩ Beardless figure of youthful proportions standing to front, head l. His arm rests on a short serpent-staff, and he is naked save for a chlamys which is wrapped round the upper r. arm, passes behind his shoulders, and hangs down over his l. elbow.

Æ. 0.80. 101.8 grs. (6.60 grm.). [Pl. I.]

This coin, on which the absence of the beard is certain, adds another to the very uncommon representations of Asclepius as a beardless youth; the pose is the same as that of the similar figure on a bronze medallion of Antoninus Pius published by Sir John Evans,³ except for the inverted stance and slight variation in the arrangement of the chlamys. There seems no reason to doubt that the figure is meant for Asclepius and not Apollo. Apollo does not appear at all in the series of coin types at Prusias, while the cult of Asclepius is attested by an inscription⁴ and by the frequent use as coin types of Hygieia and of the serpent coiling round an altar or cup. Apart from the coin under notice the figure of Asclepius himself appears as a coin type only once, under Hadrian (*R. G.*, No. 13, not illustrated), where the condition of the coin is such that it would seem to be impossible to

³ *Num. Chron.*, 1867, Pl. i. 1. Cp. also the very similar figure standing with Salus on a medallion of Hadrian: Gneecchi, *Medagl. Rom.*, III, Tav. 147, No. 6. See, however, Wroth in *Num. Chron.*, 1882, p. 301 seqq. (who would regard all naked youthful figures with the serpent-staff as Apollo, god of healing), and von Sallet, *Z. f. N.*, 1882, p. 140, followed by Pick, *Num. Zeit.*, 1891, p. 68 (Serdica).

⁴ *Inscr. Gr. ad Res. Rom. pert.*, No. 69, as ΣΩΤΗΡ.

decide whether he is bearded or not. Owing to the difficulty of deciding this question the type of the beardless Asclepius is often attributed to many more cities than the evidence justifies. Wieseler, for example, in his article on the subject⁵ has been frequently misled by imperfect engravings of coins often in mediocre condition. After checking so far as possible the numerous coins he cites, I can only find the beardless figure with certainty at Phlius, Troezen, Zacynthus, Serdica, Cierium, Parium, and possibly Pergamum.

Of the remarkable issue of Cierium with the youthful seated figure and the serpent coiling up a tree trunk three specimens are known: one published by Bompois now at Paris, weighing 173.1 grs., one formerly in the Fox collection now at Berlin, weighing 177.0 grs., and one in the Photiades collection, weighing 175.1 grs.⁶ The beardless seated Asclepius has also been recognized on bronze coins of the Magnetes and Tricca, but in both cases the evidence is insufficient⁷ and the Cierian type stands isolated in the Thessalian series. The didrachm is an exceptional coin in Thessaly: leaving these coins of Cierium aside it only occurs at the important cities of Larissa, Gomphi-Philippopolis, and Pherae, and then in conjunction with the drachm

⁵ "Die bildlichen Darstellungen des jugendlichen und unbärtigen Aesculap," in *Götting. gel. Nachricht.*, 1888, p. 143.

⁶ Bompois, *Observations sur un didrachme inédit de la ville de Cierium en Thessalie* (11.22 grm.); Fox, *Inédited Greek Coins*, Part I, p. 31, No. 9, Suppl. Plate No. 9 (11.47 grm.); *Photiades Sale Cat.*, No. 51, Pl. i (11.35 grm.).

⁷ Wieseler, *loc. cit.*, and Thraemer in Pauly-Wissowa, s. v. Asklepios. *E. g.* of four varieties of the Tricca type in the British Museum, three are unquestionably bearded and one doubtful.

and smaller denominations; its normal weight, as might be expected in the Aeginetic standard, runs from 182.5 to 185.5 grs.⁸ Apart from these didrachms, which read **KIEPIEΩN**, the only silver coins that we have of Cierium are trihemiobols, obols, and hemiobols, with the ethnic written **KIEPIEΙΩN**, though the later bronze coins show both forms. On no other coins do we find any representation of Asclepius or any reference to his cult.

In view of the rarity of the cult of the beardless Asclepius outside the Peloponnese it is a remarkable coincidence that Prusias ad Hypium was known as Cierus before it received its later name from a Bithynian king. Memnon, our only authority, says that it was so called after a river Cierus which flowed past it; he gives the ethnic as *Κιερανοί*. The Thessalian Cierium also had another name; it was originally, and indeed generally, known as Arne, and as such it is commonly referred to in classical authors. Apart from the coins we only know of its second name from Stephanus, who gives it as Cierium, and from Strabo, who gives it as Cierus.⁹ I would suggest that these didrachms, which have till now been given to Arne-Cierium in Thessaly, may really belong to Cierus-Prusias in Bithynia. The Thessalian town was known

⁸ Of 24 examples of the didrachms of these three towns which I have been able to collect 19 fall between 182.5-185.5 grains (11.83-12.02 grammes), the "outliers" being 178.5 grs. (11.57 grm.), 180.0 grs. (11.66 grm.), 180.5 grs. (11.70 grm.), 188.0 grs. (12.18 grm.), 188.5 grs. (12.21 grm.).

⁹ Steph. Byz. s. v. *Ἀρνη*; Strabo ix, cap. 5, § 15. Strabo's form Cierus seems to be supported *inter alia* by a passage of Theophrastus, where *Κίερον* should be read for *Κίθρον*. See Meineke's note to the passage in Stephanus in the Berlin edition of 1849.

indifferently as Cierium or Cierus, so it is not of great importance that the only author who gives us the earlier name of Prusias should give it as Cierus—the town took its name from a river, and it might do so either in the substantival or adjectival form. That Memnon gives the ethnic as *Κιερανός* and not as *Κιεριεύς* need not surprise us: in the same way the ethnic of Amastris is invariably given in the authors as *Ἀμαστριανός* (*Ἀμαστρηνός*), while the early coins are inscribed **ΑΜΑΣΤΡΙΕΩΝ**. Bompis, in publishing his specimen, had already marked the difference in style between it and the other coins of Arne-Cierium and noted the likeness of the head on the obverse to that on the silver coins of Philip of Macedon. Cierus-Prusias was closely connected with, and from time to time dependent on, the Bithynian Heraclea, and a similar link with the Macedonian coin types (*e.g.* at Philippi) appears at Heraclea also in the earliest didrachms with the head of the young Heracles.¹⁰ The weights of these very rare didrachms run from 170.4 to 180.7 grs. (11.04–11.71 grm.), thus corresponding closely with the Cierian.

To sum up. There is no reference to an Asclepius cult on any other coins of Arne-Cierium. Apart from these coins there is no other certain evidence for the worship of a beardless Asclepius in Thessaly; in North-west Asia Minor he appears at Cierus-Prusias, at Parium, and possibly at Pergamum. The weight-standard is not that otherwise universally employed in Thessaly at this date; it is that used at Heraclea in Bithynia. The didrachms are inscribed

¹⁰ Possibly the coins of Heraclea are a little earlier.

ΚΙΕΡΙΕΩΝ—the other silver issues of Arne-Cierium **ΚΙΕΡΙΕΙΩΝ**. Where the didrachm is used otherwise in Thessaly it is accompanied by the drachm and its subdivisions: at Arne-Cierium we find nothing larger than the trihemiobol. The style of the coins is peculiar in the Thessalian series and offers an analogy with Macedonian types; so do the contemporary coins of Heraclea. The cumulative effect of all these considerations is to suggest that the didrachms hitherto given to Arne-Cierium should be attributed to Cierus-Prusias.

LAMPSACUS.

5. *Obv.*—· **ΣΕΠΓΕΤΑΣ**. Bust of Geta r., laur., in paludamentum; dotted border.

Rev.—Winged sea-horse r.; above **ΛΑΝΥΑ**, beneath **ΚΗΝΩΝ**; dotted border.

Æ. 0.70. 34.3 grs. (2.22 grm.).

(Mionnet, ii, p. 566, 337, from Vaillant, *Num. Græca*, p. 118.)

PARIUM.

6. *Obv.*—Head of Janus; across field to l. **C]G**, to r. **I∇**; dotted border.

Rev.—Prow of galley r.; in field above **Q·LVCRET L·PONT**; to l. **I]I**, to r. **V[IR**; below **COL·DED·PR**.

Æ. 0.70. 60.2 grs. (3.90 grm.). B. M. (Woodhouse Bequest).

Compare the similar coin published by Imhoof-Blumer (*Mus. Klagenfurt*, p. 71, No. 152), but with **M·TVRIOLEG** in place of **COL·DED·PR** (?).

7. *Obv.*—Female head r., wearing wreath of corn ears and ear-ring; across field to l. **C G**, to r. **I-L**; dotted border.

Rev.—Female figure standing l.; she wears polos, holds cornucopiae on l. arm and extends her r. over an amphora which stands before her on the ground: beneath Q·LVCRET to r. up, L·PONT·IIVI above, R COL·DED·PR to l. down.

Æ. 0.75. 73.4 grs. (4.76 grm.). [Pl. I.]

Cp. Imhoof-Blumer, *Mus. Klagenfurt*, p. 71, No. 154, with Q·LVCRET·L·PONTIO·M·TVRIO·LEG.

For a discussion of the group of coins bearing the names of Lucretius and Pontius see Imhoof-Blumer, *loc. cit.* The provenance of the coins, for example No. 7 from the Propontis, suggests Parium as the mint; this is strongly supported by the use of the same obverse type on No. 7 and on coins inscribed CGIP, with the names of the duumvirs MVC ·· and PIC ··, which will be noticed below. The obstacle in the way of this attribution is the obverse inscription, read as C·G·I·L, which would naturally point to a town with L as its initial letter: the dot, however, between the I and the L has more the appearance of a ligature (I L on No. 6, I-L on No. 7),¹¹ and I would suggest that the intention is to give the first three letters of the name Julia, the town's name being omitted as on parallel coins of Sinope. Otherwise, as Imhoof suggested later,¹² the I L may well stand for Julia Laus as on the colonial coins of Corinth, also a foundation of Caesar; if so the second title would have been dropped after the first issue. Mommsen explains COL·DED·PR as (*duumviris*) *colonia deducta primis*.

The head on the obverse of No. 7 is the same as that

¹¹ So Babelon in *Coll. Wadd.*, pp. 51, 930 (cp. also Mionnet, ii, p. 578, Nos. 423-4, where the reading is given as CH).

¹² *Kleinas. Münzen*, vol. i, p. 30.

on the coins of the duumvirs **MVC** . . and **PIC** . . (*B. M. Cat.*, Nos. 77-82). The head-dress is usually described as a stephane, but on the coin under notice and on a **MVC-PIC** coin (*B. M. Cat.*, No. 78) it is clearly a wreath, probably of corn ears, and the head will therefore be that of Ceres. Demeter occurs also on the pre-colonial coinage.¹³

The figure on the reverse is presumably the Fortune of the colony; her attitude recalls that of Athena on later coins of Side (*B. M. Cat.*, *Lycia, &c.*, Pl. xxviii. 18), where she is described as dropping a pebble into an amphora, *i. e.* "voting". The goddess of Side, however, carries a palm, and with this attribute she is otherwise represented in a definitely agonistic connexion, for example, holding a prize crown or crowned by Nike (*B. M. Cat.*, *ibid.*, Nos. 17, 16), while the amphora itself is found under a table which supports a prize crown (*B. M. Cat.*, *ibid.*, No. 12). In dropping a pebble into an urn, then, she is probably not voting but performing an act in connexion with the games—as patron goddess of the city she is dropping into the urn the lots which on other coins¹⁴ the competitors are represented as drawing to decide their places in the heats. A similar interpretation might apply to the winged female figure, holding a cornucopie—a mixture of Nike and Tyche—and dropping a pebble into an urn, which occurs as symbol on the late Athenian

¹³ *Coll. Wadd.*, p. 51, No. 928. *Obv.* head of Demeter; *rev.* ear of corn.

¹⁴ *E.g.* at Aphrodisias, *B. M. Cat.*, *Caria*, Pl. viii. 2; at Palaeopolis, *Rev. Num.*, 1869, Pl. iii. 1; at Ancyra, *B. M. Cat.*, *Galatia, &c.*, Pl. ii. 13, and at Nicaea, *B. M. Cat.*, *Pontus, &c.*, Pl. xxxii. 16. In nearly all these cases one at least of the athletes holds a palm in just the same manner as Athena on the Side coins.

tetradrachms of the magistrates Heraclides and Euclēs (*B. M. Cat.*, *Attica*, p. 56, Nos. 414-16). In the same way on the present coin the Fortune of the colony is dropping into the urn the lots which the colonists will draw to decide the distribution of their holdings.

8. *Obv.*—Youthful male head r., with long hair; to r. up
PA RIOCON.

Rev.—Capricorn r. holding globe; behind cornucopiae, beneath **CGIHP.**

Æ. 0.80. 65.3 grs. (4.17 grm.).

A variety of the *B. M. Cat.*, No. 88.

9. *Obv.*—**IMPVALERIANVSPFAVG** Bust of Valerian r., laur.; dotted border.

Rev.—**COL·G·I·H·PAR** Marsyas standing l. with wine-skin.

Æ. 0.85. 63.0 grs. (4.08 grm.).

This otherwise common colonial type seems to be confined at Parium to the coins of Valerian and his family; the other published example being of the time of Gallienus.¹⁵

10. *Obv.*—**CLGALLIENVSAV** Bust of Gallienus r., laur., in paludamentum; dotted border.

Rev.—**CGI HP** Cupid standing half l, his r. extended over a term, his l. elbow resting on pillar; dotted border.

Æ. 0.80. 48.4 grs. (3.14 grm.). [Pl. I.]

This type represents the famous Eros of Praxiteles at Parium; other coins on which it appears have been collected by Professor Percy Gardner in *J. H. S.*, 1883, p. 270. The present specimen is notable as the latest known example of the type and for the clearness of its

¹⁵ Mionnet, *Suppl.*, v. 411, 808.

detail. Eros holds no object in his right hand, and what had been regarded as a chlamys over his left arm is clearly seen, as Furtwängler has already indicated, to be a pillar on which he is leaning.¹⁶

ABYDUS.

11. *Obv.*—Head of Apollo r., laur., with long hair falling on either side of neck.

Rev.—Eagle r. standing on stag's head; to l. up **MEN**, to r. down **ΗΞ**, below to r. **ΑΒΥ**.

Α. 0.60. 50.5 grs. (3.27 grm.). [Pl. I.]

This seems a new magistrate's name for Abydus. For the type of the eagle on the stag's head the coins of Croton (*B. M. Cat., Italy*, p. 350, Nos. 68, 69) may be compared. It seems as if the object on which the eagle stands on the reverse of the **ΜΗΤΡΟΔΩΡΟΣ** tetradrachm of Abydus (*B. M. Cat., Troas, &c.*, p. 2, No. 10) is a stag's antler rather than an aplustre. The weight of the coin is interesting; the normal weight of the vast majority of the drachms of Abydus with Apollo-eagle types and magistrate's names lies between 39–41 grs. (2.53–2.66 grm.),¹⁷ but it is not less than 50 grs. (3.24 grm.) in the case of three magistrates—**ΜΕΝΗΣ**

¹⁶ Roscher, *Lex.*, s. v. Eros.

¹⁷ The weights of 103 drachms collected from every source available to me and plotted to the nearest half-grain in a table of frequency gave the following results: Wt. 24.5 grs. (1.59 grm.), 1 coin; 33.5 (2.17 grm.), 1; 35.0 (2.27 grm.), 2; 35.5 (2.30 grm.), 36.0 (2.33 grm.), 36.5 (2.37 grm.), 37.0 (2.40 grm.), 1 each; 37.5 (2.43 grm.), 4; 38.0 (2.46 grm.), 5; 38.5 (2.49 grm.), 4; 39.0 (2.53 grm.), 7; 39.5 (2.56 grm.), 16; 40.0 (2.59 grm.), 27; 40.5 (2.62 grm.), 13; 41.0 (2.66 grm.), 9; 41.5 (2.69 grm.), 42.0 (2.72 grm.), 42.5 (2.75 grm.), 2 each; 43.0 (2.79 grm.) and 43.5 (2.82 grm.), 1 each; 46.0 (2.98 grm.), 1. Most of those over 41 grs. (6.66 grm.) bear the name **ΥΛΛΙΠΠΟΣ**.

here, **IKESIOΣ** (B. M., 51.0 grs. (3.31 grm.), and Lambros collection,¹⁸ 53.5 grs. (3.47 grm.)), and **ΣΙΜΩΝ** (Paris, 51.0 grs. (3.31 grm.)).¹⁹

These six coins must be of the Rhodian standard, the drachm being some grains lighter than a true quarter of the tetradrachm, as, for some reason, is frequently the case with the subdivisions of this standard, *e. g.* at Rhodes itself, at Cos, Cnidus, and other places. The use at Abydus of the Rhodian standard (in which the tetradrachm only has hitherto been recognized) has generally been placed in the years 411–387 B.C., the period from the revolt against Athens to the Peace of Antalcidas, and it has been supposed that no further coinage was issued until after the death of Alexander the Great, when didrachms and hemidrachms of the same types were struck on the Persic standard (wt. 164.0 grs. (10.63 grm.) and 39–41 grs. (2.53–2.66 grm.)).²⁰ This is *a priori* unlikely, as Abydus seems to have maintained her independence from the Peace of Antalcidas until the capture of the city by Philip II in 335 B.C.,²¹ while the style of these drachms, if not of the corresponding tetradrachms, calls for a later date than *c.* 411–387 B.C. The Rhodian standard did not begin to come into general use until the early years of the fourth century, but we know at

¹⁸ Hirsch, *Aukt.-Kat.* xxix, No. 671.

¹⁹ Babelon, *Traité des monnaies grecques et romaines*, 2^{ème} partie, T. ii (hereafter referred to as *Tr.*), p. 1330, No. 2455, "tétrébole persique".

²⁰ Head, *H. N.* ii, p. 539; Wroth, *B. M. Cat., Troas, &c.*, Introd., p. xli; Babelon, *Tr.*, p. 1326, who makes the later issue begin *c.* 340 B.C.; but as the town was captured by Philip in 335, it seems unlikely that coins were issued between that date and the death of Alexander.

²¹ Judeich, *Kleinasi. Studien*, p. 297.

least four magistrates' names on the tetradrachms—**ΜΗΤΡΟΔΩΡΟΣ**, **ΕΧΕΠΟΛΙΣ**,²² **ΕΥΚΡΙΝΗΣ**,²³ **ΜΟΛΠΑΣ**,²³ besides the three on the drachms. It is hard, therefore, apart from any question of style, to suppose that all these coins were struck in the ten years preceding the Peace of Antalcidas, and the style of the drachms, which comes very close to that of the later coins of Persic weight, points to a date at least no earlier than the middle of the fourth century. It is most natural to suppose that the issue of coins of Rhodian weight began after 400 B.C., if not on the occasion of the final withdrawal of the Spartan garrison in 387, and was continued till the capture of the city by Philip in 335.

12. *Obv.*—As No. 11.

Rev.—Eagle standing r.; behind, to l. upwards **ΑΒΥ**, to r. tripod-lebes.

Æ. 0.65. 63.4 grs. (4.11 grm.). [Pl. I.]

This coin is of earlier style than any of the bronze coins of Abydus known to me; the tripod-lebes appears on a Persic hemidrachm with the name of **ΛΥΣΑΣ**,²⁴ the obverse of which is very close to the obverse of our coin.

13. *Obv.*—Head of Apollo, laur., facing.

Rev.—Lyre. $\begin{matrix} \text{A} & \text{B} \\ \Delta & \text{Y} \end{matrix}$

Æ. 0.40. 21.8 grs. (1.41 grm.).

The smaller denomination of the coin with similar types in the British Museum (*B. M. Cat.*, No. 48), there dated 320–200 B.C. The lyre, however, otherwise

²² *Tr.*, pp. 1327–30.

²³ Regling, *Sammlung Warren*, No. 1035.

²⁴ *B. M. Cat.*, *Troas*, &c., p. 3, No. 20.

uncommon, appears frequently as a reverse type in early imperial times,²⁵ and the style of both coins, though pretty and careful, seems to admit of a much later date, possibly in the first century B.C.

14. *Obv.*—**ΚΥΝΚΛΗΤ** . . Bust of Senate r.

Rev.—**ΑΒ[ΥΔ]ΗΝΩΝ** Cult image of Artemis (Ephesia?) facing, with fillets falling to the ground from the wrists of her outstretched arms (head-dress uncertain).

Æ. 0.55. 26.7 grs. (1.73 grm.). [Pl. I.]

15. *Obv.*—**ΤΡΑΙΑΝΟ ΚΑΙΣΑΡ** Bust of Trajan r., laur., wearing paludamentum.

Rev.—^A**Υ** as No. 14, but without fillets; in l. hand branch with three leaves; to r. a stag, its hind quarters concealed by the cult image. The image wears polos and horseshoe-shaped veil.

Æ. 0.75. 112.4 grs. (7.28 grm.). [Pl. I.]

So-called "quasi-autonomous" coins of imperial times are rare at Abydus, and the *Σύνκλητος* type does not seem to have been noted hitherto.

The cult image on No. 14 is remarkable as a closer copy of the Ephesia type than is usual on the coins of the city. The common type of cult image is that shown on No. 15 without fillets and with the stag; the attribute in the left hand which Imhoof does not specify in his publication of a similar coin is a branch, as on the variant of the type which appears under M. Aurelius.²⁶

16. *Obv.*—**ΑΔΡΙΑΝΟΣ** Bust of Hadrian r., laur., wearing paludamentum.

²⁵ *B. M. Cat., Troas, &c.*, p. 5, No. 48.

²⁶ *Gr. Münzen*, p. 621, No. 200, and *Kleinas. Münz.*, p. 33, No. 2.

Rev.—The Dioscuri, naked, standing to front, their outer arms each resting on a spear, the inner, from which hangs a fold of drapery, bent at the elbow and holding torch (?); between, below, **ΑΒΥ**.

Æ. 0.70. 64.3 grs. (4.17 grm.). [Pl. I.]

This seems the earliest instance of the type of the standing Dioscuri; it closely resembles that published by Imhoof (*Gr. Münzen*, p. 622, No. 201), which is, however, without the object which I have described as a fold of drapery hanging from the crook of the arm. The object in question may possibly be the pileus hanging upside down by its strings.

17. *Obv.*—**ΑΥΚΑΙ** . . . Bust of Sept. Severus r., laur., wearing paludamentum.

Rev.—**ΑΡΧΦΑΒΑΤΠΡΟΚΛΟΥ** Tyche, wearing turreted crown, seated l. on rocks, holding rudder in r. hand, and resting her l. on the rock; beneath, **ΑΒΥΔ**.

Æ. 0.85. 62.7 grs. (4.06 grm.). [Pl. I.]

Mionnet publishes this coin from Sestini, but with the false reading **ΑΡΧΑΙΑΠΡΟΚΛΟΥ**.²⁷

Assus.

18. *Obv.*—Griffin crouching l.; underneath, **ΑΣΣΙ** (overstruck over head of Athena r. in crested Athenian helmet).

Rev.—Owl standing three-quarters r. (overstruck over griffin crouching l., above traces of **ΑΣΣΙ**).

Æ. 0.85. 122.5 grs. (7.94 grm.).

²⁷ Mionnet, *Supp.*, tom. v, p. 506, No. 61; Sestini, *Lett. Num.*, tom. vii, p. 74, No. 31. It seems worth noting that the previous coin (*ibid.*, No. 60 and No. 31) really has the same name and must be a similar coin to No. 60 on p. 7 of *B. M. Cat., Troas, &c.* Sestini read **ΑΡΧΦΑΒ[. . ΠΡΟ]ΚΛΟΥ**, the **Β** and **Κ** being indistinct, as **ΑΡΧΦΛΚ . . . ΝΔΟΥ**, and his reading has been taken up through Mionnet into Münsterberg's *Beamtennamen*.

Cp. the coin figured in *Tr.*, Pl. clxiv, No. 3, and Mionnet, *Supp.*, tom. v, p. 295, No. 86 = Sestini, *Lett. Num. Contin.*, tom. viii, No. 7.²¹

The original coin was of the same class as that described in *B. M. Cat., Troas, &c.*, p. 37, No. 10 seqq. Such re-strikes are not uncommon in the coast towns of Mysia and the Troad during the second and first centuries, and are characterized by the use of much smaller dies than are sufficient to cover the flan. At the same time we have to do with something more than a mere countermark in the accepted sense of that word, for the new types are impressed on either side simultaneously, as their relative position shows, and in such a way as to supersede the old types, while to one of them a typical coin legend is attached. Similar issues occur also at Abydus, Parium, Priapus, and in each case the city has re-struck its own coins.²²

19. *Obv.*—ΤΙΚΛΑΥΔ ΣΕΒΑΣΤΟΣ Head of Claudius r., laur.; dotted border.

Rev.—Griffin crouching r.; above ΑΣΣΙ, in exergue thunderbolt (?); dotted border.

Æ. 0.80. 58.4 grs. (3.78 grm.).

This coin is from the same *obv.* die as *B. M. Cat., Troas, &c.*, p. 38, No. 24 (with reverse type, head of Athena), which, owing to the obliteration of the first half of the

²¹ Mionnet gives two more coins (*ibid.*, Nos. 87, 88) exactly similar except that the countermark on the *obv.* (which is without legend) is described as a Pegasus—I strongly suspect that it should really be a griffin.

²² Abydus, two varieties, *B. M. Cat., Troas, &c.*, p. 4, Nos. 38 and 39, and Imhoof-Blumer, *Gr. Münzen*, Tafel vii, No. 18; Parium, *B. M. Cat., Mysia*, p. 100, No. 68. Priapus, two varieties, *ibid.*, p. 177, Nos. 8, 9, and 10, 11 (on the last the type, a small head of Priapus as on No. 10, has not been noticed on the obverse, which is described as double struck).

legend, has been wrongly assigned to Augustus,³⁰ and I suspect that the same thing has happened to the coin with a griffin on the reverse, assigned by Mionnet³¹ to Augustus, which would therefore be another example of our No. 19. Apart from the coin cited by Mionnet I can find no imperial coins earlier than the reign of Claudius.

DARDANUS.

20. *Obv.*—**CEBA CTOC** Bare head of Augustus r.

Rev.—**ΔΑΡΔ** r. down, **ΑΝΙ** . . l. up; Athena Ilias going r.

Æ. 0.60. 21.3 grs. (1.38 grm.).

Possibly of the same types as Mionnet, ii, p. 655, No. 176, where the reverse is described as Victory going r.

ILIUM.

21. *Obv.*—Bust of Pallas r., wearing crested Corinthian helmet and aegis; dotted border.

Rev.—Aeneas carrying Anchises and leading Ascanius; **ΙΛΙΕΩΝ**; dotted border.

Æ. 0.65. 38.2 grs. (2.48 grm.). [Pl. I.]

This coin differs from that in the Hunter Coll. (vol. ii, p. 301, No. 3) in the absence of obverse legend.

22. *Obv.*—**ΙΟΥΛΙΑ CEBACTH** Bust of Julia Domna r.; dotted border.

Rev.—**ΙΛΙΕΩΝ ΙΛΟC** Ilios standing l. before cult image of Athena Ilias placed on basis, before which flaming altar.

Æ. 1.10. 176.7 grs. (11.45 grm.).

³⁰ A similar coin appears in the Waddington Collection, No. 663, rightly attributed to Claudius.

³¹ Tom. ii, p. 523, No. 58.

Mionnet, ii, p. 665, No. 229, and *Supp.*, tom. v, p. 569, No. 463 with incomplete legend. A coin of Caracalla (*B. M. Cat.*, No. 87) has the same reverse die.

23. *Obv.*—**ΑΥΤΚΜΕΣΤΡΑΙΔΕΚΙΟΣ** Bust of Trajan Decius r., laur., in paludamentum; dotted border.

Rev.—Cult image of Athena Ilias on basis wearing polos and holding spear and distaff, at her feet shield; across field to l. **ΙΑΙΕ**, to r. **ΩΝ**.

Æ. 0.80. 70.0 grs. (4.54 grm.).

Compare Waddington, No. 1186, a coin of the same emperor with Palladium as reverse type. The same reverse type occurs on a coin of Gordian III (*B. M. Cat.*, No. 99).

ΠΡΟΝΙΑ.

24. *Obv.*—**ΛΑΥΡΚΟΜΟΔΟΣΚΑΙΣΑΡ** Bust of young Commodus r., in paludamentum; dotted border.

Rev.— . . **ΡΟΥΦΟΥΠΕΙΟ** in exergue **ΝΙΤΩΝ**; River-god (Satnioeis) reclining l.; dotted border.

Æ. 1.00. 165.9 grs. (10.75 grm.).

The reverse type is already known from a coin of Marcus Aurelius, published by Imhoof-Blumer in *Monnaies grecques*, p. 258, No. 144. The full name of the *στρατηγός*, M. Aurelius Rufus, appears also on coins of M. Aurelius (*B. M. Cat.*, No. 6) and Faustina (Imhoof-Blumer, *Zur gr. u. röm. Münzkunde*, p. 55, No. 2); on another coin of the young Commodus he is *στρατηγός τὸ β'*.

ΚΛΑΖΟΜΕΝΑΕ.

25. *Obv.*—**ΒΡΕΤΤΑ]ΝΙΚ[ΟC]ΚΑΙΣΑΡ** Bust of Britannicus r.; dotted border.

Rev.—**ΚΛΑΙΟ** to r. up, **MEN[ΙΩΝ** to l. up; Cybele standing to front, wearing veil and polos.

Æ. 0.70. 58.8 grs. (3.78 grm.).

Cp. the later "quasi-autonomous" coin published by Imhoof-Blumer³² for the reverse type.

³² *Gr. Münzen*, p. 635, No. 259 b.

MAGNESIA AD MÆANDRUM.

26. *Obv.*—ΤΑΙΛΙΟΣΚΑΙΣΑΡΑΝΤΩΝΕΙΝΟΣ Bust of Antoninus Pius r., laur., in paludamentum; dotted border.

Rev.—ΕΠΙΔΙΟΣΚΟΥΡΙΔΟΥΓΡΑΤΟΥΜΗΤΡΜΑΓΝΗΤΩΝ Hades bearing away Persephone in four-horse chariot to r.

Æ. 1-40. 349.5 grs. (22.65 grm.). [Pl. I.]

A similar coin, but with incomplete legend, is in the Waddington Coll. (No. 1746). The present specimen has the same obverse die as *B. M. Cat.*, No. 56, and as the following coin.

27. *Obv.*—As No. 26 (same die).

Rev.—ΕΠΙΔΙΟΣΚΟΥΡΙΔΟΥΓΡΑΤΟΥΜΗΤΡΜΑΓΝΗΤ Statue of Themistocles standing l., naked, holding in his r. a patera over a flaming altar, in his l. a short sword in its sheath with strap attached, at his feet to l. forepart of

ΘΕΜ

humped bull; in field to l., ΙΣΤΟΚΛΗ.

C

Æ. 1-30. 366.8 grs. (23.77 grm.). [Pl. I.]

A second example of the coin published by Rhousopoulos in *Athenische Mittheilungen*, xxi (1896), p. 19,²³ and discussed by Hill (*Historical Greek Coins*, pp. 47-8), and by P. Gardner in *Corolla Num.*, pp. 109 ff. The present specimen appears to be from the same dies, but is interesting as giving the detail of the sword-strap clearly.

ALABANDA.

28. *Obv.*—ΑΥΤΟΚΡΑΤΩΡΚΑΙΣΑΡΑΝΤΩΝΕΙΝΟΣ
ΣΕΒ Bare bust of Antoninus Pius r.

²³ There illustrated by a line-block; for a photographic reproduction of the coin see Hirsch, *Auktions-Katalog*, xiii (Rhousopoulos Coll.).

Rev.—ΑΛΑΒΑ[Ν]ΔΕΩΝ City-Tyche, wearing modius, seated l. on throne with back; she holds a cornucopiae in her l. arm, and on her outstretched r. a small statue of Athena, helmeted, standing to l., holding in her r. hand a Nike, and resting her l. arm on a spear.

Æ. 1-25. 347-8 grs. (22-54 grm.). [Pl. I.]

A turreted female head which has doubtfully been described as the Tyche of the city is already known at Alabanda, as also is the standing figure of Athena Nicephorus.³⁴ Their combination seems to be new.

CNIDUS.

29. *Obv.*—Head and forepaw of lion r.

Rev.—Head of Nymph r. of fully developed style, hair *en queue*; in front of neck, ΚΝΙ; incuse square.

Æ. 0-55. 52-0 grs. (3-37 grm.).

This drachm is among the first coins of the Rhodian standard struck at Cnidus, and is a companion to No. 26, p. 88 of the *B. M. Cat., Caria*. Though the style of our coin is more advanced the engraver has reverted to the older fashion of the hair *en queue*, and both coins are marked by the absence of a magistrate's name, and the placing of the head on the reverse.

ΗΥΡΑΕΡΑ.

30. *Obv.*—ΑΥΤΚΠΟΛΙΚΙΝΒΑΛΕΡΙΑΝΟΣ Bust of Valerian r., laur., wearing paludamentum.

Rev.—ΚΟΝΔΙΑΝΟΥΣΤΡΑΥΠΑΙΠΗΝΩΝ Artemis in short chiton, chlamys, and endromides, standing to front, head r.; she holds bow in her l. hand, and with her r. draws arrow from quiver at her shoulder; at her feet, on r., star.

Æ. 1-10. 135-8 grs. (8-80 grm.).

³⁴ *B. M. Cat., Caria*, p. 6, No. 29, and Nos. 47-8.

The magistrate's name is already known. Artemis at Hypaepa was identified with Anaitis, and is almost always represented under the form of a cult image. The Hellenic form occurs as a reverse type under Julia Domna.³⁵

PHILADELPHIA.

31. *Obv.*—ΑΥΚΑΙΤΡΑΙΑΔΡΙΑΝΤΩΝΕΙΝ . . . Head of Antoninus Pius r., laur. ; dotted border.

Rev.—ΕΠΙΑΦΚΟΡΝΗΛΙΑΝΟΥΦΙΛΑΔΕΛΦΕΩΝ
In exergue ANEITIC (*sic*); hexastyle temple containing statue of Anaitis, under the form of the Hellenic Artemis, in short chiton and endromides, standing r.; she holds a bow in her l. hand, and with her r. draws arrow from quiver at her shoulder.

Æ. 1.45. 314.8 grs. (20.37 grm.).

This magistrate's name occurs on another coin of Antoninus Pius, published by Imhoof-Blumer in *Gr. Münzen*, p. 721, No. 611. For the worship of Anaitis in this part of the world see S. Reinach's exhaustive discussion in *Chroniques d'Orient*, 1^{re} série, pp. 146 seqq. At Philadelphia her worship is attested by an inscription in honour of a victor at the Anaeiteia.³⁶ It is interesting to find the name of Anaitis, which is usually given by numismatists, following Reinach, to the veiled cult image of Hypaepa, here attached to a figure so completely Hellenic in conception. The same statue is shown from a different point of view on other coins of the city, e.g. *B. M. Cat.*, Nos. 48 and 90. Besides the cult image resembling

³⁵ Imhoof-Blumer, *Lydl. Stadtmünzen*, p. 83, No. 20; *B. M. Cat.*, *Lydia*, p. 115, No. 40.

³⁶ Le Bas-Waddington, *Inscr. d'As. Min.*, iii, No. 655; cp. also the coin with agonistic types published by Imhoof-Blumer in *Lydl. Stadtmünzen*, p. 126, with the incomplete inscription A ΕΙΑ, for which he suggests 'Ασκληπεΐα or 'Αναίτεια.

Artemis Ephesia another cult image flanked by two lions,³⁷ sometimes called that of Hecate, occurs on the coins of Philadelphia, and it may be suggested that in this we have the un-Hellenic form of the Anaitis of Philadelphia. That it differs in its details from the Anaitis of Hypaepa is immaterial. We know from Pausanias (v. 27. 5) that there was an identical cult at Hypaepa and Hierocaesarea, but the representations of Anaitis and Persica on the coins are quite different.

TRALLES (SELEUCIA).

32. *Obv.*—Zeus seated l., his l. resting on sceptre, on his outstretched r. Nike l. holding palm; all in laurel wreath.

Rev.—ΔΙΟΞΑΡΑΞΙΟΥΚΑΙΔΙΟΞΕΥΜ[ΕΝ]ΟΥ (*sic*),
Humped bull butting l.; exergual line.

Æ. 0.75. 45.7 grs. (2.96 grm.).

A new variety of the earliest issues of Tralles (probably under its third-century name of Seleucia) collected by Imhoof-Blumer on p. 109 of *Lydische Stadtmünzen*. The usual obverse type is the head, not the full-length figure of Zeus.

MIDAEUM.

33. *Obv.*—ΑΥΤ·Κ·ΜΟΓΕΛ·ΣΕΟΥΗΡ·ΜΑΚΡΙΝΟ·CAYΓ Bust of Macrinus r., laur., wearing paludamentum; dotted border.

Rev.—M I Δ] A ΕΩΝ beneath TENBPOC; the
B
river Tembrus reclining l., holding in r. and l. a reed, and resting his l. elbow on urn from which the river flows; dotted border.

Æ. 1.25. 241.2 grs. (15.63 grm.).

³⁷ Imhoof-Blumer, *Z. gr. u. röm. Münzk.*, p. 127, No. 7, correcting *Kleinas. Münzen*, p. 181, No. 6.

No coins of Macrinus seem to have been known at Midaeum hitherto, though there is a coin of Diadumenian (*B. M. Cat.*, No. 13). For the reverse type compare *B. M. Cat.*, No. 14 with **ΤΕΜΒΡΟΣ**. On the coin of Diadumenian just cited the reverse inscription reads **ΜΙΔΑΕΩΝΒ**, and Head interprets the outstanding letters **Α Β** as *ἀσπαρία δύο*. The corresponding **Α** on the coin of Macrinus is not quite distinct, but it does not seem to be larger than the other letters. It seems reasonable that the **Β** should have the same significance on both coins, but if Head's interpretation is correct (and I have none other to suggest) the difference in module and weight is remarkable.

PRYMNESSUS.

34. *Obv.*—**ΓΕΡΜΑΝ** . . . Bare head of Germanicus r.; dotted border.

Rev.—**ΔΡΟΥΣΟ** . . . **ΠΡΥΜΝΗΣΙΩΝ** Bare head of Drusus l.; dotted border.

Æ. 0.65. 64.5 grs. (40.18 grm.).

This coin must fall between the year of Tiberius's accession in A.D. 14 and the death of Germanicus in 19. It is significant of Germanicus's position as the "heir apparent" that he appears on the obverse, while Drusus, the own son of the emperor, is relegated to the reverse with the ethnic.

PERGE.

35. *Obv.*—**ΑΥΤΛΟΥΔΟΜΙ** . . . Bust of Aurelian r., laur., in paludamentum; before the bust l.

Rev.—**ΠΕΡΓΑΙΩΝ ΝΕΩΚΟ ΡΩΝ** Artemis, radiate, standing to r., holding torch; in field r. **Δ**.

Æ. 1.10. 158.7 grs. (10.28 grm.).

Artemis is here radiate as on the alliance coins of Perga and Side (*B. M. Cat.*, Nos. 105-6). This coin

seems unknown to Rhode.³⁸ The Δ in the field of the reverse disposes of his statement that the Δ appearing in the gable of the temple of Artemis on another coin of Aurelian is simply an ornament. Λ as well as Δ appears on the reverses of coins of several Pamphylian cities at this period, and both must presumably be signs of value standing in some relation to the Γ on the obverse: on the whole subject see Imhoof-Blumer, *Gr. Münzen*, p. 680.

CREMNA.

36. *Obv.*—**IMPCAEMA VRANTAVG** Bust of Elagabalus r., laur., wearing paludamentum; dotted border.

Rev.—**DIAN[AEC]REM** Diana standing to front, head l., wearing long chiton with overfold; she holds in her r. patera, and rests her l. on a torch (or spear?); at her feet, on r., animal (presumably hind) r., with head turned to look up at her; dotted border.

Æ. 0.95. 144.7 grs. (9.38 grm.).

The rev. type is very similar to that of a coin of M. Aurelius in the British Museum, on which the object in the right hand is uncertain and that in the left is described as a bow. The latter, however, seems to be the same as that on our coin (the lower part coming to the ground behind the head and forelegs of the hind), and resembles a spear or torch. The object in the right hand is certainly a patera.³⁹

SELEUCIA (PISIDIAE).

37. *Obv.*—**ΑΥΚΜΑΡΑΝΓΟΡΔΙΑΝΟC ΕΥCΕ** Bare bust of Gordian III r., laur.; dotted border.

³⁸ *Die Münzen des Kaisers Aurelianus*, 1881.

³⁹ *B. M. Cat., Lycia, &c.*, p. 216, No. 5.

Rev.—ΚΛ]ΑΥΔΙΟCEΛΕΥΚΕΩΝ Men on horseback
r.; dotted border.

Æ. 1.00. 153.0 grs. (9.91 grm.).

The same reverse type as on the coin of Severus Alexander, described by Imhoof-Blumer (*Kleinas. Münzen*, p. 399, No. 5).

ICONIUM.

38. *Obv.*—ΝΕΡ]ΩΝΚΑΙCΑΡCEΒΑCTOC Head of Nero
r., laur.; dotted border.

Rev.—ΚΛΑΥΔΕΙΚONIEΩΝ Head of Perseus r.,
wearing the ἄιδος κυνέη; harpa at shoulder.

Æ. 0.90. 86.4 grs. (5.60 grm.).

The reverse type is possibly the same as that of a Paris coin of Titus (Wad. 4765). In general the head-dress worn by Perseus is either a winged helmet (as commonly on coins) or else, as on the vases, a cap (flat or pointed).⁴⁰ Here the ἄιδος κυνέη seems to be literally a dog's skin (worn as Heracles wears the lion's skin), such as we see on the Albani Athena.⁴¹

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⁴⁰ *B. M. Cat., Macedon*, p. 18, No. 72, &c.; see Roscher, *Lexikon*, s. v. Perseus, Bd. III, Abt. 2, p. 2028.

⁴¹ Furtwängler, *Meisterwerke* (Eng. trans.), pp. 79, 80 (fig.).

II.

SOME NEW SELEUCID COPPER TYPES.

(SEE PLATE II.)

IN the present paper it is not proposed to include new denominations of types which have been previously known.

The completeness of denominations is one of the fascinations of Seleucid copper. They range from the 10 chalkoi piece to the half-lepton, and though the 10, 8, and 5 chalkoi are confined to the Antioch money of Antiochos IV, commemorative of his Egyptian successes, and the 4 chalkoi are very rare and appear only to occur with Seleukos II, Antiochos III, Timarchos, Demetrios I (if his is not rather a 3 chalkoi piece), Antiochos IV, and Alexander Balas, the normal issue under the earlier kings appears to have embraced the dichalkon, the chalkous, the half-chalkous, the dilepton, the lepton, and possibly the half-lepton. In the case of the last, however, the small size of the money has made its preservation in anything like decent condition so rare, that it is difficult to draw conclusions.

Towards the end of the dynasty enfeebled weights, poor workmanship, and indifferent preservation seem to make dogmatic conclusions extremely hazardous.

Many of the gaps which existed in the sketchy classifications of past days can now be filled in.

In the second place there is the infinite variety of symbols and monograms accompanying the type. The 306 recorded by Babelon could be largely extended, and their combinations afford a pretty puzzle to the mathematician, but they again are sternly set beyond the pale of the present paper, which aims solely at the publication of new types, and is therefore in the nature of a raid, which will, it is to be hoped, develop into a grand offensive in the hands of a more competent student than the present writer.

SELEUKOS I.

1. *Obv.*—Head of Athene in crested Corinthian helmet to r.; border of dots.

Rev.—ΒΑΣΙΛΕΩΣ [[Σ]ΕΛΕΥ in two lines on r. of type, upwards and outwards. Thick concave flan. Trophy of helmet, cuirass, and buckler with half hank of anchor; in field r. \mathfrak{MP} ; border of dots.

Æ. ↓. Wt. 86 grs. Size 18 mm. Chalkous.
[Pl. II.]

This type is new for Seleukos I, although it is known for Antiochos Soter with the monograms \mathfrak{MP} and \mathfrak{A} , sometimes, as in this case, with unusually thick flans. The monogram is a familiar one upon the tetradrachms of the Herakles head—seated Zeus type, sometimes enclosed in a wreath and sometimes by itself, which seems to dispose of the suggestion of M. Six that the wreath was the symbol of Antigonos as the anchor was of Seleukos.


I have called the spur on the left of the trophy pole the hank of an anchor, but it might be the tiller of a ship.

The position of the legend is most curious.

ANTIOCHOS II.

2. *Obv.*—Diademed head of Antiochos to r. ; border of dots.

Rev.—**ΒΑΣΙΛΕΩΣ** (r.) **ΑΝΤΙΟΧΟΥ** (exergue) in circular legend. Naked laureate Apollo sits on omphalos to l. ; in his r. hand holds three arrows ; in his l. top of bow placed on ground beside him ; in front of his feet, fore-part of feeding horse ; in

field l.  ; border of dots.


(a) Æ . \uparrow . Wt. 99 grs. Size 18 mm. Half-chalkous.
[Pl. II.]

(b) Æ . \downarrow . Wt. 36 grs. Size 13 mm. Dilepton.
[Pl. II.]


Imhoof-Blumer (*Num. Zeit.*, xlvii, 1913, pp. 171 sqq.) has discussed at length the interpretation of this group of coins, but while he gives illustrations of the Æ of Antiochos I, he has none of Antiochos II. The portrait upon these two pieces is so much younger and so entirely different from that of Antiochos I, that it seems fair to conclude that in them we have a trustworthy likeness of Antiochos II.

ANTIOCHOS III.

3. *Obv.*—Laureate head of Apollo to r. ; border of dots.

Rev.—**ΒΑΣΙΛΕ**[**ΩΣ**] (r. downwards) **ΑΝΤΙΟΧΟΥ** (l. downwards). Winged Nike in long chiton to l. crowns name of Antiochus with wreath in r. hand ; holds palm in l. ; in field l., beyond legend, .

Æ . \uparrow . Wt. 184 grs. Size 23 mm. Dichalkon.
[Pl. II.]

A fairly complete series of dichalkon, chalkous, half-chalkous, and dilepton with a horned horse head before Nike and the monogram  exists ; but it is quite different from this piece. It has quite another portrait of Antiochos and is evidently from a particular local mint, probably Eastern.

The monogram Ψ is common to Seleukos II and III as well as to Antiochos III, in whose case it is always accompanied by a youngish portrait, and belongs to a very extensive issue and therefore to an important mint, most probably Antioch.

4. *Obv.*—Diademed head of Antiochos to r. ; border of dots.

Rev.—**ΒΑΣΙΛΕΩΣ** (r. downwards) **ΑΝΤΙΟΧΟΥ**
(l. downwards). Naked laureate Apollo stands to r. ; holds in l. hand bow, in r. arrow pointing to ground ; in field l. Ψ above anchor ; border of dots.

(a) Æ . \nearrow . Wt. 267 grs. Size 26 mm. Dichalkon.
[Pl. II.]

(b) Æ . \nearrow . Wt. 43 grs. Size 16 mm. Dilepton.

The pair is quite new, and evidently forms part of an issue hitherto unknown. The larger piece was obtained from Babylon and the smaller came from the Whittall collection. The treatment of Apollo is remarkable, and the monogram is one which I have not been able to trace elsewhere.

5. *Obv.*—Head of Apollo to r. with rolled hair ; border of dots.

Rev.—**ΒΑΣΙΛΕΩΣ** (above) **ΑΝΤΙΟΧΟΥ** (below). Elephant marching to r. ; border of dots.

(a) Æ . \uparrow . Wt. 42 grs. Size 15 mm. Dilepton.
[Pl. II.]

(b) Æ . \leftarrow . Wt. 21 grs. Size 10 mm. Lepton.
[Pl. II.]

On the reverse of the larger piece behind the elephant is a monogram, probably Ψ .

These small pieces appear to be the survivals of an issue of which it is to be hoped that the larger denominations will one day appear.

The monogram is probably the same as one which is to be found upon a tetradrachm of the Heracles—Zeus seated type (Bab., Pl. vi. 10), although it is on that coin placed sideways.

SELEUKOS IV.

6. *Obv.*—Diademed head of Seleukos to r. ; border of dots.

Rev.—**ΒΑΣΙΛΕΩΣ** (r. downwards) **ΣΕΛΕΥΚΟΥ**
(l. downwards). Artemis in long chiton stands facing to r. ; holds in r. hand her spear and with l. touches the head of a roe ; in field l. M ; border of dots.

Plain bevelled edge.

Æ. †. Wt. 65 grains. Size 18 mm. Half-chalkous. [Pl. II.]

This and the coin to be described next are of special interest because they present upon the obverse a portrait of Seleukos instead of a deity, with reverses, which are already known.

It will be apparent from evidence which this paper later develops that there was a double issue in many cases of moneys with similar reverses, in which one series presented the portrait of the king and the other that of a god or goddess, as the case might be.

In the present instance the obverse is usually a bust of Artemis, and the edge is serrated. Slight details in the treatment of the reverse are apparent, but the type is obviously the same.

7. *Obv.*—Diademed bust of Seleukos to r. ; border of dots ; central hole.

Rev.—**ΒΑΣΙΛΕΩΣ** (above) **ΣΕΛΕΥΚΟΥ** (below). Prow of ship to left ; border of dots ; central hole.

Æ. †. Wt. 54 grs. Size 18 mm. Half-chalkous. [Pl. II.]

Despite the light weight, which is partly due to the worn state of the coin, I think this must be meant for

a half-chalkous. The usual denomination to appear is a chalkous.

Here the portrait of the king takes the place of that of Dionysos, as on the last coin it took the place of Artemis.

The importance of both of these pieces lies in the certainty with which they enable the non-portrait types to be attributed to Seleukos IV.

DEMETRIOS I.

8. *Obv.*—Facing bust of Pallas ; bead and reel border.

Rev.—**ΒΑΣΙΛΕΩΣ** (r. downwards) **ΔΗΜΗΤΡΙΟΥ** (l. downwards). Tyche, wearing calathos and chiton, stands facing ; holds in r. hand wreath, which interrupts the name of Demetrios ; in l. cornucopiae ; border of dots.

Æ. †. Wt. 68 grs. Size 18 mm. Half-chalkous.
[PL. II.]

The piece is struck upon a cast flan, which has not been carefully trimmed ; and perhaps it may be here noted that this method of preparing the blanks was probably the normal one.

The facing Pallas on the obverse is remarkable. Dr. Macdonald has been kind enough to remind me that Imhoof-Blumer, in *Monnaies grecques*, p. 435, No. 109, published a chalkous with a facing head of Helios, diademed and radiate, and a reverse, Artemis standing. This he attributes to Demetrios II. It has neither monogram nor symbol, and is just as likely to belong to Demetrios I ; indeed more likely, especially as the facing bust or head type practically ceased with Antiochos Soter, and no other examples beyond these are known. The presence of the Tyche type upon the present piece makes it more referable to Demetrios I,

who used that type for the mints at least of Antioch, Herakleia, and Apameia. The bold style of its execution suggests an artist of ambition and some real technical skill.

9. *Obv.*—Head of Demetrios to r. ; border of dots.

Rev.—Nike standing in long chiton to l., holding wreath interrupting name of Demetrios; in field l. beyond legend, monogram consisting of A and another letter. [B]AΣ (r. downwards) ΔΗΜΗ (left downwards).

Æ. ←. Wt. 25 grs. Size 14 mm. Lepton.
[Pl. II.]

Nike is quite a rare type of reverse for Demetrios. Otherwise the piece calls for no further remark than that it is barbarous and blundered. Drachms frequently suffer in the same way; and perhaps, being barbarous, the monogram purports to be that of Antioch.

10. *Obv.*—Laureate head of Apollo.

Rev.—ΒΑΣΙΛΕΩΣ (r. downwards) [ΔΗ]Μ[ΗΤΡΙΟΥ] (l. downwards). Bow and quiver. Plain edge.

Æ. ↗. Wt. 80 grs. Size 19 mm. Half-chalkous.
[Pl. II.]

The head on the obverse may be that of Apollo with the features of Demetrios. It is obviously a male head, and has a fillet of olive leaves. If it is that of Demetrios it should be compared with Nos. 7 and 8 of Seleukos IV above. The usual obverse to this reverse presents the head of Artemis. The edge is not serrated, which is also the case with the coin of Seleukos.

11. *Obv.*—Head of Athene to right in crested Corinthian helmet; border of dots.

Rev.—[BA]ΣΙΛΕΩΣ (r. downwards) [ΑΛΞΞ]ΑΝΔΡΟΥ (l. downwards). Tripod; in exergue [Δ].

Æ. ↑. Wt. 44 grs. Size 15 mm. Half-chalkous.
[Pl. II.]

Both obverse and reverse types are used by Alexander, but they do not as here appear on the same coin; and the half-chalkous is by no means a common denomination for his reign.

ANTIOCHOS VII.

12. *Obv.*—Diademed head of Antiochos to r.; border of dots.

Rev.—ΒΑΣΙΛΕΩΣ ΑΝΤΙΟΧΟΥ (r. downwards) ΕΥΕΡ
ΓΕΤΟΥ (l. downwards). Head-dress of Isis,
below date MP ; in l., beyond legend, P .
Bevelled edge.

Æ. $\left\{ \begin{array}{l} \uparrow \\ \downarrow \end{array} \right.$ Wt. 89 grs. Size 18 mm. Chalkous.
[Pl. II.]

Here is another example of the substitution of the king's portrait for a (deity) type, like the pieces of Seleukos IV and Demetrios I. The usual obverse type on this large series of chalkoi is the bust of Eros.

DEMETRIOS II (second reign).

13. *Obv.*—Eagle with open wings to r.; border of dots.



Rev.—ΒΑΣΙΛΕΩΣ ΔΗΜΗΤΡΙΟΥ (r. downwards)
ΘΕΟΥ (l. downwards). Thunderbolt. Bevelled
edge.

Æ. $\left\{ \begin{array}{l} \uparrow \\ \downarrow \end{array} \right.$ Wt. 40 grs. Size 13 mm. Dilepton.
[Pl. II.]

Probably the final ΝΙΚΑΤΟΡΟΣ of the legend is off the flan. For the reverse type the hemidrachm published by Dr. Macdonald in the *Zeitschrift für Numismatik* (vol. xxix, p. 101, Pl. v. 6) should be compared. This he attributes to Seleukeia in Pieria. The obverse of the hemidrachm with the bearded head of Demetrios naturally suggests the second reign as the time of issue, and with that the present piece may go.

There is no parallel for the eagle type of the obverse of this dilepton. It therefore presents not only a very high degree of rarity, but a very special interest.

14. *Obv.*—Diademed beardless head of Demetrios; border of dots.


Rev.—**ΒΑΣΙΛΕΩΣ ΔΗΜΗΤΡΙΟΥ** (above in two lines),
below **ΔΠΡ**  Galley with aplustre at stern; above,  **ΙΕΡ ΑΣ**; border of dots.
Bevelled edge.

Æ. ↑. Wt. 91 grs. Size 21 mm. Chalkous.
[Pl. II.]

Babelon has already published a half-chalkous of Tyre (No. 1245). The excuse for publishing this chalkous is that although the silver of Tyre and the dilepta with the reverse palm-tree are not uncommon, this is the only chalkous of the galley type which I have ever seen; the full monogram of Tyre above the galley is also quite unusual upon a copper coin. The half-chalkous reads exactly as this chalkous and is of the same date.

It is perhaps worth while correcting a confusion here into which Babelon seems to have inadvertently fallen.

He assigns the palm-tree reverse dilepta with the date **ΗΞΡ** (Nos. 1246-8) to the second reign of Demetrios. They should, of course, be assigned to the first reign.

Nor is it clear to my mind that the lepton and dilepton (Bab., Nos. 1249-51), dated **ΖΠΡ** with the monogram  in the former case, and types obverse Artemis wearing calathos and reverse cornucopiae, should be ascribed to Tyre. My own specimen of this type reads **ΣΙ**; and if they are to be put down to any Phoenician mint, why not to Sidon as much as to Tyre?

One further point is worth noting. Babelon (Pl. xx. 5, No. 985) assigns a chalkous of exactly similar type

to the first reign of Demetrios; according to his description it is undated. I felt so morally certain that this piece really belonged to the second reign that I wrote and asked M. Babelon for a cast. This he most courteously sent to me. In the exergue of the reverse are the numerals ΠΡ quite clear, but whether the preceding one is Ε or Ζ it is not possible to say, though the former appears the more likely.

ALEXANDER ZABINAS.

15. *Obv.*—Head of elephant to right; border of dots.

Rev.—ΒΑΣΙΛΕΩΣ (r. downwards), ΑΛΕΞΑΝΔΡΟΥ (l. downwards). Eagle with open wings stands on thunderbolt to l.; in field l. ΙΣΙ (?) beyond legend above bunch of grapes; in exergue ΠΠ; border of dots. Serrated edge.

Æ. †. Wt. 45 grs. Size 17 mm. Dilepton.
[Pl. II.]

If the letters on the left of the reverse were certainly ΙΣΙ there would be no doubt about the correct attribution of this coin to Zabinas. On the other hand, the bunch of grapes does appear upon one of his chalkoi (Bab., No. 1324), and the elephant, especially if Babelon's attribution of the half-chalkoi 13 (Nos. 1328–32) with obverse head of Dionysos and reverse elephant is right, would have a special attraction for Zabinas, who is represented wearing an elephant's skin as head-dress on a half-chalkous, reverse aplustre (Bab., No. 1326).

ΑΝΤΙΟΧΟΣ VIII.

16. *Obv.*—Diademed head of Antiochos to r.; border of dots.

Rev.—ΒΑΣΙΛΕΩΣ ΑΝΤΙΟΧΟΥ (r. downwards), ΕΠΙΦΑΝΟΥΣ (l. downwards). Winged Nike in long chiton to l.; holds wreath in r. hand; in field below, l., ΔΡΡ (?). Bevelled edge.

Æ. †. Wt. 143 grs. Size 21 mm. Dichalkon.
[Pl. II.]

The portrait on this large copper piece is unusually fine, and should be compared with a similar piece of Antiochos VII, figured *Brit. Mus. Cat.*, Pl. xx. 9. My own specimen of this latter is on a thick flan with bevelled edge and weighs 136 grains. They must both belong to the same mint, although they present neither monogram nor symbol.

In consequence of their heavy weight I suggest that they are meant for dichalka, an unusual denomination for these late Seleucid days, though I was able to publish another apparent dichalkon with the reverse cornucopiae, of Antiochos VIII (vide *Num. Chron.*, 4th series, vol. xii, p. 24, Pl. xi. 3).

I have to record my grateful thanks to Dr. Macdonald for being so kind as to read over the original manuscript of this paper, and by his unequalled knowledge of the Seleucid series to help me to avoid some of the pitfalls which lie in front of the collector.

EDGAR ROGERS.

III.

ASPEISAS, SATRAP OF SUSIANA.

(SEE PLATE III, FIG. 1.)

THE British Museum has recently acquired a tetradrachm with the types of Alexander the Great which is of some interest. The description of the coin (which was one of a parcel mainly of Syrian, Cilician, or further Eastern origin) is as follows:

Obv.—Head of Heracles r. in lion's skin, the hair falling back from the forehead in four heavy locks, the eye set wide open; dotted border.

Rev.—Zeus, laureate, with long hair, wearing himation over lower limbs, seated l. on throne with back and single rung; he holds eagle on his outstretched r. hand and leans his l. on sceptre; his r. leg is drawn back; beneath throne ΒΑΣΙΛΕΩΣ, in field r. vertically downwards ΑΛΕΞΑΝΔΡΟΥ, in f. l, horizontally, beneath r. arm, ΑΣΠΕΙΣΟΥ; dotted border.

R. 1.10. 261.5 grs. (16.94 grms.); dies \searrow . Glendining Sale, 16 Dec. 1920, lot 57.

The style of the reverse type, with the long hair, the right leg drawn back, and the kingly title, suggests that the coin was struck after Alexander's death, while the head of Heracles in treatment of hair and eye recalls the Alexanders of Eastern origin usually assigned to the mint of Babylon. The inscription of the reverse is of special interest as it offers, so far as I know, the only example in the earlier Alexander series of a name given at full length. ΑΣΠΕΙΣΟΥ must be the genitive

of a Persian name Ἀσπίσας, presumably the equivalent of the Greek name Φίλιππος.¹ Now an Ἀσπίσας is mentioned by Diodorus (xix. 55)—the only mention of the name in Greek literature. He says that Antigonos passing through Susa to the Mediterranean in the spring of 316 B.C., after his defeat of Eumenes in the previous winter, invested a native Persian named Ἀσπίσας with the satrapy of Susiana, thereby cancelling his previous gift of it to Seleucus, and it is difficult to resist the conclusion, which is supported by style and *provenance*, that the ΑΣΠΕΙΣΟΥ of the coin under notice represents the Ἀσπίσας mentioned by Diodorus. How long Aspeisas remained satrap we do not know, for he is not mentioned again, but at any rate he is not likely to have kept the position after the return of Seleucus to power in 312 B.C. The coin then falls to the period 316-312 B.C., and was presumably struck at Susa, the capital of the satrapy and one of the principal treasuries of the Persian empire.

E. S. G. ROBINSON.

¹ See under Aspeisas in Justi, *Iranisches Namenbuch*, p. 46, and A. H. M. Stonecipher, *Graeco-Persian Names*, p. 30.

IV.

THE LEVANTINE COINAGE.*

1. Introductory.
2. Foreign Currencies previous to the Turkish Conquest.
3. The Native Turkish Coinage.
4. The Foreign Currencies. General Remarks.
5. The Gold Ducat of Venice.
6. The Silver Dollar: of Spain; of the Empire; of Holland; the new Piece of 8 and the Regina.
7. Small Change.
8. Catalogue of Temins collected in the Levant.
9. The Modern Token Currencies of Turkey.
Comparative Table of Foreign Moneys in Aspers.
Appendix of Sources.

§ 1. *Introductory.*

THE immense natural wealth of the Turkish empire has at all times attracted European trade, and its low civilization and lack of manufactures have determined

* The Essay which is here printed was left by the author at his death in a condition nearly ready for the press. The editorial work upon it which has seemed necessary or justifiable has been confined to the verification of references that seemed to require it, and to the combination of certain portions, of which more than one draft existed, in such a way as seems most faithfully to represent the author's intention. In cases where it has not been possible to check numismatic descriptions by reference to the coins themselves, I have not ventured to make conjectural alterations. Very little has been omitted, and that only from foot-notes, in which a statement is not sufficiently explicit for lack of a reference which I have failed to verify. For the rest, the article, though it must go forth without the author's final revision, is a very characteristic specimen of his combination of untiring energy in the obscurest fields of research, with the instinct of the student-collector. He

the nature of the exchange. With few important exceptions Turkey has exported to Europe crude stuffs and received in exchange manufactured goods. The middlemen in this trade have been largely foreigners settled in the coast towns, and protected by special privileges obtained from the Porte by their respective Governments. These foreign merchants have introduced and circulated, primarily for the convenience of their own commerce, a supplementary currency of Western coins, necessitated in the first place by the extreme remissness of the Turkish Government in the matter of coinage. This remissness is of two kinds. In the first place the quality of the metal employed was notoriously bad, and fluctuating at that, and in the second neither the actual quantity of money put into circulation nor the denominations were sufficient for the trade of the country.

The method of debasement is a variety of the ancient double weights trick: the treasury received in good money at a premium and reissued the same metal heavily alloyed. The gain in this case was the treasury's, in part at least. The secret mints of provincial Pashas coined for the sole benefit of their masters. It will be noted that debasement commences when the Jews got possession of the Turkish finances (cf. von Hammer-Purgstall, vii. 235).

A further bar lay in the character of the coinage, which restricted its type in accordance with Mahomedan religious scruples to Arabic characters

would probably not have described himself as a numismatist; but the coins which he collected so assiduously were to him human documents, as much so as the stories of commerce and fraud which they serve to illustrate.—G. F. H.

undecipherable to most of those through whose hand the coin passed, and renders distinction between coinages difficult or impossible.¹

The present paper is a study of the various foreign currencies used in the Levant trade, and to a certain extent also in the interior of the country, from the taking of Constantinople down to the reform period, when the introduction of a coinage on European models rendered the country to a large extent independent of foreign media. The data are gathered partly from documents and partly from a long study of the European coins still bought and sold as bullion in the money markets of the Levant.

The main interest of the inquiry is numismatic, the economic condition and commercial relations of Turkey during the period in question being well known. It will be found to throw some light on the similar currency relations of the "barbarians" with the Greeks in the ancient world, and especially on the rules governing the acceptance and imitation of coin types by alien peoples.

§ 2. *Foreign Currencies previous to the Turkish Conquest.*

The privileged foreign communities established in Turkey for purposes of trade have their prototypes in the Italian factories under the Byzantine empire. Here also the gold coinage was stable in standard, but both it and the silver insufficient in quantity, and

¹ The imperial cipher (*toghva*) is used first as a coin type in 1657 (J. von Hammer-Purgstall, *Empire Ottoman*, tr. J. J. Hellert, 1838, xii. 408).

both the Italian possessions and their mother countries supplemented it with coinages of their own. In Europe there were three standard coins, the *denier* or penny, originally 24 grains of silver, dating from the eighth century, the gold ducat dating from the thirteenth century, and the silver dollar dating from the early years of the sixteenth century.

The silver penny does not immediately concern us: it made its way into the Levant long before the conquest of Constantinople, and though English sterlings are found sporadically, it is evident from the pennies coined by the early Levant colonies after the fourth crusade that the châtel type of Tours was the best known.

The gold ducat of Europe was already before the fall of Constantinople acclimatized in the Levant in the form of the Venetian *zecchino*.

After 1204 the predominance of Venice in the East gave an immense impetus to the circulation of her currency. *Matapani* and *vessilliferi* in silver are found in large hoards, and the standard gold coin, the celebrated *zecchino*, which made its first appearance under the Doge G. Dandolo (1280-9), was so well received that it formed the model for the gold coinage of the Genoese colonies of Pera, Chios, and Mytilene, and of the Knights of Rhodes. Fifteenth-century pilgrims state expressly that Venetian coin passed everywhere at good prices along the route they traversed, and the *sequin* in particular held its own right down to the extinction of the republic, and circulated along the eastern trade routes as far afield as India. To it we shall refer later at greater length.

§ 3. *The Native Turkish Coinage.*

The irregularities of the Turkish coinage, especially the continued debasement touched on above, make its history extremely difficult. Further complications are introduced by arbitrary tariffing of coins and by the loose use of coin-names in the authorities. Some idea of its development is, however, necessary for our inquiry.

GOLD COINAGE.

The standard gold piece, known as *altoon* ("gold"),² was first issued by Mahomed II after 1453.³

Von Hammer's elaborate note,⁴ based on and quoting many contemporary authorities, makes it clear that from the accession of Selim I (1512) to the death of Selim II (1566-74) the *altoon* was rated with the Venetian and Hungarian ducats at 60 *aspers* (q. v.). The *altoon* had already fallen to 50 *aspers* = 1 ducat by 1432.⁵ He further supposes the existence of a smaller gold coin rated with the *écu* of 6 *livres* and the *coronatus* at 50 *aspers*, but the sole authority for this is Pigafetta (1568), who calls the coin *sultaninum*. Other authors recognize but one gold coin (to which some give the same name⁶) previous to the striking

² Stanley Lane-Poole, in the Introduction to the *British Museum Catalogue of Oriental Coins*, vol. viii, p. xvii, gives the following synonyms: Flooree, Shahee (Persian), Ashrafee or Sherefee (Egyptian), and Sultanino (Italian): on the last see below.

³ Lane-Poole, *loc. cit.*

⁴ *Emp. Ottoman*, vii. 410 sqq.

⁵ Bertrandon de la Brocquière (in Wright's *Early Travels in Palestine*, 1848, p. 324).

⁶ Leunclavius (App. I), Kootwyck (App. II), Anon. (App. III). Kootwyck seems, however, to mention a Turkish gold coin current in Egypt bearing the relation 4:9 to the *altoon*.

of the *toghrali* in 1657. After this date a confusing variety of Turkish gold denominations and subdivisions grew up, culminating in the chaos described by von Hammer under Sultan Mahmud II.⁷

SILVER.

The original Turkish denomination was the *akcheh* (Gk. ἄσπρο, Fr. *aspre*, *asper*, *aspro*), struck first by Orkhan (1326-60), and weighing originally $\frac{1}{4}$ - $\frac{1}{3}$ of the Arabic *dirhem*.⁸ Von Hammer has shown that down to the Persian wars of the end of the sixteenth century the *asper* was rated at $\frac{1}{80}$ of the *altoon*.⁹ After these wars it was depreciated by adulteration, falling to $\frac{1}{180}$ about 1600,¹⁰ and continued to become lighter and more debased till it finally disappeared as a coin.

The *para* is said by Lane-Poole to have been originally $\frac{1}{2}$ of the *ghuroosh* (q. v.), and to have appeared about 1650. But the coin is mentioned already at the end of the sixteenth century as a three-*asper* piece.¹¹ At about the same date the Anonymous and Sapiencia (cp. von Hammer, vii. 414) speak of a piece of three ("bad"?) *aspers* struck in Cairo as current at Constantinople, and Kootwyck rates the *sequin* at 90 *maidins* of Egypt, thereby making the *maidin* equal to two ("good"?) *aspers*.¹² If we identify the *maidin* with the *para*¹³ we shall find the accounts

⁷ *Op. cit.*, xvi. 403.

⁸ Lane-Poole, *loc. cit.*

⁹ vii. 235 (1584).

¹⁰ Anon. (App. III).

¹¹ Fynes Moryson, p. 289.

¹² Since we know the *sequin* to have been equal to 180. But Kootwyck equates the *maidin* to $1\frac{1}{2}$ *aspers*.

¹³ Von Hammer identifies *asper*, *othmani*, and *maidin*. The first identification is correct, *othmani* being evidently the Arabic name for the Turkish *akcheh* (confirmed by Kootwyck, p. 479). In the same way *para* is the Turkish name for the Egyptian *maidin*.

fairly consistent, allowing for the depreciation of the *asper*. Thus:

About 1600	<i>maidin</i> or <i>para</i>	=	$\left\{ \begin{array}{l} 3 \text{ "bad" } \\ 2 \text{ "good" } \end{array} \right\}$	<i>aspers</i> .
c. 1670?	(<i>para</i>)		$\left\{ \begin{array}{l} 3 \text{ "bad" } \\ 2 \text{ "good" } \end{array} \right\}$	<i>aspers</i> . ¹⁴
,, 1656	(<i>maidin</i>)		$2\frac{1}{2}$	<i>aspers</i> . ¹⁵
,, 1670	(<i>para</i>)		4	<i>aspers</i> . ¹⁶
,, 1680	(<i>maidin</i>)		4	<i>aspers</i> . ¹⁷

The *ghuroosh* or *piastre* was originally a foreign coin, the European dollar.¹⁸ As a Turkish coin it was first issued by Suleiman II (1687-91), when it weighed 6 drachms: these first *piastres* were lion dollars slightly reduced and re-struck.

Specimens in the British Museum of the coinage of Mustafa III, 1757-73, are struck over a lion dollar and a twenty-eight stuiver piece respectively, which gives some idea of its value. It fell rapidly and steadily till arrested by the Medjidieh coinage at 2*d*.¹⁹

It is only after the striking of the *ghuroosh* that the denominations become complicated. About 1600 the only native coins in general use were:

- (1) The *altoon* or gold *sequin*.
- (2) The three-*asper* piece of Egypt (*maidin, para*).

¹⁴ J. Chardin (his travels extended over a number of years): the rates between 'good' and 'bad' *paras* are here stated.

¹⁵ Thévenot, *Voyage fait au Levant* (Paris, 1664).

¹⁶ Tavernier (App. V).

¹⁷ De Burgo, *Viaggio* (1680).

¹⁸ Cp. Tavernier quoted below. First mentioned in 1512 without epithet, von Hammer, vii. 410. In the sequel *ghuroosh* will be used only of the Turkish coin.

¹⁹ From 1743 to c. 1764 it was stationary at 2*s. 6d.* English (von Hammer, xvi. 281; Chandler, *Travels*, p. 19). About 1785 it had fallen to 2*s. 1d.* (J. Griffith, *Travels*, p. 308): c. 1805, 1*s. 7d.* (Dodwell, *Tour*, ii. 494): c. 1809, 1*s. 4d.* (Thornton, *State of Turkey*, ii. 37): c. 1811, its bullion value was 1*s. 1½d.* (Kelly's *Cambist*); and in 1829 its value was approximately 2·7*d.*

- (3) The *asper* (of two sorts), the worse worth $\frac{1}{2}d.$ English.²⁰

About 1670 were current :

- (1) The *altoon*.
 (2) The four-*asper* piece of Egypt : or *para*.
 (3) The *asper* with multiples of five and ten.²¹

The copper coinage need not here concern us.

§ 4. *The Foreign Currencies. General.*

So much for the coinage of the Turks themselves. It is obvious that more stable monetary standards were necessary for foreign merchants, and this was found in certain imported currencies. The chief sources of supply were Venice, Spain, Austria and Germany, Poland, and Holland. The rarity of French coins, with the two exceptions noted below, is curious in view of the volume of direct commerce between the two countries. The absence of English is easily accounted for by the laws against the export of bullion.²² Our Levant Company²³ used first Spanish coins, bought up on the passage out, and later almost exclusively Dutch.

The foreign currencies may best be classified by denominations. We will consider first the standard

²⁰ Anon. (App. III). With this compare the variety of coins current in Egypt, 1596, Kootwyck, p. 479. (1) *Altoon* or *Sultaninum* equal to 90 *maidins* = 185 *aspers*. (2) Turkish ducat (?) of 40 *maidins* = 60 *aspers*. (3) *Saiat* of 8 *aspers*. (4) *Maidin* of $1\frac{1}{2}$ *aspers*. (5) *Asper*.

²¹ Tavernier (App. V).

²² Cp. M. Epstein, *Early History of the Levant Company* (1908), p. 108.

²³ D. W. Canneman, *Diss. de Batav. Mercatura Levantica* (1839), p. 40.

gold coins or ducats, worth approximately²⁴ 7s. 6d. of our money; secondly, the standard silver dollars, ranging in value from about 4s. to 5s.; and thirdly, the small change.

§ 5. *The Gold Ducat.*

During the period of Turkish economic stability all reputable European ducats seem to have been tariffed equally, and to have ranked with the Turkish *altoon*.²⁵ In practice the Venetian *sequin*,²⁶ to which we have alluded above, came to be singled out.²⁷ Of its long acclimatization in the Levant we have spoken. It possessed besides all the qualifications necessary for the trade. These are first and foremost an unvarying fineness.²⁸ Secondly, in view of the illiterate nature of the *clientèle*, an unvarying type to guarantee the fineness: the type should also be pleasing in itself to suit the Oriental use of coins as jewellery, and if possible have some magic value. A third *desideratum*, steady supply from several centres. As protection from clipping, careful fabric, gained first by striking in a

²⁴ M. Epstein, *Levant Co.*, p. 79, n. 35, shows the enormous variation possible even for a standard coin like the *sequin*.

²⁵ The Anon. and Kootwyck about 1600 place the Turkish *sequin*, Venetian and Hungarian ducats, and French and Spanish *écus*, on the same footing, about 7s. 6d. English or 180 *aspers*.

²⁶ *Zecchino*, Eng. *Chickinoe*, Gk. *Bevéuko*, Tk. *Yaldez*.

²⁷ Thévenot half-way through the century places the Venetian *sequin* at a premium of 10 *aspers*.

²⁸ Fineness is of course much more important than weight, since shortness in weight was easily assessed by the use of the scales. This was the regular practice in Europe in the seventeenth century, as is seen from the money-changers' books of the Netherlands, and is still for *gold* coins in Turkey, as many a traveller knows to his cost: silver being depreciated and passing merely as a token currency goes by an arbitrary tariff.

collar, afterwards by a milled or patterned edge, is an additional attraction.

The Venetian *sequin* preserved its fineness (rather purer than that of the sovereign) throughout its long history,²⁹ and its types (the doge receiving the standard from St. Mark, and Christ in a nimbus of stars) with the slightest possible stylistic variation. The obverse type had a special superstitious attraction³⁰ for the Christian populations of Turkey, which would doubtless be accepted without argument by their Moslem compatriots. The supply, to judge by the enormous numbers of *sequins* still to be seen on the money-changers' stalls, must have been immense, and Venetian ships frequented every Levantine port.

The *sequin* thus became the standard gold coin by which all others were rated.

A second favourite ducat was the *ungaro*, originally, as its name implies, a Hungarian coin, which, like the Venetian, had the advantage of a constant type, a standing figure of the monarch in armour on the obverse: the reverse was generally occupied by a shield of arms or a figure of the Virgin. The standing warrior and shield types were taken over by the Dutch at the end of the sixteenth century, and the coin survived, with a modified reverse (a tablet with inscription), down to the early years of the nineteenth century, and was always popular in the Levant.³¹

²⁹ But cf. Tavernier, *Travels in India*, p. 18, "Venetian Ducats formerly best, but twelve years ago were altered".

³⁰ On the magic value of the *sequin* see *Ridgeoay Essays*, p. 637, and below (p. 63).

³¹ The treasure-ship sunk in the battle of 1770 at Tcheshme carried Venetian *sequins* and Dutch *ungari*.

The shield *ungaro* was imitated by the Este at Modena, and the tablet type by the Farnese at Parma: I have found examples of both in the Levant.

Of other ducats, except perhaps that of Ferdinand and Isabella and its Dutch imitations, none are of more than sporadic occurrence.

§ 6. *The Silver Dollar.*

With the first half of the sixteenth century first appears in Europe the large silver denomination of which the prototype is the *Joachimsthaler*. At the end of the century dollars are greatly in vogue in the Turkey trade:³² in spite of Koranic law, says Leunclavius, they were eagerly accepted in payment at an enhanced price, and without weighing. This is said particularly of the Austrian and Saxon dollars which were already struck in a collar. With them must be ranked the very pure silver *piastres* or pieces of eight (*reals*) of Seville and Mexico, which have the disadvantage of being so roughly struck as to encourage clipping.³³

Probably on this account, but also in consequence of the increase of Dutch commerce with the Levant, they are eventually ousted as money of account by the Lion dollar of the United Provinces.³⁴ There come

³² Breuning, *Orientalische Reyss* (Strassburg, 1612), p. 98, mentions that Joachimsthalers were melted (1579).

³³ *Crosoni* is the name in G. B. de Burgo, *Viaggio*, i, p. 310. J. B. Tavernier (*Travels in India*, Calcutta, 1905), p. 18: Seville reals slightly better than Mexican.

³⁴ For this point cf. R. North's *The Rt. Hon. Francis North, &c.* (Bohn's Ed., 1890), ii, pp. 93, 95. In accordance with a treaty of 1603 with the King of Poland the dollar with the lion was allowed to pass as the equal of the piece of eight (Naima, *Annals of the Turkish Empire* (*Or. Tr. Fund.*, 1832), p. 354). It is stated by

thus to be three standard dollars with a fairly constant ratio: (1) the old piece of eight or *piastro* (*Beyaz grouch* ?); (2) the rix-dollar proper, *Kara grouch*; ³⁵ (3) the Lion dollar, *Arslan grouch*.

Under the second heading must be included the *thalers* of the Empire and the archdukes, especially Tyrolean, and of Saxony, all cited by Leunclavius, and found still in abundance; besides should be remarked the *thalers* (and subdivisions) of the archbishops of Salzburg, which were doubtless aided by their good fabric and fixed type, and the *thalers* of Brandenburg. They were imitated in Italy (*Riv. It. Num.* i, 1888, 2) at Tassarolo, Correggio, Desana, Florence, Mantua, Messerano, and Modena, the last definitely for the Levant. Italian *talleri*, except the silver ducat of Venice ³⁶ and the Pisan *scudi* of the Medici, are rare. I have never seen the base Genoese *scudo* for the Levant.

Kootwyck that all dollars were rated equal at 65 *maidins* (195 *aspers*), but naturally the heavier and finer sorts would be accepted at a premium or melted, and the piece of eight evidently was recognized as the most valuable. The *Lion* became the standard owing to the vast quantities of them imported. Its exchange value towards the end of the seventeenth century fluctuated between 4s. 6d.-5s. English (between 1638-1706 4s.-5s.: *Letter-Books of Levant Co.*). From Kootwyck we should infer that for rough purposes any dollar was rated as two-thirds of any ducat, the approximate value of dollar and ducat being between 6s. and 9s. respectively. Von Hammer, vii. 26: ducat to German crown as 2:3. Big bargain made in Lion dollars, Bargrave, 1652 (\$100 = £22); cp. Mundy, p. 215. 1666 all English payments made in "current" Lion dollars: Pearson, p. 52.

³⁵ So Tavernier distinctly, but von Hammer, xi. 190, calls the rix-dollar *beyazgrouch*, and the florin (*zolota* ?) *karagrouch* (30-40 *aspers* less in 1644).

³⁶ This is much commoner in Greece than in Turkey, and generally of Doges Silv. Valier, Dom. Contarini, and Fr. Morosini, representing the occupation 1689-1714.

To return to the Leone. This very important coin, of approximately the same weight as, but less fine than, the old piece of eight, was first coined in Holland in 1575, and adopted by the United Provinces and the imperial towns of Campen, Deventer, and Zwolle. Its abundance in the Levant and the very numerous base or plated forgeries show its long importance over this area. It was coined in Holland for over a hundred years without change of design: the type is a modification of the *Joachimsthaler*; the obverse bears an armed man supporting the shield of Holland, the reverse a large rampant lion.³⁷ The early pieces are carefully struck in a collar.

As for the period at which the Lion dollar was in vogue in Turkey, Kootwyck, at the end of the sixteenth century (the Dutch did not obtain their capitulation till 1612), says that in his time all European dollars, including Venetian, German, Spanish, and Dutch, were assessed equally, and that this gave great impetus "ob evidens et ingens lucrum" to the importation of the Dutch, which were inferior in standard. The turning-point in favour of the Lion dollar was probably the year 1669, when enormous quantities of them were struck to meet a currency crisis. In the seventeenth century the officials not only of the Dutch but of the English factories were paid in Lion dollars. They are found in hoards with *Ragusans* of the middle of the eighteenth century,³⁸ and were still in use at the

³⁷ Abou Kelb: Tournefort, *Voyage*, ii. 311; J. Griffith, *Travels*, p. 308; Chardin, *Voyage*, i. 4. From the type the dollar was known to the English as "Lyon" or "Dogg" dollar, to the Italians as "Leone", to the Turks as *Arslan* (Gk. ἀσιλάν), and to the Egyptians as *Esedî* or popularly Abu-Kelb.

³⁸ A series of Chiote documents published in Γ. Φωτεινός,

beginning of the nineteenth century, though the first place as money of account was held by the new piece of eight or *colonnato*.³⁹

The Lion dollar was widely forged: it was also struck in base metal, presumably for Levant currency, by the Italian princes of Modena,⁴⁰ Sabbioneta, and Correggio,⁴¹ with their own titles. The Venetian colonial coinage with the rampant lion type was evidently an attempt to compete with it; to judge by the comparative rarity of the Venetian pieces, an unsuccessful one.

The Lion dollar was finally ousted by the Maria Theresia *thaler*⁴² and the pillar dollar or new piece of eight.⁴³ Of these important coins the latter seems to have had no imitators; the former, which continues to be struck for trade in Abyssinia and Arabia,⁴⁴ had to contend with feeble competition from the Venetian and Ragusan *scudi* with the female head, representing the republics concerned, which closely follows that of the earlier Maria Theresia coinages.

Νεαμονήσια (Chios, 1865, pp. 189 ff.), shows that *aspers* were the common money of account during the years 1610-86, pieces of eight (*μυρία*) 1641-73, and Lion dollars (*ἀσλάνια*) 1660-1737, when the series of documents stops.

³⁹ Hertslet, *Comm. Treaties*, ii. 367. In 1809: Leone = 70 p. against dollar at 80.

⁴⁰ A. Crespellani, *Zecca di Modena*, documents of 1643-59; the same, *Conii e Punzoni del Museo Estense*, in *Memorie della R. Acc. di Scienze* (Modena), 1887, p. 70, Nos. 884-8, and p. 43, No. 566.

⁴¹ Coll. E. Smelda, Schulman, 7 Dec. 1908, No. 242.

⁴² Regina, Karagrousch (von Hammer, *Hist. de l'Emp. Ott.*, Paris, 1839, xvi. 404), Abou Shusheh (Arab. *shusheh* = top-knot).

⁴³ *Colonnato*, Diregli (von Hammer, xvi. 404), Abou midfa (Arab. *midfa* = "cannon", an allusion to the columns flanking the arms).

⁴⁴ J. G. v. Hahn, *Alban. Stud.* (1854), i. 128; Burton, *Meccah*, ii. 111.

§ 7. *Small Change.*

The denominations below the dollar are supplied by various currencies besides the subdivisions of the popular dollars. Those of the Spanish *piastre* are frequently met with, of the Saxon more rarely; Austrian are very common, and in the seventeenth century are more carefully struck probably than any in Europe. The later *twenty-kreutzer* pieces (Maria Theresia and Francis Joseph I) circulated till comparatively lately, and even in our own time were current, I was told in Smyrna, in the Sporades at reduced rates.

Another standard small coin was the quarter-dollar or *roup* of Sigismund III of Poland (1587-1632), which was imitated, apparently late in the century, by the Germans in a base currency with the titles of Georg Wilhelm of Brandenburg.

Sigismund III's Danzig *ort*, a very neatly struck coin, is excessively common, his *six-groschen* piece much less so, though not rare. The very common *three-groschen* pieces of the same monarch, struck for Poland, Lithuania, and Riga, are copied by the princes of Transylvania, and the reverse of the Riga type by the Republic of Ragusa.

The subdivisions of the Venetian silver ducat are comparatively scarce, as are the half-dollars with the lion, which are for the most part early. On the other hand, the twenty-eight stuiver pieces of the imperial cities of Emden, Deventer, Campen, Zwolle, and Oldenburg are plentiful and much forged—a sure index of popularity.⁴⁵ This is the much misunderstood

⁴⁵ Cf. Canneman, *Diss. de Batav. Mercatura Levantica*, p. 38.

coin called *zolota*, as is made clear by Marsigli's description.⁴⁶ The name has a similar history to that of the *ghuroosh*: it is said to be of Slavonic origin with the meaning "three quarters".⁴⁷ The *zolota* at the end of the seventeenth century was rated at two-thirds of the Lion dollar.⁴⁸ In 1718 the Vizir Ibrahim issued a new *piastre*,⁴⁹ bearing the same relation to the original *piastre* of 120 *aspers*, which was of course based on the Lion, and this new piece, circulating at 80 *aspers*, took over the name of the foreign coin of the same value.

For some unexplained reason, probably their superior fabric, the Nancy *testoons* of Charles of Lorraine, and others, are frequently to be found in the Levant, and are copied in a series of multiples of the *bolognino* struck for Levant currency by Francesco II d'Este, Duke of Modena. The *testoon* of Lucca mentioned by Marsigli I have never met with.

§ 8. *The Temins and False Coinages for the Levant.*

The following curious story of the unloading of a fraudulent European currency upon the Turkish market in the latter half of the seventeenth century is pieced together from many sources. From the side of the Levant merchants we have no less than five several

⁴⁶ Cf. below, p. 90. Von Hammer (*op. cit.*, xii, p. 408) counts both Lion dollar and *zolota* as Turkish coins! He gives the value of the latter as 35 *paras* (xvi. 403).

⁴⁷ Lane-Poole, *loc. cit.*; cf. Schmieder, *Handwörterbuch der ges. Münzkunde*, s. v. *zlotus*, "a Polish piece of four *groshen*".

⁴⁸ So Marsigli: Thévenot (1656) gives the values as 80 and 55 *aspers* respectively.

⁴⁹ Von Hammer, *loc. cit.* xiv. 8. Both Lane-Poole and Schmieder, *op. cit.*, s. v. *zlotota*, give the value of the Turkish coin as 30 *paras*. but at no definite date.

accounts of the rise, progress, and fall of the iniquitous traffic,⁵⁰ and some stray gleanings from the Letter-books of the Levant Company. From the side of the Europeans engaged more or less directly in the traffic many documents have been published, chiefly from the archives of local Italian mints.⁵¹ A third category of evidence is formed by the fraudulent coins themselves, which are well represented in European collections, and are still to be found in quantities on money-changers' stalls in the Levant. I have appended a catalogue of the varieties collected by me during the last twelve years in Greece and Turkey, as giving a rough idea of the types circulating in the Levant markets.

Under Louis XIV the French royal mint issued a well-executed series of silver *écus* with subdivisions, including halves, quarters, and twelfths: the types were uniformly (*obv.*) the king's head and titles, and (*rev.*) a crowned shield bearing the lilies of France and the motto *Sit nomen Domini benedictum*. I have never met with one of these *écus* in the Levant, or with the subdivisions, except the twelfth, which is common. It is the twelfth or five-sous piece of this coinage which was the ultimate cause of what threatened to be a serious financial crisis in the

⁵⁰ P. Rycaut, *History of the Turkish Empire*, London, 1687, iii. 209 ff. (here App. VIII and X); J. Chardin, *Voyage en Perse*, Paris, 1723, i. 11 ff. (App. IX); J. B. Tavernier, *Relation of the Grand Seigneur's Seraglio*, London, 1677, pp. 16-18 (App. VI); R. North, *Lives of the Norths*, London, 1890, ii. 93-5; C. de la Magdeleine, *Miroir Ottoman*, Basle, 1677, p. 106 f. (App. VII).

⁵¹ Among these a document of 1667, published by Olivieri (*Monete dei Doria*, p. 83 f., No. xx), gives a good account of the trade in *luigini* up to that date. This is cited for brevity as "Olivieri xx". (See App. IV.)

Levant markets, and indeed in Turkey generally. In our authors it is variously named *luigino*,⁵² *ottavo*, *ottavetto*, *real*, or (by Turks) *temin*: to the latter name we shall return.

About 1656 a payment happened to be made by a French merchant,⁵³ or, as some said, a common sailor,⁵⁴ in Smyrna in these *luigini*, which should, of course, have been accepted at their face value of five sous, or twelve to the *écu*.⁵⁵ The Turks, however, and especially their women,⁵⁶ were so struck by the prettiness and neat fabric⁵⁷ of the coins that they willingly took them at the rate of eight, or even six,⁵⁸ to the *écu*, thus giving the importer an extra profit of no less than 50-100 per cent. on all purchases made with them. The French naturally began to import the coins in bulk: the other nations engaged in the Turkey trade, as naturally, protested at the advantage enjoyed by the French, and the coins were tarified at their proper rate. The counter-move on the part of the French was to undertake the manufacture on a

⁵² The Avignon imitation (below, *Catalogue*, Nos. 5, 6) seems to have been called *carlino* after the papal legate, Carlo Ghisi, who struck it: a Genoese variety with type of St. George was similarly called *georgino* (Olivieri, *Carte e Cronache MSS.*, Genoa, 1855, p. 142).

⁵³ Tavernier (App. VI).

⁵⁴ North, *loc. cit.*

⁵⁵ The *écu* here meant is, as North's account shows, the "weighty piece of eight", or Spanish dollar of eight *reals*, then the standard dollar-currency of the Levant. It is said by North to have been about eighteen per cent. more valuable than the Dutch Lion dollar, which was worth about 4s. 6d. English.

⁵⁶ Tavernier (App. VI). Lucas found *luigini* worn as ornaments by Bulgarian women much later (*Voy. en Grèce*, i. 237).

⁵⁷ They were probably among the first "milled" coins to be seen in Turkey.

⁵⁸ Chardin (App. IX).

large scale of coins of identical weight and fabric, but containing a large percentage of alloy.

The method used was to approach a local potentate who possessed the right of coinage and contract with him for the use of his seignorial mint with a view to the striking of a certain quantity of base coin bearing his name. Of these local potentates the Princess of Dombes, who had a mint at Trévoux, and the Prince of Orange were approached early, and numbers of *luigini* bearing their names were foisted on the Levant market. These first coinages were of a fair standard (eight ounces fine) and became immediately popular.⁵⁹

Competition and greed, however, soon began to lower the standard of the metal employed. Already in 1659 the Levant Company asks the Consul at Leghorn to complain to the Grand Duke of Tuscany of the falsified *luigini* being struck at Monaco,⁶⁰ and at the same time the Dutch are accused of fabricating such coins at Amsterdam.⁶¹ The *luigini* struck at Amsterdam do not seem to have been recognized.

⁵⁹ Tavernier mentions also at this date a series of *luigini* struck by the papal legate at Avignon which were not a success, "the effigies thereof not being well done, and the Cross hanging at the Neck displeasing to the Turks": but the mint of Avignon seems actually to have begun coining *luigini* much later. The British Museum has *luigini* of 1659 and 1660 with the head of Alexander VII, and with the legate's head of 1662 and 1665; Serafini gives other similar coins of the dates 1663 and 1666 (*Medagliere Vaticano*, 1912, ii, p. 296 f.).

⁶⁰ *Letter-Books of Levant Company* (MS. in Record Office), 26 March, 1659.

⁶¹ "Louises coined by the French and by the Hollanders at Amsterdam" in a letter to the Ambassador (Sir J. Bendysh) at Constantinople, and the consuls at Smyrna and Aleppo, of the same date (*Letter-Books of Levant Company*, 26 March, 1659).

The only Dutch *luigino* known to me is a rare piece of Zwolle.⁶²

A number of Italian mints, including not only Monaco and a number of small places in the territory of Genoa, but even Florence itself, are active in the early sixties. Genoa made a bid for the traffic with some extremely base coins towards the end of the "boom".⁶³ The wide ramifications of the traffic during the "boom" in *luigini* may be gathered from Rycaut's statement that "many who had the curiosity to make a collection of them found no less than a hundred and twenty stamps".⁶⁴ The French, who may be considered the inventors of the traffic, the Dutch, and the Genoese were all alike implicated, and many native merchants seem to have ordered the coins from Europe.⁶⁵

The most acceptable type of *luigino* had by this

⁶² See Baer's Catalogue of the J. J. R. Whites Collection, Frankfort, 1871, No. 2806.

⁶³ The Genoese varieties of the *luigino* are very rare in the Levant, and were evidently not a success. They were struck late, and with a radical change of type. Cf. *Gaz. Num.*, i. 3; *Misc. Stor. Patr.* (Turin), xi, Pl. v. 55 and 57 (1668-9), and for the decrying of several sorts of *luigini* at Genoa, Borelli, *Editti di Savoia* (Torino, 1681), p. 371 f. (many illustrations); Olivieri, *Carte e Cronache MSS.* (Genoa, 1855), p. 142. Mintages which, though I have not met with them in the Levant, were evidently intended for the traffic are those of Lucca (Massagli, *Luigino coniato a Lucca*, 1876), Mantua (1661, *Misc. Stor. Ital.*, iv. 46), and Modena (1666, *ibid.*, xii. 179 = Crespellani, *Zecca di Modena*, 126).

⁶⁴ Chardin says: 'J'en ai vû à plus de cinquante marques différentes; les plus communes avoient pour coin d'un côté une tête de femme avec ces mots au tour, *Vera virtutis imago*, & de l'autre l'Ecu de France, avec ceux-cy, *Currens per totam Asiam*.' (See App. IX.)

⁶⁵ The Germans at the same time, according to Tavernier, tried to unload a base coinage of Polish quarter-dollars, but without success.

time been found to be an imitation as exact as possible of those struck by the Princess of Dombes, whose arms were identical with those of France, save for the addition of a label of three points.

The standard of the coins falls rapidly from year to year, and the pious legends give place to satirical mottoes, "reproachful to the Turks" as Rycaut has it, and later to cynical statements of the standard of the metal, intelligible to the "Frank" merchant, but not to his Turkish *clientèle*.⁶⁶ *Bonitatis unciarum sex* gives place to *bonitatis unciarum quinque*, and that in turn to *bonitatis unciarum quatuor*, or even *trium*. The Turkish public still refused to be undeceived: the customs-officers were bribed to let the coins in;⁶⁷ the troops then before Candia refused to accept their pay in any other form.⁶⁸ In time the whole empire became flooded with base money, and what good remained was gradually bought up, re-coined as base *luigini* in Italy, and re-imported.

As to Europe, "a glut of Turkish Goods filled all Christendom, the prices low and cheap, and no profit to any Merchant dealing upon the square, or upon the old and legal way of Traffick. At *Ligorne* and other parts of *Italy* complaints were made, That the Silver and Bullion of the Country were melted down to

⁶⁶ It is fair to say that in some cases (*Catal.*, Nos. 17, 18, 22) an Arabic figure indicating the fineness is inserted at the end of the corresponding Latin legend (cf. Document xvii in Olivieri, *Monete dei Doria*, p. 78, where it is laid down as a condition in the permit to coin that the fineness of the coin shall be stated in Latin and Turkish). But the Arabic numerals are sometimes higher than the Frank words, as in types (9), (10) of the Andros find, where the standard as *written* in Latin is $\frac{1}{2}$, but as expressed in Arabic 6 : 12.

⁶⁷ Rycaut, p. 210.

⁶⁸ Tavernier, *loc. cit.*

make a composition with baser Metals for *Turkie*, and exchanged for decaying and perishable Commodities."⁶⁹

The extent of the fraud began to be generally recognized in 1667.⁷⁰ In this year the English merchants, who are universally admitted to have had no hand in the traffic,⁷¹ boycotted the *luigini*, and the price fell at once to fourteen and twenty to the dollar. The Turkish authorities had made several attempts to restrict the importation and tariff the coins already in circulation. Many cargoes had been seized in the ports, and several merchants who had invested all they had in the nefarious speculation were ruined.

The original French *luigini* of the royal mint were tariffed at five sous, and those of Dombes, Monaco, Florence, and probably Massa,⁷² at four, as being of tolerable alloy; ⁷³ but the inconvenience was obvious, since the bad pieces were deliberate imitations of the good, and public suspicions were aroused. A further attempt to license some *luigini* (obviously the latest and worst) at thirty (?) to the dollar seems likewise to have been a failure.

⁶⁹ Rycaut, *loc. cit.*

⁷⁰ From the account of Olivieri (No. xx) it is evident that many seizures of base *luigini* had been made both in Europe and in Turkey before this, and that the great days of the traffic were already over by 1667, when, we are told, though coins of the original standard (eleven ounces fine) passed in Smyrna, Constantinople, and Cyprus, it was difficult to pass any but those of France and Massa.

⁷¹ The evidence of Chardin, a Frenchman, is especially explicit on this point, which is brought out also by Rycaut and Olivieri, No. xx. North says, "Our nation, who were most aggrieved by it, laboured against it all that they possibly could, and spent money many times (*i. e.* in bribes), and had them (the *luigini*) cried down".

⁷² See note 70.

⁷³ De la Magdeleine says, "elles n'y passent plus sans être marquées & reconnues de bon argent".

The whole question of the circulation of the *luigini* had by now ceased to be a local one, affecting only the staples of European trade. The treasury was directly affected, since the tax-gatherers who demanded that their dues should be paid in "good" money, such as Spanish pieces of eight and Dutch Lion dollars, found that these were unobtainable, and that the *luigini* formed almost the sole currency of the Empire. The imprisonment of defaulters who could not pay in "good" money only led to riots, and "at *Prusa* and *Angora* the torrent of the peoples rage was not appeased without the blood and lives of some of their officers, alledging with good reason, That their Ministers and Governors having introduced or permitted this money amongst them, and allowed it as currant in that manner, as that they had for some years known no other, nor received other for all the fruits of their labour or possessions, they ought not now to refuse to receive that which they themselves had made passable".⁷⁴ In the end (1669) the Government had recourse to the heroic expedient of re-coining the whole of the base *luigini* found in the country, the owners bringing their stock to the mints and bearing the loss.

Thanks to the reputation of the Vizir, a man of known severity, and then at the height of his power as the hero of the successful Cretan war, this measure was carried through without serious trouble.

The better sort of *luigini* certainly continued to circulate, in the provinces at least, and are mentioned as currency down to the middle of the eighteenth century, as the following table shows:

1669. E. Browne, *Travels*, p. 39 (ed. 1685): Plentiful in Thessaly.

⁷⁴ Rycant (App. VIII).

1669. Guilletiere, *Athènes*, pp. 83, 114 (not current in Athens itself, but outside).
 1675-6. Wheler, *Voyage*, pp. 72, 303, Tenedos, Greece, "very current everywhere", and worth about 5*d.* English.
 .. Grelot, *Voyage*, p. 166.
 1680. Randolph, *Archipelago*, pp. 73, 86, Candia, about 5*d.*
 1699. Lucas, *Voy. au Levant*, i. 199, Syria.
 1705. .. *Voyage dans la Grèce*, i. 287, Adana.
 1739. Poccocke, *Descr. of the E.*, ii. 235, Cyprus, 22 = 3*s.*

The withdrawal and melting of the *luigini* caused a great deficiency in the currency which was eventually met by the Dutch with a large importation of Lion dollars.⁷⁵ The dollars of this issue are probably to be recognized in certain very roughly engraved pieces frequently seen in the Levant, which bear dates subsequent to the disuse of the type in Holland. These seem to be honest coins of fair standard, struck, sometimes from old dies, in the official mints.⁷⁶

The scandalous exploitation of the Turkish markets

⁷⁵ On this point North, who is almost certainly wrong, says that the *quantity of silver* put on the market by the melting of the (base) *luigini* made the difference in value between the old piece of eight (formerly the standard dollar) and the Lion dollar inappreciable, which state of things was taken advantage of by the Dutch, and led to the replacing of the piece of eight by the Lion dollar. But already in 1666 all salaries were paid by the Levant Co. in current Lion dollars, except the ambassador's, which was paid in "weighty dollars". J. B. Pearson, *Biograph. Sketches of the Chaplains to the Levant Co.*, p. 52: cp. Robert Bargrave's *Travels* (MS. Bodl. Rawlinson C. 799), where a bargain is made in Lion dollars in 1652. Rycaut represents the calling in of the *luigini* as causing a great scarcity of currency: "It was strange to see, how on a sudden all Trade ceased, no money being left in the Country, few Bargains were made but by Barthers." This seems much more probable on the face of it.

⁷⁶ Like Maria Theresia dollars which used to be struck in Milan for a percentage by the Austrians: Burton, *Meccah*, ii. 111; J. G. von Hahn, *Albanes. Studien*, i. 128.

by the importers of *luigini* was neither the first attempt of its kind nor the last.⁷⁷ It differed from others by the scale on which it was carried out, by the success which attended it, in spite of repeated protest and exposure, down to the final abolition of the traffic, and perhaps by the more than ordinary shamelessness of those engaged in it.

The interest of the whole episode for the history of currency is considerable. In all times certain foreign currencies have had special vogue among alien, and especially illiterate, nations. The general rules governing the selection of such currencies by the illiterate customer, who only distinguishes the imported coinage by type, not by inscription, have been given above (p. 47). Of these general rules the fine gold Venetian *sequin*, struck with uniform types for many centuries, and circulating over an astonishing area, affords an instructive example. The *luigino* fails miserably to conform to the rule as to standard, though in other respects (immense output and uniformity of type) it is well suited for extra European markets.

In the case of the Venetian *sequin* I have pointed out elsewhere⁷⁸ that the obverse type, misinterpreted by the Greeks as representing Helena and Constantine, gave the coin a superstitious value as a charm, which ultimately commended it even to Moslems. Superstition, I believe, has not been without influence in promoting the circulation of the *luigini*, despite their

⁷⁷ For false *besliks* manufactured in Europe for the Turkish market about the first half of the last century, see F. Hervé, *Residence in Turkey*, 1837, i. 38; Ninet in H. E. J. Stanley, *The East and the West*, p. 70; cf. C. White, *Constantinople*, ii. 33.

⁷⁸ *Ridgeway Essays*, p. 637.

baseness. During the whole period of their "boom" the great siege of Candia was in progress. Tavernier remarks twice on the insistence with which the troops before Candia demanded to be paid in this money as one of the difficulties the Government had to contend with in putting down the traffic. Its final abolition coincides with the fall of Candia and the end of the war.

It seems at least probable that the *luigini* were considered lucky coins. The Turkish name for them, *temin*, is unexplained.⁷⁹ It is very difficult to say what gave them their reputation.⁸⁰ It may, on the one hand, be derived from the interpretation or misinterpretation of its types. In the present case we have some slight reason for suspecting that the magic power of the coin centred in its reverse type. North's note on the counterfeiters of the *luigini* seems significant: "such as by any means could hook in flowers de luce, were sure to make this use of them. They that had no direct title made somewhat else to be like them; some made eagles so like flowers-de-luce that it must be a cunning man to distinguish them."⁸¹

⁷⁹ *Temin*, Rycaut, De la Magdeleine, p. 106; *timmin*, Chardin, p. 11; *temeen*, North. *Sümn* in von Hammer-Hellert, *Hist. Emp. Ott.* xi. 366, quoting De la Croix, seems only a mistake. [Mr. J. Allan informs me that the Turkish name *temin* (for *تَمِين*) means simply $\frac{1}{8}$; cf. *ottavo* above. *Sümn* is De la Croix's transliteration of *تَمِين*.—G. F. H.]

⁸⁰ Delhi rupees of Muhammad Shah became rare during the Afghan war because the Afghans used them to place in the mouths of fallen *Ghazis*. But the reason for the choice of this particular rupee for the purpose remains obscure (*Num. Chron.*, 1881, p. 324).

⁸¹ North, *loc. cit.* The allusion is evidently to the coins struck by members of the Doria family (below, Nos. 23, 24). Similarly lilies, branches of orange, and halberds take the place of *fleurs-de-lis* in Nos. 2, 16, 15 respectively: cp. also No. 35, note.

But, again, the superstition may equally well have been founded on a dervish's prescription, or a purely lucky accident, such as a spent ball striking a *luigino* in a soldier's pocket, which would at once secure the reputation of the coin as an amulet against Christian bullets.

CATALOGUE OF TEMINS COLLECTED IN
THE LEVANT.

ARQUATA.

1. *Obr.*—ET·DELECTATIONE·DIGNE

Rev.—(b)⁸² +PARTES CVRIOSITATE→A 16-67.

F. Poey d'Avant, *Monnaies féodales de France* (Paris, 1858-62), No. 5244, Pl. cxix. 4 (var. 1668). P. Mantellier, *Notice sur la monnaie de Trévoux et de Dombes* (Paris, 1844), p. 89, No. 112 (var. 1668).

2. *Obr.*—EFFVLGET VBIQVE

Rev.—(a)⁸² *PVRITATE·ET·CANDORE *A 16-67.
Lilies on shield.

3. *Obr.*—PVLCHROR·ETSI·NON·PRIMA

Rev.—(b) ⌘ DNS·DIRIGAT·ET·PROTEGAT 16-68
and ·A· below.

Rivista della Numism. antica e moderna (Asti), i, 1864, p. 190; the legends PVLCHROR·SED·NON·PRIMA and DEVS·PROTECTOR·MEVS are prescribed for a coinage at Arquata in an undated document (*ibid.*, p. 65). Andros find, type 13, 14 (E. Gnechi, *Il Tesoro di Andros in Riv. italiana di Numism.* iv, 1891, pp. 129 ff.). *Corpus Numm. Ital.*, ii, p. 7, No. 3.

. *Obr.*—DE·PROCVL·PRÆTIVM·EIVS

Rev.—(a) TRAHIT·SVA·QVEMQVE·VOLVPTAS
and ·A· below 16-68.

Poey d'Avant, No. 5247, Pl. cxix. 12. Andros find, type 10.

⁸² (a) Before the legend indicates that it begins at the bottom, (b) that it begins at the top.

AVIGNON.

5. *Obv.*—FLAVIVS·CAR·GHISIVS·LEG·A Bust to r.
Rev.—(b) PAX ORIETVR EX MONTIBVS. 1660.
 * A. Arms of Rovere and Chigi quarterly.
 Cp. Cinagli, *Monete de' Papi*, p. 241, No. 100.
6. *Obv.*—FLAVIVS·CAR·GHISIVS·L·A
Rev.—(b) AB STELLA·LVX·ORITVR. (m.m.) 1667.
 Cp. Cinagli, *loc. cit.*, No. 105.
- 6 *bis.* Variety with LE·A (*Obv.*) and (*Rev.*) ORITVR
 (helmet)-* 1667.

CAMPI (Gian Battista I Centurioni and his wife
 Giulia Serra, daughter of Gian Tommaso, 1668).

7. *Obv.*—IVLIA·M·PRINCIP·CAMPI
Rev.—(b) CENTVPLVM ☉ GERMINABV · ☉ · ☉
 16-68.
Corpus Numm. Ital., ii, p. 53, No. 7. The motto
 CENTVPLVM GERMINABIT is suggested for the
 mint of Campi in a document (Olivieri, *Monete dei
 Centurione-Scotti*, p. 29).
8. *Obv.*—HÆC·EST·PALANTIS·IMAGO
Rev.—(b) DEVS·MEVS·ET·REDEMPTOR ☉ and ·C·
 below; 16-68.
 Poey d'Avant, No. 5240 (var. IMAG). *Revue Numis-
 matique*, 1869-70, pp. 118, 122, assigned to Tassarolo,
 since the Spinola of Tassarolo bore the title of Count
 Palatine (cf. an *ungaro* of Agostino Spinola figured in
 Olivieri, *Monete degli Spinola*, Pl.iii. 4, and Poey d'Avant,
 No. 5231).⁸³ I prefer Campi on account of the mint-mark.

DOMBES.

9. *Obv.*—HEC·EST·VIRTVTIS·IMAG
Rev.—PER·TOTAM·ASIAM·CVRRENS ☉ 16-66.
 Andros find, type 6.

⁸³ A very base and worn half Lion dollar bought by me at Smyrna bears the legends: (*obv.*) MON·DA·SOL·45—COM·PALAT, and (*rev.*) CONFIXINXDOMXNONXPERIBXINXETERX (rose).

10. *Obv.*—HEC·EST·VIRTVTIS·IMAGO

Rev.—(b) DEVS·MEVS·ET·OMNIA 16-66. Fleur-de-lis
below shield.

Andros find, type 7. Mantellier, p. 89, No. 108, var.
1668.

11. *Obv.*—PVL·CRA·VIRTVTIS·IMAGO

Rev.—(b) SIMVL·TVTANTVR·ET·ORNANT. ∴ 16-67.

Poey d'Avant, No. 5236, Pl. cxviii. 16. Mantellier,
p. 88, No. 105, Pl. xi. 7. *Rev. Num.*, 1869-70, p. 118
(assigned to Torriglia). Olivieri, *Monete dei Doria*,
p. 73, Doc. xv. *Corpus Numm. Ital.*, iii, p. 595, No. 11
(var. "6"). Assigned to Torriglia.

DOMBES (Anne Marie Louise de Bourbon, 1650-93).

12. *Obv.*—AN·MA·LOV·DE·BOVRBON

Rev.—(a) PRINC·(lis) SOW·DE·(lis) DOMBES 16-68.
A below shield.

P.-A. T. Duby, *Traité des Monnoies des Barons*
(Paris, 1790), Pl. xlvi. 12, p. 143. Variety, Andros
find, type 1.

13. *Obv.*—PLACET·ET·POLLERE·VIDETVR

Rev.—(a) IPSOQVE·FIT·VTILIS·VSV· 16-68.

Poey d'Avant, No. 5242; cf. No. 5241 (var. VIDETV).
Mantellier, p. 89, No. 110.

14. *Obv.*—PVL·CRA·VIRTVTIS·IMAGO

Rev.—(b) ⊗ BONITATIS·VNCIARVM·SEX· 16-68.

Perhaps of Torriglia.

15. *Obv.*—PVL·CRA * VIRTVTIS * IMAGO

Rev.—(b) TRES * SECVRES BONIT * VNC * SEX
16-68. The fleurs-de-lis are replaced by halberd
heads.

Perhaps of Torriglia. The type (*tre punte di alobarde*)
is prescribed for that mint, but with the motto SIMVL
TVTANTVR ET ORNANT, in a note to a docu-
ment of 1666, in Olivieri, *Monete dei Doria*, p. 73.

16. *Obv.*—ARETH·PRO·ATLANT

Rev.—(b) HESPERIDVM·DECVS 16-68. The fleurs-de-lis are replaced by branches bearing three oranges.

Poey d'Avant, No. 5249, Pl. cxix. 11. Mantellier, p. 87, No. 103. *Rev. Num.*, 1869-70, p. 116, where Longpérier interprets the obverse motto *Arethusa proles Atlantis*, and assigns the coin to a Ligurian mint.

17. *Obv.*—PVL·CRA·VIRT·VTIS·IMAGO

Rev.—(b) ☉ BONIT·VN·CIARVM·QVATVOR. N₃
16-69.

18. *Obv.*—GRATIOR·IN·PVL·VIRT·VS

Rev.—(b) ☉ BONITATIS·VN·CIARVM·QVIN. 15
16-69.

Andros find, type 11.

FOSDINOVO (M. Maddalena Malaspina Centurioni, 1667-69).

19. *Obv.*—MARCH·FOSD·BONIT·VN·C·Q·NQ.

Rev.—(b) INTER·SPINAS·CERVLEA FLOREN (sun)
16-69.

Poey d'Avant, No. 5266. Mantellier, p. 87, No. 103; cf. Longpérier in *Rev. Num.*, 1869-70, p. 117. Andros find, types 4, 5.

FRANCE (Louis XIV).

20. *Obv.*—LVD·XIIII·D·G·*·FR·ET·NAV·REX

Rev.—(b) SIT·NOMEN·DOMINI·BENEDICTVM.
1659 and D below.

21. *Obv.*—LVD·XIIII·D·G·+·FR·ET·NAV·REX (old head);
Y below.

Rev.—(b) As preceding. 1660. Shield quarterly of France and Dauphiné.

21 *bis*. Do. with m.m. 1.

GENOA.

22. *Obv.*—DVX ET GVB REIP GENV and below 1669.
Arms of City crowned with supporters.
Rev.—BON·VNC·IIII and above $\frac{N}{\Sigma}$. Justice seated r.
Corpus Numm. Ital., iii, p. 390, No. 7.

LOANO (Giov. Andrea III Doria, 1654–1737).

23. *Obv.*—IO·AND·PR DORIA LA Bust to r., beneath
* 78 *
Rev.—(b) DEVS·PROTECTOR·MEVS. 16–65. The
fleurs-de-lis are of eagle form.⁸⁴

Mantellier, p. 84, No. 96. Olivieri, *Monete dei Doria*, Pl. iii. 5; cp. *Corpus Numm. Ital.* iii, p. 514, No. 11 (var. without figures under bust). The figures beneath bust indicate the standard $\frac{7}{12}$ to $\frac{8}{12}$ fine; cf. document in Olivieri, p. 83.

TORRIGLIA (Violante Doria Lomellini, 1665–8).

24. *Obv.*—VIOLANTA·LOM·PRIN·AV
Rev.—(b) DEVS·PROTECTOR·MEVS 16–65. The
fleurs-de-lis are replaced by small eagles.⁸⁵

Poey d'Avant, 5251 (var. AVR). Mantellier, p. 84, No. 97, Pl. xi. 4 (var. VIOLANTE). *Corpus Numm. Ital.* iii, p. 593, No. 1.

25. *Obv.*—DON·VI·LO·PRINC·S·VED·DOR
Rev.—(b) * DOMINVS·VIRTVS * MEA·E·SALVS·
MEA 16–65.

Olivieri, *Monete dei Doria*, Pl. iii. 2. *Rev. Num.*, 1869–70, p. 120. A variety with DON·VI·LO·PRINC·SVE·DO and two lilies and an eagle on shield; this is mentioned in documents, Olivieri, *loc. cit.*, p. 73, No. xiv. 1667; cp. *Corpus Numm. Ital.* iii, p. 594, Nos. 4 ff.

⁸⁴ Cp. the passage in North, above, p. 64.

⁸⁵ See the passage in North, above, p. 64.

MASSA DI LUNIGIANA (Alberico II, 1662-90).

26. *Obv.*—ALBERIC·II·S·R·I·E·MASSÆ PRIN Bust to r., beneath 8.

Rev.—(b) CVSTODIAT·DOMINVS. 1663. Arms (double eagle on scroll with LIBERTAS over shield of Cibo).

26 *bis.* Var. with date 1664.

27. *Obv.*—ALBERIC·S·R·I·E·MASSÆ·DVX·I 8 beneath bust.

Rev.—As before. 1663.

MONACO (Onorato II Grimaldi, 1604-62;
Ludovico I, 1662-1701).

28. *Obv.*—HON·II·D·G·PRIN MONOEC Bust to r.

Rev.—(b) DVX·VALENT·PAR·S·FRANCIE. 1660. Grimaldi shield.

29. *Obv.*—LVD·I·D·G·PRI·MONOECI Bust to r.

Rev.—DVX VALENT·PAR·S·FRANCIE·&. 1662.

Corpus Numm. Ital., iii, p. 540, No. 3.

30. *Obv.*—LVD·I·D·G·(star)·PRIN·MONOECI·&. Bust with long hair to l.

Rev.—(a) 1665·FLORENT(lis)·CVM·LILIO AN·DO. Arms in cartouche with coronet, &c.

Corpus Numm. Ital., iii, p. 542, No. 20.

ORANGE (Guillaume Henri, 1650-72).

31. *Obv.*—GVIL·HNR | ·D·G·PRI·AV

Rev.—(b) SOLI·DEO·HONOR·ET·GLO. 1660.

Duby, *op. cit.*, i, Pl. xxvii. 11 (1661), p. 104. Poey d'Avant, No. 4641 (Pl. ci. 9), var. AVR and GLOR.

32. *Obv.*—GVIL HNR D | G·PRI AV

Rev.—(b) SOLI·DEO·HONOR·ET·GLO 1666. Arms: post-horns (1 and 4) and lions rampant.

Duby, *op. cit.* i, Pl. xxvii. 12. Poey d'Avant, No. 4642.

TASSAROLO (Livia Centurioni Oltremarini, wife of Filippo Spinola).

33. *Obv.*—LIV·MA·PRI·SP·COM·T·SOW·DOM

Rev.—(b) DNS·ILLVMINAT·ET·SALVS·MEA ☉
16-60. T below shield.

Cp. Poey d'Avant, No. 5231, Pl. cviii. 13, var. ANMALIV COMPALAT. *Rev. Num.*, 1869-70, p. 121. Andros find, type 3.

34. *Obv.*—*Ibid.*

Rev.—(b) DNS·ADIVTOR+ +ET·REDEM·MEVS ☉
16-66. T below shield.

Riv. Num. (Asti), i, 1864, p. 61. Andros find, type 2. *Corpus Numm. Ital.* ii, p. 411, No. 4.

35. *Obv.*—PHIL[IPPVS·D·G·]TASS·COMES Bust to r.

Rev.—(b) [IN] TE DOMINE SPERAVI [1665].

Olivieri, *Monete dei Spinola*, p. 109, No. xl, Pl. viii. 2. *Corpus Numm. Ital.* ii, p. 408, No. 43.

35 bis. *Obv.*—PH]ILIPPVS·D·G·COM·TA[SS·

Rev.—(b) CIRCVMDEDISTI]·ME·LÆTITIA· 16[66].
Arms: lis between two roses, all in circle on shield.

Olivieri, *Monete dei Spinola*, p. 110, No. xliii, Pl. viii. 5, var. COMES TASS. *Corpus Numm. Ital.* ii, p. 409, No. 45 (var. COMES).

TUSCANY (Fernando II, 1621-70).

36. *Obv.*—FERDINAND·II·MAG·D·ET· Head in radiate crown; beneath ·Λ·

Rev.—(b) SOLI·DEO·VIRT·HON·ET·GLO 16(lis)60.
Circle round fleurs-de-lis.

36 bis. Var. with DV·ET and V beneath head.

Rev.—SOLI DEO VIRT HON ET G 16(lis)61.

§ 9. *The Modern Token Currencies of Turkey.*

The chronic scarcity of small change in Turkey is apparent to every visitor even to Constantinople; the difficulty is aggravated in the provinces, where it has called forth a series of token-currencies which it is the purpose of this section to discuss. Though anything like a complete list is out of the question it may be worth while to put on record such facts as may still be gathered about these coinages which circulate in out-of-the-way places, have for the most part no legal status, and are rapidly disappearing. It is for this reason that I have attempted to form a collection of them, which I have handed over to the British Museum.

The tokens in question are sanctioned by various authorities, including:

- (a) Municipalities,
- (b) Cafés and other businesses,
- (c) Churches,

and vary in value from five to twenty *paras*.

(a) Municipal tokens, so far as I have met with them, are countermarked copper *piastres*, and subdivisions of the earlier Abdul Medjid currency, which are now demonetized (5 p. still circulates at Smyrna).

Of this class I am only acquainted with the—

- 10 *paras* of Dardanelles, countermarked ζ .
- 20 *paras* of Mytilene.
- 20 *paras* of Ploumari in Mytilene (the same coin countermarked $\Delta\Pi$).
- 20 *paras* (?) of Bairamitch.

(b) The business class are as a rule brass or tin tickets with a rough punch-mark indicating their value. An exceptionally well-executed example is the nickel Carlovassi tramway ticket.

(c) Church tokens form a very large class, which has been even larger, as the Government has in many cases put a stop to them. They are issued by the committees (*ἐπιτροπή*) of church government in Greek villages, primarily for use in collections, and are redeemable by the committees. They actually circulate freely in the towns of issue, and frequently over much wider areas. For instance, I found circulating at Bunar Hissar (Thrace) tokens of Samakovi and Midia, which are not only distant villages but have not even direct communication with Bunar Hissar, and the tokens of Erenkeui in the Troad pass freely alongside the municipal tokens in the Dardanelles.

Church tokens may be divided into three classes:

I. Special coinages; chiefly (*a*) bracteates of thin brass or tin inscribed with the name of the church, value, cross, &c.; sometimes (*b*) more or less ambitious cast or stamped pieces.

II. Counter-marked pieces; (*a*) coppers of Abdul Medjid, or (*b*) brass German counters. The counter-mark is usually the initial of the dedication saint with or without a cross.

III. Paper checks with rubber stamps.

The usual value is five *paras*. The distribution of these currencies is conditioned by the ascendancy of the Greek population; I know of only one instance (Ermeni Keui on the Kapu Dagħ) of Armenians striking such tokens. It is remarkable that the ecclesiastical community of Mt. Athos does not, the small change of the Holy Mountain being almost entirely Russian: on the other hand a monastery on Nisyros is said to have issued tokens.

The following is a list of villages which strike or have struck such tokens:—

European Turkey (district of Kirk-Kilisse).

Bunar Hissar (I a. ΑΓΙΟΣ ΚΩΝΣΤΑΝΤΙΝΟΣ Β + Χ).

Genna (I a. Π(αναγία) + Θ(εοτόκος), 1888).

Midia (I a. ΑΓΙΟΣ ΑΝΔΡΕΑΣ ΜΗΔΕΙΑΣ).

Samakóvi (I a. ΑΓΙΟΣ ΘΕΟ[ΛΟΓΟΣ] ΣΑΜΑΚ[οβι]).

Skopò (I a. 10 p).

Aegean Islands:

Calymnos.

Nisyros (III).⁸⁶

Ploumari (Mytilene) (II a).⁸⁷

Samos (I a, III).⁸⁶

Thasos (nine villages)⁸⁸ (II a).

Samothrace⁸⁹ (III).

Asia Minor:

Brusa district:

Aboulliond (III).

Goulion (Karagatch, III).

Kapu Dagh:

Vathy (II, 13).

Yeni Keui (I a).

Ermeni Keui (I a).

Trebizond district:

Santa (I b).

Gumush Khané.

Eren-keui (Troad): the Church of St. George issues

⁸⁶ *J. R. Anthr. Inst.*, 1885, p. 402; cf. *B. S. A.* xii. 169, note.

⁸⁷ The old copper *piastre* was issued by Government to the island at 20 *paras*, then withdrawn and issued again at the same value by the municipality of Ploumari with the countermark Δ(ημαρχείον) Π(λουμαρίον). A *third* countermark—script capitals ΠΛ on opposite sides of the coin—is said to be that of the church of Ploumari. The coin now passes freely at 5 *paras* along the Asiatic coast opposite Mytilene.

⁸⁸ Tozer, *Aegean*, p. 295; cf. *J. H. S.* xxix. 249 (*illus.*).

⁸⁹ Tozer, *op. cit.* p. 336.

COMPARATIVE TABLE OF FOREIGN MONEYS IN ASPERS.

(a) GOLD.		(b) SILVER.				Authority.	Date.
(Venetian) <i>Zecchino</i> .	<i>Ungaro</i> .	(Spanish) <i>Ducat</i> .	(Spanish) Piece of Eight.	(Imperial) Rix-dollar.	(Dutch) Lion Dollar.			(Imperial) Zatola.
180	180	180	100 ⁰³ p.		95 p.		Anon. c. 1600 ⁹⁰
170			110				Fynes Moryson ⁹² 1623 (Chios)
			80 —		75 80	55	Rantzau ⁹³ Thévenot ⁹⁴ 1656
			82½		75		" ⁹⁵ " (Egypt)
			80		70		Tavernier 1670?
300	260				120	80	Marsigli ⁹⁶ c. 1680
			47 m.		42 m.		De Burgo 1680 (Egypt)
			80 ^a p.(?)		60 p.		Griffiths ⁹⁷ 1785-6
					70 ^a p.(?)		Hertslet 1809

⁹⁶⁻⁹⁷ For footnotes see next page.

(1) at 20 *paras*, an Abdul Medjid 5-*para* piece with countermark A(γιος) †Γ(εώργιος); and (2) brass 10 and 20 *para* pieces executed abroad, and bearing (*obv.*) St. George on horseback ΑΓΙΟΣ ΓΕΩΡΓΙΟΣ ΕΝ ΟΦΡΥΝΙΩ, (*rev.*) Latin cross in border. These coins are issued pierced, so that in case of complaint being made by Government it may be said that they were intended for medals.

F. W. HASLUCK.

⁹⁰ Selaniki (ap. von Hammer, vii. 414) gives the same ratio in 1597.

⁹¹ The species of *écu* is not specified, but is inferred from the value of the rix-dollar: but more probably the coins are as elsewhere, the piece of eight and the Lion. Sapiencia about the same date puts the Spanish piece of eight at 80 (*Nuevo Tratado de Turchia*, p. 28, quoted by von Hammer), the *sultanino* at 130.

⁹² The Lion was probably at 80. Sapiencia says: "Un real di a ocho español vale diez aspros mas que los reales di a ocho de otros Reyes" (*Nuevo Tratado de Turchia*, Madr., 1622, p. 28, quoted by von Hammer, vii. 414).

Kootwyck's table (p. 479) for Egypt in 1596 is:

All standard gold pieces (Turkish *altun*, Venetian *zecchino*, and *ungaro*) 90 *maidins*.

Maidin = $1\frac{1}{2}$ *aspers* = 1 *stuiver*.

Saiat = 8 *aspers*.

4 *saiats* = $2\frac{1}{2}$ Venetian *lire* or 20 *stuivers*.

$1\frac{1}{2}$ *saiats* = 12 *aspers* = 10 *gazette* = 20 *marchetti/soldi* = 8 *stuivers*.

⁹³ *Reisebeschreibung* (1702), p. 15.

⁹⁴ *Relation d'un voyage fait au Levant* (Paris, 1664), p. 128.

⁹⁵ *Ibid.*, p. 521.

⁹⁶ De Burgo (1680), *Viaggio*, i. 310, gives the following table for Egypt: 1 piece of 8 = 47 *maidins*; *zecchino* = $2\frac{1}{2}$ pieces of 8 or 117 m. 3 a.; *ungaro* = $2\frac{1}{2}$ pieces of 8 or 105 m. 3 a.; lion = 42 m., showing that the *asper* in Egypt was much depreciated, as we should judge from the details given by von Hammer, xiii. 58 (1702):

Light *piastre* ("au lion", "esedi") had risen from 40 to 60, and was reduced to 55.

Heavy *piastre* (*riala*) had risen from 60 to 80, and was reduced to 65.

Light *ducat* (*toghrali*) had risen from 100 to 120, and was reduced to 100.

Heavy *ducat* (*zinjili*, *yaldüz*) had risen from 110 to 130, and was reduced to 115.

⁹⁷ J. Griffiths, *Travels in Europe, Asia Minor, and Arabia* (1805), p. 308.

APPENDIX OF SOURCES.

I.

Leunclavius, *Pandectes Hist. Turc. (Annales Sultanorum Ottomanidarum, Francofurdi, 1588)*, p. 268, § 55.

Hodie non amplius animos Turcorum illa religio tantopere tangit, ut signatos Christianorum principum caractere nummos aversentur. Immo nummos sive ducatos Venetos, quibus vetitae lege Mahumetis impressae sunt imagines, Sultaninis suis qui nihil habent legi contrarium, Arabicis dumtaxat insigniti literis, longe praeferunt. Taleris autem Germanicis, praesertim quibus aut ipsius imperatoris, aut Ferdinandi archiducis, aut Septemviri Saxonis insculpti sunt vultus, usque adeo non infesti sunt, ut ex illis ipsis sibi prohibitis adgnitos imaginibus expetant avidissime: nec dubitent, modo se pro mercibus suis eos habituros intelligant, de communi pretio trientem vel quadrantem remittere. Ne pondus quidem horum explorant, quod tamen in Sultani sui, caeterisque monetis usitatis scrupulose facere solent.

II.

Ioannes Cotovicus [J. Kootwyck], *Itinerarium Hierosolymitanum et Syriacum (1596)*, Antverpiae, 1619, p. 479.

Praeter Turcicos hos omnes Christianorum quoque principum nummos argenteos admittunt plurimos; Ducatos argenteos Venetos, Taleros Germanicos omnis generis, Batavicos item, et Regales Hispanicos; qui omnes eodem aestimantur pretio, valentque singuli Maidinos sexaginta quinque, licet apud nos pretio multum inter se differant; adeo ut talerus unus cum semisse Sultanini aurei valorem aequet. Ob tamen evidens et ingens lucrum Taleri praesertim Batavici eo plurimi advehuntur, Cechini vero Veneti nulli penitus, aut rari, cum pluris aestimentur Venetiis.

III.

Anon., "Matters concerning the Trade of Turkey". B. M.
MS. Cott. Nero B XI, fols. 6 b-7, 1595-1603.

Aspers are of two sortes, lesser and bigger; the lesser are neither so good nor so faire; but more comon. The bigger are of better siluer, & with these is the Wages of the Soldiers & Courtiers payed. An Asper is now neer the ualew of our half-peny: the present rates of money altering from the past; & that specially for the new taxes rais'd in Constantinople, in respect of the Persian warre. Then likewise was the ould currant money prohibited: for that it was stampt with diuers figures forbidden by Mahomet's law. But the trew reason was bicause it being good Siluer & newly melting it with worse, the Treasure & officers came therby to gaine excedingly. Now the Aspers be moste of them counterfet of bras washt over with Siluer, some so thin and light, that they will swim, on the top of the water; and there are few Bassaës that have not their secret mint. Those Egiptian pieces of Cairo, of 3 Aspers apece, are the only certaine good ones: for they are all Siluer indeed but they be but few: & now stampt no more | In Torcky now they coyne but 2 sortes of money (beside bras), the single Asper, and the Sultanine: the Asper Siluer, the Sultanine Gould, very fine & pure, & stampt as the Asper with Arabian Carecters. . . . This peece, for Gould & weight, is iust as the Venetian Zickeen, or Duch or Polish Hungar or the Spanish Peeces that pas among us, which we cal Duckets stampt upon thone side with 2 Heads of Ferdinand & Isabel. One of these, the last yere, ran for 180 Aspers, whiche counting an Asper for a half-peny comes to 7s. 6d. english.

IV.

Notice on the striking of the *Luigini* read to the Coinage Board of the Genoese Republic, 29 Sept., 1667.⁹⁷

The export of *luigini* to the Levant began in 1660. The first, which went to Smyrna, were coined in France and Turin, and were eleven ounces fine. The trade in them

⁹⁷ Abbreviated from A. Olivieri, *Monete dei Doria*, p. 83 f., Doc. No. xx.

continued for three years without change. Then some French merchants obtained leave from the Prince of Orange to strike others only eight ounces fine, of which considerable quantities also went to Smyrna. The English merchants had them assayed, found them to be one-third alloy, and complained, and orders were sent for the suppression of the traffic both in the East and at Marseilles. The Turks, however, insisted on having the coins, and the French continued to export them, lowering the standard still more. In 1663 the mint of Tassarolo began to strike others: 2,000 of these were seized in the hands of one Valentino Berti and confiscated. The Loano mint then began to strike on the standard of seven to eight ounces fine, and French captains in Leghorn bought them up in large quantities for Armenian merchants in Smyrna, two of whom went bankrupt soon after. In consequence of proclamations and confiscations the trade became less brisk. Ten to twelve thousand pieces of *Torriglia* were seized in a French merchant's hands at Smyrna, others only six ounces fine in Armenian hands at Constantinople, and others again at Smyrna. Similar incidents occurred at Tripoli and in Cyprus. In 1667 coins of the original ($\frac{1}{2}$) standard passed current at Smyrna, Constantinople, and Cyprus. Those of France and Massa were popular, the others passed with difficulty.

V.

J. B. TAVERNIER, *A New and Exact Relation of the Grand Signor's Seraglio*, London, 1677, p. 15 f.

The foreign Coins of Gold in *Turkey* are the *Ducates* of *Germany*, *Holland*, *Hungary*, and *Venice*. They are very much sought after, and they are chang'd, at six Livers and a half, and sometimes at six Livers and fifteen Sols; and that is done in order to the sending of them to the *Indies* where they drive a great Trade with them . . . Sometime since, there has been some abatement made in the *Ducates* of *Venice*, upon a discovery of their not being of so good an alloy as those of *Germany*.

In all the *Ottoman* Empire there is not any Money of Copper to be seen, and the Species current there must be either of Silver or Gold. True it is, that there are some pieces of Silver taken there, of a very base alloy, especially

the *Roup*, which are quarter-Ryals, coin'd in *Poland*; and with the assistance of the *Jews*, the *Bassa's*, in their several Governments, counterfeit certain foreign Coins, which are all much different from those which they are intended to imitate. The case is the same as to Silver-Coins in *Turkey*, as it is with those of Gold. There are some coin'd in the Country, as the *Asper*, and the *Parasi*, which are the best of all. And there are some foreign Moneys as the *Spanish Ryal*, and the *Rix-dollars* of *Germany* and *Holland*.

An *Asper* is the least of all the Moneys, which heretofore was worth eight *Deniers*, *French Money*, that is about $\frac{2}{3}$ of the *English* penny, as being of good Silver, and the value set upon them was after the rate of 80 for the Crown-piece. But in the more remote Provinces, the *Bassa's*, and the *Jews* cause such an abundance of counterfeit ones to be made, that at present, a Crown-piece will yield one hundred and twenty *Aspers*.⁹⁸

A *Parasi* is another kind of small money, which is worth four *Aspers*, and coin'd at *Cairo*.

Groche is the Crown, or *Spanish Ryal*, otherwise called the *Piece of eight*.

Kara-Groche is the *Rix-dollar* of *Germany*.

Aselani is the *Rix-dollar*, mark'd with the Lyon of *Holland*. After which follow the Pieces of four *Ryals*, and two *Ryals*, and of one *Ryal*; and heretofore the pieces of *five Sols*, *French Money* wherewith there was a great trade driven in *Turkey*.

VI.

J. B. TAVERNIER, *A New Relation of the Inner-Part of the Grand Seigneur's Seraglio*, London, 1677, p. 16.

The Trade driven in the five Sols-pieces.

A certain merchant of *Marseilles*, without any forethought design, sent as many Pieces of *five Sols*, newly come out of the Mint, as amounted to the sum of two, or three hundred Crowns, amongst some other Pieces of Silver-Coins, to buy Silks. The *Turks* found those little Pieces so pretty and so beautiful, and were at the first so taken therewith, that they thought them to be the eighth parts of

⁹⁸ Cf. Νέος Ἑλληνομνημων vii. 181 (261) ἐχάλασαν τὰ ἄσπρα ὅπου εἶχεν τὸ γρόση ἄσπρα 120 καὶ ἦλθεν εἰς ἄσπρα 80 (where the figures should be reversed). Larissa, 1641.

a *Ryal*, and were content to allow a Crown for every eight of them. The Factor, perceiving it, wrote to *Marseilles*, whence he receiv'd a very great sum in that Money, and gain'd very much thereby. If the *French* could have contented themselves with that honest profit, the commerce of those Pieces, which was quash'd by the excessive frauds committed in the management of it, might have continued still, and would have been very advantageous to them. The *Turks* were unwilling to trade in any other kind of Money, and in the payment of the Armies, to give the Souldiers content, there was a necessity of dispersing them among them. One day, returning out of *Persia* into *Turkey*, I was persecuted by several Women, who would needs have me give them some *Temins* (so they call that kind of money), and I could not have anything to eat for any other Money.

Our *French* Merchants were gainers at the first, after the rate of fifty *per cent.*, allowing in *Turkey* but eight of those Pieces for a Crown, whereas they had twelve of them in France for the same Piece. But the other *Europæan* Nations, the *English*, the *Dutch*, and the *Italians*, envying their happiness, came to give a check to their design, and making their complaints to the *Grand Vizir*, that Minister order'd, That, for the future, they should allow twelve of these Pieces for the Crown, or that they should not be current any longer, and that whatever sums thereof were found in the Ships, should be confiscated.

The *French* were not at all satisfy'd with that; and whereas there was a necessity of submitting to the *Grand Vizir's* Decree, they bethought themselves of having some of those Pieces coin'd, which should not have above four *Sols* of good Silver, which was a considerable advantage, of twenty-five upon the hundred. They pass'd well enough for some time, before the *Turks* had discover'd the fraud; they being satisfy'd, that the Stamp was fair, and that the Pieces look'd very white: And the Women and Maidens, of the meaner sort of People, made them contribute to the ornament of their Head-tires, about which they fasten'd those pretty little Pieces, and they came down flapping about their Foreheads, as the wealthier sort fasten'd Pieces of Gold to theirs.

But the better to compass their design, the *French* Merchants were oblig'd to find out other Countreys, where it might be lawful for them to traffick in those Pieces. Their first recourse was to those of *Dombes*, *Orange*, and *Avignon*, and passing into *Italy*, they found work for some

time for those of *Monaco*, and *Massa*. But having observ'd, that the *Turks* were more taken with the Pieces which had the Impression of a Woman's Head, and those Princes being unwilling to suffer them to coin among them any Money of so base an alloy, or to give it the stamp of *Ja*, the Princess of *Dombes*, they cast their eyes upon some Castles situate within the territories of the *Genueses*, yet subject to the jurisdiction of the Empire, where they obtain'd what they desir'd, upon conditions not disadvantageous to the Lords of those places. The Pieces they got coined at *Orange*, were also sought after, and pleas'd the *Turks*, in regard the Stamp was beautiful, and very clear; but those of the Legat of *Avignon* were not so current, the Effigies thereof not being well done, and the Cross, hanging at the Neck, displeasing to the *Turks*. Had they contented themselves, in that *Trade*, with twenty-five upon the hundred, it might have continu'd, and the profit would have been considerable: but by little and little, they came to so great an excess, till, at last, there was not one pennyworth of good Silver in every piece.

The *French*, to make them pass the better, gave eighteen, and sometimes twenty, for a Crown, of which abuse the great Merchants of *Constantinople*, *Aleppo*, *Smyrna*, and other Cities of Trade, made a good hand, they giving but twelve or thirteen for the worth of a Crown, in the payments they made to the petty Merchants of the Provinces of the Empire, for the Merchandizes they brought out of *Turkey*, there was none of that counterfeit Money dispers'd, and the *Armenians* were far enough from burthening themselves with it, in regard that all the Money, which is carried into *Persia*, is presently convey'd to the Mints, upon the Frontiers, to be melted down, and afterwards coin'd into *Abassis*, whereof they give the Merchant an account, answerably to the Standard of his Money, after it has been examin'd. . . .

The jealousy of the other Merchants.

The *Genuese* Merchants, perceiving that the *French* had at the beginning been fortunate in their Commerce, would needs imitate them in other sorts of Money, and got two or three hundred thousand *Ducats* coin'd, which they carried into *Turkey*. But they had not the success they expected, the Gold was so counterfeit, that the cheat was immediately discover'd, the Consul, and the Captain of the Vessel, were

in some trouble about it, and the persons concern'd therein, sav'd what they could of that disaster.

The *Germans* also would needs come in for a share, taking another course all along the *Dannow*, quite to the mouth of it, from whence they got to *Constantinople*, through the *Black Sea*. With other their Merchandizes, most whereof consisted in the counterfeit Copper-wares of the City of *Nuremberg*, things fit enough for those Nations, which border upon the *Euxine Sea*, they carried a quantity of *Roups*, or quarter-*Ryals*, of the coinage of *Poland*, which were pleasant to the eye, and might have been commodious enough for the Merchants, if the adulteration had been moderate. But the *Italians* need not be much asham'd, that the *Germans* should be more successful than they upon that occasion, since that both Nations came short in point of subtilty, to deceive the *Turks*.

But to return to the *French*. . . . In the heat of their Commerce, and while all things were very well with them, they thought it not enough, to carry away the richest Merchandizes, but they also bought up all sorts of good Money they could meet withal, and brought it into *France*, to carry on and continue the coinage of their counterfeit pieces. This Trade was carry'd on so far, through the whole extent of that vast Empire, and there was so prodigious a quantity of that counterfeit Money spread abroad, that it was found by the Register-Books of the Farmers of the Customes, that the sum of what had been dispers'd of it amounted to a hundred and fourscore millions [of *Livers*] not accounting what had never come to their knowledge, and what Seamen, and other private Persons might have conceal'd.

The other Merchants and Traders of *Europe*, who brought none but good Money, having exclaim'd against that disorder, and renew'd their complaints to the Grand Vizir; the *Turks* at last open'd their eyes, and that principal Minister, having comprehended, that if the thing continu'd, in a short time, instead of Silver, there would be nothing but Copper in the Empire, prohibited the bringing in of any more of those pieces of *five Sols*, upon pain of confiscation, and great penalties to be inflicted on those, who durst do anything contrary thereto.

Yet could not that crying of them down, and the *Grand Vizir's* prohibition make the Souldiers, who serv'd in *Candia*, out of love with those little pieces, the beauty whereof they were so much taken withal. Notwithstanding all the

Remonstrances that could be made to them, they would not be paid in any other kind of Money; and some discontented Persons and Mutineers, beginning to show their Teeth, they were forc'd immediately to send Gallies to *Smyrna*, and some other Cities of great Commerce, to bring away all that could be found of that sort of money. The incredible quantity of those counterfeit pieces, dispers'd in all the Provinces of the *Ottoman Empire*, is at least vanish'd, they are grown red and no longer current.

A mischievous fraud gently punished.

At the first crying down of that counterfeit money, before the news of it could have been brought to foreign Countries, a certain Person named *Goulin*, engag'd all he had in the world, to make up to the sum of five and twenty thousand Crowns in those pieces of *five Sols*. so extremely falsify'd, that there was hardly so much Silver as was requisite to whiten them. He came to *Smyrna*, where I then was, and where he soon found, that there was no way to put off his counterfeit Merchandize. Whereupon he imagin'd, that he might get it off, if he could make a speedy Voyage to *Constantinople*, where, as he had been assur'd, some Persons took them, even after they had been cry'd down. Being unwilling to hazard all by Sea, he sent away, by Land, four or five thousand Crowns, which were taken away by Thieves, near *Bursa*, and carry'd the much greater part to *Constantinople*, in a *Dutch Vessel*, of which he had also sufficient cause to repent him. After he had expos'd it at the Custom-house, for the payment of the Duties, the Chief Officer of the Customs told him, that he might return within two or three days, to take back what belong'd to him; and as soon as the other was gone, he caus'd all to be melted down in his presence. The separation being made, upon twenty thousand Crowns, which was the sum he had brought thither, there was not the full fourth part of Silver, and the Merchant coming again to the Customer, fell down all along, out of pure fear lest a severe punishment might follow the fraud whereof he was visibly convicted, seeing so much scum of brass on the one side, and so little silver on the other. But the *Turks* are not so rigorous, as some persons imagine, all was restor'd to him, nay there was no penalty inflicted upon him, and they only order'd him to be gone.

VII.

COMTE DE LA MAGDELEINE, *Miroir ottoman* (Basle, 1677), 106f.

Il y a quelques années que les pièces de cinq sols, *Temin*, y étoit tellement recherchées qu'il ne s'en donnoit que sept à l'Ecu, ce qui fit entreprendre, non seulement à quelques Suoverains (*sic*) d'en faire battre, mais aussy aux particuliers des ports d'Italie & même en Turquie, se servant du Coing de Mademoiselle de Montpensier, ce qui a été la ruine de plusieurs marchands Chrétiens & infidelles, car sur la fin elles se trouverent de si mauvais Aloüé que ceux qui les avoient prises sept ou huit à la piastre, étoit contraints d'en donner vingt, elles n'y passent plus sans être Marquées & recognues de bon argent, & ne vailent alors que quatre Sols, celles au Coing du Roy ont la même valeur qu'en France.

VIII.

PAUL RYCAUT, *History of the Turkish Empire from the year 1623 to the year 1677* (London, 1680), p. 258 f.

The story of the false Reaux or Temins. Anno Christi. 1669. Hegeira, 1080.

Towards the end of last Year, and at the beginning of this the Turks began to open their eyes, and find themselves defrauded with the grossest cheat that was ever imposed on a people who had either reason or humanity. For now three or four years had ran on, that the French, Dutch, Italians, and other Nations had introduced into all parts of the Turkish Dominions (unless in those East-ward, as *Aleppo*, and farther) a sort of small Money called by some *Luigini*, by others *Ottavi*, and by the Turks *Temins*, worth about five pence English: which appearing pleasant and bright to the eye, and commodious for change, and common expences, so bewitched the Commonalty, that Pieces of Eight, Zaichins, and other merchantable Money were laid aside, as neither currant or valuable. At first about nine years past they were of good and warrantable Silver, but afterwards with time by little and little grew worse, and of baser alloy: at length the people doting more and more upon them, they became coarser every day than other; and being still

currently passable, every person that was failed, and of bad reputation entered into the Trade, who knowing no bounds of honesty or of gain, composed their Money wholly of Copper or coarser Metals, with a fair gloss and resemblance of Silver. buying therewith the Commodities of the Country ; and at length amassed up all the Gold, Silver, and whatsoever came to hand was the price of their false and bastard Coin. with which they filled and abused all *Asia*: nor was this Money all of one Mint, but of divers Stamps and Mottoes reproachful to the Turks, and it is pity they had not wit enough to understand them, as namely, *Voluit hanc Asia mercem De procul pretium eius*, and such like ; which were so various, that many who had the curiosity to make a collection of them, found no less than an hundred and twenty several Stamps. The Commonalty still enamoured with the brightness of their colour, and commodiousness of their change, little reflected on the ill consequence to the generality, having seldom more than to supply their daily wants. And the Officers of the Customs finding a benefit extraordinary to themselves upon the vast Sums of Money imported, little cared how it fared with the publick. In the meantime the whole currant of Merchandise in the Levant was dispossessed of its ordinary and true chanel ; for vast quantities or a glut of Turkish Goods filled all Christendom, the prices low and cheap, and no profit to any Merchant dealing upon the square, or upon the old and legal way of Traffick. At *Ligorne* and other parts of *Italy* complaints were made, That the Silver and Bullion of the Country were melted down to make a composition with baser Metals for *Turkie*, and exchanged for decaying and perishable Commodities. In short, no man seemed satisfied with the Trade, and yet the World, like their Sins, which they disapprove, pursued it with all heat and violence imaginable. This Trade being thus over-laid, and vast heaps of adulterate Money imported daily worse and worse, caused the Jews and other Merchants at first to except against some sorts, and admit of others. This scruple, together with the prohibition of them two years before by the English Factory at *Smyrna*, obliging themselves unto the Levant Company under a considerable penalty not to receive this money for Cloth or other Commodities of the growth of *England*, together with the circumspection and contrivance of the English Consul, awakened first the blind minds of the Turks, who having long been infatuated with this beloved money, began now to reject and abhor it like

the false and farded countenance of a Courtisan: so that from eleven they fell to twelve, and so to thirteen and fourteen to the Lion-dollars. In which conjuncture a Dutch convoy arrived at *Smyrna*, importing vast Sums thereof: which for a Bribe to the Officers of the City, or what the Customer would ask, were permitted Licence to be landed; which overflowing in great abundance, and rather of a worse than better alloy, went declining to eighteen, and so to twenty, at which Rate for a short time they passed currant. And now at this price the Officers did what was possible to keep them up, conceiving it impossible, in a time of so much scarcity of all sorts of other Coins, that the Countries could subsist, or that Trade in buying or selling could proceed, if this money should wholly lose its esteem and value. . . . But that which raised most of tumult was the rigour of the Tax-gatherers, who refused to take that money from the people for their Duties to the Grand Signior, but demanded of them Lion-Dollars, *Sevil* and *Mexico* Pieces of Eight, or the like; which they not being able to find, beat and imprisoned them in all places, where this question came into dispute: . . . and as injured patience turns to fury, at *Prusa* and *Angora* the torrent of the peoples rage was not appeased without the blood and lives of some of their Officers, alledging with good reason, That their Ministers and Governors having introduced or permitted this money amongst them, and allowed it as currant in that manner, as that they had for some years known no other, nor received other for all the fruits of their labour or possessions, they ought not now to refuse to receive that which they themselves had made passable; which argument and reason was pressed in sundry places with that violence, that the Officers were forced to submit to the necessity of the times and the fury of the multitude. And now this money had wholly lost its reputation, and began to be refused generally at any rate whatsoever; so that though the Government thought fit to license them at thirty to the Dollar; yet the people prosecuting the abasement of it with a hate and disaffection equal to their former desires, refused generally and absolutely to accept them in payment. Wherefore the Sultan perceiving that the power of his Officers was not sufficient to render this money longer passable at any rate, at length he commanded, that every one should bring in his money of these sorts into the Mint where it should be melted down, and the Silver it produced should be delivered to the Proprietor. At which Summons several Great men volun-

tarily brought in their money, others had it seized and condemned to the Furnace, amongst which was a French Merchant ingaged to the import of sixty thousand Dollars. As yet the News of this alteration not having reached Christendom, divers ships arrived at *Constantinople* with vast Sums of this money, which were all seized and forced to the Mint. In like manner other Ships arrived at *Smyrna* with the same Commodity, which my self would not suffer to be landed, and some of them having no other foundation of Stock or Freight, returned empty, to the great loss of the Employers. It was strange to see, how on a sudden all Trade ceased, no money being left in the Country, few Bargains were made but by Barthers; and though all this ruine might wholly be attributed to the ill Government, yet the people were contented, and sate down with the loss. And thus concluded this extravagant Trade of false Money, being supposed to have wrought more of destruction and loss at the end, than it brought of benefit at the beginning.

IX.

Journal du Voyage du Chev^r [J.] Chardin en Perse & aux Indes Orientales, Londres, 1686, p. 7 f.⁹⁹

Ce commerce qui au fond étoit extrêmement inique, est celuy des pieces de cinq sols, qui a tant fait de bruit. Les Turcs, [qui les apelloient Timmins], prirent les premières à dix sols la piece, [ou six par écu]. Elles demeurèrent quelque tems à ce prix, & tomberent après¹⁰⁰ à sept sols & demi. Ils ne vouloient point d'autre monnoie. Toute la Turquie s'en emplissoit, & l'on n'y voioit plus guere d'autre argent, parce que les François l'emportoient. Cette bonne fortune les aveugla si fort, qu'ils ne se contentèrent pas du grand gain qu'ils faisoient, ils en voulurent davantage, ils se mirent à alterer les pieces de cinq sols, & ils en firent faire d'argent bas à Dombes premièrement, puis à Orange, & à Avignon. On en fit de pires à Monaco, & a Florence, & enfin on en monnoya en des chateaux écartez dans l'état de Genes, &

⁹⁹ The words in square brackets are omitted in the edition with which this extract has been collated, but are found in the author's transcript from the 1723 Paris edition, which is inaccessible to me.—G. F. H.

¹⁰⁰ "furent après rabaisées," 1686, London edition.

en divers autres lieux, qui n'étoient que de cuivre argenté. Les Marseillois, pour débiter leur monnoie, la rabaissoient eux-mêmes, & la donnoient en payement, & aux changeurs à moindre prix que le cours. Les Turcs furent long-tems sans s'apercevoir de la tromperie qu'on leur faisoit, quoy qu'elle fust si grossière, et si importante; mais en fin ils s'en aperçurent, et elle les irrita si fort, qu'ils firent par tout de grandes avanies aux François, les traitant de faux Monnoyeurs, quoy que les Hollandois & les Genoïs y eussent autant de part. Ils envoyerent de Changeurs dans tous les Ports du Levant, pour visiter l'argent qu'on apportoit, & décrifierent cette monnoye, à la reserve du vrai coin de France, qu'ils reduisirent¹⁰¹ à cinq sols la pièce: [& du coin de Florence, de Monaco, & de Dombes, dont l'aloï étoit le plus haut, qu'ils reduisirent à quatre sols. Mais enfin ils décrifierent tout le coin altéré sans exception, & ne laisserent de cours qu'aux bonnes pieces de cinq sols, dont en peu de tems l'on ne vit plus paroître, parce qu'elles valoient intrinsequement plus que leur cours]. Tous les Marchands Europeans, excepté les Anglois, étoient chargez, quand cela arriva, de grosses sommes de ces *Timmins*. Leurs Magazins en étoient remplis, ils en venoit des Vaisseaux chargez, & on commençoit d'en fabriquer par tout. Le décri de cette monnoye causa beaucoup de perte à ceux qui en faisoient trafic, plusieurs ayant perdu ce qu'ils avoient gagné, & quelques-uns davantage.

Les Anglois furent les auteurs du décri. Si cette monnoye eût continué d'avoir cours, leur negoce étoit ruiné, car il consiste particulièrement en achat de soye. Or les Negocians des *Timmins* faisoient hausser le prix de soyes, ne se souciant pas à quel prix ils les achetassent, pourveu qu'on prist leurs pieces de cinq sols en payement. J'en ai vu à plus de cinquante marques différentes; les plus communes avoient pour coin d'un côté une tête de femme avec ces mots au tour, *Vera virtutis imago*, & de l'autre l'Ecu de France, avec ceux-cy, *Currens per totam Asiam*.

¹⁰¹ The 1686 London edition has: " Ils defendirent aussi d'exposer aucune de ces mesmes pieces qu'ils appelloient des *Timmins*, qu'au vray coin de France, & ils les rebaisserent, & les mirent à cinq sols la piece."

X.

SIR PAUL RYCAUT, *History of the Turks*, London, 1700 [in Knolles, *Turkish History*, vol. iii], p. 545, ad ann. 1697.

What other Sultans have not done, this [Mustapha II] hath had the Ambition to perform; that is, under his own Name all the Pieces of Gold and Silver should pass, within his Empire; . . . I cannot say that all the Gold and Silver within the *Turkish* Dominions was brought into the Mint to be new Coined, but it is certainly reported, that a great part thereof was; to which the five Sol Pieces made by the *French*, *Italians*, and other Nations, greatly helped and contributed, of which there had been many Millions Imported in 15 Years, from 65 to 80, which were very beneficial to the Coynage of those Countries.

It was also farther commanded, That all those who had any *Venetian* Zechins, should bring them to the Mint, there to be new stamped with the Letters of this Sultan's Name, and there to be changed with the old ones of *Venice*, or otherwise changed for Silver, at the rate of two Dollars and a half *per* Zechin: Likewise all the *Lion* Dollars, commonly imported by the *Dutch* with the figure of a Lion thereupon, were order'd to be brought unto the Exchequer, where the Figure of the Lion being beaten out with the Hammer, the *Turkish* Impression with the Name of the Sultan, was to be fixed in the place thereof: To bear the Charges of this new Coyning, a quarter of a Dram of Silver was taken from every Lion-Dollar, and then it was put into the fire, where it was Hammered again, and some *Christian* letters on the side thereof were permitted to remain, that thereby it might appear, that the same were reformed Dollars, and such as came from the *Christians*; and that for the Alterations thereof, the *Turkish* Workmen were not to be blamed.

XI.

CONTE DI MARSIGLI, *Stato Militare dell' Impèrio Ottomanno* (The Hague and Amsterdam, 1732), I. vii, p. 46, gives the following account of foreign moneys circulating in Turkey about 1680:

La moneta straniera è d'argento e d'oro.

La piu commune d'Argento è il Fiorino detto Solota, ed il Tallero chiamato Cara-grosch, tutta Cesarea. D'Olanda il mezzo e l'intiero Tallero, l'uno e l'altro da noi detto leone,

ed *Aslani* dà *Turchi*. Vi è ancora il *Testone* di *Lucca*, ed altra piccola moneta di *Ragusi*.

I *Francesi* con gran loro utile vi avevano introdotto certo danaro, chiamato ivi *Timin*, ma per la sua patente falsità fu poi bandito.

D'oro vi è corrente l'*Ungaro* di qual si sia conio, ed il *Zecchino* di *Venezia* col nome di *Altun*.

Circa il valore di questa, *Aspri* Ottanta fanno un *Solota*. *Aspri* cento & vinti, un *Leone*. *Aspri* dugenti sessanta, un *Ungaro* di *Germania*. *Aspri* trecenti, un *Zecchino* di *Venezia*.

Le altre monete piccole accennate si lasciano sotto silenzio per che ora si crescono, ed ora si abbassano.

V.

NOTES ON TWO PLACE-NAMES ON THE
ANGLO-SAXON COINS.

In the following notes an attempt is made, chiefly on philological grounds, to assign to their respective mints two sets of Anglo-Saxon coins, which, it is believed, have hitherto been wrongly attributed by numismatists. For the sake of convenience, descriptions of the coins as published in the catalogue concerned are appended at the head of each note.

I. In Hildebrand's Catalogue (pp. 40 and 496), under Bridgnorth (Shropshire), we find the following descriptions of coins:

ÆTHELRED II (979-1016)

No.	Obv.	Rev.	Type.
103.	a. 10.	+ÆADNOD M ^o BRYD	C.
104.	e. 10.	+ÆÐESTAN M ^o BRYGIN	B. 1.
105.	a. 10.	+EADNOD M ^o BRYD	C.
106.	a. 9.	+EADNOÐ M ^o BRYD	B. 2.
107.	a. 10.	+EADNOÐ M ^o BRYD	B. 2.
108.	a. ir. 58. 94.	+EADNOÐ M ^o BYRDG	B. 2.
109.	a. 5.	+EADNOÐ M ^o BRY	D.
110.	a. 10.	+EADNOÐ M ^o BRY	D.
111.	a. 4.	+GODRIC ON BYRDIA	A.
112.	a. 10.	+GODRIC M ^o BRYD	C.
113.	c. 10.	+PINE M ^o BRYDIGA	B. 1.
114.	e. 10.	+PINE M ^o BRYIDGE	B. 1.

CANUTE 1016-1035 (pp. 207, 496).

112.	b.	+ÆGELMÆR ON BRY	H.
113.	a. 3. ir. 41.	+PATAMAN ON BRYD	I.

Why Hildebrand should have attributed these coins to Bridgnorth it is difficult to conceive, except perhaps in consequence of the similarity of the legends with the first element in the modern form of the name of that town. Following Hildebrand, the compilers of the *B. M. C.*, *Anglo-Saxon Coins* (vol. ii, Introd., cxii), also attributed them to the Shropshire town, whilst Mr. Carlyon-Britton in his article on "Uncertain Anglo-Saxon Mints and some new attributions" (*B. N. J.*, vi, p. 26) is likewise of the opinion that they are "correctly assigned" to Bridgnorth.

But this attribution does not fit in with the facts:

i. The Old English name for Bridgnorth is Brycge, *A.-S. C.* 896 D (but MS. A has Cwatbrycge),¹ Bricge, *ibid.* B. C., Brycge, *ibid.* D (but A again has Cwatbrycge), Bricge, *ibid.* 912 C, Brigge, *ibid.* 1102 E, 1126 E.

Later spellings of the same name are: apud Brugas, Brug(iam), *Cal. Doc.*, 1155, pp. 55, 485; Bruges, *Pat. Rolls*, 1221, p. 294; Bruges Castle, *ibid.*, 1227; Brug, *T. de N.*; Brug, Bruges, *Hund. Rolls*; Brug, Bruges, *Eccl. Tax*, 1291; Brugge, *Pat. Rolls*, Edw. III, p. 152.

ii. It was not until a comparatively late date that the element *-north* was added to the name, as may be observed from the following forms:

Briggenorth, 1494, Brigenorthe 1499, Briggenorth 1504, *Cal. Pat. Rolls*, Henry VII. But the earliest form I have been able to discover is Bruggenorth, in John Bromton's Chronicle, which is believed to have been

¹ The villages Quatt and Quatford are situated $4\frac{1}{2}$ and 2 miles respectively south-east of Bridgnorth.

either written or copied by John Bromton, Abbot of Jorval in the reign of King John.²

Leland, in his *Itinerary* (1535-1543), also bears testimony to the fact that the form Bridgenorth was of late appearance. "The name of Bridgenorthe is but of late tymes usurpyd. It is caulld in all auncient records Bridge, etc."³

iii. It will be observed from the inscriptions on the coins that D occurs in most of the legends, which if they stood for Bridgnorth could not have been the case at this early date. It was not until late Middle English times that *dg* was written for Old English *cg*—the symbol for a voiced front stop. In the Oxford Dictionary the earliest spelling of the word *bridge* with *d* is *brudge*, anno 1480,⁴ but long after this date the spellings *brigge*, *bregge*, *bruge*, &c., were still common.⁵

iv. Bridgnorth was not one of the Domesday boroughs, and there is no evidence in the Domesday Book to show that it had a mint at that time or previously.⁶

v. The view, therefore, that Bridgnorth was the minting place of the coins in question cannot be

² Cp. Chron. Joh. Bromton, &c., *Hist. Angl. Script.* x; Roger Twysden, Lond., 1652, p. 988; and Eyton, *Antiquities of Shropshire*, vol. i, p. 106.

³ Toulmin Smith's edition, p. 85.

⁴ Taken from Caxton's *Chronicles of England*, cxcii, p. 169.

⁵ If any further evidence is required to prove that *dg* could not have been written for O.E. *cg* before the late Middle English period, it is supplied by the forms for Bridgewater: Bruges Walteri, 1227, *Chart. Rolls*; Bruges Walteri, Brugeswater, *Hund. Rolls*; Briggewanter, 1346-9, *Cal. Rolls*; Briggewater, 1401-5, *Pipe Rolls*, &c.

⁶ Cp. Ballard, *Domesday Boroughs*, p. 119. Ballard only mentions Bridgnorth in his list of pre-Conquest mints on the attribution of the above coins to that place by Hildebrand and the *B. M. C.*

upheld. It is far more probable that they were struck at Bridport (or Bredy), and for the following reasons :

(a) The legends on the coins stand for some such form as Brydig(e)an or Brydian. Now Brydian (Dorsetshire) is mentioned in the Burghal Hidage as being reckoned at 1760 hides.⁷ The same name occurs twice—"Bridian" and "in ulteriore Bridian"—in a spurious charter contained in *K. C. D.* 656/987. But Bridian has been identified with Little Bredy rather than Bridport, on the ground, apparently, that the former contains a King's *tun*—Kingston Russell.⁸

(b) Bridport was the seat of a pre-Conquest mint, and had one moneyer in the time of the Confessor, though as far as I am aware no coins of that monarch have yet been found, struck at this mint.⁹

Bridport must have been an important place, as is

⁷ Cp. *B. S. C.*, No. 1335; Maitland, *D. B. and B.*, pp. 502 ff.; Chadwick, *A.-S. Inst.*, pp. 204 ff. It must be observed, however, that neither Wareham (which is known to have possessed a mint long prior to the Conquest) nor Bridian are mentioned in Birch's text, probably for the reason advanced by Professor Chadwick, *op. cit.*, p. 414.

⁸ Cp. Maitland, *loc. cit.* and *V. C. H. Dorset*, vol. ii, p. 127 f. There are two places Longbredy (*D. B.* Langebride) and Little Bredy (*D. B.* Litelbride) about 6½ and 8 miles respectively to the east of Bridport. The former is situated near the river Bride, whilst the latter stands at the source of that stream. Bridport is situated on the river Birt or Brit (called Bride by Holinshed), and the names of these two streams have often been confused. The former flows east to west, whilst the latter flows north to south, both falling into the sea not far from each other. Cp. also *Hist. and Antiq. of the County of Dorset*. John Hutchins, vol. ii, p. 184. Lond., 1863.

⁹ Cp. Brooke, *Coins of the Norman Kings* (vol. i, *Intro.*, clxiii), and the series of coins of William I with the legends **BRIPIT**, **BRIDI**, **BRD** (vol. ii, p. 97, Nos. 509-512), which have been correctly assigned to Bridport. Cp. also Carlyon-Britton, *B. N. J.*, vol. v, p. 105.

shown by its description in the Domesday Book, and next to Dorchester, it stands at the head of the account of Dorsetshire. It is classified by Ballard as a county borough, and as such it would have the right of coinage.¹⁰

(c) Unfortunately, as far as I am aware, we have no certain pre-Conquest forms for the place-name Bridport. After 1066, however, there is no lack of spellings: Brideport, *D. B.*, 1086; Bridiport, 1126-40, *Lib. Rolls*; Bridiport, 1142-54, *Cal. Doc.*, p. 60; Brideport, 1156-7, *ibid.* p. 160; Bridiport, Brideport, *Hund. Rolls*; Brudeport, Brideport, 1291, *Eccles. Tax*; Brideport, 1428, *Feudal Aids*, pp. 89, 90, &c.

The termination *-port* was often applied to inland towns, e.g. Newport Pagnell, Langport, Herefordport, Huntendenport, &c. This was particularly the case when it was desired to give prominence to that feature of a *burh* as a place in which a market was held, and a market implied the existence of a mint.¹¹

II. The identification of the place-name **HAMWIC** found on certain coins of Æthelred II (979-1016) has also for a long time puzzled numismatists. The following are descriptions of the coins in question, taken from Hildebrand's Catalogue (pp. 76, 498):

¹⁰ It may be mentioned here that in Ballard's list (*loc. cit.*) of the Domesday county boroughs, all of them with the exception of two—Bridport and Northampton—possessed a mint. It is a matter of common knowledge that all the coins marked **HAMTVN** have been assigned to Southampton, though it is generally admitted that many of them should be attributed to Northampton. Perhaps an attempt might be made to separate the coins belonging to the respective mints. If my attribution of the above-mentioned coins to Bridport is correct, this would complete the list of county borough mints, and prove conclusively that a mint was a necessary adjunct of the county borough.

¹¹ Cp. Maitland, *D. B. and B.*, p. 195.

No.	Obv.	Rev.	Type.
1294.	e. 10.	+ÆDELMAN M ^o HAMPI	B. 1.
1295.	"	+ÆDELVEARD M ^o HAMPI	"
1296.	"	+ÆDELPEARD M ^o HAM.	"
1297.	"	+ÆDELVEARD M ^o HAMPIC	"
1298.	"	+ÆDELVEARD M ^o HAMPI	B. 2.
1299.	"	+GODMAN M ^o HAMPI	C.
1300.	"	+ISEGEL M ^o HAMPIC	B. 1.
1301.	"	+ISEGEL M ^o HAMPI	C.

Hildebrand assigns them to Harwich, but on what grounds it is not clear. Harwich was not a Domesday borough (it is not even mentioned in the *D. B.*), and as far as records go it does not appear to have been a place of any importance in the O.E. period. Apart from this, however, the earliest forms of the name known to me are Herewyk, *Chart. Rolls*, 1253; Herewic, *Hund. Rolls*, 1274-5. From the philological point of view it is impossible to equate Hamwic with Herewic.

A later writer makes the tentative suggestion that the coins may belong to Droitwich.¹² But there is no evidence to support this theory. Although the place appears to have borne a variety of names in the O.E. period, Hamwic is not amongst them. According to Duignan,¹³ the early forms for the place now called Droitwich are: Saltwich, *B. C. S.*, 138/716; Saltwic, *ibid.* 557/888; Sealtwic, *K. C. D.*, 1313/1017; Wich (24 times), Wiche (once), Wic (once), *D. B.*, 1086; le Dyghtwych, 1347, &c. Consequently, Droitwich cannot be regarded as the minting place of the Hamwic coins.

Symeon of Durham, however, mentions a place Homwic (amongst others), as having been damaged by

¹² Cp. Carlyon-Britton, *B. N. J.*, vol. vi, p. 26.

¹³ *Worcestershire Place-names*, p. 53 f.

fire in the year 764.¹⁴ Roger of Hoveden, quoting from Symeon, gives the form as Homunic.¹⁵ In the *Index Locorum* in vol. iv (p. 218), Homunic is stated to be Southampton. Now this identification is confirmed by the old form Ham-wih preserved by the West Saxon nun of Heidenheim, who wrote (778-86) *Vita Willibaldi*.¹⁶ When Willibald sails from Wessex to the Seine, he embarks at Hamel-ea-mutha (now the Hamble), "iuxta illa mercimonio (*sic!*) qui dicitur Hamwik".¹⁷ As Prof. Liebermann points out, no other place can be meant than Southampton, which is in the immediate vicinity, since in the parallel passage in Wynnebald's biography (*M. G.*, p. 107),—the brother of Willibald—the place where negotiations for the voyage are carried out is described as "loca venalia quod est mercimonium". That such a market town existed close to Southampton is unknown and improbable. As independent words *wic* and *tun* were often used synonymously, and it is reasonable to suppose that they might also be interchangeable as components of a compound place-name on the analogy of such forms as Lundenburh, *A.-S. C.* 851 A, -ceaster, -wic, *ibid.* 604 E.

The evidence for this attribution afforded by the names of the moneyers is not of very substantial help. But it may be observed that the names of two of the moneyers—Ægelman and Isegel—do not occur on other coins during this reign. The name Æthel-

¹⁴ *Hist. Regum*, Rolls Series, vol. ii, p. 42.

¹⁵ *Chron. Magis. Rogeri de Hovedene*, Rolls Series, vol. i, p. 8.

¹⁶ *Monum. Germanica*, vol. xv, p. 91.

¹⁷ *Cp. Liebermann, Arch. für d. St. d. n. S. r. u. Lit.*, 1915, p. 133.

I am indebted to Professor Mawer of Newcastle for this reference.

weard, however, is found on coins struck at Hertford, London, and Sudbury, whilst the name Godman (which is very common at this period) occurs on coins from Canterbury, Dover, Hereford, London, Thetford, and Winchester. By a searching examination of the types of these coins and of those with the legends Hamtun on Æthelred's coins, it is not improbable that further light may be thrown on this question of identification.

L. WOOSNAM.

VI.

A GOLD COIN OF THE BLACK PRINCE OF THE FIGEAC MINT.

(SEE PLATE III, FIGS. 3, 4.)

IN the *Numismatic Chronicle* for 1908 (p. 105) I quoted the accounts of Richard Filongleye of the profits derived by the Black Prince from his gold and silver coinages, which established the fact that the Black Prince issued both gold and silver coins from the mint of Figeac. The gold coinage from that mint was, however, extremely small, the profits being less than £1,400, while the profits from the mint at La Rochelle exceeded £24,000, at Bordeaux £53,000, and at Poitiers and Limoges £150,000.

It was, therefore, not surprising that no gold coins of the Figeac mint were known, but I expressed a hope that one day a gold coin from this mint might be discovered. I am glad to say that hope has now been fulfilled.

In the collection of the late Mr. Talbot Ready, sold at Messrs. Sotheby's last November, there was a Pavilion of the Black Prince of the second issue which was attributed to the Limoges mint in the Sale Catalogue (lot 883). A careful examination of the coin, however, shows unmistakably that the mint-letter is F.

The following is a description of the coin :

Obv.—GD : PO : GRS : RAG : KRLI : PRPS : KQVI.
Stops, open quatrefoils ; usual type.

Rev.—+DQS : KIVTO : S : PTHOTO : ME : S : IPO :
SPTIT : QOR : MEVMP. Stops, rosettes.
Usual type, E in centre, lis in first and fourth
angles, leopard in second and third angles,
rosettes in spandrels.

Wt. 74.7 grs. (Pl. III. 3.)

The mint-mark of D'Ax.

The mint-mark of D'Ax has hitherto been a matter of uncertainty. M. Caron, in the *Bulletin de Numismatique* (see *Num. Chron.*, 1888, p. 289), described a hoard of 618 coins of the Black Prince, including coins bearing a mint-letter composed of the monogram $\overline{K}Q$, but no illustration of the monogram was given.

Mr. L. A. Lawrence has, however, recently sent me a sterling of the Black Prince (Pl. III. 4) which clears up this point satisfactorily. The monogram is composed of the letters \overline{H} and S, formed thus \overline{HS} , and no doubt stands for Aquis, or Aenqis, i. e. D'Ax.

It follows that the demi-gros previously tentatively ascribed to Bayonne (*Num. Chron.*, 1908, Pl. xii. 5, and p. 133) should be assigned to D'Ax, the mint initial previously read as b being in reality the last half of the \overline{H} , and the lower half of the S; in fact a careful study of Pl. xii. 5 will show the whole of the \overline{H} , but the top part of the S is obliterated. The sterling described under Bordeaux, on p. 143, should similarly be ascribed to D'Ax, the mint initial \overline{BS} being a wrong rendering of \overline{HS} .

L. M. HEWLETT.

VII

ON A SECOND SPECIMEN OF THE CROWN OF THE ROSE.

(SEE PLATE III, FIGS. 5-7.)

It is with the greatest pleasure that I am able to inform the Society of the addition to the National Collection, by the generosity of Mr. Sanford Saltus, of a specimen of the gold crown of the rose struck by order of Henry VIII in 1526. The coin is of unusual importance, and is the second example which has been brought to light.

I had the privilege of identifying and describing the first specimen, and a paper on the subject will be found in the *British Numismatic Journal*, first series, vol. iv, 1908. The whole subject is there discussed in detail, with a full description and illustration of the coin. The new coin closely resembles the other specimen, but different dies were used for its production, as is shown by a difference in the number and position of the saltire crosses used as stops between the words, and a variation in the shape of one letter. The description of the new coin is as follows:

Obverse.—A shield bearing the arms of England and France quarterly, above it a crown, all within two inner circles, the innermost linear, the outer slightly beaded above (the whole may have been beaded in its original condition). The inner circles cease near the outer margins of the crown. The mint-mark is a rose.

Legend: HENRIC⁹ × 8 × DEI × GRA' × REX × AGL' × Z × FRA'C'. Saltire crosses as stops, one after each word except FRAC. There are marks of contraction after HENRIC, GRA, AGL, and FRAC, and also after the A of FRAC. All the letters are of the Roman form.

Reverse.—A full-blown single rose of five petals fully displayed over a cross, each limb of which is represented by three lines. A fleur-de-lis ornaments each end. In the angles of the cross are alternately the letter h crowned and a lion, all within two inner circles, as on the obverse, the inner linear and the outer beaded. Mint-mark a rose.

Legend: hENRIC⁹ × RVTILANS × ROSA × SINE × SPINA ×. All the letters are Roman except the h of hENRIC, which is round. Saltire crosses are used as stops, one after each word except ROSA, where there are two. Weight, 50·3 grains. Slightly pierced above the top of the crown on the obverse. (Pl. III. 5.)

I have described this coin in such full detail in order to be able to point out the differences between it and the coin described in 1905. The design on both is the same, and the mint-mark is also the same, a rose. On the obverse of the earlier coin the inner circles pass farther above the crown, and the beaded circle stops at the orb surmounting the crown; the outer one is distinctly beaded all round. The first letter of the king's name h is round, not square. The saltire cross stops are one after hENRIC and two after each other word except FRAC, where there is no stop. The contraction marks are the same on both. The reverse of the older coin, like its obverse, shows two saltire crosses after each word, except again the last, where there is none, otherwise the two coins are alike. The weight of the first known specimen is 51 grains. It is

now in the possession of the American Numismatic Society, to which it was presented by Mr. Saltus.

Interesting as these coins are for their own sakes they are still more interesting as numismatic evidence of their issue. The story of the order for them is given in full in the paper before referred to. Briefly it is this: There was trouble in 1526 owing to the unequal values of coins here and on the Continent, with the result that English coins were exported, which caused a loss to the treasury here. To remedy this Cardinal Wolsey was appointed to supervise a new coinage, and to see "that the standard and fineness of the coins should be made equivalent to the rates and valuations in foreign countries, and he may also devise the printe, iron and stroke of the same". Patent Roll of the eighteenth year of Henry VIII, dated July 24th, 1526.

On August 22nd, 1526, was issued a proclamation "that owing to the enhancement of value abroad, money was carried out of this realm by secret means, nobles, half-nobles, and royalls, and as a remedy it is proclaimed that all gold current within this realm shall be made of the same value as it is in other outward parts; therefore the crown of the sun (a French coin) shall be received as 4s. 6d., having due weight and fineness, and the King thought it convenient that there should be a piece of gold of his own coin of the same weight, fineness, and value, to be called the crown of the rose, and to be current for 4s. 6d."

On the 30th October following the results of Wolsey's control of mint affairs are embodied in a report which among other items refers to George nobles and half George nobles, and states that the king was determined to have a new coin called the crown of

the double rose to be current for 5*s.*, and to be struck of 22 carat gold. The king also determined to have silver coins, groats, half-groats, pence, halfpence, and farthings made and sized according to the value of the fine gold coins. The crown of the double rose was substituted for the crown of the rose, because the latter, not being an aliquot part of the pound, was difficult to calculate. The dates quoted give us the period of currency of the crown of the rose. It could not have been earlier than August 22nd, and by October 30th it was already found unsuitable for its purpose. No wonder it is rare. The coinage thus initiated in 1526 evidently took some little time to settle down to a stereotyped form. The earliest mint-mark is a rose, which occurs on the crown of the rose, on George nobles and half George nobles, on crowns of the double rose, and on groats and half-groats, all associated with Roman letters in the legends. The crown of the double rose has **H** and **K** at the sides of the rose, the initials of Henry and Catherine of Aragon. All the earliest coins of this second, or as Mr. Symonds¹ would like to call it, Wolsey's coinage, with the exception of the crown of the double rose, are of considerable rarity. They are also much more carefully made, and are finer to look at than those which followed. The design of the crown of the rose (Pl. III. 7) was copied from the French crown of the sun (Pl. III. 6), and was made to look as much like it as possible. On the obverse the English arms replace the French arms in the crowned shield. A rose replaces the sun and crowned **H**'s replace crowned **F**'s in two angles of the cross, and the lions in the other two angles are in

¹ "Documentary Evidence of the Coinages of Henry VII and VIII," *British Numismatic Journal*, vol. x.

place of ornaments which on the French coins vary with the mint.

I have not been able to find a specific order for weight other than that the crown of the rose should weigh the same as the crown of the sun. Calculating from the weight of the ryall, which was valued at 10s., and forty-five of which should be struck from the pound tower, 54 grains should be the weight of the crown of the rose. The two examples weigh 51 grains and 50.3 grains respectively.

The piercing of the new example would account for part of the loss of weight, and probably wear would account for the remainder. At any rate the present weights of the two coins would seem to show that 54 grains is a fairly correct estimate.

Considering that these coins are so new to us, it is of interest to note that there is a picture of one in Snelling, and a note by him to say that pictures of the coin frequently appear in Dutch placarts between 1546 and 1560. Snelling himself had never seen the coin. The mint-mark in his picture is a lion. I imagine the picture to have been copied from one of those Dutch placarts. It would be perhaps too bold to say that the lion as a mint-mark was never used by Henry VIII, but I can say that I have never seen or heard of a coin of his with this mark. Snelling's picture was probably copied by Folkes, whose plates formed the basis of Ruding, so that pictures of the crown of the rose appear in both these works. Ruding notes that this coin is not known in any collection (1841 edition). The last author I can quote referring to these coins is Kenyon. He tells us that crowns of the rose were probably never struck because the name does not occur in the proclamation

of Nov. 5, which only referred to crowns of the sun not being aliquot parts of the pound. Ruding, however, after "crowns of the sun" adds "&c." in describing the proclamation. This of course is quite enough to cover the crown of the rose. It may be noted that Kenyon uses the same terms in reference to the half George noble, "possibly never struck". It is to my mind very unsafe to suggest that any coin for which orders were given was not struck because we do not now know of such a coin. Time will doubtless bring to our notice many such. A little careful examination has already revealed the unknown in the early silver of Edward III. Other examples doubtless await the student.

Some short time ago, in a note on the halfpennies and farthings of Henry VIII, I endeavoured to show why farthings frequently escape recognition through being struck with the same "coin" as halfpennies. My view met with much disapproval in some quarters. Briefly it was that the word coin here meant die. My opponents proposed to translate the word coin as design or pattern. In the order for the crown of the rose the same word coin occurs. Clearly if the king wished for a piece of gold of his own design or pattern he did not get it, as the design is evidently and intentionally copied from the crown of the sun. To my mind, however, the king did get what he wanted, which was a piece of gold of his own striking.

In conclusion I can but congratulate all those concerned in obtaining this new coin for the nation. It is in the place where all such coins should be. It belongs to none of us and yet to all.

L. A. LAWRENCE.

VIII

THE IRISH SILVER COINAGES OF EDWARD IV.

"THE study of the various coinages which took place in Ireland during the reign of Edward the Fourth is peculiarly attractive, from the number and variety of his coins which have reached our times; and the difficulties which have hitherto existed, in appropriating many of them to the exact period at which they were struck, give additional interest to the investigation."

So writes Dr. Aquilla Smith in the first paragraph of his paper on this subject in the *Transactions of the Royal Irish Academy*, vol. xix, pp. 1-49. The attraction remains to-day, for the present writer at all events, although the difficulties which faced Dr. Smith in 1839 were solved in a great measure by his researches. There are, however, certain points in his classification of the types which seem to need further consideration in the light of historical evidence not then accessible to students of Irish mint affairs.

Dr. Smith divides the moneys of the reign into four main sections, according to types:—1 (1461-3). Those devices and legends which were wholly Irish. 2 (1463-70). With Irish devices, but legends similar to those on English coins of Edward IV. 3 (1470-8). Devices and legends similar to English contemporary issues. 4 (1478-83). A distinct type known as the "three

crowns money". This chronological sequence has been followed by Mr. H. A. Grueber in his *Handbook of the Coins of Great Britain and Ireland*, in which the silver issues are arranged under seven coinages, but I am inclined to think that the fifth class (*Handbook*, p. 221) should, in the absence of any record ordering such pieces, be regarded as a variant rather than as a separate issue.

The documentary evidence for the coins of Edward's reign is remarkable in that it is almost solely derived from Acts of the Irish Parliament. During the first twelve years there are no less than eleven statutes, although not all of equal importance, which regulate the mints and currency matters, whereas the English Commons did not pass a single Act of that nature in the same period. The usual English practice was to prepare a contract in the form of an indenture between the king and the master-worker at the Tower of London, setting forth the terms under which the coins were to be struck, but not prescribing the type and legend. On the other hand, the Irish practice in the second half of the fifteenth century was to enact a law which specifically ordered that the money then authorized should bear certain devices and inscriptions, in addition to the directions as to weight and fineness. No doubt an indenture was subsequently executed by the master-worker, but as these agreements are generally missing¹ the value of the statutes from a numismatic point of view becomes still more apparent.

¹ An exception may be noted in the case of an indenture with Gernyn Lynch in the first year, which is recited *verbatim* in cap. 32 of 3 Edw. IV.

Abstracts of those statutes which were available in 1749 are printed in the appendix to James Simon's *Essay* on Irish coins, and are frequently quoted by Dr. Smith as the basis of his classification. During recent years, however, an officially revised edition of the Parliament Rolls of Ireland has been in course of publication, of which the third and latest volume includes the legislative enactments of the first twelve years of Edward's reign (1461-72). This volume contains, as Dr. Berry tells us in his preface, 422 chapters, of which only sixteen were printed in former editions, and it is therefore not surprising that new matter concerning the coinage is thus brought to light. The statutes as presented to us in the new edition do not appear to be in conflict with Dr. Smith's arrangement of his first section, nor with the earlier portion of the second section, which includes the coins bearing the crown with the king's name and Irish title on the obverse and the long cross with *Posui* legend and the place of mintage on the reverse, as ordered in 1463 by the Act 3 Edw. IV, cap. 32. But at this point a statute printed for the first time in 1914 renders necessary an amendment of the sequence of types put forward by Dr. Smith, who assumed that the king's portrait was introduced in 1467 on the "Doubles" coinage of that year. There were, however, two missing chapters of the fifth year (1465) relating to mint affairs, one of which, No. 41, was known to Simon only through a reference to it in a later Act; the existence of the other chapter, No. 19, seems to have been quite unsuspected by any of the writers. The last-named Act proves to be of sufficient importance to warrant an abstract of its provisions, which run as follows:

In a Parliament held at Dublin on Monday next before the feast of St. Luke the Evangelist (14 Oct.) in the fifth year of Edward IV (1465), before Thomas, Earl of Desmond, deputy of George, Duke of Clarence, the King's Lieutenant of his land of Ireland, it was enacted at the request of the Commons:—That Germyn Lynche, goldsmith, master of the mints in Ireland, have authority to strike in the castles of Dublin and Trim, the cities of Waterford and Limerick and the town of Galway, all manner of coins of silver necessary to the said land, that is, the groat, half-groat, penny, half-penny, and farthing, having the image of a crowned head in every of the said coins; with the same inscription in the groat and half-groat as was contained in the coin which was ordained by authority of a Parliament held at Wexford before Thomas, Earl of Desmond,² and in the penny, halfpenny, and farthing, part of the said inscription as it may be contained, according to the discretion of the master; of which groats, three shillings sixpence halfpenny farthing should make one ounce according to the standard of the Tower of London, and when not clipped shall be taken and passed throughout the said land at fourpence each. And the half-groats, pence, and halfpence shall weigh and be rated proportionately. Forasmuch as the halfpennies and farthings require much more labour and cost, whereby the master and workmen cannot be supported, the said master may alloy every ounce of the halfpence with the weight of two pennies and every ounce of the farthings with the

² In 1463, when the legends "Edwardus Dei Gratia Dominus Hibernie" and "Posui Deum", &c., were ordered for coins of the crown and long-cross type.

weight of four pennies. A remedy of sixpence in weight in every twenty shillings. And it is also ordained that the new money made in England of the new weight shall pass among the king's lieges and be of the same value as the money now made in this land and to be made in the Castle of Dublin. And further that the said Germyn Lynche, with his servants, shall be sworn before the Barons of the Exchequer of Ireland, truly to hold the occupation according to their discretion, and from thenceforth the master or his deputy shall make assay before the Barons twice a year, and that the Barons shall take the said proof upon pain of ten pounds. And of bullion brought to the mint the masters shall cause one moiety to be struck in groats and the other moiety in the smaller coins, at the will of the bearer. (Irish Statute, 5 Edw. IV, cap. 19.)

The substance of the other missing chapter (No. 41) of 1465, to which I have already alluded, is quoted by Simon in Appendix IX, in the form of a recital in the Act of 1467-8, cap. 7, but as it deals with the rating of English gold in Ireland it is not relevant at the present moment. The same cannot be said of chapter 19 of 1465, summarized above, as it deserves comment in several respects.

Although the mint cities and towns remain as fixed by the Acts of 1463, this statute orders, for the first time in Edward's reign, "the image of a crowned head" which is to be struck on each of the five denominations. The inscription is to follow the words directed to be used in 1463 (foot-note 2). I observe that the Act, unlike those which preceded and succeeded it, makes no provision for a reverse type, and

thus gives some freedom to the graver of a design for that side of the new coins. Of the coins now authorized it would seem that only the groat, half-groat, and penny³ are known, according to Dr. Smith's plates and Mr. G. Coffey's printed catalogue (1911) of the Anglo-Irish coins in the collection of the Royal Irish Academy, but the pieces in question are there assigned to 1470 or later. The weights are reduced, the groat being approximately 42 grains of the Tower ounce, as compared with 48 grains in the issue of 1463, when the calculation was based on Troy weight. Dr. Smith (pp. 29-30) thought that "Troy" was due to a mistake in transcription, but the records plainly indicate that both standards of weight⁴ were then used for currency business, a practice which must have added to the confusion. The fineness of the three largest coins was presumably equal to that of contemporary English money, as the phrase "according to the standard of the Tower of London" might be held to apply to the quality as well as to the quantity of the silver, but the halfpenny and farthing were to be further alloyed in the complicated manner described in the foregoing abstract.

I think that it will be helpful for the purpose of comparison if I sketch in bare outline the material *data* in the five statutes which governed the new issues before 1472, omitting two short and apparently unproductive Acts of 1461-2 and other irrelevant ordinances :

³ A halfpenny is illustrated in the *Handbook* (No. 30), but a coin of similar weight is called a penny in Dr. Smith's list.

⁴ It may be recalled that the Troy ounce contained 480 and the Tower ounce 450 grains.

(1) 1463, November. (3 Edw. IV, cap. 32.) Confirms agreement with Germyn Lynch in 1461 to make 4*d.*, 2*d.*, and 1*d.* Groat = 48 grains. Crown on obverse; long cross and pellets on reverse, with mint name. To this were added in 1463 the legends *Edwardus Dei Gratia Dominus Hibernie* and *Posui Deum*, &c. Mints at Dublin, Trim, Waterford, Limerick, and Galway.

(2) 1463, November. (3 Edw. IV, cap. 39.) 4*d.*, 1*d.*, $\frac{1}{2}$ *d.*, $\frac{1}{4}$ *d.*, to be made at Dondory in Waterford. Type and weight as 38 Henry VI, cap. 11, when the groat = 45 grs. Crown on obverse; long cross and pellets and mint name on reverse.

(3) 1465, October. (5 Edw. IV, cap. 19.) 4*d.*, 2*d.*, 1*d.*, $\frac{1}{2}$ *d.*, $\frac{1}{4}$ *d.* to be made by Lynch. Crowned head, and legend *Edwardus Dei Gratia Dominus Hibernie*; reverse type and legend not defined. Groat = $42\frac{2}{3}$ grs. Mints as in 1463, cap. 32.

(4) 1467, December. (7 and 8 Edw. IV, cap. 9.) "Doubles" coinage. 4*d.*, 2*d.*, 1*d.*, $\frac{1}{2}$ *d.*, $\frac{1}{4}$ *d.* Groat rated 8*d.*, other pieces in proportion. Crowned head on obverse; sun with rose in centre on reverse. Legend, obv., as (3); reverse, *Civitas Dublinie*. Double groat = 45 grs. Mints as 1463, cap. 32, but adding Drogheda and Carlingford. After Easter then next, all other silver coins annulled in Ireland.

(5) 1470, November. (10 Edw. IV, cap. 4.) 4*d.*, 2*d.*, 1*d.*, $\frac{1}{2}$ *d.*, $\frac{1}{4}$ *d.* Crowned head on obverse; long cross with pellets, as Calais groat, on reverse. *Edwardus Dei Gratia Rex Anglie & Dominus Hibernie* on obverse, and *Posui*, &c., with mint name, on reverse. Groat = $43\frac{7}{11}$ grs. Mints: Dublin, Trim, and Drogheda. The "doubles" are reduced to normal rating, and after the Feast of the Purification then next are annulled.

I propose now to consider the extent to which Dr. Smith's grouping of the silver coinages is affected by the statute of 1465. In approaching that part of my subject which deals with matters of opinion rather than with historical facts, it will be convenient first to establish at least one coinage which need not give rise to any controversy in respect of its place in the series. The "doubles" issue of 1467 can be identified with comparative certainty by its type, which harmonizes with the Act and is distinct from others of that period. It can therefore be regarded as a fixed point in the central portion of Dr. Smith's arrangement, but the respective dates assigned to the two other coinages between 1465-70 have induced me to offer a few comments.

In the light of the newly-found 1465 statute it will be agreed that the earliest crowned-head type was struck in or shortly after that year, and not in 1467 as hitherto supposed. Which, then, of the various coins with the head, other than the "doubles", should be placed under 1465? If we take heed to the provisions of the Act, as I think we should, our choice seems to be limited to the pieces which read **DNS•HYB**, because I shall presently suggest 1470 as the date of the similar type reading **REX•ANGL•DNS•HYB**. It will be borne in mind that this Act was unaccountably silent as to the reverse type of the money then authorized; that being so, I feel at liberty to assign to that year the coins which conform to the prescribed obverse type and show reverses not inconsistent with other issues before and after the presumed date. Such coins are to be found among those described on pp. 19-21 of Dr. Smith's paper, on p. 221 of the

Handbook (as fifth and sixth issues, 1470-8), and on pp. 27-32 of the Dublin catalogue. These groats, &c., have the crowned head with the Irish title only, but the reverses bear two varieties of the "Calais" cross, (1) the usual long cross with pellets, (2) the long cross with a rose in centre, the latter being classed by Mr. Grueber as a separate coinage in 1470, of which no record exists.⁵

This rearrangement displaces from 1465 a Dublin groat and penny of an abnormal type, for which no documentary sanction can yet be found; certainly not in the revised edition of the statutes of the first twelve years. The obverse bears a forked cross upon a large rose, and the reverse a sun of sixteen rays with an annulet in centre (*Handbook*, Pl. lvii, 23). The inscriptions correspond with those ordered in 1463, while the absence of the crowned head forbids a date subsequent to 1465, notwithstanding a certain resemblance between the reverse and that of the "doubles" in 1467. These two coins will be adrift from their moorings and at present I cannot act as their pilot to a safe anchorage.

The proposed transfer to 1465 of a portion of the fifth and sixth issues, as set out in the *Handbook*, leaves a blank for the year 1470. This should be filled, I submit, agreeably to the text of the statute which ordains, as we have seen, the use of an inscription containing the title **REX • ANGL** and on the reverse a long cross with pellets. We have groats, half-groats,

⁵ Unfortunately, a material part of the obverse inscription of No. 28 on p. 221 of *Handbook* is not visible on Plate lvii. An inspection of the coin shows that the word before **HYBE** is removed by clipping, but other examples of the same type read **[D]NS • HYBE**. In any event, **REX HYBE** would be an unlawful title at that time.

and pence from the mints of Dublin, Drogheda, and Limerick, with the English title and otherwise conforming to the directions; these, I believe, should constitute the 1470 group. There is, however, a difficulty in respect of the pieces with the long cross and a rose in the centre, a few of which read **REX • ANGL** and should belong to 1470 if the reverse type did not ignore the Act of that year. An unusually fine Dublin groat of this variety is in Mr. T. Bearman's collection, and is apparently the actual coin drawn in Ruding, *Suppl.*, part 2, Pl. xvi, 15. As I have already allocated to 1465 the examples of this type reading **DNS • HYB** only, it is incumbent on me to suggest a reason for the existence, even in small numbers, of similar coins with the English title, as they seem to be incompatible with any theory based on the Acts of Parliament. Although the Irish statutes have now been thoroughly explored and published down to 1472, the editor of the latest volume tells us that certain ordinances, and even the records of several Parliaments which are known to have sat, cannot be found among the official rolls. It is therefore conceivable that instructions relating to the coins with the long cross and rose were contained in one of the missing chapters. These same coins are noticeable in another respect. The graver has taken pains to distinguish the obverse from that of the long cross and pellets type by introducing alternate suns and roses at the sides of the bust, which ornaments occur on the two varieties reading **DNS • HYB** and **REX • ANGL DNS • HYB** respectively and are peculiar to the long cross and rose type. I should not omit to mention that Dr. Smith (p. 20) supports his attribution of these coins to 1470 by a reference to an Irish

statute of 1 Richard III, cap. 8, which instructs the master-worker to strike silver monies in such manner and in such places as had been ordained by the Parliament sitting in 10 Edward IV (1470). He goes on to say that a groat of Richard III is practically identical with the Edwardian coin assigned by him to 1470. The similarity of type and legend is undoubted, but when I turn to the Act of Edward's tenth year, thus prayed in aid, I find that cap. 4 (which alone deals with mint affairs) does not as a matter of fact order the particular type and legend reproduced on Richard's groat, as may be seen by a glance at the abstract No. 5, above printed. Consequently the allusion to Richard's statute appears to increase the cloud of obscurity without helping Dr. Smith's case. It may be added that cap. 8 of 1 Richard III is quoted textually in *Num. Chron.* 3rd Ser., i. 315-19, but many passages are so difficult to construe that their sense is almost lost.

There is abundant proof that Edward's Irish coinage was at the beginning of the reign controlled and struck in that island; indeed Lynch, when appointed master-worker in 1461, was also empowered to grave the pounsons where he would. But when we reach 1464 there was a change in the practice, which does not appear to have been hitherto noted. Under an English indenture of Aug. 13 in that year William, Lord Hastings, became worker of the moneys of gold and silver and keeper of the exchange within the realm of England, the "territorie of Irland", and at Calais. The document provides in the customary manner for the first issue of the light coinage in England, and then proceeds as follows: The master shall have all the franchises and liberties granted by patent on 6 August

1 Edw. IV (1461) to the master of the mint of Ireland, except only that the irons of the said mint shall be graven within the Tower of London, always keeping the print according to the moneys made within the said Tower and with a scripture to tell where the said moneys be made, like as it is in all other places (Pat. roll 4 Edw. IV, part 2). This order in effect superseded Lynch as a mint official, and if some Irish currency was struck in pursuance of the indenture the dies would have been made by Edmund Shaw, then graver at the Tower, but I cannot yet identify any coins as coming from that source. The Irish statute nearest in date to the foregoing instructions is cap. 19 of 5 Edw. IV (1465, Oct.), which orders a new coinage harmonizing with the Tower "print" as far as the obverse type is concerned, but says nothing as to the reverse (see abstract on p. 114, *supra*). The possibility that this Act was inspired by the terms of the 1464 indenture with Hastings is increased by the fact that another grant to him was made in April 1465, whereby his activities were limited to England and Calais. Accordingly his control of the Irish mints was in force during eight months only, after which period the Dublin statute became law and Lynch returned to his billet as master-worker.

The letter G which is seen on the king's breast on certain groats of Dublin, Waterford, and Drogheda deserves a short notice, although it does not affect the sequence of the types. This letter has been generally regarded, since Lindsay made the suggestion in his *View of the Coinage of Ireland* (1839), as an indication of the workmanship of Germyn Lynch, the well-known master of the Irish mints. I have often felt doubtful

about this interpretation, as we should expect to find L instead of G if the letter had a personal meaning; indeed this would appear to be the solitary instance of an Irish master-worker using the initial of his Christian name as a privy mark. I had also noticed that the G was not seen on the earlier coins, when Lynch undoubtedly held office in the mints, but only on those struck during the middle period of the reign, when he was unemployed and in disgrace for a time. It is apparent from a recital in cap. 65 of 11 and 12 Edw. IV that letters patent had been granted at Dublin on Oct. 18, 1470, to William Grampe and Thomas Barby (who died very soon), appointing them as masters of the coinage in Dublin, Trim, and Drogheda, thus again displacing Lynch. Simon, when citing this grant in his Appendix XI, prints the surname Grampe as Crumpe. Now the groats bearing G are, with some exceptions, of the type prescribed by the statute of 1470, the year of Grampe's appointment. That being so, I feel no hesitation in preferring the last-named official to Germyn Lynch as the man who was indicated on the coins, if the initial is to be interpreted in a personal sense. In this connexion it will be remembered that letters similarly placed on other coins of Edward IV, both English and Irish, have a topographical meaning, but in this instance the G cannot denote a place-name, having regard to the reverse inscriptions on the three groats in question. One other point arises with respect to Grampe and his mastership of the mints. His Irish patent was sealed, as I have already shown, about nine days after the restoration of Henry VI; therefore it seems to be a fair inference that Henry's supporters dismissed Lynch

and conferred his post on Grampe, just as Hastings was for the same cause deprived of the Tower mint and his office given to Richard Tunstall "by word of mouth" on Oct. 23, 1470 (English pat. rolls, *passim*). A reflection of the political troubles may be seen in cap. 4 of the Irish statutes 10 Edw. IV (1470, Nov. or Dec.), which uses significant words in relation to the legend on the coins then authorized—"Edwardus Dei Gratia Rex Anglie & Dominus Hibernie or the name of any other king for the time being", and also refers to the "master or masters for the time being". This was the first occasion on which the king's English title was placed on Irish moneys, the change being possibly intended to assert his claim to the throne *de iure* although he was a fugitive in foreign lands. Be that as it may, the Parliament in Dublin was at the moment sitting on the fence.

Unfortunately letters patent were issued in both countries, separate records being kept in London and in Dublin. This dual authority gave rise to apparent inconsistencies, as when the terms of an English patent differed from a contemporary Irish statute; which of them prevailed on such an occasion I do not know. Various copies of indentures and grants to mint officials were doubtless enrolled among the Irish patents of this reign, from which I had hoped to supply some at least of the deficiencies in the parliamentary enactments. I am told, however, by Mr. E. J. French, who has most kindly made several searches in Dublin on my behalf, that Edward's patent rolls from the seventh to the fifteenth year are not forthcoming at the Irish Record Office. So that road to the light is closed.

As the revised edition of the statutes after 1472 has not yet been issued it will be prudent to refrain from prophecy as to the coinages of the subsequent eleven years and to await the publication of the next volume of Parliament rolls. I may, however, with safety quote the covenants of an unprinted contract made with a new master-worker in the twenty-third year, and then add an amended list of mint officials during the whole of Edward's reign and the period of Henry's restoration.

The original contract above mentioned bears at the head the initial letter of the king's name, and on the margin an impression of one of the coins (probably the penny) then ordered to be struck; it is similar in type to No. 41 on p. 223 of Mr. Grueber's *Handbook*, but without the Kildare arms. The terms are as follows:

Indenture between Edward [IV] and Thomas Gal-mole, gentleman, witnessing that Thomas had by patent been appointed master-worker of the moneys of silver and keeper of the exchange in Dublin and Waterford; that the master had undertaken to make two manner of moneys of silver, the first called a penny with the king's arms on the one side upon a cross trefoiled on every side and with this scripture Rex Anglie & Francie, and on the other side the arms of Ireland on a like cross with this scripture Dñs Hibernie. And there shall be of such pennies in the pound weight Tower 450 Pieces which is in number 37s. 6d. (*i. e.* the penny = 12 grains). And the other money of silver shall be called a halfpenny (arms and inscriptions as on the penny) and in the pound Tower there shall be 900 pieces. They shall be of the goodness of the old sterling that is 11 oz. 2 dwt. fine silver and 18 dwt. alloy

in every pound Tower. Of every pound weight the king shall have 2s. 6d. by number, of which 18d. for the officers of the mint; and of the 18d., 6d. for the moneyers and platers, and so 35s. shall remain to the merchant. Provision for a remedy. The money taken for assays shall be 4d. from each journey, to be placed in boxes within a coffer with three locks which shall be sent over from Ireland to be assayed at the Star Chamber, and also all the coining irons which are made by the graver in the Tower. Silver is to be coined in the presence of the warden . . . and by day only. [The manuscript here becomes very defective and parts are missing.] Undated. (Society of Antiquaries MSS., vol. 116).

Although without a date the document would have been executed within a few days, if not on the day, of the sealing of Galmole's English patent, namely March 7, 1482-3. As this date was about one month before the king's death, and as I cannot trace any extant coins corresponding with the two denominations ordered, it is possible that none was struck. On the other hand, the impressions on the margin may have been produced by dies, or, it must be admitted, by wooden stamps. It will be noted that the coins were to be equal both in weight and fineness to the contemporary moneys from the Tower.

Appointments to the Irish Mints.

1461, Aug. 6. English letters patent. Germyn Lynch of London, goldsmith, to be warden and master-worker and graver, for life.

1463, Nov. His patent confirmed by statute, cap. 32.

1464, Aug. 13. English let. pat. William, Lord Hastings, to be master-worker and keeper of the exchange in Ireland.

1465, Oct. Germyn Lynch authorized by statute, cap. 19, to strike moneys.

1470, Oct. 18. Irish let. pat. William Grampe and Thomas Barby (the latter dying shortly afterwards) to be masters of the coinage for life and the life of the survivor, at Dublin, Trim, and Drogheda.

1470, Dec. 8. Irish let. pat. Patrick Keyn, goldsmith, to be supervisor and under-master and receiver of the "doubles". He struck money "not having weight nor made of good alloy" against the will of Grampe.

1473. Germyn Lynche, of Drogheda, alias "Dermitius Lynsky coynour", was indicted for having made 48s. instead of 44s. from each pound of bullion, and for coining at Drogheda, in 12 Edw. IV, 1,000 groats, of which eleven pieces weighed $\frac{3}{4}$ ounce instead of one ounce. In the same year he was pardoned by Irish letters patent. (Molyneux MSS., Trinity College, Dublin.)

1474, Aug. 20. Eng. let. pat. Richard Heron, late of London, merchant, with the assent of the Lieutenant, to be master-worker for life of the mints in Dublin, Drodath (Drogheda), Trym, Waterford, Cork, and Lymryck, with the accustomed fees and profits.

1479, Oct. 5. Eng. let. pat. German Lynche of Dublin to be master of the coinage, during pleasure.

1482-3, March 7. Eng. let. pat. Thomas Galmole, gentleman, to be master at Dublin and Waterford, during pleasure.

Germyn Lynch, or Lynsky, after the long but chequered career outlined above, appears to have frankly abandoned straight dealing with the authorities. He is described in a statute of 1483, cap. 13, as

daily making counterfeit money in the purlieus of Waterford and elsewhere with certain Irish kerds (tinkers), wherefore it was enacted that all grants to him should be revoked. Under such conditions can we be surprised at the uncertainty which exists as to the classification of Edward's Irish coinages?

HENRY SYMONDS.

IX.

A RARE PENNY STRUCK ABOUT 1346 AT ARLON (BELGIUM) IN THE REIGN OF JOHN THE BLIND, KING OF BOHEMIA AND COUNT OF LUXEMBURG (1309-1346), BY THE PROVOST ARNOULD OF ARLON.

Obv.—✠ EDW T RRES O DRS REGYB' Crowned bust facing. The legend in two bearded circles.

Rev.—MOR-ETA-ERL-ORS in two bearded circles. Long cross pattée, three pellets in each quarter, dividing the legend.

Wt. 0.72 gramme.



JOHN the Blind, King of Bohemia and Count of Luxemburg, was one of the worst monarchs that the Middle Ages could have given us. His total lack of any political sense and his endless rambles through Europe ruined his kingdom of Bohemia, where to this day his memory is cursed, and plunged his native county of Luxemburg into the greatest disorder and misery. Three things characterized this sovereign: his hatred against England, his innumerable imitations of English pennies, and lastly, his no less innumerable debts. Of the first I will say nothing save that it

brought him to his death on the field of battle at Crécy (26th of August, 1346), but I shall have more to say of the other two, as it is to these that the present coin owes its existence.

All English numismatists know the copies of the pennies of Edward II and III that John the Blind produced in profusion during the whole of his reign; upon them he audaciously falsified the legends, as is the case above, in order to mislead the public as to their origin. There are actually more than forty kinds of these coins of the English type, of low standard and inferior weight, that the Luxemburg prince has left us, many of which are still so abundant to-day that Chautard¹ rightly states that a greater quantity of pennies could not have been issued by the King of England himself, had he reigned over the county of Luxemburg.

These coins were the cause of much annoyance to England, where they were very soon cried down under the name of *lushbournes* or *luxburgers*, and necessitated numerous defensive measures by the king and the Parliament.² There was no greater squanderer than John the Blind; money in his hands vanished like smoke, as described by the Chronicle of Zbraslaw, and his debts ended by becoming so enormous, that at his death there was not sufficient money to defray his funeral expenses. He borrowed right and left, distributing to his lenders cities, castles, villages, and revenues of his county, without ever worrying himself

¹ Chautard, *Imitations des monnaies au type esterlin*, p. 108.

² Ed. Bernays and J. Vannerus, *Histoire numismatique du comté puis duché de Luxembourg et de ses fiefs*, pp. 98 to 115 and pp. 448 to 459.

as to the manner by which he would recover his bonds from the hands of those into which he had given them.

One of his principal creditors was Arnould, sheriff and judge of Arlon in 1316, provost in the following year, whose luck was extraordinary. He was the son of Nemery of Arlon, a man of very modest origin, and we see him as early as 1323 amongst this prince's bankers. The loans, which were at first modest, increased with astonishing rapidity, and each in turn carried with it a security of greater importance than its predecessors.

On the 17th of June, 1323, he lent the king 400 pounds of petits tournois, and received as security the village of Messancy with its dependencies. On the 18th of August, 1323, he advanced the king 150 pounds of Halle, and 200 marks of Cologne on the 17th of February, 1324. On the 13th of May following John gave him the tithe of the village of Selange. On the 2nd of February, 1328 (New Style), Arnould acquired the mayoralty and the court of Kahler; then the loans continued and increased with fantastic rapidity from year to year. The social position of the lender followed the same ascending progress, and it was not long before he became seneschal of the county; on the 6th of August, 1332, arrangements were made whereby he should receive all the revenues of the provosty of Arlon for six years to come, in payment for the 5,000 pounds which the king owed him. On the 25th of December, 1342, this debt amounted to 5,000 écus d'or mortgaged on the revenues of the county of Luxemburg. Arnould received the revenues of the provosty of Thionville on the 6th of January, 1343, as a guarantee for an advance of 7,000 pounds;

on the 20th of November, 1345, the king allowed him 1,000 écus d'or out of the revenues of the town of Bastogne, and also admitted having received a long time since 7,700 of the same coins which he promised to repay by the following Easter. The same day John owed another debt of 6,900 écus d'or and made a levy on the revenues of all his mint workshops in security for 1,500 of these pieces. In addition to this, the king, on the 5th of November, 1345, had borrowed once more 3,264 petits florins, secured on the revenues of the provosty of Arlon. Again, on the 29th of December, 1345, in their turn, the mint workshops of Damvillers and of Laferté were mortgaged for 1,500 écus d'or. On the 30th of December, 1345, the king arranged for 1,500 écus with both Tilman de Rosnier and Arnould, in security for which the mayoralities of Amberloup, Louville, and Rondu were given; and finally, on the 7th of July, 1346, John of Bohemia admitted that he owed Arnould 12,000 écus d'or on the promise that he would not apply for further money before this sum had been refunded.

After the death of John the Blind, Arnould became banker to his son Charles IV, elected King of the Romans on the 11th of July, 1346, and it was he who had to pay 957 écus d'or for the transport of the king's coffin from Crécy to Luxemburg: Charles then gave him the town of Durbuy in security for a loan of 2,500 royaux d'or; then, to the height of amazement, it was Arnould who paid the expenses of Charles IV's sojourn on the occasion of his visit to Luxemburg, and the burial expenses of John the Blind amounting to 677 florins. It would be very tedious indeed to con-

tinue this enumeration, and I will only mention that on December the 10th, 1346, Arnould was invested with the degree of chief captain, sovereign governor of the provosties of Arlon, Marville, St. Mard, Damvillers and dependencies, and four days afterwards, the 14th of December, 1346, Charles ordered the nobility, vassals, and officers of the towns and castellanies of Ivoix and Virton to give obedience to his counsellor Arnould of Arlon, whom he had nominated their sovereign governor. It was a real abdication of sovereignty of the whole of the south of the county of Luxemburg. Arnould, who had managed to attain the pinnacle of power, died somewhere between the 25th of December, 1347, and the 17th of April, 1348.

There is not the slightest doubt that the coin here illustrated, which adds a new specimen to the long series of John the Blind's Luxemburg pennies copied from the English pennies of Edward III, was struck by Arnould of Arlon. In fact, if the various acts of John of Bohemia in favour of Arnould were examined, one would be induced to admit frankly that this man, who derived benefit from the ever-increasing financial difficulties of the blind king, wished entirely to assume the position of his master, and would have finally succeeded, had John not fallen on the battle-field of Crécy, and, above all, if he himself had not so closely followed his royal debtor to the grave.

It is even possible to indicate with exactitude the date of its issue, and to fix this at about the beginning of 1346, i. e. in the latter months of the life of John the Blind. Not only do the large loans of November the 20th, December the 29th and 30th, 1345, allow us to come to this conclusion and to note, with the opening

of a mint at Arlon, an extra security that the creditor had taken, or perhaps received by a charter which has not been preserved; but the facts that, on the other hand, Arnould had been minting at Arlon in the name of Charles IV large coins called "plaques" (i.e. plates), of which two specimens only still remain, that the coins so called were introduced at the extreme end of John's reign, and that their issue continued only for a short period at the beginning of his son's government, and lastly the impossibility for Arnould to coin before having become powerful, that is to say, before 1345, distinctly show us that the opening of the mint at Arlon cannot go back any earlier than the beginning of the year 1346.

The English coins bring us to the same result, because our penny imitates, especially on the obverse, the coins which mark the change between the heavy and the light coinage of Edward III, which took place between 1344 and 1351, and is characterized by a smaller effigy as well as by legends with finer letters. Although it has from the wear and tear of centuries lost a good quarter of its weight, and also almost the whole of the little crowned bust of the obverse, though fortunately leaving the reverse and both legends intact, this coin nevertheless must have weighed no more than a gramme. Its lightness, and the totally falsified legend of the obverse, beginning with the first four letters of the name of Edward and finishing with YB, the abbreviation of YBERNIUS, which ends the inscription of Edward III's pennies, make it a continental forgery or a *lushbourne* of the worst type. This was the best work of an unscrupulous man.

I will say just a few words respecting this Arnould of Arlon, of whom my English readers will doubtless be desirous of making the complete acquaintance. The little that we know of his personality does not allow us to hold him in high esteem. In spite of having become a kind of potentate, he did not disdain to commit acts of robbery. In fact, one day between the 12th and 25th of August, 1346, he went out with his son Nicholas and a few other men, on the road by which the Bishop Daniel of Verden had to pass on his way from Metz to Treves, held him up, ransacked him, and carried him off prisoner. He kept him in confinement one year, in spite of the excommunication and the interdict issued by the Pope Clement VI against him, without any one daring or wishing to deliver his victim. He must also have been guilty of extortions, for when Charles IV, engaged in business of the German empire, entrusted the government of the county of Luxemburg to his great-uncle, the Archbishop Baldwin of Treves (9th of December, 1346), the latter undertook immediately after the death of this dangerous man to take control of his estate, and to compel his children to refund considerable sums. He first confiscated the whole fortune of Arnould, including the produce of his fields near Thionville, which was sold in the market of this locality. He then imposed on his heirs, the 17th of April, 1348, the following terms: they renounce without any indemnity all the possessions which their father acquired from the Crown, and which formerly had appertained to the county of Luxemburg, and in addition abandon all their claims and credits against the late king. All the acts of acknowledgement of debts or of mortgages which are

in their hands must be given back to the archbishop acting on behalf of Charles IV, and are declared null and void. As regards the goods which their father possessed by inheritance, his children are able to redeem the remainder of them for 20,000 royaux d'or, but are foreclosed in respect of the part that the archbishop had sold.

On the other hand, the archbishop renounced in the name of the king all claims against them resulting from the rendering of accounts that their deceased father ought to have made, and promised to compel Arnould's receivers to render their accounts to them.

As the result of this financial disaster, the family of Arnould of Arlon declined, and fell into complete oblivion.

EDW. BERNAYS.¹

¹ Translation and reproduction prohibited without author's consent.

X.

THE MEDALS OF CHRIST WITH HEBREW INSCRIPTIONS.

“THE discussion opened twenty years ago regarding the medals of Christ with Hebrew inscriptions is certainly not closed.” These words, with which M. Germain de Maily began his article on this subject in the *Revue Numismatique* of 1919 (pp. 89 ff.), still hold good, notwithstanding Mr. G. F. Hill's more recent study in his *Medallic Portraits of Christ*, and may serve as an excuse for still another examination of the problem. It must be understood that the present writer approaches the subject purely as a Hebraist and student of Jewish literature; the history, purpose, and date of these medals are entirely outside his province.

The medals in question, so far as known to me, present two distinct varieties of Hebrew inscriptions. One of them, which presents the straightforward legend: “Jesus of Nazareth, the Christ (or Messiah), Jehovah and man in one”, calls for no remark. The other, which is the legend of “the commonest of all the medals of Christ”, is anything but straightforward in its present form. It is with this “commonest” variety that this paper proposes to deal. Photographic reproductions are given by the French savant, M. Ferarès, on the plate (x. A-F) which accompanies his too ingenious article on the subject in the *Rev. Num.* for

1916 (pp. 269-79), and by Mr. Hill in his *Medallic Portraits* (Figs. 25-27).¹ A wax impression of a medal corresponding to Fig. 25 a, and a photograph of another from a different hand, recently came under my notice, and led to a fresh examination of the whole problem, the results of which are here submitted to the judgment of experts.

The obverse of the medals in question bears a bust of Christ facing left; in the field—in the usual type at least (see below)—across the widest part of the



Fig. 1. From Hill's *Medallic Portraits of Christ*, Fig. 26a.

medal, we find in Hebrew letters (1) an Aleph (א) behind the head of our Saviour, and (2) on the opposite side the three letters ישׁ (Yeshá), which occupy the whole of the available space to the exclusion of the final consonant of the Hebrew form of Jesus, ישׁוע.

The reverse is entirely occupied by five lines of square Hebrew characters which on my wax impression and in most of the illustrations above cited are easily decipherable, as follows:

משיח | מלך בא בשׁ ליום ואדמ אדם עשׂו | תו

¹ I have to thank the Oxford University Press for permitting the reproduction here of two of the illustrations in question.

that is, MāSHīaCH | MeLeK Ba' BeSHā | LOM We'-D-M
'ā|DāM 'āSUY | TaW.

For the last word my photograph has η , Ferarès, Plate x. f, has η , while Hill, Fig. 26 c, has η , but the medallist in this last case has failed throughout to distinguish the vowel letters η (*waw*) and η (*yodh*). As the correct reading of this word is essential for the solution I am about to propose, I would point out to non-Hebraists that the difference between the two letters η (*taw*) and η (*cheth*)—the latter with two straight shafts, the former ending in one or two “feet”—may be easily seen from a comparison of the last letter of η η (line 1) with the first of η in the very distinct reproduction in Hill's Fig. 26 a (here p. 135). The last word of the inscription, in short, *resolves itself into the name of the last letter of the Hebrew alphabet*, the significance of which for the interpretation of the inscription as a whole will be shown at a later stage. The readings η , η , and especially η , which last—the Hebrew for “living, alive”—has led all previous investigators so far astray, are, I am convinced, all mistakes of medallists ignorant of Hebrew.

The first four lines of the inscription contain two clauses of four and three words respectively. The first clause presents no difficulty and means: “Christ, (the) King, has come in peace.” It is otherwise with the second clause: η η η . Now these three words, as all will admit, have hitherto proved a veritable *crux interpretum*, and it is on these that I venture to think I am able to throw some fresh light.

Two preliminary and connected questions must first be settled—are the letters rightly deciphered as above? And, are the words rightly divided? As to the first

question, the best specimens (*e.g.* Hill, Fig. 26 a; Ferarès, Plate x. A, c, and my wax impression) have unquestionably ך (*daleth*) in both the first two words, not ך in one and ך (*resh*) in the other, as in some copies. As to the division of the words, in my impression, in Fig. 26 a, and in Plate x. c, the ך at the end of line 3 is distinctly separated from the preceding וְאִרְמִי. Now these two results, *which alone*, as we shall see presently, *give a straightforward sense to the three words under investigation*, effectively dispose (1) of Waser's view (*De antiquis Numis Hebr.* [1605], fol. 62) that we should read וְאִרְמִי מְאָדָּם (*ve-'ôr mē'adam*), "et lux de homine facta est", which Mr. Hill regards as "the most plausible"; (2) of the hitherto generally accepted reading רָם (*rām*) "exalted", for the first word of line 4; and (3) of Dr. Barnett's suggestion (Hill, *op. cit.*, p. 53) that we should read אֲדָמָה in line 3. Apart from the objection to such an Aramaic form in an ordinary Hebrew inscription, the Aramaic אֲדָמָה (*'admā'*) means "blood" not "man".

How, then, are these three mysterious words, deciphered and divided as above, to be rendered in English? As they stand they can only mean, "and man was made (or became) man", which every one must admit to be nonsense. There is no alternative but to postulate a blunder of some sort on the part of the original artist, which blunder has been slavishly copied by his successors, albeit in ignorance. The crucial question is: Wherein did he blunder?

For the clue to the answer we must go back to the first recorded notice of these Christ-medals as given by Mr. Hill on pages 47-8 of his *Medallic Portraits*. A certain Albonesius, writing in 1538, tells of having

seen in North Italy "an image of our Saviour cast in bronze, with Samaritan letters . . . on the side of which coin were to be seen letters . . . of which the sense was as follows: Messiah the King came in peace, [and] God became man or incarnate (MESSIAS REX VENIT IN PACE, [ET] DEVS HOMO FACTVS EST, VEL INCARNATVS EST) ".²

My contention is that the medal seen and described by Albonesius was a medal of the type we are now discussing, although his description is not quite complete. Let us suppose that the originator of this type of medal wished to enhance its value—or, it may be, its apparent antiquity—by having the above Christus-Rex formula, as it may be called, inscribed upon it in Hebrew. He would naturally take it to a Hebrew-Christian convert, who proceeds to turn it *word for word* into the sacred tongue, without regard for Hebrew idiom. The result would be as follows:

מִשָּׁח מֶלֶךְ בָּא בְּשָׁלוֹם וְאֵלֹהִים אָרָם עִשָּׂו

factus-est homo et-Deus in-pace venit rex Christus

The Hebrew word here introduced for *Deus* contains the key to the solution of the *crux interpretum* we are now discussing. The correct Hebrew word for "God" is of course Elohim (אֱלֹהִים). But every student of rabbinic literature knows that, in order to avoid the possible profanation of the divine name, the Jews frequently wrote, especially in a secular document, אֱלֹדִים (with *scriptio defectiva* אֱלֹדִים), *i.e.* Elodim for Elohim. The translator, in my opinion, wrote the

² For the probable source of this formula, including the missing conjunction, see Hill, *op. cit.*, pp. 43 ff.

word in its "defective" form, אֵלִים (*'elodim*),³ but the unlucky medallist *inadvertently omitted the ל* (*lamed*), inscribing אֵלִים אֵלִים or rather אֵלִים (of which later), with what baneful results the numberless efforts to obtain an intelligible translation are witness. The missing letter, I may add, appears on the reverse of a slightly different type of medal, of which I shall have a word to say at the close. I believe, therefore, that the latter part of the inscription should be read אֵלִים אֵלִים, which gives us a word for word rendering of "et Deus homo factus est", just as the preceding half of the inscription is a word for word translation of 'Christus rex venit in pace', neither rendering being idiomatic Hebrew.⁴

An essential part of my interpretation, however, still remains to be added. The originator of the Hebrew inscription, or more probably the Hebrew-Christian translator, wished to add something to the traditional Christus-Rex formula. Now in Rev. xii. 13, Christ applies to Himself the phrase, "I am the Alpha and the Omega, the first and the last, the beginning and the end", which in i. 8 and xxi. 6—in i. 11 it is wanting in the best manuscripts—has been applied to God the Father. This phrase "Alpha and Omega" is really the Greek equivalent of the older Jewish expression, "Aleph and Taw", the first and last letters of the Hebrew alphabet, as A and Ω are of the Greek

³ The "vowel-letters" ך and ם were doubtless omitted in order to economize the available space. In the "Henderson medal" (see below) only ם was omitted.

⁴ The first two words should each have the Hebrew definite article prefixed, and "became (*ἐγένετο*) man" is not אֵלִים אֵלִים but אֵלִים הָיָה according to Hebrew idiom.

alphabet. When the Hebrew letters on the obverse of our medals are examined in this light, it will at once be seen that the Aleph, of which no satisfactory explanation has yet been given, is the counterpart of the Taw at the close of the legend on the reverse.⁵ In other words, the legends of obverse and reverse are to be read as one (see *infra*).

Connected with this reference to our Saviour as "the beginning and the end", I am inclined to believe, is the perplexing medial ם of ארם (line 3), where we ought to have the final ם. It may not, after all, be the result of an oversight, but may be intentional; for Josephus (*contra Apion.* ii. 23) and the later Jewish doctors describe God as "the beginning, the middle, and the end of all things". "The seal of God", the Rabbis were wont to say, "is אמת" (*emeth*, truth), the three letters of which are respectively the first, the middle, and the last of the Hebrew alphabet (see article "Alpha and Omega", in the *Jewish Encycl.* i. 438 f.). While rejecting the far-fetched cryptograms which M. Ferarès finds in our inscription, I believe that the א, the open medial ם, and the ן—the letters of *emeth*—may contain the Jewish cryptogram, signifying the essential deity of our Saviour, who is, like God, the beginning, middle, and end of all things.

As to what led to this addition to the normal Christus-Rex formula I would hazard a conjecture.

⁵ I admit the weak point here. We should have expected the letter ן alone as the appropriate counterpart of the א of the obverse. It is possible, indeed probable, that the translator closed the inscription with : (*sôph pāsūq*), the usual "full stop" at the end of a Hebrew sentence. This the medallist ignorantly read as א.

On the Trivulzio medal the Latin legend, which Mr. Hill regards as the original source of the Christus-Rex formula, is followed by a cross. Now in the old Hebrew-Phoenician alphabet the letter Taw, as might have been seen on Jewish coins known to the author



Fig. 2. From Hill's *Medallic Portraits of Christ*, Fig. 25.

of our inscription, had the form of a cross. Is it not possible that this identity of the Christian cross and the Hebrew Taw may have suggested the addition of the cryptic letters to the original Christus-Rex inscription?

To sum up the results of our investigation, I maintain that the inscriptions on both sides of these medals form a continuous legend, beginning and ending with the Hebrew equivalent of A and Ω respectively, thus: "A. Jesus Christ, the King (or Jesus, King Messiah), came in peace and God became man. Ω", with the further indication to the initiated (other converts from

Judaism?) that this same Jesus was truly God, the beginning, middle, and end of all things.

A word now, in conclusion, with reference to the slightly divergent inscription on the so-called "Henderson medal" (reproduced here, p. 141). In all essential respects it is the same as that of the usual type above described, but it presents one or two special features. In addition to the mistake of ה for ח at the close, which it shares with some medals of the commoner type: (1) owing to complete ignorance of the Hebrew alphabet on the part of the medallist, the conjunction ו (*waw*) is represented by an inverted semicolon, wrongly taken by Mr. Hill as "marks of punctuation". (2) the normal final ם appears in אדם; (3) connected therewith is the most striking feature of all, viz. the writing of אלרים—really אלורים, with ר for ך—with the ל (*lamed*), the omission of which in the common type of the inscription has been the cause of so much confusion. Strangely enough, the medallist, while more accurate in this point, has put Elodim after, instead of before, אדם, so that the Hebrew now reads: "and man became God"!

On the obverse the opening א, which the medallist probably took to be the first letter of the name of Jesus, now stands in the left half of the field, immediately followed by the letters יש. Of the ל in the space beneath I have no explanation to offer. Is it a blundering attempt to reproduce the last two letters (ע) of the name Yeshûa'? No blunder is too great to ascribe to so ignorant a workman.

A. R. S. KENNEDY.

MISCELLANEA.

SILVER DRACHMA OF SMYRNA.

(SEE PLATE III, FIG. 2.)

THE British Museum Coin Department has recently acquired a specimen of an interesting drachma of Smyrna, which appears to be unpublished. There is another example, from the same dies, in the Hague cabinet, a cast of which was sent to me some years ago by the courtesy of the authorities: but I did not mention this coin in my article on the silver coinage of Smyrna in the *Numismatic Chronicle* for 1914, as I was puzzled by the cast, and wished to have an opportunity of inspecting the original before assigning the type a place in the series. The opportunity has been provided by the recent purchase made by the British Museum, and the kindness of the Keeper of the Coin Department.

The types are as follows:

Obv.—Head of Apollo r., laur.: border of dots.

Rev.—Homer seated l., laur., with himation draped over legs, holding in r. hand roll which rests on his knee, and resting l. hand on sceptre: tol. ↓ Σ ΜΥΡΝΑΙΩΝ: in ex., traces of monogram.

R. 63.7 grs. = 4.12 grms.: 22 mm.

The Hague specimen weighs 3.75 grms.

This drachma is clearly earlier in style than any of the Smyrnaean drachmas previously published, and differs from all in the treatment of the figure of Homer on the reverse, wherein it is artistically far superior to either the later drachmas or the bronze Homereia, which have a similar type. In both of the latter groups the figure is in simple profile, with the right hand up to the chin, the roll held out almost horizontally in the left, the sceptre transversely resting on the right shoulder, and the whole body draped: the general effect is clumsy and huddled. The coin now under consideration shows a more majestic treatment, which suggests a derivation from a Zeus type: the upper part of

the body is partly turned out of profile to the front, the roll in the right hand is pointed upwards on the diagonal of the knee-angle, the sceptre is vertical, and only the legs are draped. In the execution as well as in the conception of the type the superiority is equally marked.

Another obvious point of difference from the later drachmas is in the absence of any magistrate's name. There seems to have been a monogram on the reverse in the exergue, but it is indecipherable on the British Museum specimen—the most that can be said is that it looks as if it had been built up on a **M** or **N**—and is off the flan of the Hague specimen. If there was a monogram, this gives a correlation with the tetradrachms of the first series described in my previous article, which similarly bear a monogram only; and no drachmas were then assigned to this series. In point of style, however, this drachma is somewhat earlier than any of the tetradrachms.

Fortunately its place in the general series of Smyrnaean issues can be determined by the help of the bronze *Homereia*. The treatment of the head of Apollo on the obverse is exactly that of a group which probably comes at the beginning of the issues of *Homereia*; the magistrates' names which occur on the coins of this group are Hermippos, Theudes, Artemidoros, Pythion, Phanodemos, Aristomenes, Zenis, Charikles, Hikesios, Apollphanes, and Xenondes. The obverse dies of these magistrates, if not executed by the same hand, at any rate belong to the same school: characteristic points are the generally rounded appearance of the head, the wreath made of three pairs of leaves with broad ties between, and the arrangement of the hair, which is shown in curved locks radiating down over the crown of the head, knotted at the back with three or four folds shown roughly parallel to the line of the neck, and brought forward in two closely twisted curls from behind the ear towards the front of the neck, the ear being left entirely visible: the type is surrounded by a border of dots. Another characteristic of this group of *Homereia* found also on this drachma is the small and neat lettering of the inscription on the reverse: in this respect of lettering the engravers of the dies at Smyrna deteriorated rapidly.

On grounds of style, then, this drachma may be classed as contemporary with the first issues of *Homereia*, and thus given its relation to the later issues, and an approximate date of about 180 B. C.

FIND OF ROMAN DENARII NEAR NUNEATON.

THE twenty-nine denarii described below were found recently in the Griff Granite Quarry, Nuneaton; we owe it to the care and courtesy of the owners, Messrs. Wm. Griffiths & Co., that we are able to describe them here. There can be little doubt that they belong to a hoard, but it is improbable that the whole of the hoard has been recovered. The references are to Cohen, *Monnaies frappées sous l'Empire romain*, 2nd ed.

M. ANTONIUS.

The East.

1. *Obv.*—Eagle and standards.

Rev.—Galley.

83–81 B. C.; cp. C. 27 ff.

SEPTIMIUS SEVERUS.

Rome.

2. *Obv.*—L. SEPT. SEV. PERT. AVG. IMP. VII. Head laureate, r.

Rev.—P. M. TR. P. III COS II PP. Mars advancing r., carrying spear and trophy.

A. D. 195; C. 397.

3. *Obv.*—(Same as No. 2.)

Rev.—PM. TR. P IIII COS II P.P. Minerva standing l., holding spear and shield.

A. D. 196; C. 416.

4. *Obv.*—L. SEPT. SEV. PERT. AVG. IMP VIII. Head laureate, r.

Rev.—P.M. TR. P. V. COS. II PP. Sol standing l., raising r. hand and holding whip in l.

A. D. 197; C. 433.

5. *Obv.*—**L. SEPT. SEV. PERT. AVG. IMP X.** Head laureate, r.
Rev.—**PACI AETERNAE.** Pax seated l., holding branch and sceptre.
 A. D. 197-8; C. 357.
6. *Obv.*—**SEVERVS PIVS AVG.** Head laureate, r.
Rev.—**LIBERALITAS AVG VI.** Liberalitas standing l., holding tessera and cornucopiae.
 c. A. D. 208; C. 298.
7. *Obv.*—(Same as No. 6.)
Rev.—**P.M. TR P XVIII COS III PP.** Neptune standing l., holding trident.
 A. D. 210; C. 543.
- Antioch.*
8. *Obv.*—**IMP. CAE. L. SEP. SEV. PERT AVG. COSII.** Head laureate r.
Rev.—**LIBER. AVG.** Liberalitas standing l., holding tessera and cornucopiae.
 A. D. 194-5; C. 283.
9. *Obv.*—(Same as No. 8.)
Rev.—**TR. P. III. IMP [V] COS.** Captive seated r. on ground, hands behind back; pile of arms.
 A. D. 195; C. 659.
10. *Obv.*—**L. SEP SEVERVS PER AVG P M IMP XI.** Head laureate r.
Rev.—**SALVTI AVGC.** Salus seated l., feeding serpent coiled round altar.
 A. D. 198; C. 642.

JULIA DOMNA.

Rome.

11. *Obv.*—**IVLIA AVGVSTA.** Bust draped r.
Rev.—**DIANA LVCIFERA.** Diana standing l., holding torch in both hands.
 A. D. 196-211; C. 27.

12. *Obv.*—(Same as No. 11.)
Rev.—**PIETAS PVBLICA.** Pietas standing l., holding up both hands: at her feet, l., altar.
 A. D. 196-211; C. 156.
13. *Obv.*—(Same as No. 11.)
Rev.—**VENVS FELIX.** Venus standing l., holding apple in l. hand and raising fold of dress with r.
 A. D. 196-211; C. 198.
14. *Obv.*—(Same as No. 11.)
Rev.—**VESTAE SANCTAE.** Vesta standing l., holding patera and sceptre.
 A. D. 196-211; C. 246.

CARACALLA.

Rome.

15. *Obv.*—**M. AVR. ANTON CAES. PONTIF.** Bust draped r.
Rev.—**PRINCIPI IVVENTVTIS.** Prince standing l., holding sceptre and spear; behind him, r., trophy.
 A. D. 196-8; C. 505.
16. *Obv.*—**IMP. CAE. M. AVR. ANT. AVG. P. TR. P.**
 Bust draped, laureate r.
Rev.—**FIDES PVBLICA.** Fides standing r., holding ears of corn and poppies.
 A. D. 198; C. 82.
17. *Obv.*—**ANTONINVS PIVS AVG.** Bust draped, laureate r.
Rev.—**PONT. TR. P. VI. COS.** Mars standing l., holding Victory and spear.
 A. D. 203; C. 499.
18. *Obv.*—**ANTONINVS PIVS AVG.** Head laureate r.
Rev.—**VOTA SOLVT DEC COS III.** Prince standing l., sacrificing over altar.
 A. D. 208; C. 682.

19. *Obv.*—(Same as No. 18.)

Rev.—**PONTIF. TR. P. XII. COS. III.** Clementia seated l., holding patera and cornucopiae.
A. D. 209; C. 465.

GETA.

20. *Obv.*—**IMP. CAES. P. SEPT. GETA. PIVS. AVG.**
Head laureate r.

Rev.—**PONTIF. TR. P. II COS. II.** Felicitas standing l., holding caduceus and sceptre.
A. D. 210; C. 137.

ELAGABALUS.

Rome.

21. *Obv.*—**IMP. CAES. M. AVR. ANTONINVS. AVG.**
Bust draped, laureate r.

Rev.—**VICTOR. ANTONINI. AVG.** Victory advancing r., holding wreath and palm.
A. D. 218-19; C. 289.

22. *Obv.*—**IMP. ANTONINVS PIVS. AVG.** Bust draped, laureate r.

Rev.—**FIDES MILITVM.** Eagle between standards.
A. D. 219-22; C. 43.

SEVERUS ALEXANDER.

Rome.

23. *Obv.*—**IMP. C. M. AVR. SEV. ALEXAND. AVG.**
Bust draped, laureate r.

Rev.—**LIBERTAS AVG.** Libertas standing l., holding pileus and sceptre.
A. D. 222-8; C. 90.

24. *Obv.*—**IMP. SEV. ALEXAND. AVG.** Bust draped, laureate r.

Rev.—**ANNOVA AVG.** Annona standing r., holding rudder and modius with corn ears.
A. D. 228-31; C. 32.

25. *Obv.*—(Same as No. 24.)

Rev.—**IOVI CONSERVATORI.** Jupiter standing l., holding fulmen and sceptre; at his feet, small figure of Emperor.

A. D. 228-31; C. 73.

JULIA MAMAEA.

Rome.

26. *Obv.*—**IVLIA MAMAEA AVG.** Bust draped r.

Rev.—**FELICITAS PVBLICA.** Felicitas standing l., leaning on cippus, holding caduceus.

A. D. 218-22; C. 17.

27. *Obv.*—(Same as No. 26.)

Rev.—**IVNO CONSERVATRIX.** Juno standing l., holding patera and sceptre: at her feet, peacock.

A. D. 218-22; C. 35.

28. *Obv.*—**IVLIA MAMAEA AVG.** Bust draped, diademed r.

Rev.—**VENERI FELICI.** Venus standing r., holding child and sceptre.

A. D. 222-35; C. 60.

29. *Obv.*—**IVLIA MAMAEA AVG.** Bust draped, diademed r.

Rev.—**VESTA.** Vesta standing l., holding palladium and sceptre.

A. D. 222-35; C. 81.

H. MATTINGLY.

A FIND OF TUDOR AND STUART SILVER.

AMONG the coins belonging to the Society are a number which evidently, from their appearance, form the whole, or more probably a portion, of a hoard buried during the troubled times of the Civil War in the seventeenth century. There appears to be no record of how, where, and when the discovery took place, or the means by which the hoard came into the Society's possession. It consists of shillings and sixpences from the reign of Philip and Mary down to near the end of that of Charles I, the latest coins bearing the mint-mark of circle within triangle. This shows that the date of its being hidden was some time in the year 1642, quite at the beginning of the war. As in other hoards, the coins of the earlier dates are much worn, and those of the latest mint-marks are badly struck. It is peculiar that there are no half-crowns. There are only two coins worthy of remark, and these are two sixpences of Elizabeth—the first 1582, with the earlier legend on the obverse, mint-mark Bell over Sword; the second 1584, mint-mark Escallop over A. The total number of coins is seventy-four, made up as follows: Philip and Mary, shillings one and sixpences one; Elizabeth, eight and thirty-two; James I, seven and four; and Charles, fifteen and six respectively.

The following is the list:

Philip and Mary.

1554, shilling (1) and sixpence (1), both with the Spanish titles.

Elizabeth.

Shillings (8).

Mint-marks: Lis (1) with inner circles, legend **ANG·FR·Z·HIB'**; Cross-crosslet (1) **ANG·FR·ET·HI'**; Martlet (1) **ANG·FRA·ET·HIB'**; Bell (1); A (1); Hand (1); Wool-pack (1); 2 (1).

Sixpences (82).

1561 m.m.	Pheon (1) large flan	ANG' FR' ET·HIB'.
1562 "	" (1) " "	ANG' FR' ET·HI'.
1564 "	" (1) small bust	" " " "
1565 "	Rose (1)	ANG' FR' ET·HI'.
1566 "	Lion (1).	
1567 "	Coronet (1).	1581 m.m. Long Cross (1).
1568 "	" (1).	1582 " Sword (2).
1569 "	" (1).	" " Bell over Sword
1570 "	Castle (1).	(1).
1571 "	" (1).	1583 " Bell (?) (1).
1572 "	Ermine (1).	1584 " Escallop over A
1573 "	" (1).	(1).
" "	Acorn (1).	1585 " Escallop (1).
1574 "	Cinquefoil (1).	1592 " Ton (1).
1575 "	" (1).	1593 " " (1).
1578 "	Cross (1).	1594 " " (1).
1579 "	" (1).	1602 " 2 (2).
1580 "	Long Cross (1).	Undecipherable (2).

James I.

Shillings (7).

Mint-mark	Thistle, first issue, second Head	(1).
"	Lis, " "	(1).
"	Escallop, second issue, fourth Head	(1).
"	Coronet, " "	(1).
"	" " fifth Head	(1).
"	Bell over key " "	(1).
"	Trefoil, third issue, sixth Head, MAG:BRI:	
	FR:ET HI:(1).	

Sixpences (4).

1603 m.m.	Thistle, first Head	(1).
1604 "	" second Head	(1).
1607 "	Escallop, fourth Head	(1).
1623 "	Lis, sixth Head	(1).

Charles I.

Shillings (15).

Mint-mark	Plume (1).
"	Bell (1).
"	Crown (1).
"	Ton type 3 a (3).
"	" 4 Aberystwith head (1).
"	Anchor, first head (1).
"	" second head (2).
"	Triangle, first head (1).
"	Star (1).
"	Circle in Triangle (3).

Sixpences (6).

Mint-mark	Harp (1).
"	Crown (1).
"	Ton type 4 (1).
"	Anchor (1).
"	Triangle type 5 (1).
"	Star (1).

H. W. MORRIESEN.

SOME UNRECORDED TOKENS.

THE following tokens have been overlooked by Atkins, Messrs. Dalton and Hamer, and Mr. Davis. All seem to be rare.

1. *Obv.*—A shield bearing the arms of Sir Thomas Lowther, 4th Bt. (*Or, six annulets sable 3, 2, and 1*), with a baronet's helmet, crest of a griffin (shown with four lion's legs) passant, and leaf-mantling. Mute. *Rev.*—**LOWTHER** in italic cipher in the middle of the flan.

Halfpenny size ($1\frac{1}{8}$ " diameter). Copper. Also struck in silver. (B. M.)

From the form of the helmet it is clear that this piece was struck before 1784, when Sir Thomas was created Earl of Lonsdale. The badge of Ulster is omitted from the shield.

2. *Obv.*—Crest of a griffin (shown as in No. 1), on a wreath.
Mute. *Rev.*—As that of No. 1, but on a smaller scale.

Farthing size ($\frac{7}{8}$ " diameter). Brass.

These two tokens were in use at the Lowther Collieries at Whitehaven in the eighteenth century. Some specimens have a large 4 stamped upon them: this refers to four bogies, or a pit ton (= two Imperial tons, or more). The miners were paid by the pit ton. For the meaning of this stamp I am indebted to Mr. J. F. Curwen, F.S.A., of Kendal.

The Farthing size is noticed by Batty (ii, p. 691, No. 2329), but he tells us nothing about it. A specimen of each was catalogued in the Murdoch Sale at Sotheby's in Dec. 1904 (No. 703, and Pl. xx), where they were miscalled jettons.

3. *Obv.*—A round shield charged with the arms of Curwen (*Argent, fretty gules, a chief azure*), with helm, crest of a unicorn's head, and scroll-mantling. *Mute.*
Rev.—CURWEN in two lines across the flan, with an ornament above and below.

Halfpenny size (1" diameter). Copper.

This token was issued for use at Curwen's coal mines at Workington. Mr. G. F. Hill points out that it was struck in accordance with the following permission, granted by Sir Isaac Newton, Master of the Mint: "November 3^d 1725. Let tokens be made of the form drawn above for Mr. Curwin. Is. Newton" (B. M. Add. MS. 18757, fol. 19 v^o). Mr. Hill adds that, judging from the date, it is by Croker. It is noticed, but, as usual, not identified, by Batty (i, p. 285, No. 2729). Three countermarked specimens also passed through his hands: (a) "IC" on obverse; (b) "4 K" on obverse and reverse—brass; (c) "4 H" on obverse and reverse—brass (*Ibid.*).

4. Another version was issued by John Christian Curwen in 1782, bearing his initials J. C. C. (*Ex inform.* Mr. J. F. Curwen.)
5. *Obv.*—Crest of a demi-lion, on a wreath, holding a chaplet and ensigned with the coronet of a baron. *Mute.*
Rev.—A small chaplet in the centre of the flan, which is otherwise blank. *Mute.*

Halfpenny size ($1\frac{1}{8}$ " diameter). Copper. Remains of gilding.

This coin must have been issued by Henry Bridgeman, who was created Baron Bradford in 1794, between that date and 1800, when he died. The present Earl of Bradford has no knowledge of it or for what purpose it was struck, and my inquiries elsewhere have produced no result.

6. *Obv.*--An ovoid shield, on a bracket, charged with *A chevron between three covered cups*, the whole ensigned with a crest of a unicorn's head. Mute. *Rev.*--*E C* in italic cipher with 1750 below it.

Halfpenny size ($\frac{1}{8}$ " diameter). Brass, or bright copper.
A very pretty little piece.

The arms, and the C on the reverse, show this token to relate to the family of Candishe, or Cavendish, of Suffolk, who bore *Sable, a chevron or between three cups (covered or uncovered) argent*. This family was of Grimston Hall, Trimley, in the above county, the seat of Thomas Cavendish, the first English circumnavigator (1560-92). The site of his home is now occupied by a farm-house. (See Metcalfe, *Visit. Suffolk*, p. 12.) The same arms are on the font at Levington, hard by, quartered by Brandon.

The local antiquaries whom I have consulted can give no information as to this token. It was not known to Golding (*Coinage of Suffolk*, 1868).

7. *Obv.*—In seven lines, the first and last curved, GEALE | & | MACBRIDE | 17 | WESTMORLAND | STREET | DUBLIN. *Rev.*—In three lines, the first and last curved, FASHIONABLE | *Spray with a rose* | FURNISHING | *Spray with a rose* | IRONMONGERS.

Halfpenny size ($1\frac{1}{8}$ " diameter). Copper.

This tradesman's token is of either quite the end of the eighteenth or quite the beginning of the nineteenth century. It passed through Batty's hands (ii, p. 372, No. 3730).

8. *Obv.*—As Davis, p. 221, No. 75 (Dublin), but with HALFPENNY TOKEN above. *Rev.*—As Davis.
9. *Obv.*—*I*K*. Above is 17 (incuse), below is 36 (incuse). All within a beaded circle. *Rev.*—Across the flan WALTON. Date and circle as on the obverse.

Farthing size ($\frac{7}{8}$ " diameter). Copper.

This was a Twopenny token issued by the Walton-on-the-Naze Copperas Company, Essex, in 1736. The proprietor was John Kirby. (See *Essex Review*, 1893, pp. 56, 123, 266; and W. S. Fitch's *Assembly of Suffolk Tokens*.) Although this coin has been published before, I have added it here because it is not in either Atkins or Dalton and Hamer.

F. P. BARNARD.

REVIEWS.

Mélanges numismatiques. Par A. Dieudonné. 2de Série, pp. 444, with thirteen plates. Paris (Rollin et Feuardent and A. Picard). 1919.

FOLLOWING the example of some of his colleagues, M. Dieudonné, instead of distributing offprints of his contributions to periodicals at the time of their publication, keeps them until they are sufficient to make a volume, such as the one now before us. The method has some defects, but more advantages. Those who are privileged to have copies of these volumes will be grateful for the certainty of finding with the minimum of search anything that the author has written. The interest of the present series is mainly mediaeval. The articles on ancient numismatics are few in number, and are mostly concerned with a particular subject which has always been a favourite of the author's: the imperial coinage of Syria. Four of them deal with the manner of reckoning the regnal years of the Emperors Nero and Galba at Antioch; the coinage of one Commodus at Seleucia—not the Emperor, but L. Ceionius Commodus, who was consul in A. D. 78, and whose grandson reigned as L. Verus; the complicated question of the eagle on the coins of Antioch and the distinction between the mints of the "monnaies d'empire"—what is usually called the "provincial coinage" of Syria; and the question as to who it was who had right of coinage at Antioch under the Empire.

As regards the distinction of the mints, it is possible (cp. *B. M. C., Phoenicia*, p. cxxxvii) that the extreme difficulty of distinguishing them, and the existence of hybrids, and of coins apparently of similar fabric but of different mints, may be explained by the assumption that they were all struck at Antioch, but out of bullion supplied by various cities—an arrangement which seems to have been in use in Cilicia as early as the fourth century B. C.

The other question of ancient numismatics treated by M. Dieudonné is the find of denarii of Juba II at Elksar, the classification of which seems to indicate that Juba's

queen Cleopatra did not die as early as A. D. 1, the year in which Juba married Glaphyra in Syria, but that she survived to be his wife once more when he returned to Mauretania.

In the Mediaeval series M. Dieudonné describes three finds, one of the middle of the eleventh century (St. Hilaire), one of the thirteenth century (Saint-Clair-sur-Elle), and one of the fourteenth century (Chilleurs); the St. Hilaire find is of special interest by reason of the great rarity of the deniers and oboles parisis of Henry I, of which the find contained about a hundred specimens.

The feudal period is the subject of a discourse on economics in criticism of the views published by M. Bridrey. The position which M. Dieudonné propounds of the co-partnership of the feudal lord and his subjects in the coinage is theoretical rather than actual, for the power of the lord to push his wares enabled him to control their quality without reference to his subjects. The parallel of the loaf of bread is hardly apposite; the proof of the quality of the loaf lies in an instinctive sense of physical satisfaction, but the effect of the debasement of the coinage is more remote and subtle. He rightly emphasizes the parallel between debasement in feudal times and modern taxation, but in his approval of the former as a method of taxation suitable to the period he seems to minimize the power it placed in the lord's hands for oppressing his subjects by an excessive and insidious levy, and for estranging revenues from public use to his personal advantage.

M. Dieudonné delights in the difficult problems of monetary standards, and a large part of the present volume is devoted to studies of the standard of eleventh and twelfth century deniers, and of the value of the mark and the interrelation of coin-values. He emphasizes the use of coin-terms in double sense of weights and values, and again in his note on Jean de Vaux, Warden of the Mint of Amiens, he draws attention to their use as mere numerical terms without sense of value. An apprehension of this confusion may perhaps help to elucidate many difficulties in records of coinage. A case in point is the crux in the indenture to Turnemire for the English coinage of 1180; the Red Book version orders farthings to be of the weight of 65s. 8d. to the pound, and the Pipe Roll version orders that each pound shall contain eighty farthings and three shillings extra because alloy is added; the only means of finding agreement in the two versions seems to be by reading in the Red Book a numerical

sense of sou and denier, which gives 788 farthings to the pound, or a weight of 6.85 grains for the farthing, and in the Pipe Roll version taking three shillings in the sense of weight values to conclude that the amount of alloy added to each pound of fine silver was the equivalent of $\frac{80}{960} + \frac{3}{0}$ of a pound Tower, i. e. 1,260 grains Troy; thus the alloyed pound would weigh 5,400 + 1,260, or 6,660 grains, and be coined into 972 farthings, each of which weighs 6.85 grains Troy.

A useful description is given of the feudal piéforts, and of the recent acquisitions of the Cabinet des Médailles, one of the most interesting being the Zay collection of colonial issues; attention is drawn to the disadvantages of Zay's classification, which divorces the issues struck in France from those struck locally, and a sound basis of classification is proposed.

The royal issues of France from the middle of the fourteenth century to the end of the fifteenth are the subject of several papers. In addition to a comprehensive treatise on the coinage of 1365-1447, which surveys the periods of debasement and restoration in relation to the political history, there are special notes on the Écu à la Couronne of Charles VI and Charles VII, the Royal d'or and Écu "neuf" of Charles VII, and a careful classification of the *monnaies noires* of the fourteenth century.

G. F. H.

G. C. B.

Die Bildnismedaillen Karls des Fünften. By Max Bernhart.
Pp. 97 with 16 Plates and 22 Illustrations in the text.
Printed by Carl Kuhn. Munich, 1919.

THIS volume is very welcome. I may confess that I had once entertained vague intentions of attempting some such work myself; now that I see the difficulties involved in the task, I am glad that it has been undertaken by abler hands. The mass of the medals described are, of course, of German origin. Outside of Germany no criticism of this part of the book is possible. I propose to give here, less as criticism than as supplement, notes which I have made, mostly on points of small detail, on the medals which are described

as being outside the German series. In general, it may be suggested that, if a second edition of the book is called for, its usefulness would be much increased by a plainer classification of these medals into schools and under masters; the jettons and coins might also be more clearly distinguished; the many hybrids should be weeded out, or transferred to foot-notes; references to the plates inserted in the text; and an index of artists supplied.

No. 157. The British Museum specimen is not a "galvano", but an old hollow cast. The obverse of this medal is, as stated, by Giovanni Bernardi; but the reverse appears to be by another hand. It is clear from the illustrations that neither of the two reverses with which this medal is fitted was made for the obverse.

No. 159. Add the reference to Armand (i. 138. 7). Note that the obverse, being based on Titian's picture, cannot be earlier than 1548, whereas the reverse commemorates the African expedition of 1585.

No. 162. This is the medal with the Tiber reverse (*in spem prisca honoris*). The comparison with the medals with the quite different Danube reverse is misleading.

No. 163. The fifth reverse mentioned under this medal (portrait of Mary of Hungary) and doubtless the obverse with which it is associated (since the piece is struck) can hardly be Italian. Both this and the reduction (No. 164) are probably to be regarded as German copies of an Italian cast medal. The sixth reverse has nothing to do with Charles V; it was made in 1555 for Ferrante Gonzaga.

No. 166. The two busts on the reverse of this medal are described as Ferdinand I and Maximilian. I have always regarded them as Henri II and François II, and I find that the *Tresor* (which is not referred to) is of the same opinion. In the lead cast in the British Museum, poor though it be, François's ugly little nose is unmistakable.

No. 167. This is described as a one-sided stone model. But a reference is given to Domanig, who describes it as a gold medal, with the portraits of Maria and Maximilian II on the reverse.

No. 170. Lorenzo Fragni is suggested as the artist; but in view of the favourite Burgundian motif, and of something in the style, I am inclined to look for a Netherlander.

No. 176. This medal is quite different from that described by Armand, ii (not i). 180. 1, which is attributed to Giov. Bernardi, and has already been described under No. 160.

No. 178. There is no "galvano" of this in the British

Museum, but there is one in the Victoria and Albert Museum. Two specimens are described in the Vidal Quadras y Ramon Catalogue (13529-30), and Van Mieris (ii. 442) illustrates one without inscriptions. In any case, the work is probably not Italian; perhaps Netherlandish, as the treatment of the equestrian figure seems to indicate.

No. 180. At Naples is a variety with the head laureate instead of crowned, if Rinaldis (No. 800) describes it correctly.

No. 181. The recognition of the signature of Leone Leoni on this fine medal has been anticipated by Rizzini in the Brescia Catalogue (No. 219), and by myself (Mr. Rosenheim's specimen, *Burlington Magazine*, xv, 1909, p. 97).

No. 182. This has already been described by Armand (ii. 181. 7) as a slight variant of the preceding. There was a specimen (condemned as a "neuerer Guss") in the Lanna Collection, iii. 629. Possibly this is identical with the one illustrated and described as being "im Handel".

No. 184. This medal is a hybrid of the worst kind. The obverse is by Christoph Weiditz (Habich, Taf. iv. 9); the reverse is a portrait by Ludovico Leoni, which has nothing to do with Charles. A good specimen of the obverse has already been described in its right place (No. 26).

No. 206. As stated in the introduction, this medal (of the obverse of which there is a fine lead casting in the British Museum) bears the signature of a monogrammist. In the *Burlington Magazine* (xxix, Sept. 1919, p. 251) I have collected the other works of this pleasing artist, and shown that he is quite distinct from Pastorino. He worked in Rome round about the year 1540, and is perhaps Tommaso of Perugia, called Il Fagiuolo. His monogram, hitherto wrongly read, is composed of the letters T and P.

No. 207 has already been described under 182.

Nos. 208 and 209 both show the lion's skin hanging from one column, and the club leaning against the other.

No. 226. This mysterious French medal exists with a reverse by the same hand; the specimen is illustrated in my *Medals of the Renaissance*, Pl. xxv. 9.

G. F. H.

XI.

GREEK COINS ACQUIRED BY THE BRITISH MUSEUM IN 1920.

[SEE PLATES IV, V.]

ALTHOUGH the actual number of Greek coins acquired during the year is comparatively large (2,970, as against 2,076 in the previous year), it was not to be expected that they should include so many pieces of importance. Nevertheless, as the following pages will show, there have been some interesting acquisitions; and there is much, especially in the Earle Fox bequest, which, while it cannot make a great display, is of importance and service to the student, notably in the Athenian and Corinthian series.

I proceed, with the usual omission of coins which it is hoped will soon appear in the official catalogues now in preparation, to describe some of the more outstanding pieces.

Hatria.

1. A good specimen of the *as*, similar to Haeberlin i, p. 204, No. 5, except that the value mark on the reverse is not visible. The weight is 341.8 g.

Cumae.

2. *Obv.*—Skin of forepart and scalp of lion seen from above, between two boars' heads opposed; border of dots.

Rev.—KVM AION Mussel-shell; border of dots.

R 21 mm. Wt. 7.59 g. PL. IV. From the Yorke Moore (Sotheby's, 1889, lot 26) and Hermann Weber Collections. L. Sambon, *Monn. Ant. de l'Italie*, i, p. 151, No. 248.

Sambon describes this as having the letter Λ on the mussel-shell, to r.; that is so, but it appears to be the remains of an earlier inscription, for the coin seems to be restruck.

It is generally agreed that most of the coins of Cumae with this curious obverse type are later than 480; and Babelon, indeed, in his *Traité*, regards them all as outside his first period. The specimen in the French Cabinet weighing 5.42 g. has, however, been placed by Sambon and Head (*H. N.*², p. 36) in the first period of the coinage (490-480), when its 'Aeginetic' weight seems to fit in with that of the Chalcidian colonies. Probably earlier than 480, in any case, are the didrachms of 'Euboic' weight with the head of Pallas, although Babelon seems to reserve these also for his later volume.¹

The curious interruption of the series of Cumae by this type of the trophy or dedication of the spoils of a lion and two boars has hitherto been unexplained. But Mr. Robinson makes the very attractive suggestion that it commemorates the battle of 474 B.C., in which Hieron of Syracuse in combination with the Cumaeans defeated the Etruscans and their allies, the Carthaginians.² The lion's scalp may represent the Carthaginians, as on the coins of Syracuse and Leontini commemorating the battle of Himera. Or the spoils may represent not a lion, but the typical Etruscan monster, the Chimaera. The boars may also stand for the Etruscans; it is significant that Chimaera and

¹ I may mention that the Weber specimen, Sambon, p. 165, No. 293, has also passed into the British Museum.

² *Diod.* xi. 51; *Schol. Pind. Pyth.* i. 137. The former does not mention the Carthaginians.

boar are both found on fifth-century coins of that people.

The fact that the type clearly represents some kind of dedication makes this suggestion well worth considering, although it necessitates bringing down all the coins of this group after 474 B.C.

Hyria.

3. *Obv.*—Head of Athena r., wearing crested Athenian helmet wreathed with olive.

Rev.—HVPIETES Bull r., with human head in profile lowered; between its legs A S; three-leaved plant (?) growing from exergual line; flaw in exergue.

R → 22 mm. Wt. 7.47 g. Pl. IV. From the Sir H. Weber and Bunbury (1896, lot 35) Collections. A. Sambon, *Monn. Ant. de l'Italie*, No. 772.

Sambon, who dates this coin to the period 400–335 B.C., takes the flower for the letter $\psi = \chi$. The style is, of course, archaizing. Another example of this affectation of archaism at Hyria is given by Newell (*Am. Journ. Num.*, xlvi, 1914, p. 62: head of Athena with archaistic facing eye).

Velia.

4. *Obv.*—Head of Athena l., in crested Athenian helmet, decorated with Skylla ἀποσκοπεύουσα.

Rev.—Lion bringing down stag l.; in field r., Δ; inscription above [YE ΛΗΤΕΩ Ν] off the flan.

R → 21 mm. Wt. 7.50 g. Pl. IV. From Sotheby's Sale, 26, vii, 1920, lot 21.

The reverse of this coin is from the same die as B.M.C., No. 38. The obverse, with Skylla on the helmet, is very rare at Velia, and evidently due to the influence of Thurium. A specimen in the Pozzi Collection (Pl. VIII. 245) seems to share the same die.

Thurium.

5. *Obv.*—Small head of Athena r., wearing crested Athenian helmet; on bowl, Skylla hurling a stone with r.; on neck-piece Φ . Border of dots.

Rev.— $\Theta\text{OYPI}\Omega$ [N] Bull charging r., head facing; above, ΘE ; in exergue, two fishes r. and $\text{T}\Lambda$. Border of dots.

$\text{R} \leftarrow 21$ mm. Wt. 7.89 g. Pl. IV. Presented by Sir Arthur Evans. From the Sir H. Weber Collection (bought from Sambon, 1885).

The neat style and the name *The* . . connect the reverse of this coin with B.M.C., Nos. 77 ff. The obverse is, however, in rather bolder relief.

6. *Obv.*—Head of Athena r., in crested Athenian helmet; on bowl, griffin running; on neck-piece, uncertain letter (? Σ).

Rev.— $\Theta\text{OYPI}\Omega\text{N}$ Bull charging r., head facing; in exergue, Φ I and dolphin r.

$\text{R} \rightarrow 21.5$ mm. Wt. 6.58 g. Pl. IV. From the Sir H. Weber Collection (ex Tighe Sale, 1892, lot 16).

A didrachm of reduced weight. Cp. Egger, xl. 194 (6.47 g.) and Feuardent, June 9, 1913, lot 47.

Panormus.

7. *Obv.*—Head of Zeus l., bearded and laureate. Border of dots.

Rev.—Male figure, wearing helmet, cuirass and chlamys, standing l., holding patera in extended r., resting l. on spear, at foot of which is his shield. In field l. **CATO** and monogram of Panormus. Border of dots.


$\text{R} \leftarrow 23$ mm. Wt. 4.52 g. Pl. IV. From the Yorke Moore (1889, lot 101) and Sir Hermann Weber Collections.



Similar to No. 36 of Panormus in the British Museum,³ but from different dies, and an unusually finely preserved specimen, although the lower part of the monogram is off the flan.

³ Bahrfeldt in *Rev. Suisse*, xii, p. 396.

Inensimeus of Olbia.

S. *Obv.*—ΒΑΣΙΛΕΩΣΙΝΕΝΣΙΜΕΩΣ (beginning on r., above). Bust of Inensimeus r., bearded, wearing diadem and pearl necklace (?); behind, the

sign  Border of dots.

Rev.— - - ON ΝΙΚΗΡΑΤΟΥ (beginning on r.). Bust of Artemis r., hair in chignon and bound with wreath, shoulders draped; in front, bow; below, dolphin r.; behind monogram  and, above, another monogram  . Border of dots.

R ↓ 25 mm. Wt. 11.11 g. Pl. IV. From the collection of the Grand Duke Alexander Mikhailovich. Already published by A. V. Orêshnikov, "Excursions into the Province of the Ancient Numismatics of the Black Sea Coast-region" (in Russian, *Moscow Num. Soc. Miscellany*, 1914), p. 16 and Pl. I. 6. Cp. Minns, *Scythians and Greeks*, p. 487.

The style of this coin dates it to the first century of our era. Inensimeus would appear to be the same person as Inismeus, of whom a silver coin weighing 3.74 g. is also published by Orêshnikov (*loc. cit.*, p. 17, Pl. I. 7); other variations of the name are recorded by the same writer. The word preceding the man's name on the reverse is not clear; one would expect ΟΛΒΙΟ-ΠΟΛΕΙΤΩΝ, but that cannot be made out of the remains. All that is visible before the O is a horizontal stroke (i.e. the bottom of Δ, Ε, Ζ, Ξ, or Σ). The curious sign behind the king's head recurs in the same place on the smaller denomination. It seems to belong to the same class as the signs which are found on various S. Russian objects, and which Minns⁴ compares to the Caucasian *tamga* or brand of possession.

The head on the reverse, not identified by Orêshnikov in his first publication, is obviously Artemis, as

⁴ *Scythians and Greeks*, p. 316 f.

he points out in a later article.⁵ It probably represents a local statue, and as the abbreviation **OPT** is occasionally associated with a similar head, Orêshnikov suggests that the goddess was known as Artemis Ortygia.

Aenus.

9. The tetradrachm (profile head of Hermes, *rev.* symbol pig's head), Corpus, No. 263.

Philip II.

10. *Obv.*—Head of Zeus r., laureate. Border of dots.

Rev.—ΦΙΛΙΠ ΠΟΥ above. Jockey, nude, hair bound with taenia, holding palm-branch, on horseback r.; below horse, seven-pointed star.

AR ↓ 23.5 mm. Wt. 14.48 g. Pl. IV. A particularly fine specimen of Müller, No. 92.

Crannon.

11. *Obv.*—Nude man r., wearing petasos slung round his neck, seizing a bull by the horns; below, **AX**; above, on l. **N** Border of dots.

Rev.—Horse standing l., pawing the ground, bridle trailing; on off side of it, trident; inscription beginning above on r., and reading retrograde, outwardly, **ΟΝ Α ΞΧ** All in incuse square.

AR ↓ 20. Wt. 5.70 g. Pl. IV. Pierced with long oval hole.

12. *Obv.*—Same as preceding (same die). Countermark: cross in circle (wheel?).

Rev.—Similar type to preceding; inscription beginning on l. and reading outwardly **K ΡΑ Ν**

AR ← 21. Wt. 5.54 g. Pl. IV. Pierced. From the Sir Hermann Weber Collection (from Margaritis, 1887).

These two drachms are of the same period as drachms of Pherae and other places which are well known,⁶ and

⁵ "Supplements to the Numismatics of Olbia, &c.," pp. 2-5, in *Moscow Num. Soc. Miscellany*, vol. iii, 1914, in Russian.

⁶ Babelon, *Traité*, II. i. 1427 ff., &c. (Pl. XLIII).

as the half-drachm of Crannon already in the Museum. They enable us to read correctly the abbreviated name which is seen on the half-drachm, viz. XAN or AXN⁷: it is retrograde on the drachms, and on the half-drachm the British Museum Cataloguer has not noticed the X behind the man's leg, under the body of the bull.⁸ This name, and others which occur on similar coins of other cities of the time, are taken to be the names of tyrants unknown to history. It is, however, possible that they represent the heroes who were regarded as founders of the taurokathapsia in each city.

Imhoof-Blumer⁹ describes two drachms (one at the time in his own collection, the other, plated, at Berlin) apparently similar to these, but takes the X for a flying bird. Judging from Sestini's engraving¹⁰ the specimen described by him was similar to the second of the two in this Museum.

Illyrio-Epirote.

13. *Obv.*—Head of Apollo l., wearing broad laurel-wreath; long hair.

Rev.—Tripod with rings and lion's feet; on r., downwards, ΔΑΡΑ; on l., downwards ΑΙΡΡ

At $\frac{1}{2}$ 25 mm. Wt. 12.18 g. Pl. IV. Presented by Sir Arthur Evans From the Sir H. Weber Collection (ex Bunbury I, lot 867).

Cp. the smaller denomination, B.M.C, *Uncertain of Illyria*, No. 2, with ΔΑΓ and ΑΡΡΙΑ.

⁷ ΑΧΥ. . . seems preferable in the case of a Thessalian; cf. the place-name ΑΧΥΜ.

⁸ Svoronos has read it rightly on the Mavrogordato specimen: *Journ. Int.*, xiii, p. 272, No. 395. On the Berlin obol, Babelon, No. 1426, the X was on the part of the coin which is broken away.

⁹ MS. list (in the British Museum) of the coins of Thessaly. Both coins are now presumably at Berlin.

¹⁰ *Lett. num.*, vi, Pl. I. 16.

14. *Obv.*—Head of Apollo l., laureate.

Rev.—Tripod without rings; three-pronged feet; above, crescent; inscription beginning on l. above, retrograde, $\Sigma\Lambda\Gamma\Xi\Lambda\Gamma$; on r., lance-head downwards. Border of dots.

$R \downarrow$ 25 mm. Wt. 11.63 g. Pl. IV. Presented by Sir Arthur Evans. From the Sir H. Weber Collection (ex Bunbury I, lot 870).

The reverse legend of this barbarous coin is probably an attempt at $\Pi\epsilon\lambda\alpha\gamma\iota\tau\alpha\varsigma$ retrograde (cp. B.M.C., *Pelagia*, No. 1).

Chalcis.

15. *Obv.*—Female head l., hair confined with broad band, over which at back the hair is taken up; wears single drop ear-ring and necklace.

Rev.— $\chi\alpha\alpha$ below. Eagle l., with wings spread, carrying serpent.

$R \rightarrow$ 17 mm. Wt. 3.42 g. Pl. V.

The head on the obverse appears to be the same lady who is represented, wearing a veil, on the tetradrachm of the period,¹¹ 196–146 B.C. The broad band confining her hair seems to be a diadem, although the ends are not shown. Gardner identified the lady as the Chalcidian Euboea, the bride of Antiochus III.

It is true that Imhoof-Blumer¹² regards a head with a band in the hair, not unlike the present coin, as representing the nymph Chalkis. That nymph, however, is usually portrayed with the hair bound by a simple taenia, which is not actually visible, as in the coin next to it in Imhoof-Blumer's plate. The head with the band, at least in the new British Museum

¹¹ Head, *Coins of the Ancients*, V B 32; B.M.C., *Central Greece*, Pl. XXI. 1.

¹² "Nymphen und Chariten," p. 85 (*Journ. Intern.*, xi, 1908), Pl. VI. 5.

specimen, seems to have more of the character of a portrait.

Athens.

16. *Obv.*—Head of Athena r., wearing crested helmet (adorned with three olive-leaves and floral scroll), and ear-ring consisting of three pear-shaped drops, one large between two small; hair on forehead represented by lines, on neck by rows of dots.

Rev.—Owl, with wings spread, standing to front; on l., olive-spray with two leaves and one berry; on r., above, Λ ; between wings and legs $\exists \odot$ All in incuse square.

At \uparrow 36 mm. Wt. 42.80 g. Pl. V.

The Museum has long possessed a well-known specimen of the so-called 'Marathon' decadrachm,¹³ but it is unfortunately disfigured by a terrible gash on the obverse, reaching from the temple, through the eye, to the edge of the coin, and penetrating to the other side. It is, nevertheless, of rather finer workmanship than the new specimen, which is somewhat clumsy in treatment, and shows weakness in the detail of the floral ornament on the helmet. It is to be noticed too that the slight wave in the hair on the forehead above the eye is absent in the new acquisition, which loses a little grace thereby.

The following other specimens of the decadrachm are recorded.

Berlin, 42.66 g.,¹⁴ *Traité*, 1141, Pl. XXXV. 8.

Paris, 43.66 g.,¹⁵ *Traité*, 1142, Pl. XXXV. 11.

¹³ B.M.C., *Attica*, No. 40; *Coins of the Ancients*, II B 19. Bought from Thomas Burgon in 1841.

¹⁴ The Prokesch specimen (*Inédita*, 1854, p. 29, wt. 803 Paris grains).

¹⁵ The Luynes-Thomas-Strangford specimen (see Brøndsted, *Voyages dans la Grèce*, 2^{me} livr., 1830, p. 188; Thomas Sale, Sotheby's, July 8, 1844, lot 1500).

London, 42.70 g., B.M.C., No. 40, Pl. III. 1.

[Rhousespoulos] 40.40 g.¹⁶ Hirsch, xiii. 1965, Pl. XXIV.

[Delbeke]¹⁷ 40.37 g. Sale Catal., Sotheby's, 1907, Pl. V. 139.

[E. F. Weber] 39.00 g. Hirsch, xxi. 1645, Pl. XXII.

[Walcher de Molthein] 30.75 g. Catal., 1895, 1432, Pl. XI. *False?*

[Behr] 42.00 g. Lenormant, *Catal. Behr* (1857), lot 201.¹⁸

So far as it is possible to judge from casts and illustrations, the first seven specimens on the above list are all from different dies. (The Behr specimen is not figured.) But appearances may be deceptive, because, owing to the excessive relief of the obverse, parts of the design are unequally struck up; also the condition of some of the specimens makes it difficult to judge.

The chronology of the Attic coinage of the beginning of the fifth century is far from settled; and the attribution of these decadrachms to the time of Marathon is not certain. I am inclined to agree with Regling, who argues¹⁹ that the existence of tetradrachms with the olive-leaves in the helmet, but with a more archaic treatment of the hair on the forehead, shows that the decadrachms are more likely to have been struck about 480.

The new specimen was acquired from an Athenian

¹⁶ So the Hirsch Catalogue; Babelon gives 40.04 g.


¹⁷ The Photiades specimen (Paris Sale, 1890, lot 532).

¹⁸ Lenormant does not describe any olive-spray on the reverse. Was it absent, as in Becker's forgery, or off the flan, as in the Luynes specimen? Lenormant, in his note, mentions a specimen at Athens, which is not alluded to by any one else, unless it is one of the various forgeries which exist (see Prokesch, *loc. cit.*; one from the Woodhouse Collection is in the British Museum).

¹⁹ *Numism. Literatur-Blatt*, 38 (1921), p. 1798.

in whose family it had long been a treasured possession, being worn on festal occasions on a chain by the ladies of the house. The small loop with which it was supplied for this purpose has been removed.

Athens: Oriental Imitation.

17. *Obv.*—Head of Athena r. in helmet decorated with three olive leaves and floral scroll; behind, monogram 

Rev.—Owl standing r., head facing; on r., downwards, AOE; on l., prow r. Traces of incuse circle.

AR ↓ 24 mm. Wt. 16.52 g. Pl. V. From Sotheby's Sale, 12, vii, 1920, lot 65. Said to have been found on the bank of the Oxus.

An electrotype of this specimen, which seems to be unique, has long been in the Museum. The Museum has also recently acquired, by the gift of Mr. R. B. Whitehead, a drachm with the same symbol. Such coins come from the N.W. frontier. The obverse of the tetradrachm is similar in style to the tetradrachm already catalogued by Head (B.M.C., *Athens*, No. 268), although the monogram on that coin and on No. 267, which are both of Indian provenance, is different. To the same group belong the tetradrachms in the Pozzi Collection (Pl. II, Nos. 1581, 1583) with symbols shield and trident, and the drachm (*ibid.*, Pl. L, No. 1593) with symbol trident.

The Athenian and Corinthian Series have been immensely strengthened by the Earle Fox bequest; but the improvement lies in the completion of series rather than in the addition of specimens of individual importance such as would call for special mention here. Many of them have already been published in the articles of which a list is given in another place.²⁰

²⁰ *Num. Chron.*, 1920, p. 94.

Achaean League.

The Museum took the opportunity, which was offered, of purchasing out of the collection formed by the late General Malcolm G. Clerk a large number of varieties of the coinage of the Achaean League which were not already represented in the Museum series. Most, therefore, of the specimens described in his book on the subject as being in his own possession, but not in the Museum, have now passed to the latter.

Psophis.

18. *Obv.*—Zeus Amarios standing l., leaning with l. on sceptre, holding Nike in r., on r. downwards
[A]ΛΕΞΙΑΣ [Border of dots.]

Rev.—Demeter Panachaia seated l., holding wreath in r., resting with l. on sceptre [on l., off the flan. ΑΧΑΙΩΝ]; on r. upwards ΨΩΦΙΔΙΩΝ
Border of dots. Incuse circle.

Æ ↑ 20 mm. Wt. 4.76 g. Earle Fox bequest.

Bronze coins of this mint of the League seem to be hitherto unknown.

Elis.

19. *Obv.*—Eagle r., flapping wings, standing on and tearing a hare. Countermark: eagle standing l.

Rev.—Nike, with wings spread, running l., r. extended [holding wreath], l. holding skirt; across field, F A. Incuse circle.

Æ ↖ 23 mm. Wt. 12.02 g. Pl. V. From the Sir H. Weber Coll. (ex Rhousopoulos, 1897). Seltman, *Nomisma*, viii, p. 40, No. 69 c. Same reverse die as B.M.C., No. 9.

20. *Obv.*—Head of Zeus r., laureate.

Rev.—Eagle standing r., on snake which rears up against it; in field l., grain of corn and thunderbolt; across field F [A]
H P

Æ ↑ 24 mm. Wt. 12.31 g. Pl. V.

Cp. B.M.C., Nos. 132 ff. HP is presumably the magis-

trate who is represented by **H** on other coins of this group.

Cnossus.

21. *Obv.*—Head of Zeus r., bearded and laureate. Border of dots.

Rev.—**ΚΝΩ** above, **Σ** **Ι** at sides of, and **ΩΝ** below, labyrinth. Concave field.

R → 21 mm. Wt. 5.63 g. Pl. V.

This drachm belongs to the period 200–67 B.C., but differs from the specimen recorded by Svoronos in having a head of Zeus instead of Ammon. In this it corresponds to the copper of the period.²¹

Cyzicus.

22. *Obv.*—Lion with dishevelled mane, head twisted to front and touching its paws, crouching l. on tunny.

Rev.—Mill-sail incuse.

EL hecte. 11.5 mm. Wt. 2.59 g. Pl. V. See v. Fritze, *Nomisma*, vii, p. 7, No. 83. From the Sir H. Weber Coll. (bought from Sambon, 1889). Corresponds to the stater, B.M.C., No. 45.

Alabanda.

23. *Obv.*—Bust of Apollo r., laureate, hair in chignon, with long curls on neck.

Rev.—Pegasus flying r.; above **ΑΑΑ ΒΑΝ**, below **ΔΕ ΩΝ** and bunch of grapes; in field r. **ΙΕ**; all in wreath.

R ↑ 27 mm. Wt. 11.98 g. Pl. V.

To the dates on coins of this group, collected by Head (B.M.C., *Caria*, p. xxviii), must be added:

ΙΗ (18) Hirsch Catal. xx. 407 = Prowe. 1904, 1852.
and **ΑΓ** (83) Paris, *Inv. Wadd.*, 2091.

Babelon (*Rev. Num.*, 1890, p. 427) cites a variety of

²¹ B.M.C., *Crete*, Cnossus, Nos. 46–48.

the tridrachm bearing a monogram in front of the Pegasus; whether this is a date (for **LKA**) or not, I cannot determine for lack of an exact drawing. Head, rightly, it would seem, inclined to the opinion that the era is that of the freedom of Caria and Lycia, 168 B.C. It will be observed that, on this assumption, the coin dated 33 brings the series down to within two years of the constitution of the Roman Province of Asia, after which, as Head remarks, the coinage would cease.

Pixodaros, dynast of Caria.

24. *Obv.*—Head of Apollo l., laureate.

Rev.—**ΠΙΞΩΔΑΡ** r., downwards. Zeus Labraundeus standing r., sceptre in l., double-axe in r.; in field l. **A**

\bar{N} \uparrow 10 mm. Wt. 1.36 g. Pl. V. From the Sir H. Weber Coll. (bought from Lambros, 1889).

The letter in the field of the reverse distinguishes this piece from the ordinary coins of Pixodaros.

Lycia.

25. *Obv.*—Head of Athena r., in crested Athenian helmet adorned with three olive-leaves and floral spray.

Rev.—Head of bearded dynast l., in kyrbasia bound with diadem; inscription beginning on r., behind the head, **ΑΜΞ ΘΥ** (Krīna). All in deep incuse square.

\bar{R} \uparrow 18 mm. Wt. 8.32 g. Pl. V. From Sotheby's Sale, Feb. 3, 1920, lot 299.

Weight and types associate this coin with the series of Khārōi.²² The name appears to be otherwise unknown; but a mutilated word *krū*.. occurs in an inscription of the early fourth century.²³

²² B.M.C., *Lycia*, Nos. 101-3; Babelon, *Traité*, Pl. XCIX. 2 ff.

²³ *Tituli Asiae Minoris*, i, No. 104. The inscription, which, Mr. Arkwright tells me, appears in this part to contain a list of names, is later than our coin.

Selge.

26. *Obv.*—Two wrestlers engaging; between them, Σ
Border of dots.

Rev.—ΣΕΛΓΕΩΝ on l. upwards. Heracles, nude, standing to front, head r., wielding club with r., holding lion-skin over extended l. In field r. a circular shield. Border of dots.

Æ ↑ 24 mm. Wt. 9.85 g. Pl. V. Signs of restriking on reverse.

On this stater (which appears to be of the period 300–190 B.C.) the local Heracles takes the place of the slinger borrowed from Aspendus. It seems to be his first appearance on the coinage. The circular object on the reverse, though it looks like a sphere, is probably a shield, like that which occurs on the later bronze (B.M.C., Nos. 55 ff.) Several other specimens are described by Imhoof-Blumer.²⁴

Cibyra in Cilicia.

27. *Obv.*—Head of Zeus r., laureate.

Rev.—ΚΙΒΥΡΑΤΩΝ on r. downwards. Hermes, bare-headed, chlamys wrapped round l. arm, caduceus in r., standing l. In field l. downwards, ΕΚ Countermark on r., female head r.

Æ ↑ 21 mm. Wt. 5.34 g.

Cp. Imhoof-Blumer, *Gr. Münzen*, p. 679, No. 462. Pl. X. 18 (same countermark).

Tarsus.

28. *Obv.*—Baaltars, nude to waist, seated l., on seat without back; holds eagle-topped sceptre in r., rests l. on hip. On r., upwards, בעלתרין; in field l. ear of barley and bunch of grapes; between sceptre and arm, ♂; below seat, ♀. Border of dots.

²⁴ *Kleinas. Münzen*, ii, p. 401, No. 2. In the Paris Cabinet is a specimen with Σ on the obverse, like ours (Mionnet, *Suppl.* vii, 133, 139).

Rev.—Lion bringing down bull, above double row of walls of Tarsus; inscription, beginning above on r., עברנהרא חולך מזוי וי על Border of dots.

R → 23 mm. Wt. 10.65 g. Pl. V. From the Sir H. Weber Coll. (bought of W. T. Ready).

This resembles the specimens at Yale and Paris described by Newell (*Am. Journ. Num.*, liii, 1920, part II, p. 14, jj), and is of the same obverse die as the two specimens at Paris (Babelon, *Traité*, ii, 710, Pl. CXIII. 7, 8). I think it is also from the same obverse as the (Yale?) piece illustrated by Newell in his "Tarsus under Alexander" (*Am. Journ. Num.*, lii, 1919, Pl. I. 5), but the reverse die is again different, and as the two reverses at Paris are from different dies, we have four different reverse dies used in conjunction with the same obverse.

As Newell has shown (p. 15), these issues, describing Mazaeus as governor of Cilicia and Ebernahara, are the last of his issues in Tarsus, and must therefore date from shortly before 333 B.C.

Salamis or Cyrene?

29. *Obv.*—Head of horse r. Border of dots.

Rev.—Ram's head r. Border of dots. Traces of incuse circle.

N ↓ 7.5 mm. Wt. 0.40 g. ($\frac{1}{20}$ stater). Pl. V. From the Froehner Collection. Cp. *Rev. Num.*, 1885, p. 17, No. 43 (Athens Cabinet).

The Athens specimen came from Alexandria. There is also in the Paris Cabinet a gold coin weighing 1.05 g. ($\frac{1}{8}$ stater), with a forepart of a horse on the obverse, and a ram's head on the reverse,²⁵ accom-

²⁵ Six, *Rev. Num.*, 1883, p. 372, No. 2; Babelon, *Traité*, II. ii, 1176, Pl. CXXIX. 8 (under Euagoras II, with a query).

panied by two uncertain letters (Cypriote or Phoenician). This piece is said to have come from Cyrenaica, through M. de Bourville; but that collector's cabinet contained many coins of other districts. The combination of horse and ram is natural in both Cyprus and Cyrene, although it is true that, at Salamis, the ram's head goes out before Euagoras I and the horse does not come in until Euagoras II. Judging by style and fabric I should be inclined to attribute our coin, if to Cyprus at all, then to the first rather than to the second Euagoras. Mr. Robinson is not inclined to accept it for Cyrenaica.

Salamis.

30. *Obv.*—Head of bearded Heracles r., wearing lion-skin.
Plain border.

Rev.— \ddagger (Ba). Plain border.

\bar{N} \nearrow 6 mm. Wt. 0.20 g. Pl. V. From the Froehner Collection.

This little coin ($\frac{1}{40}$ stater), is clearly connected by its type of the head of Heracles with the series of Euagoras I.²⁰

Antiochus IX.

31. *Obv.*—Bust of Antiochus IX r., with whiskers, diademed.
Fillet border.

Rev.—The so-called pyre of Sandan, surmounted by eagle with wings spread. Inscription on r. downwards ΒΑΣΙΛΕΩΣ | ΑΝΤΙΟΧΟΥ on l. ΦΙΛΟΠΑΤΟΡΟΣ; in field l. monograms

Δ and ME

\bar{R} \uparrow 30 mm. Wt. 16.45 g. Pl. V. From the Sir H. Weber Coll. (bought from Lambros, 1895). Presented by Miss Helen Farquhar.

²⁰ Cp. B.M.C., *Cyprus*, Pl. XI. 14-17.

The monster on whose back Sandan stands is placed between two objects which in most representations (*e.g.* B.M.C., *Seleucid Kings*, Pls. XXI. 6, XXIV. 3; Babelon, *Rois de Syrie*, Pls. XXV. 5, XXVI. 12) are more or less omphalos-shaped. On the new specimen a horizontal line at the top of each object suggests the flat cap which is commonly found on the top of sacred stones.²⁷ If such stones were associated with the worship of Sandan, it would be natural to place models of them on his monument.²⁸

In a recent note²⁹ Münsterberg points out that the supposed pyre has no resemblance to any other construction of that nature, and that what is represented must be a relief, like the double reliefs (back to back) of Jupiter Dolichenus.

G. F. HILL.

²⁷ Cp. the stone in the car at Sidon (*J. H. S.*, xxxi, 1911, p. 61, Pl. III. 17), the cone at Paphos (B.M.C., *Cyprus*, pp. cxxxii ff.), and the baetyls at Bostra (*J. R. S.*, vi, 1916, p. 138).

²⁸ The latest to discuss this deity (Hofer in Roscher's *Lexikon*, and Philipp in Pauly-Wissowa I A 2, 2264 ff.) do not touch on this detail.

²⁹ *Num. Zeit.* 53, 1920, p. 36.

XII.

NOTES ON A HOARD OF ROMAN DENARII FOUND IN THE SIERRA MORENA IN THE SOUTH OF SPAIN.

IN the month of October last (1920) a wood-cutter, when grubbing up the roots of a bush of a gum-cistus, which grows so abundantly on the hills in Southern Spain, casually struck something hard which, at first sight, looked like a stone of quartzite, one of the native rocks of the country, but which on closer examination proved to be a "purse" made out of a piece of thin sheet lead, filled with Roman denarii. There were in all 617 coins, the greater part of which were in quite a good state of preservation. By a most fortunate combination of favourable circumstances, the complete hoard passed temporarily into the hands of the manager of a neighbouring mine, who was able to "hold on" to them until they were carefully examined and classified but a fortnight ago. It can safely be said that but few parts of Spain have been more prolific in finds of Roman coins than the Province of Jaen on the Northern confines of Andalusia, a rich agricultural country and an important mining centre, through which passed in Roman times the great highway from Cadiz to Rome and other roads connecting the Northern Provinces with Baetica. It, unfortunately, rarely happens that a find can be rescued in time to prevent distribution and to allow of critical examination. There is the well-known instance of the Cástulo hoard found in A.D. 1618, if I remember correctly, and published many years ago, and a few others of lesser importance, to which I have

been able to call attention; but, speaking generally, no sooner are coins re-discovered than they disappear again, and often into the melting-pot of the *platero* or jeweller in the neighbouring town.

The Cástulo find was one of those in which the coins had been placed in a silver bowl before being hidden away, a not infrequent occurrence in the Iberian Peninsula, and especially in the Province of Jaen. These bowls are of a peculiar shape, being wide at the lip and tapering to a rounded egg-shaped base and, with one exception (that of the find made in the Landes country in the South of France, the bowl of which, if I remember correctly, is in the Museum at Rouen), are only found in Spain. And as a typical example of the difficulties one meets with when endeavouring to trace such finds I would mention an instance from this very Province of Jaen, where a hoard consisting of a similar bowl and its coin contents was purchased by a mining engineer who tipped the coins into a drawer and had the bowl melted down to make tea-spoons for his children!

In the present instance, however, the coins, as I have already mentioned, were enclosed in a purse made of sheet-lead (Fig. 1), which has been folded over from back to front so to say, and from side to side (but in this case in opposite directions), so as to form a strong and imperishable envelope for the treasure.

The hoard was discovered at a spot which lies at about two miles in a north-easterly direction, as the crow flies, from the Centenillo Silver Lead Mines in the Sierra Morena, which are situated some six miles, in a direct line north-west, from the town of La Carolina, and not far from the place where a small hoard of silver coins and a silver bracelet and frag-

ments of silver jewellery were found in 1907.¹ The date of the latest coin in this, as well as in the present find, is about 90 B. C., which points to the hiding of both treasures as having been contemporaneous.

The assay results of the lead of the envelope show the contents in silver to be 50 grammes per ton of lead, which speaks well for the work of the Roman



FIG. 1. About one-quarter size.

miner-smelters, and points, without any doubt in my opinion, to the abstraction from the neighbouring Centenillo mine of the piece of sheet-lead out of which the "purse" was formed.

There have been two other finds of Roman denarii at or near this mine, but in both cases the latest coins bear a later date, viz. 45 B. C., which coincides with the period of Julius Caesar's campaigns in the Iberian Peninsula.²

¹ "Notes on a find of Roman Republican Silver Coins and of Ornaments from the Centenillo Mine, Sierra Morena," by G. F. Hill, M.A., and H. W. Sandars, F.S.A. *Num. Chron.*, Fourth Series, vol. xii, 1912.

² "Coins from the neighbourhood of a Roman Mine in Southern Spain," by G. F. Hill, M.A., and H. W. Sandars, F.S.A. *The Journal of Roman Studies*, vol. i, 1911, pp. 100 and 104.

The following is a description of the 617 specimens composing the hoard now under review.

List of Coins composing the hoard of Roman Denarii discovered near the Centenillo Mine in October, 1920.

No.	Approx. date B. C.	Struck in	Class.	Reference to Babelon. ³	Number in hoard.
1	ca. 244	Rome	Au(relius) ?	i. 1. p. 235	1
2	268-217	"	Anonymous. Dioscuri	i. 2. 39	12
3	"	"	"	i. 5. 40	3
4	"	"	"	i. 6. 40	10
5	"	"	" with sym- bols	i. 20. 47	7
6	217-157	"	Incuse		1
7	217	"	P(ublius) Mae(nius)	i. 1. 162	1
8	214	"	Pur(purio)	i. 13. 522	2
9	"	"	A(ulus) Pluti(us)	ii. 1. 465	1
10	"	"	C(aius) Pluti(us)	ii. 1. 329	6
11	"	"	C(aius) Ter(entius) Luc(anus)	ii. 10. 483	6
12	209	"	C(aius) Val(erius) C(aii) f(ilius) Flaccus	ii. 7. 510	3
13	209-184	"	P(ublius) Paetu(s)	i. 3. 110	5
14	"	"	Flavus	i. 1. 453	6
15	204	"	C(aius) Scribonius	ii. 1. 424	7
16	"	"	C(aius) Juni(us) C(aii) f(ilius)	i. 1. 101	4
17	200	"	P(ublius) Sul(a)	i. 1. 387	8
18	"	"	Sp(urius) Afra(nius)	i. 1. 135	6
19	"	"	Natta	ii. 1. 303	8
20	"	"	Nata	ii. 2. 303	2
21	ca. 200	"	L(ucius) Sauf(eius)	ii. 1. 421	8
22	194	"	Saran(us)	ii. 1. 226	2
23	"	"	C(aius) Maian(ius)	ii. 1. 166	2
24	179	"	Cn(aeus) Calp(urnius)	ii. 1. 285	1
25	174	"	C(aius) Antest(ius)	i. 1. 144	6
26	"	"	M(arcus) Atil(ius) Sara(nus)	i. 8. 229	5
27	"	"	M(arcus) Jun(ius)	ii. 8. 104	5
28	"	"	Q(uintus) Marc(ius) Libo	ii. 1. 181	7
29	"	"	L(ucius) Semp(ronius) Pitio	ii. 2. 430	2
30	164	"	L(ucius) Cup(iennius)	i. 1. 444	5
31	"	"	Cn(aeus) Lucr(etius) Trio	ii. 1. 151	10
				Carr. forw.	152

³ *Description historique et chronologique des Monnaies de la République romaine* par Ernest Babelon. Paris, 1885-6. The British Museum Catalogue is not accessible to me at the time of writing, but the references to Babelon will be sufficient for the present purpose.

No.	Approx. date B. C.	Struck in	Class.	Reference to Babelon.	Number in hoard.
				Br. forw.	152
32	154	Rome	Anonymous	i. 101. p. 67	2
33	"	"	C(aius) Re(nius)	ii. 1. 399	11
34	149	"	C(naeus) Gel(lius)	i. 1. 535	11
35	"	"	Q(uintus) Min(ucius) Ruf(us) .	ii. 1. 227	10
36	"	"	C(aius) Cato	ii. 1. 368	16
37	"	"	M(arcus) Fan(nius) C(aii) f(ilius)	i. 1. 491	14
38	144	"	Q(uintus) Fabi(us) Labeo . . .	i. 1. 480	9
39	"	"	M(arcus) Baebi(us) Q(uinti) f(ilius) Tampil(us)	i. 12. 254	16
40	"	"	C(aius) Cur(iatius) (filius) Trig(eminus)	i. 2. 446	2
41	139	"	L(ucius) Trebani(us)	ii. 1. 500	2
42	"	"	M(arcus) Carbo	ii. 6. 288	11
43	"	"	Carbo	ii. 7. 289	11
44	"	"	Au(relius) Ruf(us)	i. 19. 242	3
45	138	"	C(aius) Cur(iatius) f(ilius) . .	i. 2. 446	3
46	136	"	C(aius) Titin(ius)	ii. 7. 495	1
47	"	"	L(ucius) Juli(us)	ii. 1. 2	4
48	ca. 135	"	M(arcus) Tulli(us)	ii. 10. 503	4
49	"	"	A(ulus) Man(ius) Q(uinti) f(ilius) Serg(ia)	ii. 1. 175	1
50	134	"	L(ucius) Opeimi(us)	ii. 12. 273	2
51	"	"	M(arcus) Opeimi(us)	ii. 16. 275	3
52	"	"	M(anius) Acili(us) Balbus . . .	i. 1. 102	1
53	"	"	L(ucius) Post(umius) A(lbinus)	ii. 1. 377	4
54	"	"	T(itus) Q(uinctius)	ii. 2. 392	2
55	129	"	C(aius) Albur(ius) Gem(inus) . .	i. 1. 94	9
56	"	"	M(arcus) Porc(ius) Laeca	ii. 3. 369	14
57	"	"	M(arcus) Acilius M(arci) f(i- lius)	i. 4. 103	6
58	"	"	Q(uintus) Mete(llus)	i. 21. 266	4
59	"	"	M(arcus) Var(gunteius)	ii. 1. 525	16
60	"	"	C(aius) Aug(urinus)	ii. 3. 229	2
61	"	"	Sex(tus) Po(mpeius) Fostlus. .	ii. 1. 336	8
62	"	"	Ti(berius) Vet(urius)	ii. 1. 535	8
63	124	"	L(ucius) Ante(stius) Grag(ulus)	i. 9. 146	20
64	"	"	C(aius) Serveili(us) M(arci) f(ilius)	ii. 1. 444	9
65	123	"	M(arcus) Metellus Q(uinti) f(ilius)	i. 28. 269	3
66	"	"	C(aius) Serveili(us)	ii. 1. 446	1
67	"	"	C(aius) Serveil(ius)	ii. 6. 447	1
68	"	"	Q(uintus) Max(imus)	i. 5. 482	4
				Carr. forw.	400

No.	Approx. date B. C.	Struck in	Class.	Reference to Babelon.	Number in hoard.
				Br. forw.	400
69	119	Rome	Q(uintus) Pilipus	ii. 11. p. 186	5
70	"	"	T(itus) Clouli(us)	i. 1. 360	4
71	"	"	Cn(aeus) Dom(itius)	i. 14. 462	5
72	"	"	M(arcus) Mar(cius)	ii. 8. 185	12
73	114	"	Q(uintus) Curt(ius), M(arcus) Sila(nus)	i. 2. 450	8 + 1 incuse
74	"	"	Cn(aeus) Dom(itius)	ii. 7. 460	3
75	"	"	Ti(berii) Minuci(i) C(aii) f(ilii) Augurini	ii. 9. 231	12
76	ca. 112	"	Ma(nio) Aimilio Lep(ido)	i. 7. 118	15
77	112	"	C(aius) Font(eius)	i. 1. 499	5
78	"	"	L(ucius) Philipus	ii. 12. 187	6
79	110	"	P(ublius) Nerva	ii. 7. 129	4
80	"	"	Q(uintus) Mar(cius), C(aius) Fabius? L(ucius) Roscius?	ii. 16. 189	1
81	"	"	P(ublius) Mae(nius) An(tiatius)	ii. 7. 164	7
82	"	"	P(ublius) Laeca, Provoco	ii. 4. 370	1
83	"	"	N(umerius) Fabi(us) Pictor	i. 11. 484	2
84	"	"	C(aius) Fabius? L(ucius) Roscius? Q(uintus) M(arcus)	ii. 17. 189	1
85	109	"	C(aius) Cassi(us)	i. 1. 325	4
86	108	"	M(arcus) Calid(ius) Q(uintus) Met(ellus) Cn(aeus) Ful(vius)	i. 1. 283	2
87	"	"	C(naenus) Fou(lvius) M(arcus) Cal(idius) Q(uintus) Met(ellus)	i. 1. 513	3
88	106	"	P(ublius) Calp(urnius)	i. 2. 286	3
89	"	"	L(ucius) Minuci(us)	ii. 15. 233	2
90	"	"	C(aius) Pulcher	i. 1. 545	4
91	104	"	Anonymous	i. 176. 72	8
92	"	Italy	L(ucii) Valeri(i) Flacci	ii. 11. 512	4
93	"	"	L(ucius) Caesi(us)	i. 1. 281	2
94	"	Rome	M(arci) Fouri(i) L(ucii) f(ilii) Philii	i. 18. 525	21
95	"	"	Q(uintus) Lutati(us) Cerco. Q(aestor)	ii. 2. 157	1
96	ca. 104	"	M(arcus) S(ergius) S(ilus) Ex S(enatus) C(onsulto)	ii. 6. 442	17
97	"	"	T(iberius) Q(uintus), d(e) S(enatus) S(ententia)	ii. 6. 394	3
98	"	"	Ma(nius) Fonteius	i. 1. 502	1
99	99	"	(Q. Caecilius Metellus Pius)	i. 38. 273	12
				Carr. forw.	579

No.	Approx. date B. C.	Struck in	Class.	Reference to Babelon	Number in hoard.
				Br. forw.	579
100	99	Rome	Cn(aeus) Blasio Cn(aei) f(ilius)	i. 19. p. 396	2
101	ca. 99	"	M(arcus) Herenni(us)—Pietas	i. 1. 539	1
102	99	"	T(itus) Mal(lius) Ap(pius) Q(uaestores) Ur(bani)	ii. 2. 169	1
103	"	"	Ap(pius) Cl(audius) T(itus) Mal(lius) Q(uaestores) Ur(bani)	ii. 1. 169	2
104	94	"	L(ucius) Flamini(us) Cilo.	i. 1. 495	15
105	"	Italy	Lu(cius) Memmi(us)	ii. 1. 213	1
106	"	Rome	M(arcus) Cipi(us) M(arci) f(ilius)	i. 1. 341	6
107	92	"	M(arci) Aureli(i), Scauri, L(ucio) Lic(inio), Cn(aeo) Dom(itio)	i. 20. 243	2
108	"	"	L(ucius) Cosco(nius) M(arci) f(ilius) L(ucio) Lic(inio), Cn(aeo) Dom(itio)	i. 1. 436	1
109	"	"	C(aius) Malle(olus) C(aii) f(ilius) L(ucio) Lic(inio) Cn(aeo) Dom(itio)	ii. 1. 330	1
110	"	"	L(ucii) Porci(i) Lici(ni) L(ucio) Lic(inio) Cn(aeo) Dom(itio)	ii. 8. 373	4
111	90	"	L(ucius) Scip(io) Asiag(enus)	i. 24. 399	2
				Total	617

Among the anonymous coins with the Dioscuri on the reverse (No. 5) is one with *obv.* symbol, knotted staff, *rev.* symbol, wing. This seems to be an unpublished variety, and should be compared with the denarius (Grueber, Pl. LXXXVIII. 5) which has the same staff on the obverse, and a feather on the reverse.

As I have mentioned above, the coins generally are in a good state of preservation, while those of the later dates do not show signs of much usage. It may consequently be fairly assumed that the hoard was buried soon, or but a few years, after 90 B. C., a date

which corresponds, as I have already pointed out, with the find of coins and jewellery made in 1907. It is, moreover, interesting to find that it corresponds with the dates of a hoard of 568 denarii, which was discovered near the small town of Santa Elena, a few miles to the north of La Carolina in 1903,⁴ and among which were several coins (19) of 90 B.C., and two of 89 B.C. It is a curious coincidence that, in this case too, the coins were wrapped in sheet-lead envelopes. The Centenillo find, however, did not contain any autonomous or Celtiberian denarii, whereas there were six such coins among those of the Santa Elena find, as well as the remains of a "cake" of silver which had been cut into two parts, and which also bore an inscription in Celtiberian characters.

I venture to suggest that the recent Centenillo hoard, as well as the earlier (1907) hoard from the neighbourhood of that mine, the Santa Elena hoard, and the hoards of Pozoblanco (92 B.C.), Cástulo (Cazlona) and Oliva (90 B.C.), as well as the hoard of jewellery and denarii (89 B.C.) found in 1914 at Mogon (all in or near the Province of Jaen), were hidden away during the troublous times incidental to the internecine struggles and the long drawn-out campaigns of the early years of the first century B.C.

⁴ *Revue Numismatique*, IV^e Série, Tome ix, 1905, pp. 396-405, "Notes sur un dépôt de Monnaies romaines découvert en Espagne (Province de Jaen) en 1903," Horace Sandars.

XIII.

THE MINTS OF VESPASIAN.

[SEE PLATES VI, VII.]

THIS paper is the natural continuation of a study of the coinages of the Civil Wars of A. D. 68-69, published in the *Numismatic Chronicle* for 1914. Like many enterprises of far greater importance it has been delayed years long by the War. I can only hope that the delay will bring with it some compensating gain in the form of better considered and tested judgements than I could have offered seven years ago.

The reign of Vespasian marks the end of the first period of the Empire and the beginning of a new age, and this fact we find reflected as soon as we enter on the closer study of the coinage. Vespasian does away with the confusions of the Civil Wars, brings the coinage into the channels in which it was to run for more than a century, and indicates clearly that he fully realizes the part assigned to him in history of second founder of the Roman Empire. Into all the problems of his extensive coinage I cannot for the moment enter. My main objects are to determine the places of mintage and, to some extent, the chronology¹ of his coins. I have tried to quote only coins which

¹ Some interesting information will be found in B. Piek's articles, entitled "Zur Titulatur der Flavier", in *Zeitschrift für Numismatik*, 1885, 1886.

I have been able to examine personally (either in the British Museum or in other collections) or which have been published and illustrated with such scientific accuracy as to exclude any danger of serious error. What is lost in breadth by this method will, I trust, be compensated by increased accuracy. The misfortune is that our chief handbook, Cohen, sometimes falls short of the minimum standard that must be required.

I will first deal with the mints in succession and then conclude with a discussion of the results obtained.

I. *Mint of Rome.* *A*, *AR* (for *Æ*, see below).

A, *AR*. The earliest aurei and denarii of this mint may be readily recognized by a comparison with the Roman issues of Vitellius. The first portrait of Vespasian, in fact, is virtually that of his predecessor; this gives way to one more characteristic of Vespasian himself, but it is not till about A.D. 72 that we find what we may call the normal type of portrait. The legends of both obverse and reverse read from l. to r., inwardly, from A.D. 69-73; from r. to l. outwardly from A.D. 73-75; in A.D. 76 the direction l. to r. is restored for the reverse, while the direction r. to l. is retained for the obverse. The portraits of Titus and Domitian, who share with their father the right of coinage, invariably face r.: that of Vespasian is usually r., though from A.D. 75 to the end of the reign a portrait facing l. alternates with it. Whilst the actual portrait of the Emperor varies, the general style of the mint, especially in the lettering, remains

singularly uniform and enables us as a rule without much difficulty to detect its issues. [Pl. VI. 1-9.]

I append a conspectus of the issues of this mint, which, though far from complete, will give a general idea of its working :

VESPASIAN.

- I. *Obv.*—Head laureate r. **IMP CAESAR VESPASIANVS AVG** (l. to r.). Dec. A. D. 69—end of 70 (?).
1. *Rev.*—**CAESAR AVG F COS CAESAR AVG F PR** Heads of Titus and Domitian facing one another. *A*, *R*.
2. **COS ITER FORT RED** Fortuna standing l., holding cornucopiae and rudder. *R*.
3. **COS ITER TR POT** Aequitas standing l., holding scales and rod. *A*, *R*.
4. **COS ITER TR POT** Mars advancing r., carrying spear and trophy. *A*, *R*.
5. **COS ITER TR POT** Neptune standing l., holding trident and acrostolium. *R*.
6. **COS ITER TR POT** Pax standing l., holding branch and caduceus. *A*, *R*.
7. **COS ITER TR POT** Pax seated l., &c. (as above). *A*, *R*.
8. **IVDAEA** Judaea seated r. on ground, mourning: behind her, a trophy. *A*, *A*.
9. **TITVS ET DOMITIANVS CAESARES PRIN IVEN** Titus and Domitian seated l., holding branches. *R*.

Probably to this mint and to this period of the mint belong the denarii

10. *Obv.*—Emperor in Quadriga r. **IMP CAESAR**
Rev.—Victory on prow. **VESP AVG**
11. *Obv.*—Bust of Sol, radiate, draped, facing.
Rev.—Vespasian standing l., holding spear in l. hand and raising r. in act of address. **VESPASIANVS** [Pl. VI. 10.]

The former is an obvious adaptation of the denarius of Augustus, with legend **CAESAR DIVI F** or **IMP CAESAR** (cf. Grueber, *B. M. Cat. of Rep. Coins*, ii, pp. 12 ff.); the latter borrows its obverse from a denarius of L. Mussidius Longus, moneyer c. 39 B.C. (cf. Grueber, *op. cit.*, i. 578), its reverse from a denarius of Augustus (Grueber, *op. cit.*, ii. p. 9). For the significance of these imitations see below.

- II. *Obv.*—Head laureate r. **IMP CAES VESP AVG PM**
(l. to r.). A. D. 71.
12. *Rev.*—**AVGVR PON MAX** Sacrificial implements. *R.*
13. **AVGVR TRI POT** Sacrificial implements. *R.*
14. **PON MAX** Vesta seated l., holding simpulum. *R.*
15. **TRI POT** Vesta seated l., holding simpulum. *R.*
16. **TRI POT II COS III PP** Pax seated l., holding branch and caduceus. *A, R.*
17. **VIC AVG** Victory standing r. on globe, holding wreath. *A.*
- III. *Obv.*—Head laureate r. **IMP CAES VESP AVG PM**
COS IIII (l. to r.). A. D. 72–73 (June 30).
18. *Rev.*—**AVGVR TRI POT** Sacrificial implements. *R.*
19. **CONCORDIA AVGVSTI** Concordia seated l., holding patera and cornucopiae. *R.*
20. **IMP** Quadriga to r. *A.*
21. **IVDAEA** Judaea seated r. (as above). *R* plated.
22. *Rev.*—**NEP RED** Neptune standing l., holding trident and acrostolium. *A.*
23. **TRI POT** Vesta seated l., holding simpulum. *R.*
24. **VESTA** Vesta standing l., holding simpulum. *R.*
25. **VIC AVG** Victory standing r. on globe, holding wreath. *A.*
26. **VICTORIA AVGVSTI** Victory standing r., crowning trophy. *R.*

27. No legend. Warrior standing r., palm-tree, Judaea seated r., mourning. *A*.
28. No legend. Quadriga to r. *A*.
- IV. *Obv.*—Head laureate r. **IMP CAES VESP AVG PM COS IIII CEN** (l. to r.). A.D. 73 (July 10).
29. *Rev.*—**FIDES PVBL** Clasped hands, holding caduceus, corn-ears, and poppies. *R*.
30. **PAX AVG** Pax standing l., leaning on cippus, holding branch in l. hand and caduceus over tripod in r. *A*.
31. **SALVS AVG** Salus seated l., holding patera. *R*.
32. **VESTA** Round temple. *A*.
- V. *Obv.*—Head laureate r. **IMP CAES VESP AVG CEN** (l. to r.).
- VI. *Obv.*—Head laureate r. **IMP CAES VESP AVG CEN** (r. to l.).
- VII. *Obv.*—Head laureate r. **IMP CAES VESP AVG CENS** (r. to l.). A.D. 73-74.
33. *Rev.*—**PAX AVG** Pax standing l. (as above). *A*.
34. **PONTIF MAXIM** Emperor seated r., holding branch and sceptre. *R*.
35. **SALVS AVG** Salus seated l., holding patera. *R*.
36. **SPQR** in oak-wreath. *R*.
37. **VESTA** Round temple. *A*.
- VIII. *Obv.*—Head laureate r. **IMP CAES VESP AVG PM COS V CENS** (r. to l.). A.D. 74.
38. *Rev.*—**VICTORIA AVGVSTI** Victory flying r., holding wreath and branch. *R*. Q.
39. **VICTORIA AVGVSTI** Victory seated l., holding wreath and branch. *R*. Q.
- IX. *Obv.*—Head laureate r. **IMP CAESAR VESP AVG** (rarely **AVGVST**) (r. to l.). A.D. 74.
40. *Rev.*—**AVGVR TRIPOT** Sacrificial implements. *A*.
41. **COS V** Laurel branches. *R*.

42. **PONT MAX TR P COS V** Emperor seated r., holding branch and sceptre. *Æ*.
43. **PONT MAX TR P COS V** Winged caduceus. *Æ*.
44. **PONTIF MAXIM** Winged caduceus. *Æ*.
45. Capricorns, globe and shield inscribed **S C** *Æ*.
- X. *Obv.*—Head laureate r. (occasionally l.). **IMP CAESAR VESPASIANVS AVG** (r. to l.). Before end of A. D. 75 to end of reign.
46. *Rev.*—**AETERNITAS** Aeternitas standing l., holding busts of sun and moon. *Æ*.
47. **COS VI** Mars standing, holding spear and flag. *Æ*.
48. **COS VI** Bull butting r. *Æ*.
49. **COS VI** Capricorn and globe. *Æ*.
50. **COS VII** Cow walking (or standing) r. *Æ*, *Æ*.
51. **COS VII** Eagle on cippus. *Æ*.
52. **COS VIII** Mars standing (as above). *Æ*.
53. **COS VIII** Victory crowning Emperor. *Æ*, *Æ*.
54. **COS VIII** Yoke of oxen l. *Æ*.
55. **COS VIII** Star above prow. *Æ*.
56. **FORTVNA AVGVSTI** Fortune standing l. on altar, holding cornucopiae and rudder. *Æ*.
57. **IMP XIII** Bull butting r. *Æ*, *Æ*.
58. **IOVIS CVSTOS** Jupiter standing l., holding sceptre and patera: at his feet, altar. *Æ*.
59. **PAX AVGVST** Pax seated l., holding branch and sceptre. *Æ*.
60. **PONT MAX TR P COS V** Winged caduceus. *Æ*.
61. **PONT MAX TR P COS V** Emperor seated r., holding branch and sceptre. *Æ*.
62. **PONT MAX TR P COS VI** Pax seated l., &c. *Æ*.
63. **PONT MAX TR P COS VI** Victory standing on cista, between two serpents. *Æ*, *Æ*.
64. **PONT MAX TR P COS VI** Securitas seated l., r. hand above head. *Æ*.

65. **PONT MAX TR P COS VI** Victory standing l. on prow, holding wreath. *AR.*
66. **TR P X COS VIII** Ceres seated l., holding corn-ears and torch. *N, AR.*
67. **TR P X COS VIII** Victory standing l., erecting trophy. *N, AR.*
68. **TR P X COS VIII** Capricorn and globe. *AR.*
69. **TR P X COS VIII** Statue on rostral column. *AI.*
70. **VICTORIA AVGVSTI** Victory seated l., holding wreath and palm. *N. Q.*
71. **VICTORIA AVGVSTI** Victory seated l., &c. *AR. Q.*
72. **VICTORIA AVGVSTI** Victory flying r., &c. *AR. Q.*

(Both the last with **VESPASIAN** not **VESPASIANVS** on *obv.*)²

- XI. *Obv.*—Head laureate r. (and l.). **CAESAR VESPASIANVS AVG**³ (r. to l.). A.D. 78–79 (?).
73. *Rev.*—**ANNONA AVG** Annona seated l., holding basket of fruit. *N, AR.*
74. **CERES AVGVST** Ceres standing l., holding corn-ears and torch. *N, AR.*
75. **IMP XIX** Sow and little pigs, l. *AR.*
76. **IMP XIX** Modicus and corn-ears. *AR.*
77. **IMP XIX** Goatherd milking she-goat. *AI.*

TITUS.

- I. *Obv.*—Head laureate r. **T CAES IMP VESP PON TR POT** (l. to r.). July 1, A.D. 71–June 30. A.D. 73.

² This obverse belongs to this period, perhaps to the beginning of it (cf. Titus); so far as I know, it occurs only on quinarii.

³ The omission of praenomen **IMP** is curious. The reason, I think, is that the obverse is properly designed to go with the reverse **IMP XIX**, when **IMP**, occurring as a cognomen, was not needed as a praenomen.

1. *Rev.*—**NEP RED** Neptune standing l., holding trident and acrostolium. *R.*
 2. **VIC AVG** Victory standing r. on globe, holding wreath. *A.*
 3. No legend. Warrior standing r., palm-tree, Judaea seated r. mourning. *A, R.*
 4. No legend. Quadriga, r. *A.*
- II. *Obv.*—Head laureate r. **T CAES IMP VESP PON TR POT CENS** (l. to r.).
- III. Head laureate r. **T CAES IMP VESP TR P CENS** (l. to r.).
- IV. Head laureate r. **T CAES IMP VESP TR P CENS** (r. to l.).
- V. Head laureate r. **T CAES IMP VESP CENS** (r. to l.).
- VI. Head laureate r. **T CAES IMP VESP CEN** (r. to l.).
July 1st A. D. 73-74.
5. *Rev.*—**PAX AVG** Pax standing l., leaning on cippus, &c. *A.*
 6. **PONTIF TR POT** Titus seated l., holding sceptre and branch. *A, R.*
 7. **VESTA** Round temple. *A.*
 8. **VICTORIA AVGVSTI** Victory flying r., &c. *R. Q.*
 9. **VICTORIA AVGVSTI** Victory seated l., &c. *R. Q.*
 10. No legend. Quadriga to r. *A.*
- VII. *Obv.*—Head laureate r. **T CAESAR IMP VESP** (r. to l.). A. D. 74.
11. *Rev.*—**PONTIF TR POT** Fortuna standing l. on altar, &c. *A.*
 12. **PONTIF TR P COS III** Winged caduceus. *R.*
- VIII. *Obv.*—Head laureate r. **T CAESAR IMP VESPA-SIAN** A. D. 74.
13. *Rev.*—**AETERNITAS** Aeternitas standing l., &c. *A.*

14. COS IIII Bull butting r. *A*, *R*.
 15. COS V Cow standing r. *A*, *R*.
 16. COS V Cow standing l. *A*.
 17. COS V Eagle on cippus. *R*.
 18. IMP VIII Bull butting r. *A*.
 19. PAX AVGVST Pax seated l., holding branch and
sceptre. *A*.
 20. PONTIF TR P COS IIII Titus seated r. holding
sceptre and branch. *R*.
 21. PONTIF TR P COS IIII Pax seated l., &c. *R*.
 22. PONTIF TR P COS IIII Victory standing on
cippus between two serpents. *A*.
 23. PONTIF TR POT Fortuna standing on altar,
&c. *A*.
 24. VICTORIA AVGVSTI Victory flying r., &c.
R. *Q*.
 25. VICTORIA AVGVSTI Victory seated l., &c.
R. *Q*.
- IX. *Obv.*—Head laureate r. T CAESAR IMP VESPA-
SIANVS (r. to l.). Before end of A.D. 74-79.
26. *Rev.*—COS V Cow standing r. *A*.
 27. COS VI Mars standing, holding spear and trophy.
A, *R*.
 28. COS VI Rome seated r., with eagles. *A*, *R*.
 29. COS VI Yoke of oxen l. *R*.
 30. COS VI Star and prow. *A*.
 31. IOVIS CVSTOS Jupiter standing l., holding sceptre
and patera. *R*.
 32. TR POT VIII COS VII Venus standing r., lean-
ing on cippus, &c. *R*.
 33. TR POT VIII COS VII Quadriga to l. *R*.
 34. TR POT VIII COS VII Captive and trophy. *R*.

- X. *Obv.*—Head laureate r. **T CAESAR VESPASIANVS** (r. to l.). A. D. 78–79 (?).^{3a}
35. *Rev.*—**ANNONA AVG** Annona seated l., &c. *A*, *A*.
36. **CERES AVGVST** Ceres standing l., &c. *A*.
37. **IMP XIII** Sow and little pigs l. *A*.
38. **IMP XIII** Goatherd milking she-goat. *A*.

DOMITIAN.

- I. *Obv.*—Head bare r. **CAES AVG F DOMITIAN COS II** (l. to r.).
- II. Head bare r. **CAES AVG F DOMIT COS II** (l. to r.).
- III. Head bare r. **CAES AVG F DOMIT COS II** (r. to l.).
A. D. 78.
1. *Rev.*—**VESTA** Round temple. *A*.
2. No legend. Domitian riding l. *A*, *A*.
- IV. *Obv.*—Head bare r. **CAES AVG F DOMIT COS III**
(r. to l.). A. D. 74.
3. *Rev.*—**PRINCEPS IVVENTVTIS** Spes advancing l., &c. *A*, *A*.
4. **VICTORIA AVGVSTI** Victory flying r., &c. *A*. Q.
5. **VICTORIA AVGVSTI** Victory seated l., &c. *A*. Q.
- V. *Obv.*—Head bare r. **CAESAR AVG F DOMITIANVS** (r. to l.) A. D. 74–79.
6. *Rev.*—**CERES AVGVST** Ceres standing l., &c. *A*.
7. **COS IIII** Cornucopiae. *A*.
8. **COS V** She-wolf and twins. *A*, *A*.
9. **COS V** Captive kneeling and restoring standards. *A*.
10. **COS V** Warrior on horseback r. *A*.
11. **VICTORIA AVGVST** Victory flying r., &c. *A*. Q.
12. **VICTORIA AVGVST** Victory seated l., &c. *A*. Q.

^{3a} For omission of **IMP**, cp. above, p. 193 note 3.

- VI. *Obv.*—Head bare r. CAESAR AVG F DOMITIA-
NVS COS VI A. D. 79. A, R.
13. *Rev.*—PRINCEPS IVVENTVTIS Salus standing
r., leaning on cippus, feeding snake. A, R.
14. PRINCEPS IVVENTVTIS Vesta seated l., holding
sceptre and Palladium. A, R.
15. PRINCEPS IVVENTVTIS Clasped hands holding
eagle, set on prow. A, R.

One feature of this series of reverse types which deserves special attention is the frequent occurrence of types, either directly copied or else adapted from types of Augustus and his period.⁴ Laffranchi, in an interesting article⁵ has already discussed this point and explained its significance. Vespasian deliberately directs public notice to the fact that he desires to be regarded as the successor of Augustus, the second founder of the Empire. The Centenary of the battle of Actium probably suggested the inauguration of the series; but, once started, the idea was developed and extended far beyond this immediate aim.

Mint of Rome. Æ.

The "Aes" coinage of Vespasian was struck mainly at the mint of Rome, the only other mint to issue on a considerable scale being Lugdunum. The Lugdunum issues can be distinguished by their likeness (*a*) to the gold and silver of that mint, (*b*) to the Lugdunum "Aes" of Nero. The Roman issues preserve the traditional style of the Senatorial mint. For the sake

⁴ Cf. for example, the butting bull, the capricorn and globe, the yoke of oxen, the captive with standard, &c.; cf. too the altar and the eagle on Asses of the reign.

⁵ In *Riv. Ital. di Num.*, 1911, pp. 427 ff.

of brevity, I shall give only a rough list of the obverse titles employed and a series of portraits. The coinage of the years A.D. 70-71, however, offers some special difficulties, and it will therefore receive a fuller treatment later (see below).

VESPASIAN.

Obverse legends.

IMP CAES VESPASIAN AVG P M TR P PP
COS II A.D. 70.

IMP CAESAR VESPASIAN AVG PM TR P PP
COS III A.D. 71.

IMP CAES VESPAS AVG PM TR P PP COS III
A.D. 71.

IMP CAES VESPAS AVG PM TR P PP COS IIII
A.D. 72.

IMP CAES VESP AVG PM TR P PP COS IIII
CENS A.D. 73-74 (July 1).

IMP CAES VESP AVG PM T P COS V CENS
A.D. 74.

IMP CAESAR VESP AVG COS V CENS
A.D. 74.

IMP CAES VESP AVG PM T P COS VI A.D. 75.

IMP CAES VESPASIAN AVG P M TR P PP
COS VII A.D. 76.

IMP CAES VESPASIAN AVG PM TR P PP
COS VIII A.D. 77-78.

TITUS.

Obverse legends.

T CAES VESPASIAN IMP PON TR POT
COS II A.D. 72 (- June 80).

T CAESAR VESPASIAN IMP III PON TR POT II
COS II A.D. 72 (July 1)-73 (June 80).

T CAESAR VESPASIAN IMP IIII PON TR POT
II COS II A.D. 72 (?)-73 (June 80).

T CAESAR VESPASIAN IMP IIII PON TR POT
III COS II A.D. 73 (July 1-).

T CAES VESP IMP PON TR POT COS II CENS
A.D. 73 (July 1-).

T CAES IMP PON TR P COS II CENS A.D. 73
(July 1-).

T CAES IMP PON TR P COS III CENS A.D. 74.

T CAESAR IMP COS III CENS A.D. 74.

T CAESAR IMP COS V A.D. 76.

T CAES IMP AVG F TR P COS VI CENSOR
A.D. 77-79.

The shorter legends are, in some cases, found only on dupondii and asses, not on sestertii.

DOMITIAN.

Obverse legends.

CAESAR AVG F DOMITIANVS COS DES II.
A.D. 72.

CAESAR AVG F DOMITIANVS COS III A.D. 74.

CAESAR AVG F DOMITIANVS COS IIII A.D. 75.

CAESAR AVG F DOMITIANVS COS V A.D. 77.

CAESAR AVG F DOMITIANVS COS VI A.D. 77-
79.

(On dupondii and asses the short form DOMITIAN is used.)

The legends, obverse and reverse, normally read l. to r., letters outwards; the direction r. to l. is found, but only very rarely on the obverse of coins with the head of Vespasian to l. This portrait alternates with the portrait r. in the last few years of the reign. The portraits of Titus and Domitian invariably face r.

(For sequence of portraits see Plates.)

II. *Mint of Lugdunum.* *N, R, Æ.*

N, R. The mint of Lugdunum struck for Vespasian in the distinctive style, already observed for Galba and Vitellius, from A.D. 69-73.⁶ Its issues were, especially in gold, considerably larger than those of any of the other provincial mints, and it clearly retained something of its old dignity and importance.⁷ But in A.D. 73 it appears to have been closed, not to be reopened until the time of Albinus (see below); its distinctive style disappears from the coinage and there is no sufficient evidence to make us believe that it continued to work as a branch of the Roman mint. [Pl. VI. 11-15.]

I append a conspectus of the coinage, which, it appears, is all of Vespasian:⁸

I. *Obv.*—Head laureate r. **IMP CAESAR VESPASIANVS AVG TR P** A.D. 69-71.

1. *Rev.*—**FORTVNA AVGVST** Fortune standing l., holding cornucopiae and rudder. *R.*

2. **IVDAEA DEVICTA** Judaea standing l., beside a palm-tree. *R.*

3. **LIBERTAS RESTITVTA** Libertas standing l., holding pileus and sceptre (Paris). *R.*

4. **MARS CONSERV** Mars standing facing, looking r., holding spear and trophy (Paris). *V.*

5. **TITVS ET DOMITIAN CAESARES PRIN IVEN** The princes riding r. *V.* [Pl. VI. 11.]

⁶ See article in *Num. Chron.*, 1914, quoted above, p. 187.

⁷ The war against the rebels on the Rhine was undoubtedly the immediate cause of this.

⁸ A denarius of Titus in B. M. with

Obv. Head laureate r. **T CAES IMP VESP PON TR POT**

Rev. Victory standing r. on globe, holding wreath **VIC AVG**

may perhaps belong here.

6. **TITVS ET DOMITIAN CAESARES PRIN IVEN** The princes seated l. *A*, *A*.
7. **TRIVMP AVG** Triumphal procession—captive, chariot, &c. *A*. [Pl. VI. 12.]
8. **VICTORIA AVGVSTI** Victory standing, holding shield above head. *A*.
9. **VICTORIA AVGVSTI** Victory flying l., holding wreath and palm (Paris). *A*.
10. Hand clasped over eagle and standards (Paris). *A*.

A. D. 70.

11. **COS ITER FORT RED** Fortune standing l., holding cornucopiae and rudder. *A*.
12. **COS ITER TR POT** Aequitas standing l., holding rod and scales. *A*, *A*.
13. **COS ITER TR POT** Neptune standing l., holding trident and dolphin. *A*.

A. D. 71.

14. **COS III FORT RED** Female figure standing l., holding caduceus and ball. *A*.
15. **COS III FORT RED** Fortune standing l., holding cornucopiae and rudder. *A*.
16. **COS III TR POT** Aequitas standing l., holding rod and scales. *A*.
17. **TR POT COS III** Aequitas standing l., holding rod and scales. *A*.

A. D. 71.

II. *Obv.*—Head laureate r. **IMP CAESAR VESPASIAN AVG PM TR P PP COS III.**

18. *Rev.*—**PACI AVGVSTI** Winged female figure advancing r., holding caduceus and raising fold of dress: in front a snake. *A*.

SPQR PP OB CS in oak-wreath. *A*.

A. D. 71.

III. *Obv.*—Head laureate r. IMP CAES VESPAS AVG
TR P COS III

19. COS III FORT RED Female figure standing l.,
holding caduceus and ball. Æ.

A. D. 71.

IV. *Obv.*—Head laureate r. IMP CAES VESP AVG
PM TR P IIII PP COS III

20. *Rev.*—VIC AVG Victory standing l. on globe,
holding wreath. Æ.

A. D. 72.

V. *Obv.*—Head laureate r. IMP CAES VESPAS AVG
PM TR PIIII PP COS IIII

21. *Rev.*—DE IVDAEIS Trophy. A. [Pl. VI. 13 *rev.*]

22. PACI AVGVSTI Winged female figure advancing
r. (as above). Æ.

On all these coins the legends, both obverse and reverse, read l. to r., inwardly. On the following coin the *Obv.* legend reads r. to l., outwardly.

A. D. 73 (?).

VI. *Obv.*—Head laureate r. IMP CAESAR VESPASIA-
NVS AVG⁹

23. *Rev.*—VESTA Round temple. A.

The style of lettering remains uniform throughout this series, the portrait undergoes considerable changes. A few aurei show a quite unusual portrait in high relief and of considerable beauty. The lettering and the form of obverse legend lead one to assign them to this mint, but they were probably struck as special

⁹ Whether the legend IMP CAESAR VESPASIANVS AVG, reading l. to r., is ever found at Lugdunum is not quite certain.

commemorative pieces, i.e. as medals rather than as ordinary coins, from dies prepared by skilful artists, and issued in limited quantities.¹⁰

A denarius in the British Museum shows :

Obv.—Head laureate r. IMP CAES VESP AVG P
M COS IIII

Rev.—TITVS ET DOMITIAN CAESARES PRIN
IVEN The princes seated l.

an obverse of the Roman, with a reverse of the Lugdunum mint—date A. D. 72. (For a discussion of this see below.)

Æ. There were issues from this mint at intervals from the beginning to the end of the reign. The portraits, on the whole, run parallel to those of the Lugdunum gold and silver, the types for the most part follow the Roman mint, but there are a few distinctive of Lugdunum. This mint for Aes had been opened by Nero to supply the special needs of Gaul, Britain, and Spain. Africa was, probably, supplied from Rome. Vitellius apparently used the mint but slightly for this metal,¹¹ Galba not at all.¹²

The following is a list of obverse titles employed at the mint :

VESPASIAN.

IMP CAESAR VESPASIANVS AVG P M TR P
A. D. 69-70.

IMP CAES VESPASIAN AVG PM TR P PP
COS II A. D. 70.

¹⁰ A series of aurei and denarii was struck by Vespasian for Galba at this mint.

¹¹ And only in the last few months of his reign.

¹² His Lugdunum issues are all posthumous.

IMP CAES VESPASIAN AVG PM TR P PP
COS III A.D. 71.

IMP CAES VESPASIAN AVG PM TR P PP
COS IIII A.D. 72.

IMP CAES VESPASIAN AVG COS IIII A.D. 72.

IMP CAES VESPASIAN AVG PM TR P PP
COS VIII A.D. 77-79.

IMP CAES VESPASIAN AVG COS VIII PP
A.D. 77-79.

IMP CAES VESPASIAN AVG COS VIII A.D. 79.

TITUS.

T CAES IMP AVG F PON TR P COS VI CEN-
SOR A.D. 77-79.

T CAES IMP AVG F TR P COS VI CENSOR
A.D. 77-79.

DOMITIAN.

CAESAR AVG F DOMITIANVS COS V A.D. 77-79

The shorter legends are, in some cases, found only on dupondii and asses, not on sestertii.

Among the most characteristic Lugdunum reverses are "PROVIDENT S. C. Altar" & "S. C. Eagle on globe".

From A.D. 72 onwards the classification of the "Aes" of Vespasian is absolutely straightforward; the earlier issues—particularly those of A.D. 71—present some curious difficulties. We find a variety of portraits, unlike the regular portraits of Rome and Lugdunum, and an extremely large series of reverse types, some of great interest. The question at once arises whether the whole of this varied series can be distributed over the two mints of Rome and Lugdunum. In all probability it can; but we must recognize here special issues—commemorating the end of the Civil Wars

and the suppression of the German-Gallic revolt—which, bearing so marked a medallion nature, were adorned with a profuse variety of fine and selected portraits. It is interesting to note that there is a series of “Aes” of Galba, quite detachable from the main body of his coinage, which curiously resembles the series just discussed in the fine and unusual character of its portraits and, in several cases, in reverse type. Mr. F. A. Walters has already suggested that Galba’s series was commemorative in nature and was issued at the close of his reign, in connexion with the adoption of Piso; while fully accepting the idea that it was commemorative, I think it probable that it was issued by Vespasian, not by Galba himself, in A. D. 71, side by side with the series discussed above. Galba had enjoyed extraordinary popularity in Spain and Southern Gaul and his partisans had subsequently espoused the cause of Vespasian, who might well be disposed therefore to favour them, the more so as the anti-Galban faction in Gaul had embraced the cause of Vitellius and afterwards thrown in its lot with Civilis and his rebels.

The following is a conspectus of the sestertii struck by Vespasian in A. D. 71—giving first a list of obverses, secondly a list of reverses, with notes of obverses with which they occur.

Obverses.

(R=Rome, L=Lugdunum.)

- R. 1. Bust of Vespasian bare, head laureate r. IMP
CAES VESPASIAN AVG PM TR P PP
COS III
- R. 2. Bust of Vespasian bare, head laureate r. IMP
CAES VESPAS AVG PM TR P PP COS III

These are what may be regarded as the normal portraits of the Roman mint, (2) succeeding (1).

- L. 1. Bust of Vespasian bare, head laureate r. IMP
CAES VESPASIAN AVG PM TR P PP
COS III
- L. 2. Bust of Vespasian bare, head laureate r. IMP
CAES VESPASIAN AVG PM TR P PP
COS III
- L. 3. Bust of Vespasian bare, head laureate r. IMP
CAES VESPASIAN AVG PM TR P PP
COS III

Three distinct successive portraits of the mint of Lugdunum.

1. Bust of Vespasian bare, head laureate r. Small die on large flan. IMP CAESAR VESPASIAN AVG PM TR P PP COS III
2. Bust bare, head laureate r. (small portrait). IMP CAES VESPASIAN AVG PM TR P PP COS III
3. Bust bare, head laureate r. (large portrait). IMP CAES VESPASIAN AVG PM TR P PP COS III
4. Bust bare, head laureate l. IMP CAES VESPASIAN AVG PM TR P PP COS III
5. Bust bare, head laureate r. IMP CAESAR VESPASIANVS AVG PM TP PP COS III
6. Bust with paludamentum, head laureate, r. IMP CAESAR VESPASIANVS AVG PM TP PP COS III
7. Bust with aegis, head laureate r. (often a globe below bust). IMP CAESAR VESPASIANVS AVG PM TP PP COS III

These seven portraits appear to me exceptional, either for Rome or Lugdunum, and were probably made for the special issue described above.

Reverses.

1. CAESAR AVG F DES IMP AVG F COS DES
IT S. C. Titus and Domitian standing face to
face. R.1, L.1, L.2, 2, 3, 4.
2. CONCOR AVG S. C. Concordia seated l., holding
palm and cornucopiae. R.2.
3. FIDES EXERCITVVM S. C. Clasped hands holding
eagle on prow. 4, 6.
4. FORTVNAE REDVCI S. C. Fortune standing l.,
holding rudder and cornucopiae. R.1, R.2, 4, 6.
5. HONOS ET VIRTVS S. C. Honos and Virtus
standing face to face. R.2, 6, 7.
6. IVDAEA CAPTA S. C. (1) Judaea seated on ground,
r.: behind her, palm and captive. R.1, R.2, 2, 3.
7. IVDAEA CAPTA S. C. (2). Judaea seated on ground,
l.: behind her, palm and captive. R.1, 3 (?).
8. IVDAEA CAPTA S. C. (3). Judaea seated on ground:
behind her, palm and warrior. R.1, L.3, 3.
9. LIBERTAS PVBLICA S. C. Libertas standing l.,
holding pileus and sceptre. R.1, 3, 5.
10. LIBERTAS RESTITVTA S. C. Emperor standing
l., raising a kneeling woman. 5, 6.
11. MARS VICTOR S. C. (1). Mars standing facing,
holding spear and trophy. R.1, 4.
12. MARS VICTOR S. C. (2). Mars advancing l., hold-
ing Victory and trophy. R.1, R.2, 2.
13. PAX AVGVSTI S. C. (1). Pax standing l., holding
branch and cornucopiae. R.1, R.2, 3, 5, 6.
14. PAX AVGVSTI S. C. (2). Pax standing r. setting
fire to a heap of arms. R.2.
15. PAX P... ROMANI S. C. Pax standing l., holding
branch and cornucopiae. R.1.¹³
16. ROMA S. C. (1). Roma standing l., holding Victory
and spear. R.1, R.2, L.3, 3, 4.

¹³ Possibly "IMP" should be read (the coin is worn at this point):
cp. rev. of Galba, "VICTORIA IMPERI ROMANI S. C."

17. **ROMA S. C.** (2). Roma standing l., holding Victory and eagle, leaning on a trophy. 7.
18. **ROMA S. C.** (3). Roma seated l., holding Victory and parazonium. L.1, L.2.
19. **ROMA S. C.** (4). Roma seated l., holding Victory and parazonium; in background, the seven hills. 2, 6, 7.
20. **ROMA RESVRGES S. C.** Emperor standing l., raising a kneeling woman. R.1, 3.
21. **S. C.** Mars advancing l., holding spear and trophy. R.2, 2, 3, 4, 5.
22. **S. C.** Front view of hexastyle temple. R.1.
23. **S. C.** Victory advancing l., holding palm and wreath. R.1.
24. **S. C.** Shrine of Isis, with semicircular pediment. 7.
25. **S. C.** Quadriga r. R.2.
26. **S.P.Q.R.ADSERTORI LIBERTATIS PVBLICAE** in oak-wreath. R.1, 5, 6.
27. **S. P. Q. R. OB CIVES SERVATOS** in oak-wreath. R.1, 3.
28. **SALVS AVGVSTA S. C.** Salus seated l., holding patera and sceptre. R. 2.
29. **SIGNIS RECEPTIS S. C.** Victory standing l., holding out standard to Emperor standing on platform. 1, 6.
30. **SPES AVGVSTA S. C.** Spes standing l. and greeting three soldiers, one of whom hands her a standard. 2.
31. **VICTORIA AVG S. C.** Emperor standing l., sacrificing over an altar, crowned by Victory. R.1.
32. **VICTORIA AVGVSTI S. C.** Victory standing r., inscribing a trophy. R.1, R.2, 2, 4, 5, 7.
33. **VICTORIA AVGVSTI S. C.** Victory flying r., Emperor standing l. 5, 7.

The solution of the problems of A. D. 71 will probably involve the solution of earlier problems of the reign : I have not dealt in detail with the coinage of A. D. 69-70 owing to lack of sufficient reliable material.

III. *Mint of Tarraco.* *A*, *A*.

This mint issued an interesting series of aurei and denarii till about the end of A. D. 70. The style of portraiture is anything but uniform, and one might be tempted to assign the coins to two or even three mints, did not links exist which closely connect coins, at first sight very unlike one another. A conspectus of this coinage follows :

- I. *Obv.*—Head laureate r. **IMP CAESAR VESPASIANVS** (r. to l. outwardly).
1. *Rev.*—**IVDAEA** Judaea seated r., mourning: behind her, trophy. *A*.
- II. *Obv.*—Head laureate r. **IMP CAESAR AVG VESPASIANVS** (r. to l. outwardly).
2. *Rev.*—**CONSENSVS EXERCITVVM** Mars advancing l., holding spear and eagle. *A*.
[Pl. VI. 17.]
- III. *Obv.*—Head laureate r. **IMP CAESAR AVG VESPASIANVS** (l. to r. inwardly).
3. *Rev.*—**HISPANIA** Hispania standing l., holding corn-ears, spears, and shield. *A*. (Paris.)
[Pl. VI. 18.]
4. *Rev.*—**MARS VLTOR** Mars advancing r., holding spear and trophy. *A*. (B. M. and Paris.)
5. *Rev.*—**PAX** Pax standing l., holding caduceus, corn-ears, and poppy. *A*.
- IV. *Obv.*—Head laureate r. **IMP CAESAR VESPASIANVS AVG** (l. to r. inwardly).
6. *Rev.*—**COS ITER FORT RED** Fortune standing l., holding cornucopiae and rudder. *A*. [Pl. VI. 18.]
7. *Rev.*—**COS ITER TR POT** Pax seated l., holding caduceus and branch. *A*. [Pl. VI. 19.]
8. *Rev.*—**COS ITER TR POT** Neptune standing l., holding dolphin and trident. *A*.
9. *Rev.*—**IVDAEA** Judaea seated r., mourning: behind her, trophy. *A*, *A*.

And with one reverse, apparently later than the others:

10. *Rev.*—**COS DESIG III TR POT** Aequitas standing l., holding scales and rod. *A.* (Baldwin, 1919.)
 V. *Obv.*—Head laureate r. **IMP CAESAR VESPASIANVS AVG PM TR P** (l. to r. inwardly.)
 11. *Rev.*—**COS ITER TR POT** Pax seated l., holding caduceus and branch. *A.*

A small series of denarii with

- Obv.*—Head laureate l. **IMP CAESAR VESPASIANVS AVG** (l. to r. inwardly.)
 12. *Rev.*—**LIBERTAS PVBLICA** Liberty standing l., holding pileus and wand. *A.*
 13. *Rev.*—**VICTORIA IMP VESPASIAN** Victory standing l. on globe holding wreath and palm. *A.*
 [Pl. VI. 20.]

probably belongs to the same mint.¹⁴ In portraiture and lettering it diverges somewhat from any other series, and no one seems to have known for certain whether to assign it to East or West. I think it is probably Spanish; the reverse types in particular are all closely connected with the Spanish series of Galba.

The reverse legends invariably read l. to r. inwardly, except in the few cases, specially noted above, where they read vertically downwards on r. and l.

The Tarraco coins of Vitellius with head r., read r. to l., outwardly, in obverse legend. The earliest coins of Vespasian follow them. The legend of Vitellius was "A. Vitellius Imp Germanicus", omitting

¹⁴ Laffranchi assigns it to Antioch. On Pl. II of his article he illustrates a number of coins, some assigned here to Tarraco, which he attributes to an "unknown mint". I have only dealt with those which I have been able to examine personally. My impression is that all except the aureus with *rev.* **MARS CONSERV** belong to the "Tarraco" group.

"Augustus"; and in this omission the earliest legend of Vespasian, "Imp Caesar Vespasianus" follows it.

"Augustus (Aug)" is then inserted between "Caesar" and "Vespasianus" and finally is placed in its normal position at the end of the legend. During the period in which the legend "Imp Caesar Aug Vespasianus" was in use, the direction of legend was changed to l. to r., inwards. The coins of Vitellius with head l. read l. to r., letters inwardly on obverse; the little series of Vespasian's with head l. follows them.

A few of the links that connect the various parts of this series may here be noted. The Paris aureus with *rev.* HISPANIA (strong evidence in favour of the Spanish origin of the coin) is closely related by obverse die to the British Museum aureus with *rev.* MARS VLTOR. Another Paris aureus, linked by its reverse MARS VLTOR to the last-mentioned coin, is closely related by obverse to other British Museum aurei with *rev.* PAX and IVDAEA.

IV. *Mint of Poetovio (?)*.

It would appear probable *a priori* that the armies of Illyricum, on joining Vespasian, signalized their choice by a special coinage. We can trace that coinage in the following group of denarii :

Obv.—Head laureate r. IMP CAESAR VESPASIANVS AVG (l. to r. inwardly).

1. *Rev.*—CONSEN EXERCIT (in vertical lines). Two soldiers standing l. and r. and clasping hands. *R.* (Paris.)

2. *Rev.*—CONSENSVS EXERCIT(VS) Two soldiers standing l. and r. and clasping hands. *R.*

[Pl. VII. 1.]

3. *Rev.*—GENIVM P R Genius standing l., holding cornucopiae and patera. *R.*

4. *Rev.*—**PACIS EVENT(VM)** Genius standing l., holding corn-ears and patera. *R.*
5. *Rev.*—**ROMA PERPETVA** Roma seated l., holding Victory and parazonium. *R.* [Pl. VII. 2.]

The portrait is curious and unusual. The reverse types have an original flavour. There are several special tricks, for instance, the accusative case ("genium", "eventum") and the writing of this reverse legend in vertical lines.¹⁵ We have to deal with a new mint rather Western than Eastern in its affinities. The attribution to Illyricum is strongly probable: Poetovio was perhaps the place of mintage. (Cp. Tac. *H.* iii. 1. Council of War held there.)

The following mule is of great interest:—

Obv.—Head laureate r. **IMP CAES VESP AVG PM
COS IIII**

Rev.—Two soldiers standing, clasping hands. **CONSEN
EXERCIT** (in vertical lines). *R.* (Paris.)

The obverse is certainly of the mint of Rome, the reverse no less certainly of the mint above assigned to Poetovio (?). We noted above a similar mule with *obv.* of Rome, *rev.* of Lugdunum. These coins appear to afford a material support for the plausible suggestion, that on the closing of the non-Roman mints there was a transfer of personnel and material to Rome.¹⁶

¹⁵ This last trick reappears on coins of Tarraco, but as it appears there first on coins of Vespasian it may have been learnt from this mint.

¹⁶ Other mules are:

Cohen 44. Paris. *R.*

Obv. **IMP CAES VESP AVG PM TR P PP
COS III** Head laureate r. Lugdunum.

Rev. **AVGVR PON MAX** Sacrificial implements.
Rome.

V. *Mints of Asia Minor.* *N.*, *Æ.* (See Imhoof-Blumer, *Revue Suisse de Num.* 1905, pp. 161 ff.)

Before discussing the question of mintage, I will give a summary of the issues concerned :

The following reverse types are found :

- (1) **AVG** in wreath.
- (2) **CONCORDIA AVG** Female figure (Ceres?) seated l., holding corn-ears.
- (3) **LIBERI IMP AVG VESPAS** Busts of Titus and Domitian facing one another.
- (4) (a) **PACI AVGVSTAE** Victory advancing l., holding wreath.
- (b) **PACI AVGVSTAE** Victory advancing r., holding wreath.
- (5) **PACI ORB TERR AVG** Female bust, draped, turreted, r.

The following groups of coins, distinguished by obverse legend and (in some cases) by mint-mark, may be traced :

(1) **VESPASIAN.**

Obv.—Head laureate r. **IMP CAES VESPAS AVG**
No mint-mark.

Rev.—1, 3, 4 a, 5. All *Æ.*

Cohen 78. Paris. *Æ.*

Obv. **IMP CAESAR VESPASIANVS AVG**
Head laureate r. Rome.

Rev. **CONSEN EXERCIT** Two soldiers. Poetovio.

After Cohen 285. Paris. *Æ.*

Obv. **IMP CAESAR VESPASIANVS AVG**
Head laureate r. Rome.

Rev. **PACI AVGVSTI** Winged female figure.
Lugdunum.

Cohen 288. Paris. *Æ.*

Obv. **IMP CAES VESP AVG PM** Head laureate
r. Rome.

Rev. **PACI AVGVSTI**, as above. Lugdunum.

(2) VESPASIAN.

Obv.—Head laureate r. IMP CAES VESPAS AVG
Mint-mark \ominus

Rev.—1, 4, 5. All \mathcal{A} . (Add Cohen 292. \mathcal{A} . Paris.
Variant of 5. Female bust draped l.)

(3) VESPASIAN.

Obv.—(a) Head laureate r. IMP CAESAR VESPA-
SIANVS AVG [Pl. VII. 3.]

(b) Head laureate r. IMP CAESAR VESPA-
SIANVS AVG P Mint-mark ∇

Rev.—3. \mathcal{A} . (With *obv.* a.,* B. M.; with *obv.* b, Berlin.)

(4) VESPASIAN.

Obv.—Head laureate r. IMP CAESAR VESPAS
AVG COS II TR P PP Mint-mark \ominus

Rev.—1, 2, 3, 4, 5. All \mathcal{A} . [Pl. VII. 4.]

(5) VESPASIAN.

Obv.—Head laureate r. IMP CAESAR VESPAS
AVG COS II TR P PP Mint-mark >B

Rev.—2 (\mathcal{A} , Berlin; \mathcal{A} , Walters Coll.), 3 (\mathcal{A}), 5 (\mathcal{A}).

(6) VESPASIAN.

Obv.—Head laureate r. IMP CAESAR VESPAS
AVG COS III TP P PP Mint-mark >B

Rev.—5 (\mathcal{A}). [Pl. VII. 5.]

(7) VESPASIAN.

Obv.—Head laureate r. IMP CAESAR VESPAS
AVG COS III TR P PP Mint-mark EPE or
EPE

Rev.—1, 2, 3, 4 b, 5. All \mathcal{A} . [Pl. VII. 6.]

TITUS.

Obv.—Head laureate r. IMPERATOR T CAESAR
AVGVSTI F Same mint-mark.

Rev.—1 (\mathcal{A}), 2 (\mathcal{A} , \mathcal{A}), 4 b (\mathcal{A}). [Pl. VII. 7.]

DOMITIAN.

Obv.—Bust, draped, cuirassed, head bare, r. DOMITIANVS CAESAR AVG F Same mint-mark.

Rev.—1, 2, 4 b. All A.

(8) VESPASIAN.

Obv.—Head laureate r. IMP CAESAR VESPAS AVG COSV TR P PP Mint-mark, star.

Rev.—5 (A).

TITUS.

Obv.—Head laureate r. IMP T CAESAR COS III Same mint-mark.

Rev.—2, 4 b. Both A.

The dating of these groups causes no difficulty.

Groups 1-3 belong to the very beginning of the reign—*circa* August A.D. 69—early A.D. 70, groups 4, 5 to A.D. 70, groups 6 and 7 to A.D. 71 (the undated coins of Titus and Domitian presumably going with their father's dated ones), group 8 to A.D. 74.

The question of mints is less simple.

The mintmark of group 7, **EPE** has long been recognized as "EPHE"—Ephesus; the mint-mark of groups 5 and 6, **>B-**, is certainly Byzantium,¹⁷ though it has not as yet been generally recognized and has been usually dismissed as inexplicable. The mint-marks of groups 2 and 4 (**⊕**) and group 3 (**⊖**) remain in doubt.¹⁸ On the analogy of **EPE** and **>B-**, we expect a Latin

¹⁷ Cp. Tac. *H.* ii. 83. Mucianus "classem e Ponto Byzantium adigi iusserat"; Tacitus seems to imply that Byzantium was a main base of operations in the first stages of the war; in ch. 84 he goes on to speak of Mucianus's endeavours to raise money.

¹⁸ B. Pick has suggested Phocaea. The suggestion is, *a priori*, extremely unlikely; Phocaea was a town of slight importance at the time. See, however, note on p. 225.

monogram and it is just possible that we have here shorthand forms of the latter (ϞB). The style is quite consistent with this suggestion and I would tentatively assign these groups (2-5) together with group 1 (no mint-mark) to Byzantium. Group (8), probably commemorating the completion of Vespasian's first quinquennium, may belong to Ephesus, but it is conceivable, at least, that it may belong to another mint.¹⁹ Asia boasted many notable cities and Vespasian may not have confined to Ephesus the honour of issuing imperial currency.

The motive for the choice of Byzantium as the first mint was certainly military; it was found convenient to strike money at the base of operations. The transference of the mint to Ephesus, when warlike operations were entirely over, is equally intelligible, for Ephesus was the centre of the provincial coinage (the so-called "Cistophoric Medallions"), and had therefore first claim to issue these imperial coins, which for the time replaced the provincial.

For asses of Vespasian, assigned by Imhoof-Blumer to Asia Minor, see below.

VI. *Mints of the Syrian District.*

Here again a survey of the coinage must precede questions of mintage.

Group 1. VESPASIAN AND TITUS.²⁰

1. *Obv.*—Head of Vespasian laureate l. IMP CAESAR
VESPASIA AVG

¹⁹ Why should not Ephesus continue to sign with its own mark, EPE?

²⁰ Undated denarii of Vespasian with *Obv.* IMP CAESAR VESPASIANVS AVG and head laureate r. *Rev.* (1) VIRTVS AVGVST Virtus standing r., holding spear and parazonium and (2) AVG in wreath may belong here. [Pl. VII. 9.]

- Rev.*—Head of Titus laureate r. **T FLAVI VESPASIANVS CAESAR** *A.*
2. *Obv.*—Head of Vespasian, laureate r. **IMP CAESAR VESPASIANVS AVG**
- Rev.*—Head of Titus laureate r. **IMP T FLAVIVS CAESAR AVG F** *A.* [Pl. VII. 8.]
3. *Obv.*—Head of Vespasian, laureate r. **IMP CAESAR VESPASIANVS AVG**
- Rev.*—Head of Titus laureate r. **IMP T FLAVIVS CAESAR AV F** *A.* (Paris.)
- Group 2. **VESPASIAN, VESPASIAN AND TITUS, AND VESPASIAN, TITUS, AND DOMITIAN.**
- Obv.*—Bust of Vespasian draped, head laureate l. **IMP VESPAS AVG PM TRI P P P COS IIII**
4. *Rev.*—Vespasian standing l., extending hand to female figure, kneeling r. **PAX AVGVSTI** *A.*
[Pl. VII. 10.]
5. *Rev.*—Head of Titus, bare, r. **IMP CAES VES . . . AVG F TRI PII COS II** *A.* (Jameson Coll.)
Found at Ephesus.
6. *Rev.*—Heads of Titus and Domitian facing one another. **CAE DVM ET TI CAES IMP VESPAS** *A.* (Montagu Sale.)

The following denarii are to be connected with this group of aurei.

Group 2^a. **VESPASIAN.**

- Obv.*—Head of Vespasian laureate r. **IMP CAES VESP AVG P M COS IIII**
7. *Rev.*—**CONCORDIA AVGVSTI** Female figure seated l., holding patera and cornucopiae. *A.*
8. **NEP RED** Neptune standing l., holding acrostolium and trident. *A.*
9. **VICTORIA AVGVSTI** Victory advancing r. to crown standard. *A.* [Pl. VII. 11.]
10. Judaea seated r. : behind her, palm-tree and Roman warrior. *A.*
11. Emperor in quadriga r. *A.*

TITUS.

Obv.—Bust of Titus, draped, head laureate r. **T CAES
IMP VESP PON TR POT**

12. *Rev.*—**CONCORDIA AVGVSTI**, as above. *Æ*.
[Pl. VII. 12.]
13. **NEP RED**, as above. *Æ*.
14. Judaea seated r., as above. *Æ*.
15. Prince in quadriga, r. *Æ*.

Aurei of Vespasian and Titus (and a few denarii), with the above obverse and reverse types, show all the characteristics of the Roman mint and must certainly be assigned to it. These denarii, on the other hand, in general style and particularly in lettering, clearly diverge from it. They are Eastern—showing no affinities with any of the Western mints.²¹

Group 3. VESPASIAN, VESPASIAN AND TITUS, AND TITUS.

Obv.—Head of Vespasian, laureate r. **IMP VESPA
CAESAR AVGVS** [Pl. VII. 13 *obv.*]

16. *Rev.*—**ROMA** Roma seated r. on shield, holding parazonium and spear. *Æ*.
17. *Rev.*—**IMP
T
CAESAR** In three lines on shield laid on two crossed spears. *Æ*. (Hall Coll.)

Obv.—Head of Vespasian, laureate r. **IMP CAESAR
VESPASIANVS AVG**

18. *Rev.*—**PONT MAX TR POT** Female figure seated r., holding branch and sceptre. *Æ*. (Ponton d'Amécourt Sale.)
- Obv.*—Head of Titus, laureate r. **IMP T CAESAR
VESPASIANVS**

²¹ Cp. Paris aureus with *Obv.* Head of Vespasian laureate r. **IMP CAES VESP AVG PM** in style of these denarii. *Rev.* Head of Titus, bare, r. **IMP CAES VESP AVG P
TRIP [II] COS II** (cp. group of aurei above): a definite connecting link.

19. *Rev.*—**CONCORDIA AVG** Concordia seated l., holding patera and cornucopiae. [Pl. VII. 13 *rev.*]
20. *Obv.*—As above.
Rev.—**IVDAEA DEVICTA** Victory standing r., inscribing **IMP T CAES** on shield fastened to palm-tree. *A.* (Paris.)
21. *Obv.*—As above.
Rev.—**[VIRTVS] AVGVSTI** (?) Virtus standing r., holding spear and parazonium. End of *rev.* legend doubtful. *A.* (Coll. Trivulzio. *Boll. di Num. e Sfr.* iii. 18.)

Group 4. VESPASIAN.

Obv.—Bust bare, head radiate r. **IMP CAES VESPASIANVS AVG**

22. *Rev.*—Victory flying l., holding wreath and palm. **VICT AVG** *A.* (Paris.)

Group 5. Denarii of VESPASIAN, TITUS, AND DOMITIAN.

VESPASIAN.

Obv.—Head of Vespasian, laureate r. **IMP CAESAR VESPASIANVS AVG** (r. to l.)

23. *Rev.*—**COS VII** Pegasus r. (l. to r.). [Pl. VII. 14.]
24. **PON MAX TR P COS VII** Winged caduceus (r. to l.)
25. **FIDES PVBL** Clasped hands holding caduceus, corn-ears, and poppies. (r. to l.)

TITUS.

Obv.—Head of Titus, laureate r. **T CAES IMP VESP CENS** (r. to l.)

26. *Rev.*—**COSV** Minerva r. with lance and shield: before her, owl.
27. **COSV** Eagle, head turned r., on cippus. [Pl. VII. 15.]

DOMITIAN.

Obv.—Head of Domitian, laureate r. CAES AVG F
DOMIT COS III (r. to l.)

28. *Rev.*—Spes advancing l., holding flower. PRINCEPS
IVVENTVTIS (l. down, r. up).

Obv.—Head laureate r. CAES AVG F DOMITIANVS.

29. *Rev.*—COS. IIII Eagle, head turned r., on cippus.

30. FIDES PVBL. Clasped hands holding caduceus.

31. PON MAX TR P COS IIII Winged caduceus.

Group 1 belongs to the very beginning of the reign, July 69 onwards, and so may groups 3 and 4, though probably they are a little later (end of 69–70).

Group 2, on the other hand, belongs to the year A.D. 72–73. (COS IIII Vespasian, COS II TR P II Titus.)

Group 5 belongs to the years A.D. 74–76.

As regards mintage, group 1 is certainly to be assigned to Antioch; for (a) it is very close in style to the Antioch tetradrachms, (b) it is the only series which can be assigned to that mint at the beginning of the reign, and we know from Tacitus (*H.* ii. 82) that gold and silver were struck there immediately after Vespasian's election as Emperor. There are few denarii of this group; the supply of silver, mentioned by Tacitus, consisted partly of the normal Antioch tetradrachms. Laffranchi assigns the coins to Alexandria, but the evidence of coins and history tends against him.

Group 2, though quite separable in style from group 1, may also belong to Antioch.²² It certainly belongs to that part of the world and, between A.D. 69 and 72, there is room for some variation of style.

²² Caesarea in Cappadocia is a possible alternative (suggested by Rev. E. A. Sydenham).

The denarii of group 2^a are also Eastern and presumably also of Antioch. Their exact relation to the Roman coins of similar types is rather difficult to understand; at present, it seems, we have to record the fact that we find an issue distributed over the two mints of Rome and Antioch.

Group 3 shows very close resemblance of style to tetradrachms of an uncertain Phoenician mint (Tyre?)²³ and, wherever these latter are finally placed, must go with them.

Group 4 may belong to Judaea, as Laffranchi suggests: it is certainly Eastern.

Group 5 shows types used at the Roman mint, but a style which appears to be Eastern, though not of either Antioch or Ephesus. It was perhaps struck for Lycia and Pamphylia, which in A. D. 74 were established as one imperial province. (Note the Pegasus type, suitable to Lycia with its Bellerophon legend.)

VII. *Mint of Commagene.*

The credit of discovering this mint belongs to the late Commander Mowat, who, in an interesting article in the *Revue Numismatique* (1911, pp. 423 ff.), picked out these issues and the earlier issues with similar types of Tiberius and connected them with the annexation of Commagene to the Empire, first by Tiberius in A. D. 18 and a second time by Vespasian in A. D. 72.²⁴

A conspectus of this coinage follows:

VESPASIAN.

I. *Obv.*—Head laureate r. IMP VESP AVG P M T P

²³ Cf. B.M.C. *Phoenicia (Imperial Provincial Coinage)*, pp. 298 ff.).

²⁴ Note the crossed cornuacopiae types. Cp. B.M.C. *Galatia, &c. (Commagene)*, pp. 106 ff.).

- II. *Obv.*—Head laureate l. **IMP CAESAR VESP AVG**
 1. *Rev.*—**S. C.** in wreath. As.
- III. *Obv.*—Head laureate l. **IMP VESP AVG**
 2. *Rev.*—**P M TR POT PP** Winged caduceus upright.
 Semis.
- IV. *Obv.*—Head laureate r. **IMP CAESAR VESPASIA-
 NVS AVG** (or **VESPASIAN**)
- V. *Obv.*—Head laureate l. **IMP CAESAR VESPASIAN
 AVG**
 3. *Rev.*—**PON MAX TR POT PP COSV CENS**
 Winged caduceus between crossed cornucopiae.
 Dupondius.
- VI. *Obv.*—Head laureate r. **IMP CAESAR VESPASIAN
 AVGVSTVS**
 4. *Rev.*—**PONT MAX TR POT PP COS VIII CENS
 S. C.**

Female figure (Annona?) standing l., holding corn-ears in r. hand and cornucopiae in l. Dupondius.
 (Imhoof-Blumer Coll. Cp. *Rev. Suisse de N.*, xiii, p. 178.)

A variant in the same collection shows Annona wearing modius and holding poppies as well as corn-ears. Both these coins came from Smyrna.²⁵

TITUS.

- I. *Obv.*—Head laureate r. **T CAESAR IMP PONT**
 II. *Obv.*—Head laureate r. **T CAESAR IMP COSIII
 CENS**
 5. *Rev.*—**TR POT COS III CENSOR** Winged caduceus
 between crossed cornucopiae. Dupondius.

²⁵ A dupondius in the B. M., apparently with the same legends as the above, came in with a number of Greek coins of Antioch in Pisidia, &c. The reverse type is doubtful. Other coins of Vespasian of this mint with dates **COS IIII**, **COS VII**, and **COS VIII** are quoted by Mowat (*op. cit.*). Mowat assigns these pieces to the mint of Antioch: I incline to place them with the others described above.

DOMITIAN.

- I. *Obv.*—Head laureate I. CAESAR AVGVSTI F
 6. *Rev.*—DOMITIANVS COSII Winged caduceus
 between crossed cornuacopiae. Dupondius.
- II. *Obv.*—Head laureate I. CAESAR DOMIT COS II
 7. *Rev.*—S. C. in wreath. As.

If we are right in assigning these issues to Comma-gene, they will date from late in A.D. 72 onwards. Imhoof-Blumer regarded his two coins with *rev.* Annona, as Eastern, but was inclined to assign them to the Asia Minor district. It appears to me that they fit naturally into this group; the letters S. C. on the reverse are, in any case, surprising, and perhaps express nothing more than a desire to imitate the Senatorial currency.

The coins appear to be of three denominations—dupondii, asses, and semisses.

It remains to characterize briefly the coinage policy of Vespasian. He came to the throne in a period of confusion, when the system²⁶ which had gradually evolved from the time of Augustus to that of Nero had been thrown out of gear. Raised to the throne away from Rome like his predecessors Galba and Vitellus, he was led like them to issue his first imperial coins from provincial mints. But once firmly settled in power he showed clearly what his own policy was to be. By the end of the year A.D. 76 Rome was the only mint left to strike gold and silver. By the end of the reign the issue of "Aes" was similarly

²⁶ For this system cp. my article, "Mints of the Early Empire" in *J. R. S.*, 1917.

centralized in the Senatorial mint.²⁷ With Vespasian, in fact, begin the greatest days of the mints of Rome, when from them flowed the whole supply of gold and a large part of the supply of silver and "Aes" for the whole Empire. A great increase of personnel must have been required and we may safely assume that it was chiefly provided by the incorporation of the staff of the provincial mints, now closed, in the Roman.²⁸ But great as the demands undoubtedly were, Rome proved equal to them; not until the days of Septimius Severus was her essential primacy in coinage again challenged.

It may, of course, be questioned whether this centralization of coinage was really as complete as I have just suggested. May not a number of provincial mints have existed, which acted simply as branches of the Roman mint and issued coins indistinguishable in style and fabric from the Roman issues?²⁹ It is of course impossible to prove the negative completely but strong reasons can be adduced for thinking that this was not the case. When civil war again rent the Empire in the years A.D. 193-197, Niger struck at Antioch and Albinus, a few years later, at Lugdunum. Both these series are quite distinct from the regular Roman issues. Now, had there been such branches of the Roman mint in the provinces as we have suggested above, Antioch and Lugdunum could hardly have

²⁷ The main numismatic evidence on which these statements are based is, of course, the uniformity of style in the coinage in all metals, which is found from now on to prevail.

²⁸ For evidence of close connexion between Rome and provincial mints towards the time of their closing, see above.

²⁹ Modern parallels to such a system are too common to require enumeration.

failed to possess them, and, had they possessed them, the first issues, at least, of Niger and Albinus would have shown a close connexion with the previous issues. This is not the case. The conclusion clearly is that a mint for Imperial coinage did not exist either at Antioch or at Lugdunum in the year A. D. 193. We may therefore assume as a sound working hypothesis that, from Vespasian to Septimius Severus, Rome was actually the centre of all Imperial coinage.³⁰





The subsequent history of the Roman mint and of the provincial mints, which in the third century grew up beside it, lies beyond the scope of the present paper. It has already perhaps exceeded its proper limits; but a study of the mints of Vespasian seemed incomplete without some such appraisal of his policy as has been here attempted.

H. MATTINGLY.

³⁰ Provincial issues in silver and copper, issued by imperial authority but for circumscribed areas of the Empire, continue of course to exist. They do not affect our present argument, but a close study of them is urgently required.

NOTE.

Through an unfortunate oversight, two errors have crept into the Plates. On Pl. VI the *obv.* and *rev.* types of No. 13, and on Pl. VII the *obv.* and *rev.* types of 13 should be separated.

P. 215. For the mint of the coins marked  and , Philippi, suggested by Mr Hill, is far more probable than Phocaea;  would read "ΦΙ", and  would read "ΠΙ". Were it not for the distance between Byzantium and Philippi, which makes it hard to explain close similarity between their issues, I should adopt it in preference to the text.

XIV.

THIRD-CENTURY ROMAN MINTS AND MARKS.

THE object of the following notes is to bring together some portions of the mass of information that has been excellently collected by Viennese, French, and Italian numismatists, but is difficult of access, being published in several languages, and in various books and periodicals, some of which are scarce.

The conclusions of those writers have been considered with reference to the coins themselves; some criticism on them is offered, and where they are not adopted, the reasons for dissent are set out.

The period dealt with extends from the accession of Valerian and Gallienus in A.D. 253, through the partial reform of Aurelian, down to the drastic one of Diocletian in 296.

Since the reform of Caracalla the monetary system of the Empire had comprised the following denominations of coins, viz.:

Gold.—Aurei and some half-aurei (quinarii), which always approximated closely to their true standard both in weight and alloy.

The Silver Series.—(1) Antoniniani, distinguished by the radiate crown of an Emperor and a crescent under the bust of an Empress. (2) Denarii, on which the Emperor wears a laurel crown and an Empress lacks her crescent, and (3) Quinarii, distinguishable by size only from the denarii. Since the reign of Septimius

Severus these coins had been struck in an alloy of white metal instead of good silver.

The Bronze Series.—Sestertii, dupondii and asses.

Medallions were occasionally struck in all metals.

In the following notes reference is generally made to the antoniniani (on which and on the aurei most of the mint-marks will be found) unless the contrary is stated.

In the earlier years of the third century the Empire relied for most of its currency on the two great mints of Rome and Antioch. The latter mint was opened in or about A. D. 193 and used by Severus. It struck largely from 197 to 202, but then appears to have been disused till 218, when it recommenced an activity which was thereafter practically continuous. Examination of the coins shows that, at least from the time of Gordianus Pius, one or more other mints were also at work, though their output does not appear to have been large. Their coins are distinguishable from those of Rome and Antioch, and fall into two classes. Count de Salis, whose opinion was of great weight, and whose work has done much for the arrangement of the National collection, attributes one of those classes to Milan. Unfortunately, he left no record of his reasons, but it is interesting (in view of certain suggestions to be made hereafter) to note that the coins so attributed bear portraits in somewhat higher relief than those of the two great mints. The other class shows low relief and a large head and face, heavy featured, with a grave expression, which characteristics will be found on the coins struck at Siscia at a later date. It seems probable that this class issued from some mint working in Central Europe, not necessarily

at Siscia. Mr. Mattingly has suggested Viminacium as a possible mint city and this suggestion is also made by Signor Laffranchi. It is not clear that these supplemental mints were at work simultaneously, but it is evident that the empire required mintage facilities additional to those of Rome and Antioch, and that they were provided in the provinces lying between those two cities.

The decline of the Roman coinage, which had commenced before the end of the Second Century, resulted, about the middle of the reign of Valerian and his family (253-268), in the use of so poor an alloy that the metal of the coins of the silver series ceased to have any resemblance to silver, and their position in the monetary system was only indicated by a surface wash of white metal. At the same time the gold issues became irregular in size, weight, and alloy, and the coinage of true bronze almost ceased.

The debasement of the metal offered opportunities to fraudulent moneyers, and it became important to adopt some means of identifying the persons responsible for individual issues. From this need there grew up a system of mint marking which was at first imperfect and irregular, but culminated, under the reforms of Diocletian and Constantine the Great, in a complete series of marks on almost every coin, indicating the mint city, the number of the officina or workshop, and the issue to which the coin belonged.

When this practice is completely carried out it becomes possible, by reference to historical events, style, and other considerations, to arrange the coins according to their places of origin and in accurate chronological order. Even where the marking is

occasional or incomplete, it will still be found of much assistance to the student.

The practice of using a city mark was curiously slow in coming into vogue. It would be reasonable to expect that that form of identification would at once suggest itself and become universal, but the fact is that, although such marks as **R** (Rome) and **S** (Siscia) do occasionally occur even so early as the reign of Gallienus, it was not commonly adopted until after the reform of Diocletian, prior to which it is most often necessary to rely on the style of the coin, and the identification of the other marks that it bears with the mint of issue, as grounds of attribution. The use of a city mark is somewhat frequent on the gold coinage, and a comparison of the style of baser coins with marked aurei often assists the attribution of the former.

The officinae are distinguished by their numbers which are indicated by figures I, II, III, IIII, &c., by Latin characters and numerals, P, S, T, Q, IV, V, VI, VII, VIII, VIII, IX, X, XI, XII (U and 4 being sometimes used for V and VI and N for IX) or by Greek numerals A, B, Γ, Δ, Ε, Σ, Ζ, Η. The number 9 is rarely represented by Θ (to which, as the initial of *θάνατος*, there seems to have been a superstitious objection) but appears as N, ΕΔ, or *. Where a higher number of officinae has to be indicated resort is generally had to the Latin numerals X, XI, and XII. A series of dots ., .., ..., and, is used at one or two mints, the Latin letters A, B, C, D at others, and there are other peculiarities of treatment, such as the carrying of a portion of the reverse legend into the exergue, which were confined to certain mints and are there-

fore means of identification. Office marks are almost always on the reverse of the coin, the salient exceptions being the series of dots above mentioned, and very rarely a letter, on the obverse beneath the bust. The dot marks are sometimes found on both sides of the coin, on the obverse under the bust and on the reverse in the exergue. The task of attribution would have been simpler had not the selection of marks been capricious. Although, in some places, and at some times, it will be found that a mint was fairly constant to one class of mark, yet there are many instances of irregularity, and a mark frequently occurs in more than one mint: for instance, the Latin series was the earliest form of mark at all the central mints. Where the style of the coins is clearly distinguishable this is of less importance, but in some cases it is perplexing, for certain mints approximate closely to each other in style.

The number of officinae at work in different mints, and in the same mint at different dates, varied considerably, and it is often possible to obtain material assistance in attribution by ascertaining the number of officinae represented on a series of coins. If, for instance, the attribution lies between Siscia and Rome, and the office marks exceed seven, the coin must be of Rome, for there were at no time more than seven officinae at work in Siscia. These variations of number will also assist in the arrangement of the coins in chronological order (an arrangement which is not attempted by these notes) for the dates, or approximate dates, of the increase and decrease of the number of officinae are in many cases known.

The distinction of series is often indicated by the

position of the office mark on the coin; for instance, one series is numbered in the field to the left of the reverse type, another to the right, and a third in the exergue. Another method of distinction is the introduction of a star, wreath, crown, thunderbolt, or other object, either in conjunction with the office mark or on some other part of the field of the coin. There are a few series in which what has been called a secret mark was employed, particularly certain issues of Probus which embody the letters of the word "Aequiti", and coins of Diocletian and Maximian which bear references to Jove and Hercules, their adopted deities. There are some instances, notably on some of the "Aequiti" series, where an alteration in the position of a mark in the field does not indicate a change of series, and the same remark applies, especially in the reign of Probus, to some variations in the style of the bust.

Although the practice of mint-marking only became common about A.D. 259, it had been occasionally used at Rome by Philip, some of whose coins bear a Greek letter in the field or a numeral (from I to VII) in the exergue, and at Antioch by Trajanus Decius and particularly by Trebonianus Gallus, who used a series of dots from 1 to 4 and numerals II V (for 3), IV, V, VI, and VII. These marks are found either on the obverse, under the bust, or on the reverse under the type, and sometimes in both places on the same coin.

If the system above indicated had been applied to all the issues of the period, even with the omission of city-marks, the task of attribution would have been comparatively easy, but almost every mint, in almost every reign, issued some coins that bear no mint-

marks whatsoever. As to these coins we are thrown back on the consideration of style and fabric, and on the comparison of them with such coins as do bear a distinctive mark.

It is impossible to lay down any rules to which there are not numerous exceptions, but, generally speaking, it may be said that the coinage of the period falls into three distinguishable classes or styles, *i.e.* those of (i) the Western Mints, (ii) the Central Mints including Italy, and (iii) the Eastern Mints. It will be convenient to discuss the question of style more closely in treating of the individual mints, but it may be shortly said here that the work of the West, though it degenerated under the usurpers, in sympathy with the similar process at Rome, is generally good, without rising to excellence, and is marked by the regular size, neatness, and substantial appearance of the coins, and by a singular resemblance in the portraits. All the Emperors are depicted with homely and somewhat pleasing faces, distinguishable, but more or less of the same type. So great is the similarity that one is tempted to imagine that some chief engraver, held office during many years, and established a school of art among his assistants.

In the centre the coins are more varied in size and weight, the art is often finer but irregular, and though a similarity exists, there is no uniformity. The coins, especially those of Rome, are marked by a certain lightness and smartness of treatment which does not generally occur in either of the other districts.

The Eastern workmanship is distinguishable by a lack of fineness in the touch of the craftsman, which results in an ugly and ungainly portrait, or imparts

a roughness of detail to a portrait otherwise well designed. The white metal wash seems to have been effectively applied in the East, and many of the coins on which it is still apparent will be found to belong to that part of the Empire.

The mint of Serdica, not a prolific one, shows peculiarities of style which leave it somewhat outside either of the above divisions.

It is here necessary to consider a question which affects the above arrangement and has been a ground of much controversy, namely, the situation of the mint that used the city mark **T**.

The time-honoured view is that this mark is of Tarraco, a view based upon the apparent need of a mint in Spain (where it is beyond question that there were large issues of coins under earlier Emperors) and upon the work of the Viennese school of numismatists.

It is not proposed here to discuss the whole controversy in detail, but it is submitted that the above attribution cannot be maintained for the following reasons, among others:—

1. *Style*.—That of the earlier Romano-Spanish coins (*e.g.* those of Galba and Vespasian) was individual and clearly distinguishable from that of Italian and other mints, but the distinction cannot be detected in the coins under consideration. The writer may be permitted to enforce this point from his own experience. He commenced the study which has led to the present notes by arranging many hundred coins of the period in classes which appeared, on style, to represent the different mints, and did so without having read the works of any of the controversialists. His results, while fairly correct as to other mints, showed numerous

attributions to Rome, Siscia, and T, which had, on consulting the authorities, to be removed to another of those places. There is an underlying similarity in style which shows close connexion between them, and seems to exclude all probability that one of them was situate in an outlying province of the Empire, especially in one which had always previously been distinctive in its workmanship.

When Aurelian effected his reform he would appear to have furnished something in the nature of patterns to his moneyers, for we find, for a short time, an approximation of style in several mints, and this is particularly noticeable in the issues of Rome, Siscia, and T, and becomes less so as the distance between the capital and the provincial mint cities increases. The earlier of these patterns is large and heavy, and bears a bust in very full relief. This type is found so similarly reproduced at Rome, T, and Siscia that reference to the mint-marks is necessary to distinguish between the mints. It does not appear at Serdica, which was probably not established till a short time after the commencement of the reform. Some attempt at it is found at Cyzicus, but it did not reach Antioch. Its place was taken by a somewhat smaller coin in good, but not such high relief, and this pattern was followed more or less accurately in all mints except that of Gaul.

2. *History*.—The issues of the mint in question do not appear among the early coins of Valerian and his family, but are found after the rebellion of Postumus, when the Gallic coinage of the legitimate Emperors ceases for a time. As that rebellion appears to have quickly spread to Spain, it is almost impossible that

a Spanish mint could have made the large output of the **T** mint coins of Gallienus which we find in existence, especially as it is recorded that Tarraco had, shortly before, been sacked and almost destroyed by the Franks.

Claudius Gothicus did not recover Spain, and yet the issues of this mint during his reign form a substantial part of his coinage. Under Quintillus, whose short reign was passed in Northern Italy, we find numerous coins of Rome and **T**, a few said to be of Siscia, and perhaps a very few of Cyzicus. These last coins are so scarce that the writer has never been able to see one. Pre-reform coins of Aurelian of the **T** mint are also found, although at that time he held neither Gaul nor Spain.

It is worthy of note that the scarce coin of Gallienus reading **IO CANTAB**, a clear reference to Spain, has been attributed, not to **T**, but to Siscia, where it has been suggested that a Cantabrian Legion, probably serving outside Spain at the time of the usurpation, was stationed. Such a compliment to a Legion, whose origin may have made its loyalty somewhat doubtful, would not be impolitic. It may also be mentioned that the recent examination by Mr. Mattingly of a considerable collection made in Spain showed very few coins of the **T** mint, but did show that, at a later date, the mint at Carthage was supplying large quantities of coin to Spain. On the other hand the records of North Italian finds show a preponderance of coins of the **T** mint.

3. *The Mint-marks.*—The not infrequent appearance of the letters **TI**, coupled with the number of an officina, and therefore almost certainly a city mark,

is strong evidence that the mint is not of Tarraco but of Ticinum.

An examination of the coins shows that, among the earliest issues of the mint, the letter **M** was used in conjunction with the indication of the three officinae then at work (**MP**, **MS**, and **MT**), and again, among what appear to be the early reformed coins of Aurelian, as they bear a bust which has been suggested to be the first pattern of that issue, we find **PM**, **SM**, **TM**, and **QM**. The supporters of Tarraco have been obliged, on style, to attribute these coins to the **T** mint, and have attempted to interpret the letter **M** as "Moneta", an abbreviation which did not come into use till a later date.

It is suggested that the true explanation is that Gallienus, having lost Gaul, found himself in need of a new mint or mints, and opened one at Mediolanum (Milan), and that it was removed to the neighbouring town of Ticinum by Aurelian, for some reason of policy or convenience which has not come down to us. Both these places were situated on great military roads to the North and West. The attribution to Mediolanum had the authority of Count de Salis, and it is proposed to adopt it in these notes.

That the principal Gallic mint was at Lugdunum (Lyons) is clear from the use of the marks **L** and **LVC**, but the letter **A** occurs under Tacitus and Florian, coupled with marks of officinae in such a manner as to suggest that it is the initial letter of a mint city. It is possible that there may have been a temporary removal to Arelate (Arles), a city which from time to time bore a considerable part in monetary affairs. The rare mark **CA** will be discussed later.

There is some difference of opinion as to the situation of the eastern mints, especially during the reigns of Valerian and his family. An attempt has been made to differentiate coins bearing two figures on the reverse type, and to attribute them to Antioch, while those bearing one figure only are given to Cyzicus or other mint city. It is clear that, by reason of the invasions of the Persians and the revolt of Macrianus and Quietus, there must have been periods when the imperial mint ceased to work in Antioch, and an examination of the variously attributed coins shows that in many cases their fabric and appearance are exactly similar, whereas, at a later date, difference exists between the styles of Antioch and Cyzicus. It is therefore suggested that the mint should be considered as of Antioch, whether in fact it was actually being operated at that city, or was temporarily driven out by enemy or usurper.

THE WESTERN MINTS.

If the view above expressed as to the T mint is accepted, it follows that the only mints operating in the Western division of the Empire, until the British mints were opened by Carausius, were situated in Gaul. The marks show that the principal mint city was Lugdunum, but we have seen that there is some ground for believing that coins were for a time struck at Arelate. The mint of Treves was opened by Diocletian shortly before the close of our period, and there are reasons for some other attributions which will be discussed later. Lugdunum had been very prolific under the early Emperors, but there is no reason to believe that it operated in the third century before the reign of Valerian. The obverse inscriptions

suggest that it was opened in the early years of that reign.

It was lost to the legitimate Emperors on the successful rebellion of Postumus in 258, and regained by Aurelian on the abdication of Tetricus in 273. It struck bronze under Postumus but, except a few special pieces, not under any other Emperor before the reform of Diocletian.

Valerian and his family.—The mint struck coins of Valerian, Gallienus, Salonina, Valerian the younger, and Saloninus in all denominations. The issues throw some light on the vexed question of the attribution of coins to Valerian the younger, for they comprise some dedicatory pieces inscribed **DIVO VALERIANO CAES, CON-SACRATIO**, which have been attributed to Saloninus. This attribution can hardly be correct as, at the time of the murder of Saloninus, the mint had already fallen into the hands of his murderer, Postumus, who would not have struck coins to his memory. Again we find here two coins of the Pietas type, the one inscribed **VALERIANVS CAES**, and the other **SALON VALERIANVS CAES**, which also suggest the existence of two Caesars, both sons of Gallienus, one of whom died before the loss of the mint. A theory that Valerian the younger was a brother of Gallienus is negatived by the evidence of his portrait, which is that of a youth.

The portraits both of Emperors and Caesars are pleasant and homely, the expressions cheerful and benevolent, the heads and busts well proportioned to the field of the coins.

The Emperors are most often depicted radiate to right, the bust draped; but there are some coins of

Gallienus on which the head is radiate to left, the bust cuirassed, and the Emperor armed with shield and spear. The points of the crescent under the bust of Salonina are thick and sharply upturned, as is the case at Rome and Milan. As the practice of mint-marking had not been introduced when Gaul was lost no such marks are found.

The Gallic Emperors.—The period from 258, when Postumus successfully rebelled in Gaul and detached that province, with Spain and Britain, from Rome, until the abdication of Tetricus in 273, contains much of numismatic interest. The story of the coinage is so exactly similar to that of the rest of the Empire that it is clear that its course was directed by policy and not by chance.

The Gallic mints followed each alteration in the currency of Rome. They struck at first aurei and gold quinarii, silver or white metal denarii and quinarii, antoniniani, sestertii, dupondii, and asses, and an occasional medallion, but, as in Rome, during the reign of Gallienus, the bulk of the coins were aurei, antoniniani and sestertii, with some smaller bronze, the other denominations being issued in small numbers with the evident intention of keeping the old monetary system in existence.

After the reign of Gallienus the denarii, quinarii, and bronze series (except a few smaller bronze issued from the central mints) ceased both in Rome and the other provinces held by Claudius and in Gaul, and did not reappear until the reform of Aurelian.

In 258 the degradation of the alloy of the antoniniani had commenced, and therefore we find that those of Postumus are never of so good metal as the earlier

issues of Lugdunum, but they compare satisfactorily with the later issues of Gallienus. The size and weight of the coins fall *pari passu* with those of Rome, reaching the lowest point under the Tetrici just before the reform of Aurelian, and the quality of the silver wash declines in like manner. The object of this close imitation of the coinage of Rome was, no doubt, to avoid inequalities of value which might have placed Gaul at a disadvantage in the exchange, and perhaps to show that there was no essential difference between the Gallic and Roman emperors, and to further the hope of the former (shared by all usurpers), that the whole Empire might ultimately fall into their hands. Hence also probably arose the occasional use of the types of Roma on their coins.

Another feature of the period is the amount of barbarous money which was in circulation, an amount so great that it must have occupied quite an important position, official or unofficial, in the currency. Under Postumus it mostly consists of sestertii, dupondii, and asses, often very poor and blundered and frequently cast. Under the later emperors the pieces are imitations of antoniniani, always of small size, and sometimes not more than 10 millimetres in diameter and 4 grains in weight. Where decipherable, the inscriptions are generally those of Tetricus, father or son, rarely of Victorinus, but somewhat frequently of Claudius Gothicus, who would appear to have been a popular hero in Gaul as well as in the rest of the Empire. It is said that these coins remained in local issue and circulation long after the recovery of Gaul by Rome. They are occasionally found in base white metal. Specimens are also found that differ consider-

ably from the ordinary style of fabric, and are better executed. It has been suggested by Mr. Grueber that they were struck in Britain.

M. Adrien Blanchet read at the Brussels Congress, 1910, a valuable paper on the barbarous small coinage of the Tetrici and conclusively disposed of theories that it was issued by German invaders, or under the Merovingians in the Sixth Century. Some of the evidence that he adduces seems also to show conclusively that, though the issue may have continued, from more or less unauthorized mints, for some time after the fall of the Gallic Empire, it certainly ceased in or before the Constantine period. As to the first theory, he points to the fact that the pieces in question are found in large numbers outside the range of the German invasions, and, in one case at least, they were accompanied by blank flans, of small size, evidently prepared for their local manufacture. As to the Merovingian theory, he shows that, though Roman types were then imitated, the finds of the period do not contain these barbarous pieces in large numbers, nor in larger numbers than other Roman coins or types, and he cites the hoard of Jublains, deposited in the time of Aurelian, and other third-century hoards, which show that practically all the main varieties of the coins in question were then already in circulation.

As to the period during which they continued to be struck, he has been unable to trace their existence in any hoards deposited after the reigns of Arcadius and Honorius, and points out that they have been found in company with similar barbarous imitations of the coinage of Constantine the Great. The

discovery at Autun, in 1894, of a moneyer's workshop affords evidence that these later imitations were also Gallic, and that they took the place of the earlier ones, for there were found crucibles (one of which still contained bronze), a number of barbarous pieces of Constantine, unused and ready for issue, and, in a corner, a large number of worn specimens of the earlier barbarous types, evidently about to be melted for recoinage.

Barbarous pieces are frequently found with other Roman coins, and we may safely conclude that they were contemporary, or nearly contemporary issues from local officinae and, even if not actually recognized by the Imperial Government, were received by the people as part of the ordinary currency.

It is impossible to say what was their position in the tariff: probably they supplied a need for some coin of less value than the antoninianus.

Postumus.—The aurei of this Emperor are varied in type and generally well executed. The imperial portrait is often combined with that of a god or goddess whose features have been supposed to be those of Postumus Junior the son, or Julia Donata the supposed wife of the emperor, but these attributions, and similar suggestions as to Victorina, the mother, and Victorinus, the son of the Emperor Victorinus, must be received with reserve and only as probabilities. It is likely that the features of members of the imperial house were depicted, but the busts are primarily those of gods and goddesses, not of Caesars and Augustae.

The full face portrait of the Emperor is a rarity among Roman coins, and was also used by that other great usurper, Carausius; in each case the effect is

somewhat displeasing. Both of them resorted at the commencement of their reigns to the expedient of overstriking older coins. The fondness of Postumus for inscriptions setting forth his Tribunician and Consular powers is of much assistance in the arrangement of his coinage. The dates of his five Consulates were 258, 259, 260 (or thereabouts) 265, and 267.

The mint of Lugdunum struck for Postumus much in the same style as it had for Gallienus, and its early portraits of the former are very like those of the latter. It modified the vulgarity of Postumus so that his earliest coins show a handsome face with regular features and well-trimmed beard; the portrait of a gentleman. The later issues of the same mint become somewhat less pleasing.

That the mint was at Lugdunum is clear from the style and from the occasional appearance of a bust of the Emperor radiate to left, which is reminiscent of coins of Gallienus, though the latter is armoured and bears a spear, while Postumus, who adopted Hercules as his patron deity, wears the lion's skin and bears a club. The practice of dividing the titles of the Emperor by dots, which occurs at this mint under Probus, is also sometimes employed by Postumus.

The following mint-marks appear during the reign, viz., $\frac{P}{\text{—}}$, $\frac{I}{P}$, $\frac{I}{S}$, $\frac{I}{T}$, $\frac{V}{\text{—}}*$, and $\frac{C}{\text{—}} \frac{A}{\text{—}}$, but most of the coins are unmarked.

None of these marks appear to be attributable to Lugdunum, where the use of mint-marks had not been introduced under Gallienus. They are only found on coins issued towards the end of the reign, and, if the conclusions set forth below are accepted, it is clear that

the first mint-marks of Lugdunum must be looked for after the reform of Aurelian.

The mark C | A is attributed to Colonia Claudia Augusta Agrippinensium (Cologne), an attribution which is justified by the inscriptions **CO CL AGRIP COS IIII** and **C C A A COS IIII**, which are found on coins of the reign. When the coinage is arranged in chronological order it becomes apparent that, at some time between the third and fourth consulates there was a change of mint. The coins become smaller, the work less artistic, and the vulgar features and rough beard of the Emperor appear unmodified. The coins marked C | A are very scarce (Cohen values them at 100 francs), but they are exactly of the style of the pieces just described. We may therefore safely attribute this mint to Cologne.

The defence of the Rhine was always one of the preoccupations of the Emperor, whose patron deity was Hercules of Deuso (Deutz, opposite to Cologne, or perhaps Duisburg), and who personifies the river on some of his coins. He built himself a palace at Treves, of which great ruins remain to this day, and there can be little doubt that, having done so, he removed his mint to the neighbouring city of Cologne and closed the establishment at Lugdunum. The coins of Marius, which could hardly have been struck elsewhere than at Cologne, confirm this by their similarity in style. Some of the coins of Cologne are very thick, and nearly double the ordinary weight. Cohen treats them as distinct varieties, and speaks of one of them as a double antoninianus.

It is more difficult to attribute the mark V | *, which is rarely found under Postumus, but appears on a number of the coins of Victorinus. The pieces so

marked are of a fabric that suggests a renewal of mint operations in the south (but not necessarily at Lugdunum) being of a weaker and looser style than the sturdy but inartistic coinage of Cologne, and inferior to the early issues of Postumus from Lugdunum. It is clear that the **V** is not indicative of a fifth officina, as no Gallic mint ever exceeded four, and the suggestion that it refers to the Vota can hardly be accepted, seeing that the method of reference by a mere letter in the field of a coin otherwise dedicated would be in a high degree unusual, and that Postumus had celebrated his quinquennalia in 262, before his association with Victorinus. It is suggested with all reserve that it may be a city mark and that the southern mint may have resumed operations at Vienna (Vienne).

The coins marked **P** in the field are of much the same style as those marked **V**, and were struck late in the reign. The mark is no doubt that of a first officina, but no series has been traced.

There remain the coins with exergual marks, which are of small size (and therefore late in the reign), but are sometimes in even higher relief than the best issues of Lugdunum. They bear a portrait which, if less artistic than some from that mint, is much more comely than that of Cologne. The types of nearly all these pieces have reference to the knights or cavalry, the inscriptions being **CONCORD**, **FIDES**, **PAX** or **VIRTVS** combined with **AEQVIT**, **EQVIT**, **AEQVITVM** or **EQVITVM**. On comparing them with the coinage of Gallienus struck at Milan towards the end of his reign it will be seen that the style is identical, and it will be found that that mint was then working in three officinae and using these very marks.

The history of the war between Gallienus and Postumus is obscure, but it seems that Postumus delivered Gaul from Roman inroads in or about 265, and we know that the hold of Gallienus over his north-western provinces was none too firm, for he had to send Aureolus into Rhaetia a year or two later to get together an army for their protection. It is suggested that these coins indicate that Postumus carried the war so far that Milan fell for a time into his power, when and where the coins were issued, probably for the pay of the cavalry whose name they bear, and who may have specially contributed by some feat of arms to the Emperor's success. We may surmise that it became necessary to withdraw from the city, either in consequence of the outbreak of Laelian in Gaul, or of the threat of the army of Aureolus.

The legends of these coins are very unusual and, if we could believe it, a confirmation of the attribution would be found in the works of the earlier numismatists. Aureolus turned against his master, but, beaten at Pontirolo, he threw himself and the remains of his army into Milan, where he held out until after the murder of Gallienus in 268. The older writers credit him with having struck some coins there, including one bearing the inscription **CONCORDIA EQVIT.** Cohen thinks, however, that all the published coins of Aureolus are false, and the piece in question is probably an altered coin of Postumus.

It is surprising that Aureolus, whose rebellion lasted some time, left no coins. It may be that he found his power insufficient for success without the help of other pretenders and, therefore, never actually assumed the purple. The suggestion that he may have struck these

coins in the name of Postumus is negatived by the fact that the date of his entry into Milan was later than that of the death of that emperor.

The exergual mark **Z** has been credited to Postumus, but the writer has failed to verify it, and believes it to be a blunder or misreading for **S**.

Victorinus.—This Emperor struck aurei, gold quinarii, antoniniani, and white metal quinarii, and is credited with one bronze and one white metal medallion and with a few pieces said to be of good silver. He was associated with Postumus in or about 265, and his earlier coinage is, no doubt, of Lugdunum, being comparable to the later issues of Postumus from that mint. There are some of his coins that appear to be of Cologne, but the majority of his later pieces show a softness and looseness of execution which does not belong to either of those two mints.

He had charge of the south, and that fact, and the style of most of his coins, support the suggestion made above of the reopening of a southern mint late in the reign of Postumus.

His only recorded mint-marks are *| and V|*. The former being only found on coins of the **ORIENS AVG** Sol type, may be an attribute of the deity portrayed and not a mint-mark.

The coins so marked are in his late style.

The letters **P. F.** which sometimes appear in the field or exergue of his Legionary types are, on other coins of that series, embodied in the legend and are not mint-marks.

The most interesting feature of his reign is the issue of a series of these types which honour some 10 Legions, the object whereof has not yet been satis-

factorily explained. Similar issues were made by Gallienus, Carausius, and others. Sir Charles Oman has shown that the issue by the former was limited to the Legions under his rule, and we shall see that, though the latter included Legions outside his provinces, he had a political object in view. Victorinus included in his list Legions stationed even so far away as Palestine and Egypt, and omitted two that were in Britain and others that were on the Rhine. Mr. Mattingly has suggested that the issue may have been made in furtherance of a scheme for a combination with other pretenders to overthrow Gallienus, and it may be that this is the true explanation. One would expect in that case to find a greater number of Legions included in the series, but the coins are very scarce, and there may have been others that have not come down to us. At the same time, the possibility that this was only another instance of the fidelity with which the mint of Gaul followed that of Rome must not be disregarded.

Laelian.—This Emperor was no doubt the person who is styled by some historians Lollian or Aelian. His history is obscure, but it seems that he broke into rebellion at Moguntiacum (Mayence) in 267, and that he devoted part of his few months' reign to the defence of the Rhine against the Germans and the re-establishment of its fortresses.

Whether he slew or was slain by Postumus, was murdered by his own soldiers (tired of work on those fortresses, or instigated by Victorinus), or whether, on the contrary, he overcame Victorinus, and drove him northward, or even slew him, are matters of difference among the historians.

His coinage of aurei and antoniniani is the scarcest of the Gallic issues, and he is credited by Cohen with two silver pieces. He used no mint-marks, but his coinage resembles the later issues of Victorinus which have been attributed above to some mint in southern Gaul. One of his aurei, inscribed **TEMPORVM FELICITAS**, bears a seated female figure, supposed to be Spain. This may be, like the Roma types, merely an indication of what he hoped for, or it may indicate that his power extended more widely in the south than appears from historical evidence. In the latter case, we may fairly hold that he used the mint which had been established by Victorinus; otherwise we must assume a mint at Mayence or elsewhere in the Rhineland. The fabric of the coins does not suggest Cologne.

Marius.—On the death of Victorinus this Emperor was elected at Cologne (at the suggestion of that competent lady Victorina, mother of the late Emperor) and murdered, it is said, by one of his officers three days after his election.

The considerable number of his coins still in existence contradicts this story. Their resemblance to the Cologne issues of Postumus shows that they were issued from that mint, though there are no mint-marks. They are aurei and antoniniani only.

The Tetrici.—Tetricus I is said also to have owed his election to the advice of Victorina. He associated his son with him as Caesar, and there seems to be sufficient evidence that he subsequently named him Augustus.

The issues of the joint reign comprise aurei, gold quinarii, antoniniani, and quinarii, and one gold and one bronze medallion. Some coins alleged to be of silver are attributed, but their existence, and indeed

that of all the alleged silver issues of the Gallic Empire, must be accepted with reserve.

Tetricus the elder was Governor of Aquitania at the time of his election, and his coins, which are without mint-marks, resemble the later issues of Victorinus and suggest a southern Gallic mint.

There are coins bearing the head of Tetricus on the one side and that of Postumus or Victorinus on the other, which must not be taken to indicate that the reigns were to any extent contemporary, but rather that Tetricus claimed to be the legal successor of the earlier emperors and not a mere usurper.

Aurelian and Severina.—As neither Claudius Gothicus nor Quintillus regained possession of Gaul, there are none of their coins that can be attributed to the western mints, nor, for the like reason, are there any pre-reform coins of Aurelian, but, after the abdication of Tetricus, the mint of Lugdunum was reopened with four officinae. Some of the coins, which are in better style than their immediate predecessors, and show the unmistakable Gallic portrait, bear no marks; others both of the Emperor and Severina bear exergual marks only, the series being AL, BL, CL, and DL, or the same letters with dots as •A•L•. The portrait of Severina is pleasing.

Tacitus and Florian.—These Emperors struck many coins in Gaul. The portraits remain unmistakably Gallic, the Emperors being depicted as pleasant, simple, elderly men, burly and round-headed, generally radiate, draped and cuirassed to right; more rarely with the like bust to left. The lettering is clear and good. A number of coins are without mint-marks.

Numerals in the exergue, marks very typical of this

mint, were now first used, and the star, unfortunately common to many mints, makes its appearance here for the only time prior to the reign of Diocletian. The use of the letter **A** in a manner that suggests that it is a city mark has been referred to above. The marks used are varied and sometimes the Greek form of the letter **D** is used: not infrequently, a letter is reversed, as **∩** or **∩**. The letter **C** is sometimes written **G**. There were generally four officinae at work, but the numeral **IIII** has not been noted.

The following marks are found, viz., | P, A | *, B | *, C | *, ∩ | *, ∩ | *, ∩ | *, Δ | *, and | *. Also $\frac{|}{|}$, $\frac{|}{II}$, and $\frac{|}{III}$, and the same marks with a star or occasionally a cross, in the field to right, A | A, B | A, C | A, Δ | A, $\frac{|}{AA}$, $\frac{|}{BA}$, $\frac{|}{CA}$, $\frac{|}{\Delta A}$, and the same marks

with three dots as $\frac{|}{\cdot A \cdot A \cdot}$. The mark $\frac{|}{\cdot A \cdot \Delta}$ occurs, but the rest of the series is not recorded. In considering these coins marked **A** we must remember that there is no reason to suppose that the mint of Cologne was then open, and the similarity of their style to that of Lugdunum suggests the neighbouring city.

Probus.—The mint continued to work in four officinae, and to issue well-struck and regular coins with the same style of portrait and bust, of which there are two varieties, the one somewhat narrower, with a longer and thinner neck than the other. A radiate or helmeted, armoured bust to left is occasionally used. The lettering continues large and good. Dots are sometimes placed near the tops of the letters to divide the titles of the Emperor.

The exergual numerals $\overset{|}{I}$, $\overset{|}{II}$, $\overset{|}{III}$, and $\overset{|}{IIII}$ are most commonly used, but the letters A, B, C and D, to right and left of the field without any exergual marks, are found. Some coins are unmarked.

Carus and his family.—Under these Emperors the same characteristics persist, though the high standard of the preceding reign is hardly maintained. Carus is sometimes depicted to right, cuirassed, and wearing a radiate helmet; on his dedicatory coins the bust is bare. There are coins which bear the jugate busts of Carus and Carinus. The portrait of Magnia Urbica is very charming, and the crescent is more delicately depicted than in the case of previous empresses.

The marks used are similar to those of Probus with the addition of the following: $\overset{|}{A}$
 LVG , $\overset{|}{B}$
 LVG , $\overset{|}{C}$
 LVG , $\overset{|}{D}$
 LVG . This series appears to be complete as set out, although the letter of the officina is in two cases to right, and in two to left of the field. The peculiar practice of occasionally reversing C and D is continued. The officinae were divided among the emperors. For instance, in one issue, the first and fourth struck for Carinus, while the second and third struck for Numerian. This practice was common also in other mints.

Certain coins bearing the portraits of Carus and Carinus face to face, which appear to belong to this mint, bear exergual mint-marks X·I, X·I·I and X·ET·I. They are somewhat larger than the ordinary antoniniani. The writer has never seen any trace of silver wash on them, and is inclined to believe that they contain no percentage of silver and were not tariffed as antoniniani.

Diocletian and his Colleagues.—The mint continued to work in three, and sometimes four officinae, and its output was large. The typical Gallic style of workmanship and portrait continued.

The busts are found radiate, draped, or cuirassed, to right, helmeted and cuirassed to right or left (in the latter case armed with shield and spear), or radiate and draped in the imperial mantle to left, holding a sceptre or, in some cases, an orb. The coins are neat and well struck, and the silver wash is often still visible.

The mint-marks comprise many with which we are familiar and many new ones, including some Greek numerals and several symbols, the star, crescent, club, and thunderbolt.

The following are found:—

$\frac{|}{I}$, $\frac{|}{II}$, $\frac{|}{III}$, P, S, and T in the field to left or right or in the exergue; A, B, C, D, E, F, G, H, I, K, L, M, N, O, P, Q, R, S, T, U, V, W, X, Y, Z, and Δ in like positions; $\frac{A}{SML}$, $\frac{A}{SML}$, and $\frac{A}{SML}$, the marks running in each case to D or Δ . Also $\frac{|}{*}$, $\frac{A}{*}$, $\frac{|}{*}$, $\frac{|}{A}$, $\frac{|}{A*}$, $\frac{|}{B*}$, $\frac{|}{*B}$, $\frac{|}{*}$, $\frac{|}{\equiv}$, $\frac{|}{C}$, $\frac{|}{\equiv}$, $\frac{|}{\equiv}$, $\frac{|}{C}$, $\frac{|}{\equiv}$, $\frac{|}{\equiv}$, $\frac{|}{C}$, $\frac{|}{B}$, $\frac{|}{A}$, and $\frac{|}{B}$.

A few coins are unmarked.

Treviri.

The mint of Treves was opened in 295 or 296 with four officinae and closely followed the style of Lugdunum. The city mark TR is used in the exergue

and office marks A to D are found to right or left in the field. The mark $\frac{1}{PTR}$ is also used, but no continuation of that series has been found nor any variety of bust noted by the writer except the common one, radiate, draped and cuirassed to right.

THE MINTS OF CARAUSIUS AND ALLECTUS.

When Carausius sailed across from Boulogne to Britain in 287, and assumed the purple, he at once commenced to issue a coinage. Although it is probable that, as some numismatists think, there were occasionally (if not continuously) mints operating in that country under earlier emperors, there is no evidence that they were at work during the middle of the third century (unless the existence of a few semi-barbarous pieces mentioned above be accepted as such evidence), and the new Emperor found no skilled artificers available. To this the coins bear evidence, for the earlier ones are of extremely poor workmanship, on flans of all sizes, with legends that are often blundered. Many of them are overstruck on older coins and show traces of the original busts, types, and inscriptions.

As the Emperor's power increased the mints attained greater skill and accuracy, and towards the end of the reign they produced very respectable work. The workmen were, however, on the whole, less skilled mechanics than those of the Continental mints, and were evidently local men who evolved a style which is easily distinguishable from that of Gaul (even did not the rough, burly and very characteristic portraits

of the Emperor distinguish him from his more legitimate brethren), and in its best expression is certainly not less artistic.

Many of the later busts show considerable medallic merit, being, as one may well imagine, truthful (for they can hardly be thought to flatter the Emperor), forcible, and in good relief. Most of the gold coinage is quite good, though the average weight of the aurei of Diocletian is not attained.

The principal numismatic feature of the reign is the issue of a silver coinage, often of fine metal and good British workmanship. All these coins are denarii of earlier date than the good silver coinage of Diocletian and his continental colleagues.

Three mints operated during the reign; the mint-marks show that one of them was undoubtedly at London, and another at some British city that used the city mark C. It is generally believed that this mint was at Camulodunum (Colchester) the principal Roman Colonia in the island, but claims have recently been made in favour of Corinium (Cirencester) based on the fact that it also was a place of importance, conveniently situated for the service of the west and at a distance from London. The rare, but published forms of the mark, CC and CL, are much against this claim, and it may fairly be said that no sufficient evidence against the accepted attribution to Camulodunum has as yet been adduced.

It was formerly suggested that this mint was situated at Clausentum (Bitterne, near Southampton), but there is nothing to support this suggestion, which was probably based on a misreading of a mark as CLA.

In a large find of coins of this Emperor in Wales

there were strips of metal prepared for the cutting of blanks, and it may be that he carried his mint officials, or some of them, with him on his journeys.

The third mint was at Rotomagus (Rouen) and occasionally used the exergual mark **R**. Its coins are continental in style, and totally distinct from those struck in Britain. The portrait is unlike the Emperor, being thin, conventional, and in low relief. The mint issued aurei, which are very rare, and a considerable number of antoniniani. There are a few coins which appear to be of a continental style quite different from that of Rouen.

Many coins of all mints are unmarked.

The first to operate was that of London, and the earliest mint-marks, generally **ML** in the exergue, appear while the work was rough and barbarous, the flans irregular in size and shape, and the mint evidently but poorly organized.

There is evidence that the number of officinae rose to four and perhaps five before the end of the reign, but the great majority of the coins were issued by the first and second officinae. The mark of the fourth officina, **D**, is found only on gold, and it seems that all the British aurei of the two Emperors were struck in London. Many marks are blundered, and the number recorded is so great (being upwards of 150) that the student must be referred to the *Numismatic Chronicle* for 1907, where they will be found fully set out on pp. 58-67. Those which are common are of London,

$\frac{|}{ML}$, $\frac{B|E}{MLXXI}$, $\frac{F|O}{ML}$, $\frac{S|P}{MLXXI}$, of Colchester $\frac{|}{C}$, $\frac{|}{MC}$, $\frac{S|C}{C}$, and without city mark, $\frac{S|C}{C}$, $\frac{S|P}{C}$, and $\frac{|}{RSR}$,

and such combinations as S | A, S | B, S | C, S | E, S | F, S | P, S | O, B | E, and so forth are found with or without city and value marks. It is clear that these marks indicate an alteration of the system in vogue in other mints of the time, an alteration which has some parallel in the mark **SMS** of Siscia, and is found more or less developed in the time of Constantine the Great. The meaning of these new combinations is obscure, and is discussed in the pages of the *Numismatic Chronicle* above referred to, but, in effect, they may be taken to be varied and more capricious methods of indicating the series to which the coins belonged. The number of the officina is generally indicated by the letters **A**, **B**, **C**, **D**, **E**, but **P** and **S** are also used, and some of the marks suggest that the same letters were also used with other meanings, such as *percussa*, *signata*, *emissa*. The letter **F** was apparently not used as a numeral, but perhaps for *facta*, and the letter **O** probably signifies officina. In this matter as well as in the restoration of silver coinage the British mints seem to have led, rather than followed, the mints of Europe.

The mint of Colchester opened later in the reign, and its work is in consequence better on the average than that of London; it did not extend beyond a third officina. Its mint-marks are less numerous than those of London, but even so about forty varieties have been noted, most of them comprising the letter **C**.

An attempt was formerly made to attribute certain silver and bronze coins bearing the exergual mark **RSR** to Rutupiae (Richborough), but they are almost certainly of London. The question is fully discussed in the *Chronicle* (1907, p. 46).

Carausius struck, both at London and Colchester, a series of coins bearing the portraits and inscriptions of Diocletian and Maximian Hercules; they bear city marks which make their attribution certain, but their style is distinct from the coins issued in the name of Carausius himself, and is more continental. They are neat and well executed, and bear reverse legends terminating in **AVGGG**, thus asserting the acceptance of the British Emperor as a colleague by the two continental rulers.

Carausius also struck a series of coins in honour of Legions, and, whatever may be thought of the legionary issue of Victorinus, there can be little doubt that the British Emperor acted from a political motive. His power was for a time considerable in the north of Gaul, and he evidently contemplated its extension, and commemorated all the Legions stationed in Britain and in the nearer parts of Europe which were either already under his command, or, as he hoped, might attach themselves to him.

The British Emperor struck no sestertii and, with one possible exception, no dupondii or asses. Few traces of silver wash (if any) have been found on his antoniniani. His busts and those of his successor are generally draped, cuirassed, or draped and cuirassed to right, either laureate or radiate according to the class of coin; but busts to left, armoured or in the imperial mantle are to be found. Like Postumus, he essayed a full-faced portrait, but the result is unpleasing. His most famous coin is that inscribed **CARAVSIVS ET FRATRES SVI**, around the busts of Diocletian, Maximian Hercules, and himself.

There is such great irregularity in the size of his

coins that it has been suggested that some of them passed as quinarii, and this theory receives support from the small coins of Allectus, which invariably bear in the exergue QL or QC. That these coins are intended to be quinarii of antoniniani is shown by the fact that the busts are radiate. The coins of similar module issued by Aurelian and some of the subsequent Emperors are laureate, to indicate, as the writer believes, that they were successors of the denarius. Under those Emperors a still smaller laureate washed bronze piece takes the place of the silver or white metal quinarius.

Under Allectus the improvement continued, and nearly all his coins are well struck and bear a city mark and that of an officina. London and Colchester continued to strike, but Northern Gaul had been reconquered by Constantius Chlorus before the death of Carausius and its mint abolished.

The coinage of aurei, antoniniani, and quinarii continued, but the silver issue ceased or almost ceased with Carausius. There are a few coins of Allectus which show traces of a silver wash.

The mint-marks are much less numerous than those of Carausius, but about thirty are recorded in the *Numismatic Chronicle*, 1906, p. 135.

On the antoniniani of London the marks more frequently used are $\frac{|}{ML}$ and $\frac{|}{MSL}$, and the like marks combined with SA, SC, and SP in the field. $\frac{S|B}{ML}$, $\frac{S|F}{ML}$, and $\frac{S|M}{ML}$ are recorded but are of great rarity. The marks $\underline{D|}$ and $\underline{D|}$ are found on aurei. By far the greater part of the antoniniani of Colchester are

marked $\frac{1}{C}$, $\frac{1}{SPC}$, $\frac{S|P}{C}$, or $\frac{S|P}{CL}$, and $\frac{S|A}{C}$, $\frac{S|A}{CL}$, and $\frac{S|A}{MC}$, are recorded in respect of one coin each.

The quinarii of London, all of the type **VIRTVS AVG**, Galley, are always marked $\frac{1}{QL}$, and those of Colchester (where the inscription **LAETITIA AVG** is also used) almost always $\frac{1}{QC}$.

It would seem therefore that there are traces of four officinae in London, but that in Colchester (if we assume that **P** and **A** both stand for the first) one officina only was at work.

On the defeat of Allectus in 296 the mint of London was closed for a few years, and that of Colchester came to an end.

THE CENTRAL MINTS.

Rome.

Valerian and his family. When Valerian and Gallienus ascended the throne they found this great mint at work in six or seven officinae, a number which was increased to twelve in or about the year 260.

Its large output comprised gold, white metal, and the greater part of the bronze issues of the reign. All the coinage of Maximian is of this mint. The laureate quinarii which appear in small numbers under various emperors are generally of Rome or Ticinum. They were originally of white metal and afterwards silver washed, but all traces of the wash have now disappeared from most if not all of them.

The earlier busts are, with few exceptions, draped or cuirassed to right, laureate or radiate according to

the denomination of the coin. The smaller bronze comprised dupondii and asses.

Valerian the younger and Saloninus are sometimes depicted bareheaded, and here again it may be noted that the inscriptions **P C L VALERIANVS NOB CAES** and **LIC COR SAL VALERIANVS N CAES** can hardly refer to the same prince. A few Æ^1 and Æ^2 show Gallienus laureate and draped to left, and there are late antoniniani on which he appears radiate or helmeted to left, armed with spear and shield. After his reign no sesterces were issued except by Aurelian, but smaller bronze coins of most emperors are found but are rare, except those of Aurelian and Severina, which are common.

The white metal coins show grave portraits with regular features, the busts are generally radiate, draped or cuirassed to right, the points of the crescent behind the busts of the empresses are often thick, clumsy, and sharply upturned. There are, of course, no mint-marks on these coins.

When the issue of washed bronze commenced, we find certain typical features which continue to mark many, but not all, of the coins of the mint at least down to the reform of Aurelian.

(1) The coins are in low relief and irregular both in size and shape, and although flatness gives place for a time to the higher relief of the reformed patterns of Aurelian, it soon reasserts itself and remains typical of the mint under the later emperors.

(2) The pre-reform busts are small and narrow, and generally either bare or covered with a small square cuirass. Where the bust is bare, it frequently shows a deep indentation like an inverted **V**, rising far up

into the neck, which it divides into two almost equal parts. This treatment is sometimes found on coins of Milan and Siscia, but is so much more common at Rome that its appearance raises a presumption in favour of that mint. It appears occasionally so late as the reign of Carinus.

(3) The lettering is extremely weak, the letters **M** and **N** being frequently mere collections of almost perpendicular strokes. This peculiarity persists until the reform of Aurelian, and affects a large proportion of the coins of the mint; it is occasionally found on the coins of Milan and Siscia, but can readily be distinguished from a weakness in the same letters found on the coins of Antioch.

Mint-marks began to make their reappearance about the year 259. The earliest series then used by the Roman mint was Latin, consisting of **P**, **S**, **T**, **Q**, **V**, and **VI**, on either side of the field or in the exergue. Coins so marked are rare, but that they do belong to the mint of Rome, and not that of Milan, is apparent from their style, and from the occasional use of the city mark **R**, in conjunction with the Latin letter. With the increase in the number of officinae the Greek series of marks **A**, **B**, **Γ**, **Δ**, **Ε**, **Σ**, **Z**, **H**, followed by the Roman series **N**, **X**, **XI**, and **XII** was introduced, and frequently reappears throughout the period under consideration and, though Latin marks are used from time to time, there seems to have been a distinct preference for the Greek series in this mint. There are numerous coins without mint-marks of all reigns down to the reform of Aurelian.

Claudius and Quintillus. The coins of this mint issued by these emperors, when marked at all, bear

the Greek series to right or left of the field or in the exergue, and are very poor in style, size, and lettering. The coinage of the antoniniani reached the lowest stage of its degradation both in art and workmanship, although the scarce bronze coins of the period show that there were still moneyers who were by no means without technical skill. The mint continued to operate in twelve officinae, and its output was very large.

Aurelian and Severina. The same description applies to the pre-reform coins, and the same series of mint-marks was used, but apparently in the field only.

Under the reform which gave rise to, or took place after; the great rebellion of the moneyers in 271, the number of officinae was reduced, first to ten, and afterwards to seven, and the issues of other mints became proportionately more numerous. There were a few unmarked coins, and on others the mint letter R appears, either in the field or at the termination of the new sign (believed to be of value) XXI; as $\frac{R | A}{XXI}$, $\frac{|}{XXIR}$, or $\frac{* |}{XXIR}$, with or without a preceding Greek mark. Latin marks were also used. Some gold is marked $\frac{|}{R}$. The debatable exergual inscription VSV appears on some of the washed bronze denarii with or without Greek letters in the field, while other denarii bear the exergual letters A and B. Latin marks were used on some antoniniani.

The following series are found to run to ten, viz., $\frac{A |}{XXIR}$, in which the Greek numeral I is sometimes used to indicate the tenth officina, $\frac{|}{AXXIR}$, and $\frac{|}{P}$ in which last series the ninth mark is written $\frac{|}{VIII}$.

The following series run to seven only: $\frac{|P}{XXI}$, $\frac{|P}{XXI^*}$, $\frac{XXI|P}{Lion}$, $\frac{A|}{XXI}$, $\frac{|}{AXXI}$, and $\frac{|A}{XXIR}$.

The series marked $\frac{R|A}{XXI}$ has been traced from the first to the sixth officina only, and, but for the appearance of the city mark **R**, its attribution to this mint would be doubtful.

The reintroduction of Latin marks in this reign is regrettable, and it would certainly be convenient to attribute all coins so marked to Siscia, but the appearance of the marks of the seventh and subsequent officinae renders that attribution impossible.

The old flatness of the coinage disappears for a time after the reform, but has a tendency to reappear as the reign draws to its close. Before the reform the Emperor is usually depicted on the antoniniani radiate to right, draped, or draped and cuirassed; under the reform, cuirassed only. The crescent under the bust of the Empress continues to have thick points, but the curve is sometimes wider than that in earlier reigns. The lettering under the reform is good.

This reign is, as above mentioned, marked by the reappearance of a few Æ^1 , and of Æ^2 in considerable numbers. Most, if not all of them, were issued at Rome or Ticinum, where there were also considerable issues of the small laureate silver-washed coins which appear to be the successors of the denarius. There is no pre-reform coinage of Severina in any mint.

Tacitus and Florian. The improvement in style and lettering, which commenced under the reform, is well maintained, but the relief is less than in Gaul and Ticinum. The emperors are usually depicted

radiate, draped and cuirassed to right, but the bare deeply indented bust is also found. The number of officinae remained at seven.

The marks are $\frac{|A}{XXI}$ and $\frac{|}{XXIA}$, running in each case to Z. The mark $\frac{|}{XXIR}$ is found.

Probus. Under this Emperor the mint continued to operate in seven officinae, and to produce coins which show a marked revival of medallic art; an improvement which is common to all mints and is indeed more noticeable elsewhere than at Rome. The lettering is good, the relief is sometimes considerably higher than usual, the size of the Roman coins is irregular, but the busts are often attractive and show much variety.

In addition to the common radiate, draped and cuirassed bust to right (on which the mantle is often highly ornamented during this reign) the moneyers depicted the Emperor radiate to left, draped with the imperial mantle, and holding a sceptre, or helmeted and armoured to left, holding spear and shield. It should be noted that these varieties of treatment do not indicate different series, and are sometimes even found on coins issued in the same series by the same officina. The majority of the issues of Rome are identified by the use of the city mark R, the separate series being distinguished by the introduction of a symbol, a star, crescent, crown, fulmen, &c.

The last series of the reign is interesting in that it embodies one letter of the word 'Aequiti' in each of its seven marks.

The marks attributed to the mint during this reign,

running to seven in each case except the first and fourth, are:

$\overline{\text{R}}$, $\overline{\text{R}^* \text{A}}$, $\overline{\text{R} \cup \text{A}}$, $\overline{\text{R} \cup \text{A}}$, $\overline{\text{R} \odot \text{A}}$, and $\overline{\text{R} \rightleftharpoons \text{A}}$,

and the Aequiti series as follows:

$\overline{\text{RAA}}$, $\overline{\text{REB}}$, $\overline{\text{RQF}}$, $\overline{\text{RV}\Delta}$, $\overline{\text{RI}\epsilon}$, $\overline{\text{RT}\zeta}$, and $\overline{\text{RIZ}}$.

The mark $\text{R}\cup\text{A}$ has not been traced beyond the fifth officina. The mint issued a small amount of bronze coinage during this reign, including some laureate pieces of a module between Æ^2 and Æ^3 , which are excellently engraved and struck.

Carus and his family. The coinage of these emperors is not quite so good as that of their predecessor, being flat and often small in diameter. It generally presents a radiate, draped or cuirassed bust to right with or without ornament. The dedicatory coins of Carus show a bare bust, marked with the deep central upcurve. Seven officinae were in operation, but it seems doubtful if they all operated in every series, as some marks have not been traced.

The striking feature in the history of the mint during this period is that it was called upon to provide the pay of the army in the Persian War (283), and, for that purpose, abandoned the use of the letter **R** and the numeral **XXI**, and adopted the Greek version thereof **KA**, which had previously only been used in Serdica and the East. The style of the coins and the use of symbols which formed part of the mint-marks of the previous reign makes this certain.

The marks used during the reign run to the seventh officina, except where they comprise the symbol \cup ,

peculiar to Rome, which has not been recorded beyond the sixth, but here and there one or two officinae seem to be missing from the series; at any rate, their marks have not yet been noted.

The following are found:

$\overline{\text{RA}}$, $\overline{\text{AK}}$, $\overline{\text{BAK}}$, $\overline{\text{AKA}}$, $\overline{\text{KAA}}$, $\overline{\text{KA}\smile\text{A}}$, $\overline{\text{KA}\smile\text{A}}$,
 $\overline{\text{K}\smile\text{AA}}$, and $\overline{\text{K}\smile\text{AA}}$.

The mark $\overline{\text{KAB}\smile}$ is recorded, but no other mark of the series to which it should belong.

Diocletian and his colleagues. The mint still retained its typical low relief and, for some time at least, its seven officinae, but they appear to have been afterwards reduced to three.

The busts are radiate and draped, or draped and cuirassed to right. The mint-marks are numerous, and the system of "secret" marking, noticed under Probus, was again resorted to, the letters used being those of the names of the two deities, Jove and Hercules, under whose special protection the two senior emperors placed themselves.

The former deity is referred to by the word **IOBI**, and the latter by **HPKOYAI**. In the former series **I** and **O** appear separately, but **B** and **I** are always combined; while the latter word is always divided as follows: **HP•KOY•AI**. These combinations were used in three offices only, and the recorded marks are:

$\overline{\text{A}\cdot\text{XXI}\cdot\text{I}}$, $\overline{\text{A}\cdot\text{XXI}\cdot\text{I}}$, $\overline{\text{A}\cdot\text{XXI}\cdot\text{I}}$, $\overline{\text{B}\cdot\text{XXI}\cdot\text{O}}$, $\overline{\text{B}\cdot\text{XXI}\cdot\text{O}}$, $\overline{\text{B}\cdot\text{XXI}\cdot\text{BI}}$,
 $\overline{\Gamma\cdot\text{XXI}\cdot\text{BI}}$, $\overline{\Gamma\cdot\text{XXI}\cdot\text{BI}}$, $\overline{\Gamma\cdot\text{XXI}\cdot\text{BI}}$, and $\overline{\Gamma\cdot\text{XXI}\cdot\text{BI}}$.

$\frac{A}{XXI \cdot HP}$, $\frac{A}{XXI \cdot HP}$, $\frac{A}{AXXI \cdot HP}$, $\frac{A}{XXIA \cdot HP}$, $\frac{B}{XXI \cdot KOY}$,
 $\frac{A}{BXXI \cdot KOY}$, $\frac{A}{XXIB \cdot KOY}$, $\frac{\Gamma}{XXI \cdot \Lambda I}$, $\frac{\Gamma}{XXI \cdot \Lambda I}$,
 $\frac{\Gamma}{XXI \cdot \Lambda I}$, and $\frac{\Gamma}{XXI \Gamma \cdot \Lambda I}$.

The commonest series of the reign is marked $\frac{A}{XXIA}$ to Z.

The marks $\frac{A}{XXI \cdot A}$ and $\frac{A}{XXI}$ appear to run to Γ only, and the following are also recorded :

$\frac{R}{RQ}$, $\frac{R}{\Theta}$, $\frac{\Gamma}{\Gamma}$, $\frac{\Delta}{\Delta}$.

One author has given $\frac{R}{H}$, but it has not been possible to verify it, and it appears to be inconsistent with what is known of the mint.

There is also a series in which a wreath or crown is inserted in the mark as $\frac{A}{XX \text{ } \text{ } IA}$.

Mediolanum—Ticinum.

The reasons for the suggestion that this mint commenced to operate at Milan in the latter part of the reign of Gallienus, and was removed to Ticinum by Aurelian, are given above. The workmanship is in many respects similar to that of Rome on the one side and Siscia on the other, but the coins are generally in higher relief, and this peculiarity is characteristic of the mint in greater or less degree throughout the period under consideration.

It is not contended that it marks every coin, or that other mints did not, from time to time, strike individual pieces in equally high relief, but that, on comparison with a collection of coins from any other mint, it will be apparent on average. No Greek numerals were used until the reign of Diocletian. The number of officinae never exceeded six. The mint issued some bronze coinage.

Gallienus and Salonina.—The Emperor, as at Rome, is usually shown radiate to right, with bare bust or small square cuirass, but radiate and helmeted coins to left are found. The base of the bare bust is sometimes treated as at Rome, but more often the base line is almost straight, and joins a straight line carried forward and downward from the shoulder to the front of the bust, or is waved into three curves. Even where the Roman treatment of the base occurs, the higher relief of the coin leaves the line from shoulder to point of breast visible. The crescents of Salonina, by reason of their higher relief, often accentuate the somewhat clumsy characteristic of her Roman coins. The defective writing of **M** and **N** is to be seen on some coins, but these letters are generally correctly formed.

There are portraits of the Emperor which are small, narrow, and rather heavy featured, and others, also small, in which the head is round and well-proportioned and the features pleasant. This style of portrait is sometimes to left, radiate, and cuirassed with spear and shield. There are no coins of Valerian II or Saloninus attributed to this mint.

Mint-marks, where used, are always Latin. There were at first three, and afterwards four officinae.

The marks are :

$\frac{P}{|}$, $\frac{S}{|}$, $\frac{T}{|}$, $\frac{MP}{|}$, $\frac{MS}{|}$, $\frac{MT}{|}$, $\frac{P}{|}$, $\frac{S}{|}$, $\frac{T}{|}$,
 $\frac{Q}{|}$, $\frac{P}{|}$, $\frac{S}{|}$, $\frac{T}{|}$, and $\frac{Q}{|}$.

A mark D in field or exergue is recorded both in this and the succeeding reign, but it appears to be only a method of writing P, adopted by an engraver who is wont to use a similar character as the first letter of PROVIDENTIA, &c. E is sometimes written € , and S more like Z.

Claudius Gothicus and Quintillus.—The mint operated in three officinae only. The coins are sometimes unmarked and otherwise use the exergual marks P, S, T. Some of them are in fairly high relief, but many are only distinguishable from those of Rome by the mint-marks. In this mint, as in others, the workmanship was at its worst.

Aurelian and Severina.—The above remarks apply almost down to the reform, under which the high relief is fully restored, and the number of officinae, at first three as in the previous reigns, increased to four, and afterwards to six. There are coins of this mint which appear to show a transition stage between the style of Claudius and that of the completed reform, and give some colour to those authors who have claimed that Aurelian effected two monetary reforms, a claim which, it is submitted, has not sufficient historical or numismatic support. The coins rather suggest that the mint, regretting its fall from its original high standard, set about improving its work before Aurelian directed the use of the new type of coin.

The mint affords some evidence that the long-necked, round-headed, radiate, cuirassed bust to right, in very high and full relief, which is common to Rome, Milan, and Siscia, and traceable at Cyzicus, was the first pattern of the reform, for the coins which bear it are either marked with the Latin exergual letters to Q, or with the letters PM, SM, TM and QM (sometimes written OM), while the coins of what appears to be the second pattern run to six officinae. It is probable that the design of the first pattern was produced at Milan, for it is certainly in the style of that mint.

The second pattern is to be found in almost all the mints which were then striking for the legitimate Emperor. The coins, as we have seen, are smaller, the portrait similar, but the head smaller, and the neck even longer than those of the first pattern, though the relief is still good. Neither of these patterns seems quite to have satisfied the taste of the engravers of Ticinum, and they evolved a modification thereof on which the head, neck, and bust are well proportioned, the bust well spread, and the portrait pleasant and somewhat youthful. This style reappears on some coins of Probus, and becomes typical of the mint under Carus and his family and Diocletian. The mark **XXT** runs up to a sixth officina.

The removal of the mint and the introduction of the city mark **T** took place some time after the reform, when the extreme fullness of the coins had disappeared and the second reformed type had taken its place. The fifth and sixth officinae were opened at Ticinum.

It is not possible to discuss here the meaning of the

marks **XX** and **XXI**, but it may be pointed out that the former practically never occurs at any but this mint, and is always followed by the letter **T**. There are a few coins of the British mints that read **XX**, but they are almost certainly blunders and without significance.

It is difficult to believe that the same mint in the same reign used **XX** and **XXI**, but it is claimed by Rohde and other writers that this occurred here in this reign and in that of Probus. The writer has been unable to satisfy himself that they are right as to this reign, and has, therefore, attributed all coins reading **XXI** to other mints, finding nothing in style or mint-marks that conflicts with this arrangement.

A peculiarity of this mint is the use of **U** and **4** for 5 and 6 in two series. Unmarked coins appear both before and under the reform.

The marks attributed to the mint are, before the reform: $\frac{|}{P}$, $\frac{|}{S}$, and $\frac{|}{T}$; under the reform: $\frac{|}{PM}$, $\frac{|}{SM}$, $\frac{|}{TM}$, and $\frac{|}{QM}$, $\frac{|}{P}$ running to **VI**, and $\frac{|}{PXXT}$ and $\frac{*}{PXXT}$ both running to **4**.

Tacitus and Florian.—Some coins are unmarked, and the following marks are used: $\frac{|}{P}$ and $\frac{|}{PTI}$, both running to the sixth office.

The coins are much flatter than those of the previous reign, but are in higher relief than most of those of Rome. The bust is radiate, draped and cuirassed (or more commonly cuirassed only) to right. The head is round, the cheeks full, and there are slight varieties of portrait, some of which appear peevish owing to a drawing down of the corner of the mouth.

Probus.—Coins marked **TI** and **XXT** can be certainly attributed to this mint and, by general consensus of opinion, so are also those of the "Aequiti" series that are not given to Rome.

This attribution appears to be correct, although they bear the mark **XXI**, because the three series so marked are limited to six officinae by the drastic expedient of omitting one letter, either at the beginning or end of the word, a proceeding which would have been unnecessary at Rome or Siscia, in both of which mints seven officinae were in operation.

There are three series which bear this mark ; the first, in which the letter **A** appears and the final **I** is omitted, is scarce ; the second, commencing with **E**, much more common, and the third, also commencing with **E**, but bearing a star to right or left in the field, is not uncommon. The workmanship is extremely like that of Rome, but there are some coins marked **XXT** which show the same style and, as has been stated above, there were always strong points of similarity between the two mints. The busts are to left, either helmeted and armoured with spear and shield, or radiate with the imperial mantle and sceptre. These varieties of bust do not indicate distinct series, nor does variation in the position of the star do so. The faces are small, the features pointed, and the relief low.

There is a great variety of portrait on the coins marked **XXT** and **TI**, among which will be found those just described, and also a well-rounded, radiate, draped bust to right (successor of that evolved under Aurelian), a similar bust, somewhat longer and narrower, with a dignified countenance and Roman nose

(a style which, but for the mark, would probably be attributed to Siscia), a radiate bust to right with varieties of cuirass often highly ornamented, a radiate, armoured bust to left with spear, and either a circular or rectangular shield, and some other minor varieties.

The portrait on most of these coins shows a small face of grave expression, but on a few of the radiate cuirassed busts to right it is larger, and the features are heavy and unpleasing. Dots are sometimes placed between the words or letters of the obverse legends.

By accepting the "Aequiti" coins, we admit that in this reign, if not in that of Aurelian, the mint used **XXI** as well as **XX**, and thereby the door is opened to the possible admission of numerous other series marked **XXI**, but examination of the coins themselves seems to show that they can with safety be attributed elsewhere.

The marks attributed to Ticinum are, therefore: $\frac{|}{PTI}$ and $\frac{|}{PXXT}$ running in each case to **VI**, and the "Aequiti" coins as follows:

A	E	Q	V	I	T
$\frac{|}{PXXI}$	$\frac{|}{SXXI}$	$\frac{|}{TXXI}$	$\frac{|}{QXXI}$	$\frac{|}{VXXI}$	$\frac{|}{VIXXI}$
$\frac{E|}{PXXI}$	$\frac{Q|}{SXXI}$	$\frac{V|}{TXXI}$	$\frac{I|}{QXXI}$	$\frac{T|}{VXXI}$	$\frac{||}{VIXXI}$
$\frac{E|*}{PXXI}$	$\frac{Q|*}{SXXI}$	$\frac{V|*}{TXXI}$	$\frac{I|*}{QXXI}$	$\frac{T|*}{VXXI}$	$\frac{*||}{VIXXI}$

Carus and his family. The marks **TI** and **XXT** do not recur, but the use of the letter **T** after **XXI**, the comparative fullness of relief, the treatment of the radiate, draped, or cuirassed busts of the emperors, and their resemblance to the round, radiate, draped busts of Aurelian and Probus identify the following marks

with this mint, viz., $\frac{|}{\text{PXXI}}$ and $\frac{|}{\text{PXXIT}}$ running in each case to VI.

The officinae were divided among the emperors and the Empress Magnia Urbica, as in other mints.

Diocletian and his colleagues. The mint continued to operate up to six officinae (though one of the marks used does not appear to run to that number) and to use the graceful style above described. The portraits, particularly of Diocletian, are the most youthful and pleasing of the reign.

The marks are :

$\frac{|}{\text{XXIT}}$ and $\frac{|}{\text{PXXIT}}$ to VI and $\frac{\text{A}|}{\text{XXIT}}$ to Γ .

Siscia.

We have seen that there were coins of earlier emperors which appear to have issued from some unidentified central mint, and there are some early pieces of Valerian which are in like case, but there is no evidence which fixes the place of mintage at Siscia.

It is, however, clear that a mint was established there in the middle of the reign of Gallienus, probably after the loss of Gaul, and commenced work with two officinae only.

The style has some resemblance to those of Rome and Milan—Ticinum, but the relief is in most cases less marked than on the coins of the latter mint, though at times (notably in some series towards the end of the reign of Gallienus) it is very full. Sometimes it has a leaning towards the heavier and less pleasing work of Serdica and Cyzicus. The portrait generally shows a rather large head with a grave countenance.

The bust of Gallienus is usually bare or with a small square cuirass, the bare neck being treated either with the single deep incurve of Rome or the triple curve of Milan; the crescent under the bust of the empress is less thick and sometimes wider spread than at those mints. The office numbers are at first numerals, and the letter **S** is often used.

Where numerals are used, they are smaller and thinner than those of Gaul. Some coins are unmarked, and the following marks are certainly attributable to the mint, viz.,

$\frac{I}{|}$, $\frac{II}{|}$, $\frac{III}{|}$, $\frac{IIII}{|}$, $\frac{P}{|}$, $\frac{S}{|}$, $\frac{B}{|}$, $\frac{P}{|}$, $\frac{S}{|}$,
 $\frac{S}{|}$, $\frac{2}{|}$, $\frac{SI}{|}$, $\frac{SI}{|}$, $\frac{S}{|}$, $\frac{S}{|}$, $\frac{P}{|}$, $\frac{P}{|}$, $\frac{II}{|}$, $\frac{I}{|}$, $\frac{II}{|}$,
 $\frac{I}{B}$, and $\frac{I}{SI}$.

B is probably a blundered **P**, and the letter **P** is sometimes used in a manner inconsistent with its being a mere series mark. It is possible to read it as the initial of Pannonia, and a similar use of the initial of a province is to be found some years later in the mark **HT**, for Heraclea in Thrace.

The true attribution of the star marks forms one of the greatest difficulties of the period, for that symbol was used from time to time in all the principal mints, and it is difficult to ascertain the grounds for some of the conclusions arrived at by earlier writers. The following appear to be certainly attributable to Siscia, as they do not run beyond the second officina, viz.,

$\frac{*}{|}$, $\frac{|}{*}$, $\frac{*}{|P}$, $\frac{*}{|S}$, $\frac{S}{|*}$, and $\frac{*}{|P}$.

Claudius and Quintillus. The degradation of the coinage that took place under these emperors greatly

affected this mint. The coins become small, irregular, and inartistic, and the portraits of the emperors (radiate, draped, or more often cuirassed to right) so unpleasing as to be almost caricatures. The gravity of expression, so characteristic of this mint, is, however, maintained. The letter **V** is sometimes widened at the base. The coins of Quintillus are very scarce.

The number of officinae was increased to four during the reign of Claudius. Some coins are unmarked; the following marks are attributed, viz.,

$\frac{|}{|}$, $\frac{||}{|}$, $\frac{|}{|}$, $\frac{||}{|}$ and $\frac{|}{|}$ **P** running to Q.

Aurelian and Severina. The pre-reform coins show the same characteristics as those of the previous reign, though the portrait is a little less grotesque, and there is some sign of improvement prior to the reform. The bust is usually radiate and draped to right. Many of the coins are unmarked, the only marked series bearing

$\frac{|}{|}$ **P** and $\frac{|}{\bar{p}}$, in each case running to Q.

After the reform the mint loses, until the reign of Probus, its individuality of portrait, and closely follows Rome and Ticinum. The officinae were increased to six. The mint-marks attributed are:

$\frac{P}{XXI}$, $\frac{P}{XXI}$, $\frac{S}{XXIP}$, $\frac{|}{PXXI}$, $\frac{|}{XXIP}$, $\frac{P}{XX\cdot I}$, $\frac{|}{PXX\cdot I}$,
 $\frac{|}{XX\cdot IP}$, and $\frac{|}{XXI\cdot P}$, in each case running to VI.

With some hesitation the writer follows the attribution by Rohde to this mint of the following marks which run to VI, $\frac{*}{|}$ **P**, $\frac{|}{\bar{P}^*}$, $\frac{*}{\bar{P}}$, $\frac{|}{*P}$, and $\frac{|}{P^*}$. Similar marks appear to have been contemporaneously used at Cyzicus, but do not run beyond Q.

Tacitus and Florian. The coins are scarce; the marks are $\frac{|}{XXIP}$ and $\frac{P}{XXI}$, in each case running to VI.

Probus. The number of officinae was early increased to seven, but the operations appear to have been irregular, sometimes including three officinae only. The variety of bust so noticeable on the coins of this Emperor is found here.

Considerable difficulty arises in distinguishing the issues of Rome from those of this mint, as the use of Greek numerals now commenced here, and we are thrown back on considerations of style. That Greek numerals must be attributed to the mint becomes clear from a fine series, probably the last issued during the reign, bearing the marks $\frac{A}{XXI}$, $\frac{B}{XXI}$, and $\frac{\Gamma}{XXI}$. Their busts, generally radiate and draped to right, are large, with long heads and faces, and grave and distinguished portraits, almost identical with those on certain aurei marked SIS. There can, therefore, be no doubt about the correctness of this attribution. This series also contains some coins helmeted and armoured to left with shield and spear.

There are other series marked $\frac{|}{XXI}$, $\frac{|}{AXXI}$, $\frac{|}{XXIA}$, and $\frac{|A}{XXI}$, running in the last three cases to Z, which also appear to belong to this mint for, though many of the portraits are very similar to those of Rome, there are some coins in each series on which the face is quite unlike that of Rome, but is more grave and dignified, and approaches to that described above, which it may be pointed out, if further evidence be required, strongly resembles that of Julian the usurper, whose coinage

can only have been issued at Siscia. The portrait of Diocletian is also similar. The Latin marks of the reign are :

$$\overset{\text{P}}{\text{XXI}}, \overset{\text{P}}{\text{XXI}}, \overset{\text{P}}{\text{PXXI}}, \overset{\text{P}}{\text{XXIP}}, \text{ and } \overset{*}{\text{XXIP}}$$

in each case running to VII.

Carus and his family.—The portraits are still dignified and grave, and the use of Greek numerals, coupled with the city mark SMS, tends to confirm the attribution made under the previous reign. Three officinae only were in operation.

The marks are :

$$\overset{\text{A}}{\text{XXI}}, \overset{\text{A}}{\text{SMSXXI}}, \overset{\text{A}}{\text{SMSXXI}}, \overset{\text{A}}{\text{SMSXXI}}, \text{ and } \overset{\text{A}}{\text{SMSXXIA}}$$

running in each case to Γ. M. Lucien Naville informs me that there are antoniniani of this mint which bear the mark X•I•, a slight variation of a mark found in Gaul on coins that are possibly not antoniniani. Here, M. Naville assures me, there is no difference between those so marked and the ordinary antoniniani, except the marks.

Julian.—As the power of this usurper did not extend beyond Pannonia it follows that all his coins are of Siscia. He used three officinae, but, owing perhaps to the rarity of his coins, it is not certain that the various series were struck in all the officinae. His portrait, as we have seen, resembles the late portraits of Probus and his recorded mint-marks, which all embody the letter S, are :

$$\overset{\text{S}}{\text{SIA}}, \overset{\text{S}}{\text{S B}}, \overset{\text{S}}{\text{S}}, \overset{\text{S}}{\text{S}}, \text{ and } \overset{\text{S}}{\text{S}}$$

Diocletian and his colleagues.—The mint continued to strike in three officinae in similar style and with somewhat similar mint-marks.

Those attributed are:

$$\frac{A|}{XXI}, \frac{|A}{XXI}, \frac{|}{XXIA}, \text{ and } \frac{A}{XXI}$$

Serdica.

Our knowledge of the operations of this mint is not complete, but it appears to have been established under the reform of Aurelian, about the period of the issue of the second pattern. Lying as it does between east and west, its work is somewhat influenced by both styles of technique. The greater part of the coins bear the eastern mark **KA** and are on large flans, the fields whereof are well filled by the busts, which are large and often unpleasing.

The output was small. The mark **KA** was also used at Antioch and, as some say, at Cyzicus, but the coins so marked of those mints are distinguishable by their pronounced eastern fabric. The same mark occurs at Tripolis, but here also the coins are easily distinguishable.

Aurelian and Severina.—The mint opened with three officinae, and a fourth was shortly added. The busts of Aurelian show the influence of the reformed pattern, but do not reach the fullness of relief attained in the three more central mints. The crescent on the coins of Severina sometimes shows in front of the bust, as at Antioch, and is slender and graceful. The earlier marks appear to have embodied Latin numerals which were shortly abandoned for Greek running to Δ .

The marks attributed are:

$$\frac{|}{SERD}, \frac{P|}{SERD}, \frac{|P}{SERD}, \frac{|}{PXXI}, \text{ and } \frac{|}{XXIP}, \text{ running to T.}$$

The mark $\frac{|}{XXI\cdot\Gamma}$ appears to stand alone.

$\frac{|}{KA\cdot A}$, $\frac{*}{KAA}$, $\frac{*}{KA\cdot A}$, and $\frac{*}{KA\cdot A\cdot}$ run to Δ .

A Latin series $\frac{|}{P}$ to Q has also been attributed to this mint.

Tacitus and Florian.—Four officinae operated with marks as follows:

$\frac{A}{KA}$, $\frac{*}{KA}$, $\frac{*}{KAA}$, and $\frac{*}{K\cdot A\cdot A}$, running to Δ .

Probus.—The busts of this emperor show most of the varieties found in the central mints. The lettering varies in size, and the obverse inscriptions, after the reign of Aurelian, are generally long. The number of officinae was at first four, afterwards five. The marks are:

$\frac{|}{KA}$, $\frac{A}{KA}$, $\frac{|}{KAA}$, $\frac{|}{KA\cdot A}$, and $\frac{*}{KAA}$, running to Δ .

At the end of the reign the mark $\frac{|}{A}$ occurs, and runs to ϵ .

Carus and his family.—We have seen that the mark KA was removed to Rome for the issue of coins for the Persian War, and no coinage can be certainly traced to Serdica during this reign. There is an aureus of very rough workmanship marked $\frac{|}{K}$ in the British Museum which has been attributed to it. The mint was certainly closed during the later part of the reign and the early years of Diocletian.

Heraclea.

This mint was opened by Diocletian shortly before the end of the period under consideration. The coins are flat, conventional, and unattractive. There were at first five officinae and then six.

The marks are:

HA and $\frac{A}{\cdot XXI \cdot}$ running to ϵ , and $\frac{HA}{\cdot XXI \cdot}$ running to ζ .

THE EASTERN MINTS.

Antioch.

This prolific mint was in operation before the reign of Valerian, but, as we have seen, its work on behalf of the legitimate Emperors was from time to time interrupted by usurpers and Persian invaders.

It is probable, therefore, that the mint establishment of Antioch was sometimes removed to Cyzicus or elsewhere, and there is considerable difficulty in the attribution of the coins. This difficulty is increased by the fact that the earlier issues do not bear consecutive office marks, and no assistance can be drawn from length of series.

Nor is the style of the coins in the early part of the period of much assistance for, though there appear to have been two distinct styles employed in the east, (1) with a roughly executed rugged portrait, rounded lettering and moderate relief, and (2) with very low relief, neat, well-proportioned portraits and small, wide-spaced lettering, we find that coins of both these styles are attributed by Colonel Voetter and other authorities to Antioch (and no doubt rightly so), and yet other specimens, particularly of (2) are attributed

to Cyzicus or some other eastern mint. That (1) is of Antioch is clear from the fact that it corresponds to that of the coins issued there by previous emperors, and is employed by Macrianus and Quietus, whose coins were probably struck there, and Vaballathus, whose mint was certainly there situated.

It appears that the style (2) only was used in Eastern mints in the latter part of the reign of Gallienus, and it approximates in workmanship to the large issues of Probus which, bearing marks up to a ninth officina, must be attributed to Antioch. The coins of Probus partake of the peculiarities of both styles, and indeed connect them. Voetter gives to Antioch all star marks except one, all crescent marks, and all coins with the letters **VIIC** and **PXV** in the exergue; to Cyzicus or Serdica all coins with a palm branch or the letters **SPQR** and **CVIPP** in the exergue; and to another mint in Asia Minor those marked with a star or two palm branches in the centre of the field, and he allots unmarked coins to each of these mints.

An examination of these coins shows that they are all of class (2) issued late in the reign, and, but for the mint-marks, are quite indistinguishable one from another. The workmanship of all of them shows a peculiar scratchy treatment which suggests that they were all engraved by the same artificer or school of artificers. This touch is also apparent on the coins of Probus above referred to.

Attribution of all coins of (1) to one mint, and all those of (2) to another, would be the simple solution of the difficulty, but would involve such a contradiction of the careful deductions of previous

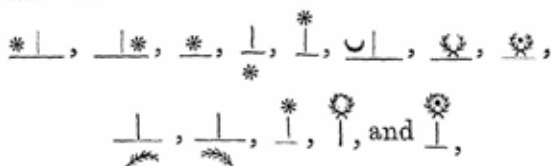
authors that the writer does not feel justified in adopting it. It would leave us without any coins of the latter part of the reign of Gallienus, attributable to Antioch, a position which, however, is not historically impossible.

It is proposed then, to treat all the above-mentioned coins as of Antioch, which was at least the parent mint, especially as they do not resemble the later coins which bear marks clearly attributable to Cyzicus.

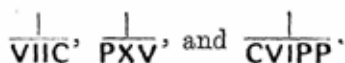
Valerian and his family.—Style (1) was in force till the defeat of Valerian; the obverse legends were long and there was a strong preference for double-figured reverse types. The crescent of Salonina is short, pointed, and behind the bust. There are no mint-marks.

In the sole reign of Gallienus style (2) only was used. The crescent of the Empress often appears in front of the bust, and is slender and of a graceful curve. The busts are radiate, draped or cuirassed to right, very rarely to left. There is a little tendency to blunder M and N, but the strokes, though disjointed, are never so nearly perpendicular as those used at Rome.

A few coins are unmarked. The mint-marks attributed are:



and the following exergual continuation of legends, viz.:



A Greek letter is sometimes found on the obverse under the bust.

Macrianus and Quietus.—The two Macrians, father and son, rebelled in Asia, and, marching westward, were defeated and slain in eastern Europe. Quietus, a younger son, was soon afterwards captured and slain in Asia by Odenathus. There are no Latin coins of the father, and those of the sons are scarce, and may have been issued at any Eastern mint, but they are usually attributed to Antioch.

The style is (1). A few are without mint-marks; the others bear a star in the field to left. The busts are radiate, draped, or cuirassed to right.

Claudius.—The hold of this Emperor upon Antioch must have been slight, as the city was throughout his reign in the power of Zenobia. As she and her son Vaballathus were nominally acting as deputies of the Roman Emperor, it is probable that the mint would work in his name, and the coins show that it did so.

There are some coins of style (1) radiate and draped to right, or radiate with bare busts to left, and some of (2) radiate, draped, or cuirassed to right. The one style uses a single Greek numeral to H in the exergue, but is often unmarked; the other frequently bears instead the exergual letters SPQR. There are unmarked coins. The marks are $\frac{1}{A}$ to H and the letters $\frac{1}{SPQR}$. No coins of Quintillus have been traced to this mint.

Aurelian and Severina.—The mint appears at first to have comprised six officinae and afterwards eight.

The influence of the reform becomes apparent, but the coins, though for a time they approximate to what I suggest to have been the second official pattern, do not lose the oriental character of the workmanship, nor the graceful poise of head, and good proportion between bust and field. The busts on the reformed coins occupy more room than do those of type (2) to which the pre-reform coins belong. The first pattern of the reform is not found here; its high relief would be contrary to all the traditions of the mint, and the influence of Aurelian may have been small as Zenobia and Vaballathus were still in power.

The Eastern practice of using the exergue for part of the legend is continued on some pre-reform coins, which read **COS.** below the reverse type. The portrait of the Emperor is radiate, draped or cuirassed to right. The crescent, still slender, is placed behind the bust of the Empress.

The marks are :

$\frac{P|}{XXI}$ and $\frac{P}{XXI}$, both to **V**;

$\frac{|}{A}$, $\frac{A|}{XXI}$, $\frac{A}{XXI}$, and $\frac{A}{XX}$, all to **H**, and the letters $\frac{|}{COS}$.

The joint coins of Vaballathus and Aurelian bearing Latin legends were issued from this mint. A Greek exergual letter to **H** appears under the bust of Aurelian and suggests that his portrait is on the reverse of the coin.

Tacitus and Florian. These Emperors carried on the arrangements of the latter part of the previous reign, but appear to have used only seven officinae, and their mint-marks are $\frac{P}{XXI}$ to **VII**, and $\frac{A}{XXI}$ to **Z**.


The writer is again indebted to M. Lucien Naville for the curious and very interesting mark $\frac{A}{XI}$ running to Z, of which he possesses the complete series. The coins are of the Concordia Militum type, and are in every respect similar to the pieces marked XXI: they show traces of silver wash.

Probus. The mint was increased to nine officinae (that number appearing as IX, or $\epsilon\Delta$ and perhaps η^1), and was very prolific. The style is a development of (2) in higher relief with somewhat larger busts, usually radiate and draped to right. The workmanship varies in skill, but shows the oriental touch. Some of the portraits are unpleasing, almost grotesque; some are stern and forbidding, while some, both on the aurei and the antoniniani, are very fine and dignified. The silver wash is often found almost perfect. The tendency to carry part of the legend into the exergue is still discernible on some of the aurei, as, for instance, the Victoria Aug. type, which has in the exergue $\frac{AVG}{A}$.

The marks are :

$\frac{I}{A}$ and $\frac{I}{ANT}$, which appear on aurei only.

$\frac{I}{XXI}$, $\frac{A}{XXI}$, to $\epsilon\Delta$; $\frac{A\cdot}{XXI}$ to IX, $\frac{*}{XXI}$, $\frac{\smile}{XXI}$, $\frac{\smile}{XXIA}$,

and .

¹ The interpretation sought to be placed on this mark is open to much question. It may be a variety of ζ . The coins that bear it are rare, but the writer possesses one in perfect condition, and the actual existence of the mark is indisputable.

Carus and his family. Nine officinae were at work.

The workmanship is well maintained, and is slightly less oriental, though the coins are still distinguishable from those of the central mints. The dignity of the best of the coins of Probus is hardly attained. The busts are radiate, draped or cuirassed to right. The dedicatory coins of Carus show the bust bare. The practice of dividing the officinae between the Emperors obtained here.

The marks are:

$\frac{|}{A}$, $\frac{|}{ANT}$, and $\frac{|}{SMA}$ on aurei, and $\frac{|A}{XXI}$, $\frac{A}{XXI}$, and $\frac{*A}{XXI}$ running to $\epsilon\Delta$ on antoniniani.

Diocletian and his colleagues. There were again large issues from this mint of a similar character to those of the last reign. The workmanship is a refinement of the oriental style, and the coins are not unpleasing. The busts on the antoniniani, radiate and draped to right, are well proportioned to the coin, and the features are dignified. The mint worked up to nine officinae, but the number in operation seems to have varied from time to time; at any rate, certain series have not been traced to that number, and some show gaps among the earlier numbers.

A tenth office has been noted using the mark I, but the writer has not been able to verify it.

The marks are:

$\frac{A}{XXI}$ running to I, $\frac{A}{XXI}$ and $\frac{\smile}{XXI}$ running to $\epsilon\Delta$, $\frac{*A}{XXI}$ to H, $\frac{*A}{ANT}$, $\frac{\smile}{ANT}$, and $\frac{A}{XXI}$ to Z.

Cyzicus.

In view of the attributions which have been made to Antioch, the earliest coins that can be safely allotted to this mint are those of Claudius marked with dots under the bust. The general fabric of these coins is similar to the second style of Antioch, but the graceful poise of the bust is wanting, the head is large and slopes backward occupying a large portion of the field; the face, also large, is sometimes almost negroid. There seems, therefore, to be ground for the attribution, especially as an examination of later coins identified with this mint by the city mark **C** shows that the occupation of the greater part of the field by the bust is characteristic of Cyzicus. Markl has noted a tendency to widen the top of the letter **A** and to disjoint the base of **V** as typical of this mint. These peculiarities appear on the coins in question, but not on those above attributed to Antioch.

The fact that the letters **SPQR** are sometimes found on the exergue of coins marked with dots does not appear to interfere with the attribution, for the dotted coins lack the neatness of Antioch, and there is no reason why this time-honoured inscription should not have been used at more than one mint.

There were three officinae.

The marks are: •, ••, ••• and **M | C**.

Coins of Quintillus of this mint are said to exist but are evidently very rare; the writer has not seen them.

Aurelian and Severina. Before the reform the series of dots under the bust is continued, and there are some unmarked coins. The mint was then of three officinae, but under the reform the number rose first to four, afterwards to five, and perhaps to six. Both Greek

and Latin office marks are used, and coins are unmarked.

The influence of the official pattern is seen, but the relief is generally lower than that of the central mints, though some coins of the second pattern are neat, well struck, and raised. There are some coins that bear on a large flan a very widespread, armoured bust with a short, round head and pointed nose, which may be the local rendering of the larger pattern—a rendering that is almost grotesque.

The coins all show a radiate bust to right, which under the reform is always cuirassed and generally wide. Even where it does not occupy a large portion of the field the lines of the armour are drawn horizontally, or almost upturned, so as to convey an idea of broad shoulders.

The mint-marks are :

Before reform •, •• and ••••.

Under reform $\frac{|}{CI}$, $\frac{|}{CII}$, $\frac{|}{C*}$, $\frac{|}{*C}$, $\frac{|}{*C*}$, $\frac{|}{*K}$, $\frac{|}{C*P}$, $\frac{|}{CP}$, and $\frac{|}{P*}$ running to T, $\frac{|}{P}$ and $\frac{|}{*P}$ to Q, $\frac{|}{A}$ to Γ, $\frac{|}{*A}$ to Δ, $\frac{|}{CA}$ and $\frac{|}{XXI}$ to Ε, and $\frac{|}{AC}$, which is said to run to Σ.

Tacitus and Florian. These emperors continued to strike in five officinae with marks $\frac{|}{P}$ to V, and $\frac{|}{A}$ to Ε. Coins marked $\frac{A}{KA}$ running to Ε, have been attributed to this mint, but the correctness of that attribution is doubtful.

Probus struck in five, afterwards six officinae; the

coins are generally large. In this mint, as in others, the Emperor is variously depicted, radiate, draped to right, radiate to left, wearing the imperial mantle and holding a sceptre, or helmeted and armoured to left with shield and spear. The lettering is generally large, the armoured busts to left are very broad and heavy, as are some of the radiate busts to left; on other coins, radiate to left, the bust, though narrower, shows a considerable depth below the neck, and in that manner occupies a large portion of the field. Where the bust is to right, both flan and bust are smaller, and the proportion of the latter to the former is less.

The mark $\overline{\text{F}}$ is used for the sixth officina, and it has been considered that $\frac{\text{CM}}{\text{XXI}}$, without a numeral, is also a mark thereof.

There appears to be some doubt whether all the marks attributed are in fact of this mint, and the writer has not been able to verify some of those that do not contain the city mark.

They are as follows, to the fifth officina:

$\frac{|}{\text{A}}$, $\frac{|}{\text{XXIP}}$, $\frac{\text{P}}{\text{XXI}}$, $\frac{\text{P}}{\text{XXI}^*}$, $\frac{\text{P}}{\text{XXIMC}}$, $\frac{\text{P}}{\text{MCXXI}}$, and $\frac{\text{CM}}{\text{XXIP}}$. The series $\frac{\text{CM}}{\text{XXIA}}$ runs to Z.

The mark $\frac{\text{CM}}{\text{XXI}}$ without office number also occurs as above mentioned.

Carus and his family.—The writer has not been able to attribute any coins of these reigns to this mint, which appears to have been closed.

Diocletian and his colleagues.—There are no coins of the early years of the reign, but the mint was

reopened shortly before the reform and operated in six officinae using marks $\frac{A}{XXI}$ and $\frac{A}{XXI}$, running to S. A series of coins similar in style to those of Heraclea, bearing the mark KA, running to the sixth officina, must be attributed to this mint.

Tripolis (Phoenicia).

This mint is believed to have been established by Aurelian with the marks $\frac{*}{KA}$ and $\frac{*|}{KA}$, which together with $\frac{A}{KA}$ and $\frac{B}{KA}$, and the curious but well authenticated marks $\frac{A}{IA}$, $\frac{B}{IA}$, and $\frac{*|}{IA}$, are also attributed to Tacitus. The coins bearing these exceptional marks are similar in all respects to those bearing the mark KA. They are of the Concordia Militum type and are evidently a parallel series to that of Antioch marked XI.

To Probus are attributed $\frac{*}{KA}$, $\frac{C}{KA}$, $\frac{T}{KA}$, $\frac{*}{XXI}$, and $\frac{\text{☉}}{XXI}$, and these attributions are confirmed by marks of

Carus and his family, $\frac{TR}{XXI}$ and $\frac{*TR}{XXI}$, which are found on coins which in size, style, and sometimes even in portrait, are indistinguishable from those of Probus.

The busts of the Emperors are radiate and draped, or cuirassed to right, the flans are large and the obverse field is well filled, the workmanship is oriental and the lettering good.

Diocletian and his colleagues.—The mint continued its work in exactly the same manner, the portrait of

Diocletian being hardly distinguishable from those of Probus and Carinus.

The mark is $\frac{TR}{XXI}$, sometimes with palm to right, left, or on both sides of the numerals in the exergue.

Unknown Mint.

Rohde records a mint of the reign of Aurelian which uses as an exergual mark the figure of a dolphin, sometimes coupled with A, B, € , or ð . The writer has never seen any of these coins.

In concluding these notes it must be admitted that they deal only with one side of the problem of the mints of the period and are necessarily incomplete, and the writer must express his great obligations to Mr. Mattingly, whose constant advice and assistance have rendered their compilation possible.

PERCY H. WEBB.

XV.

A HOARD OF COINS FOUND AT PERTH.

[PLATE VIII.]

ON August 2, 1920, some workmen, who were excavating for the foundations of a new picture-house at the corner of North St. John's Place and King Edward Street, Perth, turned up with their spades a heavy lump, which had every appearance of being solid. On closer scrutiny it was seen to consist of a mass of coins adhering to one another firmly. Unfortunately, instead of at once reporting the matter to the proper authorities, the finders broke up their prize into several parts and divided the spoil. Subsequent endeavours to dispose of individual specimens to local jewellers and dealers in antiques resulted in the police being informed. In the end practically the whole of the coins are believed to have been surrendered as treasure trove to the King's Remembrancer, who forwarded them to the National Museum of Antiquities in Edinburgh for examination and report. An unusually large proportion were selected for the cabinet of the Society of Antiquaries of Scotland. The rest were, of course, returned to the finders, along with ample compensation for those that had been retained.

Mr. T. McLaren, Burgh Surveyor, Perth, to whom I am indebted for a full and careful account of the

circumstances, tells me that, when he visited the spot a few days after the discovery, he could find no trace of a receptacle among the débris, and that the men concerned assured him that they had noticed none. Probably, therefore, the money had been contained in a bag of canvas or leather, which had rotted away completely in the course of centuries. Mr. McLaren adds that the precise *locus* was "near the north side of the new building site, and immediately to the east of the Guild Hall Close, 18 inches below the surface". The hoard lay under a house which was being demolished, and the walls of this were so close to the original place of concealment that, when they were being erected, the treasure must have escaped detection by the narrowest of margins.

The coins appear to have been in a deplorable condition when they reached the Museum. I cannot speak of this from personal knowledge, as I was absent from Edinburgh at the time. But Sir Charles Oman, who saw them almost immediately after their arrival, was inclined to take anything but a sanguine view of their future. In a letter to me he wrote: "The general condition of the silver is dreadful. Many specimens are so corroded that they may break up when cleaned and separated. Others have one side eaten into in holes, though the other side is good. The job of treating them will be a delicate and interesting one. I fear it may end in half of the whole being sent to the melter to become bullion." The passage deserves to be quoted in full because it will serve to throw into proper relief the skill and patience that were brought to bear upon a very difficult task. After the hoard had passed through

the expert hands of Mr. A. J. H. Edwards, Assistant Keeper of the Museum, it revealed itself as one of the most interesting fifteenth-century deposits of which there is any record in Scotland. Every one of the 1,128 coins could be identified with virtual certainty, and those that had not been worn by circulation were, for the most part, in a state that would have done credit to any cabinet. The total was made up of 18 pieces of gold, 611 of silver, and 499 of billon. There were, besides, a couple of billon fragments so small that they had to be set aside as hopeless. Rumour has it that some of the gold that had been in the lump escaped the vigilance of the Procurator-Fiscal. That, however, is quite doubtful. Diligent private inquiry has failed to confirm the report. It may, therefore, be assumed that the following summary of the buried treasure is reasonably complete:

Scottish Gold.

JAMES III.

Riders	2
Half-rider	1
Unicorns	14
	<hr/>
	17
	<hr/>

Foreign Gold.

MAXIMILIAN AND PHILIP THE FAIR OF BURGUNDY.

Noble de Bourgogne	1
------------------------------	---

English Silver.

EDWARD III.

Groats	17
Half-groats	88

RICHARD II.

Half-groat	1
----------------------	---

HENRY V.

Groats	6
Half-groats	6

HENRY VI.

Groats	44
Half-groats	91
Pennies	3

EDWARD IV.

Groats	3
Half-groats	2
	<hr/>
	256
	<hr/>

Scottish Silver.

ALEXANDER III.

Penny	1
-----------------	---

ROBERT III.

Groat	1
Half-groat	1

JAMES I.

Groats	84
------------------	----

JAMES II.

Groats	189
Half-groats	12

JAMES III.

Groats	56
Half-groats	5

JAMES IV.

Groats	6
	<hr/>
	355
	<hr/>

Billon.

JAMES III.

Placks	436
Half-placks	63
	<u>499</u>

A glance at the foregoing list immediately suggests that the hoard must have been concealed not long after the accession of James IV in 1488. He is the latest king represented, and his coins are relatively very few in number. Another obvious feature of interest is the evidence provided as to the extent to which English silver money was current in Scotland under the earlier Stewarts. Nearly 42 per cent. of the silver pieces were minted south of the Border. The proportion may appear to be large. But it is, of course, very much smaller than is usually found in deposits of the latter part of the thirteenth and the first half of the fourteenth centuries. There the ratio which the English coins bear to the native is seldom less than thirty to one. And even here the matter assumes a different complexion when the different denominations are looked at separately. Only about 15 per cent. of the groats are English, but less than 10 per cent. of the half-groats are Scottish. To get beyond these general inferences, a more detailed analysis is necessary.

GOLD.

As was indicated above, the whole of the Scottish gold belonged to James III (1460-88). The two Riders were both of the "First Series", on which the king faces towards the right, and both resembled

Burns, ii, p. 148, No. 1 (iii, Fig. 599); they weighed $78\frac{1}{2}$ and $77\frac{1}{2}$ grains respectively. The solitary Half-rider showed the king towards the left, and was therefore of the "Second Series". It weighed 40 grs., and corresponded to Burns, ii, p. 150, No. 1 (iii, Fig. 620). The fourteen Unicorns, ranging in weight from $59\frac{3}{4}$ grs. to 57 grs., included examples of all save four of the eleven varieties recorded by Burns, as well as an example of a variety which he does not mention. Their distribution may be worth noting:

(a) *Words divided by Stars of Six Points* (Burns, ii, p. 152).

No. 2	.	.	.	.	.	1
No. 3	.	.	.	.	.	2
No. 4	.	.	.	.	.	2
No. 5	.	.	.	.	.	3

(b) *Words divided by Stars of Five Points* (Burns, ii, p. 153).

No. 7	.	.	.	.	.	1
No. 9	.	.	.	.	.	1
Obv. as No. 7	}	.	.	.	.	1
Rev. as No. 9	}	.	.	.	.

(c) *Words on Obv. divided by Stars of Six Points, on Rev. by Stars of Five Points* (Burns, ii, p. 154).

No. 10	3
--------	---	---	---	---	---	---

The foreign gold piece was a *Noble de Bourgogne*, one of the new series of coins issued in the Low Countries during the minority of Philip the Fair, pursuant to a decree promulgated by his father Maximilian of Austria on March 13, 1487, after the latter had become 'King of the Romans'.¹ The Perth

¹ Engel and Serrure, *Num. du moyen âge*, iii, pp. 1168 ff.

example weighed 52 grs. Its types were, of course, those usually associated with the noble—on the one side the king in a ship, on the other a richly floriated cross. The obv. inscr. read MO + RO + RE + Z + PH + TRDVC + TVS + BG + BRT + Z + LIM, while that on the rev. ran REHOMTCIO + GVERRE + PTX + EST + TRRO + 1888, with M in the centre of the cross. The legend on the obv. should be expanded—*Moneta Romanorum Regis et Philippi Arciducis Austriae, Burgundiae, Brabantiae et Limburgi*. The first word on the rev. is a blundered rendering of *Reformacio*. The M in the centre of the cross may indicate either 'Malines' or 'Maximilian' or both.² The *terminus post quem* for concealment, as given by the date 1488, coincides with that deduced from the occurrence in the hoard of a sprinkling of coins of James IV.

ENGLISH SILVER.

It will be convenient to deal with the English silver first. Save for 3 pennies of Henry VI, it consisted entirely of groats (70) and half-groats (183).

EDWARD III (1327-77).

All the coins of this king in the hoard were much worn through circulation, particularly on the obv., and they were usually so badly clipped that details as to inscription, stops, and the like were difficult to determine with accuracy.³ Nevertheless, the following grouping may be accepted as reasonably certain.

² See Van der Chijs, *Brabant en Limburg*, i, p. 185.

³ Mr. L. A. Lawrence, who has examined the English coins and

First Issue of Groats (1351-60).

Mint of London.

Groats	15
------------------	----

(In six cases II is used in the mint-name, in eight cases H, and in one N.)

Half-groats	63
-----------------------	----

(Two of these are so much clipped that they are hardly larger than pennies. Some *may* be of the second issue, although it is unlikely. In 22 cases the form II is used, and in 41 H.)

Mint of York.

Groat	1
-----------------	---

Half-groats	9
-----------------------	---

Second Issue of Groats (1360-69).

Mint of London.

Groat	1
-----------------	---

(This has H.)

Half-groats	9
-----------------------	---

(Series A (with H on rev.) accounts for seven of these, and Series B (with N on rev.) for two; see *Num. Chron.*, 1898, pp. 20 f.)

Mint of Calais.

Demi-gros	2
---------------------	---

RICHARD II (1377-99).

Mint of London.

Half-groat	1
----------------------	---

from whom I have received valuable help in the identification of doubtful specimens, writes to me: "Such a collection of worn pieces I have never seen as part of a normal hoard."

HENRY V (1413-22).

Mint of London.

Groats 6

(The form *ÆRGLIĒ* is used on five of these, the form *ÆRGLI* on one. All have the egg-shaped swelling in the neck. The mullet on the l. breast is present on four, but seems to be absent on the remaining two, while on one of the latter the quatrefoil after *POSVI* is also omitted.)⁴

Half-groats 7

(The broken annulet to l. of the king's crown and the mullet on his breast appear on four of these. The remaining two have neither of those marks, but are distinguished by a horizontal straight line immediately below the royal bust.)

HENRY VI (1422-71).

In classifying the coins of Henry VI I have been guided almost entirely by the arrangement suggested by Mr. F. A. Walters in *Num. Chron.*, 1902, pp. 224 ff. But I have also had before me the late Mr. J. F. Neck's paper in *Num. Chron.* (N. S.), xi, pp. 93 ff.

i. *Annulet Coinage.*

Mint of Calais.

Gros 28

(The First Variety, with *ÆRGLIĒ* and the cusp on the breast fleured, accounts for seven of these, the Second Variety probably for five, and the Third for 15; but in some instances the condition of the coin makes it difficult to be sure whether the neck has the egg-shaped swelling or the tube-like mark. The remaining piece is of the "second transitional variety", for which see *Num. Chron.*, 1902, Pl. viii. 10.)

⁴ Mr. Lawrence points out that the last-mentioned is "Henry IV-V transitional".

Demi-gros 75
 (The First Variety absorbs 57 of these, and the Second Variety 16. The one that remains is of the "second transitional variety".)

Mint of London.

Groats 6
 (Two are of the First Variety, and four of the Second.)

Half-groats 8
 (Two belong to the First Variety, while the third belongs to the "first transitional variety".)

Mint of York.

Pennies 3
 (These three coins are all very much worn. On the best preserved of them, however, the name [h θ]NRICVS is legible on the obv.,⁵ and an annulet can be seen between the pellets in one quarter of the rev. It therefore seemed best to place them all here.⁶)

ii. *Rosette Mascle Coinage.*

Mint of Calais.

Gros 6
 (In four cases the mint-mark is a pierced cross, and in two a cross fleury.)

Demi-gros 9
 (In five cases the mint-mark is a pierced cross, and in three a cross fleury; on the remaining coin the mint-mark is not visible.)

Mint of London.

Groat 1
 (The mint-mark is a pierced cross.)

⁵ A trefoil is also distinctly visible to r. of the king's crown, and there are traces of what looks like a mullet to l. Cf. *Num. Chron.* (N. S.), xi, p. 131.

⁶ Mr. Lawrence is inclined to believe that one of them may be a late Edward III or a Richard II. The king's name is gone.

Half-groats 2

(On these two half-groats there is no mascle. The mint-mark is a cross fleury. Cf. *Num. Chron.*, 1902, Pl. x. 11.)

iii. *Pine-cone Mascle Coinage.*

Mint of Calais.

Gros 2

Demi-gros 1

Mint of London.

Half-groat 1

(This half-groat apparently belongs to what Mr. Walters calls "the rose-leaf issue"; see *Num. Chron.*, 1902, p. 245 and Pl. x. 18.)

iv. *Pine-Cone Trefoil Coinage.*

Mint of London.

Groat 1

(The rev. seems to be similar to *Num. Chron.*, 1902, Pl. ix. 6. The obv., however, has no leaf on the breast of the king, while the coin is so much clipped that the stops in the legend are indistinguishable.)

EDWARD IV (1461-83).

Light Issue.

Mint of London.

Groats 3

Half-groat 1

(One of the groats is in very good condition. The half-groat is in very fair condition.)

Mint of Canterbury.

Half-groat 1

(This is in good condition.)

SCOTTISH SILVER.

In giving an account of the Scottish silver, constant reference to Burns's indispensable work will obviate the need for much detailed description. Special attention will, however, be drawn to any points at which Burns's arrangement requires to be modified or supplemented in the light of the new material now available.

ALEXANDER III (1249-85).

The solitary penny of Alexander III can be disposed of at once. It is notable only for its survival. Its condition is very much what might be expected after two centuries of circulation, and any attempt to determine its place in the series would be hopeless. The other silver coins are all either groats (336) or half-groats (18).

ROBERT III (1390-1406).

Mint of Edinburgh.

Groat 1

(This is Burns, i, p. 290, No. 7c (iii, Fig. 349 D).

It is in fair condition, less worn than a good many of the later pieces.)

Half-groat 1

(This piece is much worn. Except that it has *SCOTORV* on the rev., it seems to have its closest analogy in Burns, i, p. 330, Nos. 1 f.)

JAMES I (1406-37).

FIRST VARIETY OF FLEUR-DE-LIS GROATS.

For the most part these pieces, like the fleur-de-lis groats generally, have suffered much through wear and clipping. Still, they could all be classified with reasonable certainty, although minute details were

often doubtful. The examination illustrated the truth of Burns's remark that "the groats of James I present a very great number of minor varieties, the difficulty being to find two coins in all respects precisely alike, more particularly of the Edinburgh mint". In a good many instances no exact analogy could be discovered in Burns's lists.

Style I.

Mint of Edinburgh 1

(This differs from either of the specimens mentioned by Burns, ii, p. 6, inasmuch as the characteristic Q and D, with curved stems, appear on the rev. as well as on the obv.)

Style II.

Mint of Edinburgh 15

(One of the 15 is so much worn that its classification is rather doubtful. In the case of three of the others the rev. appears to be that characteristic of Style III.)

Style III.

Mint of Edinburgh 52

Mint of Linlithgow 7

(Some of the Linlithgow coins—two in particular—are well preserved.)

Mint of Perth 1

SECOND VARIETY OF FLEUR-DE-LIS GROATS.

Mint of Edinburgh 7

Mint of Stirling 1

JAMES II (1437-60).

THIRD VARIETY OF FLEUR-DE-LIS GROATS.

Taken as a whole, the coins falling under this head are in worse condition than any of the other groups of fleur-de-lis groats. The number of minor varieties

differing from any described by Burns was also larger than in any other group. But the individual specimens were usually in such a worn condition that no complete account of them can be given. We must be content with the general classification:

Mint of Edinburgh 25

FOURTH VARIETY OF FLEUR-DE-LIS GROATS.

Here again exact discrimination was impossible.

Mint of Edinburgh 3

FIRST VARIETY OF CROWN GROATS.

Burns's wonderful numismatic instinct stood him in less good stead than usual when he selected, as the distinguishing marks of this variety, the projecting curl to the king's right and the slender trefoils between the lis of the crown (*Coinage of Scotland*, ii, p. 72). These marks are indeed characteristic of two out of the three dies which he knew, his Figs. 515 and 516. But they were never present on his Fig. 517, as will be clear from a comparison with such a coin from the Perth hoard as *Pl. VIII. 1.* He ought, in fact, to have broken up his First Variety, just as he does his Second, into two divisions. The two are in most respects alike. While, however, the extra curl and the slender trefoils appear in the First Division, they do not occur in the Second. The differential element in the latter is a curious defect in the stamping of the die, which makes it seem as if the crown were raised a little way from the head.

Mint of Edinburgh 20

(On the principle indicated above, 13 of these would fall into the First Division; seven of them have the

pellets in the first and third quarters, and six the pellets in the second and fourth. The remaining seven belong to the Second Division; three have the pellets in the first and third quarters, and four the pellets in the second and fourth.)

SECOND VARIETY OF CROWN GROATS.

First Division.

Mint of Edinburgh 69

(The great majority of the minor varieties represented in Burns reappear here. On the other hand, there is only one novelty that deserves noting [Pl. VIII. 2]. It has a saltire on either side of the king's neck on the obv., and no subsidiary ornaments on the rev.)

Second Division.

Mint of Edinburgh 68

(Many, though not all, of Burns's minor varieties occur. And the following new ones deserve mention: (1) *Obv.* Saltire on either side of king's neck, lis to r. of crown above, and a second lis to r. of crown at side. *Rev.* Annulets between the pellets. (2) Similar, without annulets on *Rev.* (3) *Obv.* Lis on either side of king's neck. *Rev.* Annulets between the pellets. See Pl. VIII. 3. (4) Similar, without annulets on *Rev.* See Pl. VIII. 4. (5) *Obv.* Trefoil on either side of king's neck. *Rev.* Saltires between the pellets. See Pl. VIII. 5. (6) *Obv.* Lis to l. of king's neck. *Rev.* Saltires between the pellets.)

Mint of Stirling 1

Mint of Roxburgh 2

(In both cases the rev. presents the same peculiarity as Burns (ii, p. 86) notes in regard to the two examples from the Roxburgh mint which he records—the crowns in the first and third quarters have the appearance of being re-struck over pellets. As Burns indicates, a blunder in the making of the die must be responsible.)

Mint of Perth 1

HALF-GROATS.

The only known half-groats of James II correspond to the Second Variety of Crown Groats. Burns ob-

serves (ii, p. 88): "They appear to have been struck at Edinburgh only. Very few varieties exist, and of these the individual specimens are all very rare." This statement no longer holds good. As long ago as 1905 an example from the Aberdeen mint was exhibited to the Society of Antiquaries of Scotland (*Proceedings*, xl, p. 14), and was afterwards acquired for their cabinet. The present hoard provides a second Aberdeen example (Pl. VIII. 7), as well as the first recorded example from the mint of Perth (Pl. VIII. 8). It also nearly doubles the number of known varieties of the Edinburgh mint, adding four to the five mentioned by Burns. Two of the better preserved among the four are illustrated here (Pl. VIII. 9 and 10).

Mint of Edinburgh	10
Mint of Aberdeen	1
Mint of Perth	1

JAMES III (1460-88).

GROATS WITH MULLETS OF SIX POINTS: FIRST SERIES.

Mint of Edinburgh	3
Mint of Berwick	5

GROATS WITH MULLETS OF SIX POINTS: SECOND SERIES.

1. *Crown of Five Fleurs-de-lis.*

Mint of Edinburgh	2
Mint of Berwick	1

2. *Crown of Three Fleurs-de-lis.*

Mint of Edinburgh	12
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3. *Mules* (as Burns, ii, p. 121, No. 21).

Mint of Edinburgh	2
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HALF-GROATS WITH MULLETS OF SIX POINTS: SECOND SERIES.

Mint of Berwick	2
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*GROATS WITH MULLETS OF FIVE POINTS.**With Tressure of Seven Arcs.*

Mint of Edinburgh	19
(The <i>pellets</i> are in the first and third quarters on four of these.)	

With Tressure of Eight Arcs.

Mint of Edinburgh	12
(The <i>pellets</i> are in the first and third quarters on two of these)	

HALF-GROATS WITH MULLETS OF FIVE POINTS.

Mint of Edinburgh	3
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JAMES IV (1488-1513).

As might have been anticipated, the groats of James IV are all in very good condition. They had obviously been but a short time in circulation before they were concealed.

FIVE-POINTED MULLET GROATS.

Mint of Edinburgh.	
With QRT	1
With III	5

BILLON.

No such extensive hoard of billon of this particular period has, so far as I am aware, been recorded before. Just as, with insignificant exceptions—three English pennies and one Scottish one—the silver consisted entirely of groats and half-groats, so among the billon there are only placks and half-placks, without any pennies at all. Hitherto placks of the issue here represented have been far from common, while Burns (ii, p. 160) speaks of the corresponding half-placks as being “extremely rare”. Owing to the miserable

quality of the metal, the condition of the great majority of the pieces was rather poor, those of the larger denomination being, on the whole, in a worse state than those of the smaller. Nevertheless, it proved possible to make an excellent selection for the Edinburgh Cabinet.

JAMES III (1460-88).

PLACKS: FIRST VARIETY.

Mint of Edinburgh	436
(One of these has a five-pointed star in the centre of the rev., instead of the usual saltire. See Pl. VIII. 6.)	

HALF-PLACKS: FIRST VARIETY.

Mint of Edinburgh	63
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In the course of the foregoing description attention has been called to the various points at which the coins have yielded fresh information of a positive character. It remains to consider the bearing of the negative evidence they provide. This will, I think, be admitted to be important. Thanks partly to the large number of pieces contained in the hoard, and partly to the precision with which the date of its concealment can be fixed, inferences of some moment become possible. It is not too much to say that the find promises to settle once for all two or three vexed questions in Scottish numismatics.

To begin with the billon, it will be noted that placks and half-placks alike belonged without exception to Burns's First Variety. That is, they had a cross *fourchée* on either side of the arms of Scotland on the obv. The fact that in not one of the 499 cases were the crosses replaced by the crosses characteristic of the Second Variety, shows clearly that when the

hoard was buried—that is, in the first years of the reign of James IV—placks and half-placks of the latter variety were not yet in circulation. Cardonnel attributed some of the issues of the Second Variety to James II, and Lindsay to James III. Mr. Grueber (*Handbook to the Coins of Great Britain and Ireland*, p. 177) follows Lindsay. Burns has much more hesitation. He says (ii, p. 199): “By far the larger portion, if not the whole of the existing examples, must have been struck under James IV.” He also gives good reasons for believing that “an interval of some duration had taken place between the latest issue of the placks of the first and the earliest of the second variety” (ii, p. 196). It is now plain that his caution was more than justified, and that in the “interval” there was a change of rulers. The placks and half-placks of the First Variety may safely be assigned to James III, and those of the Second Variety to his successor. This is a real step in advance.

And there is more to be learned from the silver. The groats of James IV are so few in number that they afford a somewhat narrow basis for conclusions, although it is at least certain that the varieties with QRT and IIII must have been among the first which this king struck. It is different with the groats of James III. These are fairly numerous (56), and we are accordingly entitled to assume that here we are confronted by a really representative series. Consequently, when we find no examples of the three-quarter-face groats with thistle-heads and mullets alternately in the quarters of the cross on the reverse, we cannot but feel that Burns—who has been followed by Richardson in his *Catalogue of Scottish Coins in the*

National Museum, Edinburgh—was wrong in his attribution of these coins to James III. His arguments for identifying them with the “new alayt grot” of the Act of Parliament of May 6, 1471, are ingenious (*Coinage of Scotland*, ii, pp. 112 ff.). They were not, however, accepted by Mr. Grueber (*Handbook*, pp. 182 f.), and the fresh evidence from the Perth hoard seems to justify us in setting them altogether aside. Unless and until further light comes from finds or otherwise, it will be well to revert to the traditional view of the thistle-head and mullet pieces, and to regard them as the first-coinage groats of James V.

Two other sets of groats are in somewhat similar case. The first is the group on the obv. of which is a facing head of the king with open crown, while the rev. has a crown and a fleur-de-lis in each of two opposite quarters of the cross, and three pellets, with an annulet between, in each of the other two quarters. Burns (ii, pp. 130 f.) assigns these to James III, and considers that they must have been struck pursuant to the instruction contained in the Act of Parliament of February 24, 1483-4. Their absence from the present find appears to make it certain that they are later than 1488, and so not earlier than James IV. As, however, they are at the best somewhat rare, it might conceivably be maintained that this absence was accidental. When we come to the second set, there is no room for such an explanation. The groats bearing on the obv. a bust of the king three-quarter-face towards l., wearing surcoat and armour and having a double-arched crown, are probably the commonest in the whole fifteenth-century series. Burns, while admitting that some of them were probably minted

under James IV, argues (ii, pp. 126 ff.) that the greater number must have been struck by James III. But, if this had been so, they would certainly have been well represented among the coins from Perth. In point of fact, not a single example occurs. James III must, therefore, be ruled out. *A fortiori* James II, who had his advocates among the earlier writers on Scottish coins, is also impossible. Lindsay's attribution to James IV, to which Mr. Grueber adhered in his *Handbook* (p. 179), thus holds the field.

If, however, Lindsay's classification is sound, the line of reasoning by which he reached it is wholly unsatisfactory. An Act of Jan. 14, 1488-9 directed that there should be struck a new fourteen-penny groat which was "to haue prent sic as the xiiijd grote has that now is, except that the visage sall stand eywyn in the new groit". Lindsay insists (*View of the Coinage of Scotland*, p. 86) that the phraseology of the Act "proves beyond question that the three-quarter-face coins must have been the coinage to which it applied, for the direction 'that the king's visage shall stand eyeing' cannot possibly apply to any other coins which could have been struck under this act, and we may now consider this point as completely set at rest, and all doubt and difficulty nearly removed from the coins of James IV, hitherto the subject of so much perplexity." Burns (ii, p. 128) emphatically dissents, expressing surprise "that any one in the least acquainted with the old Scottish language, or with old Scottish pronunciation, should have mistaken 'eywyn' for 'eyeing', as has been done by Lindsay". At the same time he, too, makes appeal to the words of the statute. Interpreting "eywyn"

in a sense exactly contrary to that which Lindsay had given it, he regards the direction of the Act as indicating clearly "that the visage did not stand even, or presenting the full face, on the fourteen-penny groats as last struck. And this proves beyond a doubt that the fourteen-penny groats of the previous coinage were the three-quarter-face groats with the imperial crown, these being the only coins of that denomination struck in the proportion of ten to the ounce, on which the visage did not 'stand eywyn', or even."

Burns's criticism of Lindsay is unquestionably sound, and his own reading of the statute is less obviously open to objection. Yet the non-appearance in the Perth find of any specimens of the three-quarter-face group justifies Lindsay on the main issue of attribution, and non-suits Burns. The apparent contradiction made it desirable to seek expert advice on the linguistic point involved. I accordingly put the two views before Professor Craigie, without giving him any hint of the trend of the numismatic evidence. I reproduce his interesting reply: "It is quite certain that *eywyn* does not mean 'eyeing'. (Apart from the impossible spelling, the verb *eye* is not recorded till about a century after 1488.) The meaning is clearly 'even' (for which *eywyn* is quite a natural Scottish spelling). I think it possible that this could have the sense in which Burns took it, i. e. looking straight forward; we still say *even forrit*, but I cannot produce any other example of *even* by itself in the sense of 'full face on'. Is it not possible, however, that there may be yet another explanation? 'Stand even' would naturally be contrasted with standing askew or off the straight. Is there any indication that on some of the groats the

'visage' is not at the proper angle in relation to the inscription or whatever else there may be on either side of the coin? This explanation would agree best with the direction that the *prent* was to be the same as in the existing groat. If the face had been altered from three-quarters to full, the difference would perhaps have been expressed more clearly."

Dr. George Neilson, whom I also consulted, made quite independently the same suggestion as Professor Craigie. Careful observation along these lines may one day throw light on the true meaning of "eywyn". Meanwhile the word does not help us. Burns's interpretation might have been accepted if the conclusion to which it led him had been confirmed by the composition of the Perth hoard. Without this support it carries no weight whatever. On the other hand, the absence of any admixture of three-quarter-face groats does more than suggest that they, like the thistle-head and mullet pieces and the crown and fleur-de-lis group, should be catalogued, not under James III, but under a later king. Incidentally this may involve a slightly later date for the Crostraguel pennies than that which I originally proposed for them.⁷

GEORGE MACDONALD.

⁷ *Num. Chron.*, 1919, p. 298.

XVI.

UNPUBLISHED COINS OF THE CALIPHATE.

THE following Oriental coins in the collection of the American University in Beirut are not found in any of the catalogues that I have at hand. I have compared them with the British Museum series and the catalogue of the collection of the Bibliothèque Nationale of Paris and the Khedivial collection of Cairo and the general catalogue of Tiesenhausen and excluded from mention any that are found in these catalogues. Most of those in the list do not differ, of course, from the published coins except in the year of issue, but some do and these I have noted by giving the points in which they differ. In regard to the others I have simply given the date and referred to the *British Museum Catalogues of Oriental Coins*, indicating the reference by *B. M. C.*, and the number of the coin in the catalogue. I have not included in my list any outside the coins of the Omayyad and 'Abbāsid caliphs, except a few which are of especial interest and which belong to the same period.

OMAYYAD CALIPHS.

Silver dirhems.

Mint Ardāshīr Khurra, year 80. Formulas as on No. 43
B. M. C., vol. i.

Iṣṭakhr, year 102.

Al-Rashid.

Dinar. No mint, year 171. Like *B. M. C.* 142, but with م above *rev.* area and nothing below.

Year 189, but with *nothing* beneath *rev.* area (as on *B. M. C.* 156).

Dirhem :

Mint Arrajān, year 187.

Rev. area

محمد رسول
الله صلى الله عليه وسلم
مما امر به الامير الامين
محمد بن امير المؤمنين
بفتح

Al-Baṣra, year 183. Like *B. M. C.* 168, but with جعفر beneath *rev.* area.

Al-Baṣra, year 189.

Rev.

محمد
رسول
الله
°

Balkh, years 181, 183, 184, 187.

Al-Rāfiqa, year 187.

Rev. area

محمد
رسول
الله

Annulets ○○○○○.

Madinat Zerenj, year 173. Like *B. M. C.* 176, but with داود beneath *rev.* area.

Madinat Zerenj, year 186. Like 177, but with سيف only beneath *rev.*

Madinat Zerenj, year 186 also, but *rev.* area like 171 of *B. M. C.* Annulets ○○○○○○○○○.

Muḥammadiya, year 183. *Rev.* area like 168, but has صرد beneath.

Muḥammadiya, year 172. Like 190, but *rev.* has الهى (probably for الهى) above and و below.

Sijistan, year 171.

Rev. area

محمد رسول
الله صلى الله
عليه وسلم
لخليفة الرشيد
بفتح

Al-Amīn.

Dinar. No mint; year 196. Like *B. M. C.* 233, but has
 الامين below *rev.* instead of الامام.

Dirhem. Mint Sabūr, years 194 and 195. *Rev.* like *B. M. C.*
 238.

Al-Ma'mūn.

Dinar:

No mint; year 202. *Obv.* area has عد above and
 رباعة الله beneath.

Mint wanting; year 211. Inscribed like the previous
 one except that the *rev.* area has مسرور beneath.

Mint wanting; year 214. Like *B. M. C.* 249, but with
 ابو اسحق beneath *rev.* area.

Mint wanting; year 217, like that of 202.

Madinat al-Salām, year 218. Like *B. M. C.* 259.

Dirhem:

Mint Dimashq, year 203.

محمد
 محمد رسول الله
Rev. area الامام المأمون
 عبد الله امير المؤمنين
 بن هرون

Mint Samarqand, year 205. *Rev.* like *B. M. C.* of the
 same year, but with pellet in الله of *rev.*

Mint Samarqand, year 205. Like the above.

Mint Samarqand, year 208. The *obv.* has outer margin
 like *B. M. C.* 289 but nothing beneath the area.

الله
 محمد رسول
 الله المأمون
 خليفة الله
 طلحة

The *rev.* area reads:

Mint al-Muḥammadiya, year 195.

Obv. outer margin ○ طاهر ○ بن الحسين ○ مولى المأمون ○

Beneath the *obv.* area ذو اليمينين

الله
 محمد رسول الله
Rev. area مما امر به عبد الله عبد الله
 المأمون امير المؤمنين
 الفضل

The Ṭāhir mentioned on the margin of this coin was probably the father of Ṭalḥah mentioned on the Samarḳand coin of 208. We find Ṭāhir mentioned in the Annals of al-Ṭabarī and of Abu 'l-Fidā' under the date A. H. 195 as the general of the army of al-Ma'mūn which met the forces of al-Amīn which were marching against him. The latter had just deposed al-Ma'mūn from the succession to the Caliphate, contrary to the will of their father, Harūn al-Rashīd, who had designated al-Amīn to succeed him in the Caliphate but made his brother al-Ma'mūn heir to the throne after him. Al-Amīn reversed this in A. H. 194 and designated his infant son, Mūsa, to the succession. This brought on a contest between the brothers which resulted in the dethronement and death of al-Amīn in 198. Ṭāhir defeated the army of al-Amīn at Rayy in 195 and advanced against Baghdād, which he captured, and put to death Amīn. He had already proclaimed al-Ma'mūn as Caliph in 195, the year when the above coin was struck on which his name appears as Maula, or servant, of al-Ma'mūn. He had great authority under al-Ma'mūn who bestowed upon him the governorship of all the eastern part of his empire, and he is said to have meditated the dethronement of the caliph in A. H. 207 when death overtook him.

Dirhem :

Mint al-Muḥammadiya, year 196. Same as 195, but with nothing below *obv.* area.

Mint Madinat al-Salām, year 202. Inscriptions as on *B. M. C.* 205.

Mint Marv, year 213. Two margins on *obv.*, all above *rev.* area.

Mint Ma'din-Bajunīs, year 210. Short formulas on *obv.* and *rev.* No outer margin.

Dirhem :

Mint Madinat Nisābūr, year 203. Inscriptions as on
B. M. C. 287.

Mint Madinat Herāt, year 196. Like the above.

Al-Mu'tasim.

Dinar : No mint, year 223.

على
 محمد
 رسول
 الله
 الاعلى
 Rev. area

Mint Miṣr, years 225 and 226. Inscriptions as on
B. M. C. 302.

Dirhem :

Mint Dimashq, years 225 and 226. Inscriptions same.

Mint Samarqand, years 219 and 220. Inscriptions same.

Mint Fāris, year 220. Inscriptions same.

Al-Wathik.

Dirhem :

Mint Dimashq, years 228, 229, 230, 231, 232. Inscrup-
tions as *B. M. C.* 313.

Mint Sarra-man-rā'a, year 231. Inscriptions same.

*Al-Mutawakkil.*Dinar : Mint Marv, year 240. Inscriptions as on *B. M. C.*
316.

Dirhem :

Mint Iṣbahān, year 234. Inscriptions without ابو عبد الله
beneath *obv.*

Mint Dimashq, year 234. Inscriptions as on preceding.

Mint Miṣr, year 246. Beneath *obv.* area المعتز بالله.*Al-Mu'tazz.*

Dinar :

Mint Miṣr, year 255.

Beneath *obv.* area

عبد الله بن
 امير المؤمنين

Rev. as on *B. M. C.* 342.

Al-Muhtadī.

Dinar :

Mint Sarra-man-rā'a, year 255. *Obv.* with inner and outer margins and area as usual.

	له
	محمد
<i>Rev. area</i>	رسول
	الساله
	المهتدي بالله

Al-Mu'tamid.

Dinar :

Mint Ahwāz, year 274.

	له
	محمد
	رسول
<i>Obv. area</i>	<i>Rev. area</i> السالده
لا اله الا	المعتمد على الله
الله وحده	احمد بن الموفق بالله
لا شريك له	و
الناصر لدين الله	
الموفق بالله	

Mint Al-Rāfiqa, year 270.

	له
	محمد
	رسول
<i>Obv.</i>	<i>Rev.</i> السالده
لا اله الا	المعتمد على الله
الله وحده	
لا شريك له	
المفوض الى الله	

Mint Sarra-man-rā'a, year 262. Inscriptions as above.

Mint Madinat al-Salām, year 269. Nothing beneath *obv.* area ; *rev.* like the above.

Dirhem :

Mint Arrajān, year 277. *Obv.* like that of the dinar of al-Rāfiqa above, but *rev.* has at the bottom عمرو بن ليث. (This dirhem should probably be assigned to the dynasty of the Saffarids, but it differs from the coin described in *B. M. C.*, vol. ii, 246.)Mint Dimashq, year 259. Inscriptions like those of *B. M. C.* 358.

Dirhem :

Mint Al-Kūfa, year 263. Inscriptions like those of
B. M. C. 267.

Al-Mu'tadid.

Dinar : Mint Al-Rāfiqa, years 282 and 285. Formulas as on
B. M. C. 378.

Dirhem :

Mint Barda'a, year 285. Formulas as on *B. M. C.* 378.

Mint Al-Rāfiqa, year 287. Formulas as on *B. M. C.*
378.

Mint Sarra-man-rā'a, year 283. Formulas as on *B. M. C.*
378.

Mint Sarwān, year 283. Formulas as on *B. M. C.* 378.

Al-Muktafi.

Dinar :

Mint Baṣra, year 292. Like *B. M. C.* 393.

Mint Ḥimṣ, year 295. Like *B. M. C.* 393.

Mint Al-Rāfiqa, year 289. Like *B. M. C.* 393.

Mint Filistīn, years 291, 293, and 295. Like *B. M. C.*
393.

Mint Madinat al-Salām, year 290. Like *B. M. C.* 393.

The *Rev.* of these dinars is the same in all except that of
Filistīn for 291 which has *بن خمارون* beneath.

Dirhem :

Mint Amid, year 293. Inscriptions as on the dinars.

Mint Ahwāz, year 295. Inscriptions as on the dinars.

Mint Baṣra, year 292. Inscriptions as on the dinars.

Mint Ḥalab, year 292. Inscriptions as on the dinars.

Mint Ras al-'Ain, years 289 and 291 (291 has *ولي الدولة*
below *obv.*).

Mint Suḳ al-Ahwāz, year 293. Inscriptions as on the
dinars.

Mint Shīrāz, year 291, differs from the preceding in
having *ولي الدولة* beneath the *obv.* area.

Mint Shīrāz, year 292, *without* the above addition.

Mint al-Kūfa, year 295. Like the previous (292).

Dirhem :

- Mint Muḥammadiya, years 292 and 295. Like the previous (292).
- Mint Madinat al-Salām, year 291. Like the previous (292).
- Mint al-Mošil, year 290. Like the previous (292).
- Mint Nişābīn, year 290. Like the previous (292).
- Mint Hamadān, year 289. Like the previous (292).

Al-Muḳtadir.

Dinar :

- Mint Anṭakiya, year 306. Inscriptions like *B. M. C.* 408.
- Mint Ḥalab, year 297. Inscriptions like *B. M. C.* 408.
- Mint Ṭabarīya, year 319. Very thin; weighs only 16 grains = quarter dinar.
- Mint Filistīn, years 311, 313, 314, 318, and 319. Inscriptions as above.

Dirhem :

- Mint Anṭakiya, years 311, 317. Inscriptions as above.
- Mint Ahwāz, year 304. Inscriptions as above.
- Mint Baṣra, years 299, 300, and 316. Inscriptions as above.
- Mint Tustar-min-al-Ahwāz, year 305. Inscriptions as above.
- Mint Harrān, years 305, 311, 313. Inscriptions as above.
- Mint Dimashq, years, 306, 313. Inscriptions as above.
- Mint Ras-al-'Afu, years 302, 306. Inscriptions as above.
- Mint al-Rāfiqa, years 305, 312, 313. Inscriptions as above.
- Mint Sijistān, year 305. Inscriptions like *B. M. C.* 378.
- Mint Sarra-man-rā'a, years 296 and 306.
- Mint Suḳ al-Ahwāz, years 306 and 309.
- Mint Shīrāz, years 302 and 312.

Dirhem :

Mint Şarşara (or Şarşa), years 306 and (30)8, (This mint I cannot find in any catalogue of oriental coins, but a place called *صرصر* is found in the annals of al-Ṭabarī which may be the same as the one on this coin.)

Mint Ṭarsūs, year 302? (Last unit doubtful.)

Mint Fārs, year 299.

Mint 'Ammān, year 317. (Beneath *obv.* area *يوسف بن وجيه*.) The name *يوسف بن وجيه* is found in the *Annals of Abu 'l-Fidā* under date of A. H. 341. He was then ruler of 'Ammān.

Mint Kūfa, years 311 and 312.

Mint Muḥammadiyah, year 311.

Beneath *obv.* area *الوائى ابو الحسن*

Beneath *rev.* area *يوسف بن ديواد*

(The name on the *rev.* is found in *Tiesenhansen*, 2249 on a coin struck at Barda'a.)

Mint Madinat al Salām, year 303. (Pellet above and beneath *obv.* area and two beneath *rev.*; also another of the same year with *س* beneath *rev.*)

Mint Miṣr, years 297 and 299. (Annulet beneath *rev.*)

Mint Moṣil, year 312.

Mint Niṣībīn, years 303 and 312. (303 has *له* beneath *rev.*)

Mint Hamadān, year 298.

Mint Wasīṭ, years 295, 296, 301, 313, 320. (296 like *B. M. C.* 412; 320 has *عميد الدولة* beneath *rev.*)

Al-Kāhir.

Dirhem :

Mint Rāfiqa, year 320. Inscriptions as on *B. M. C.* 453.

Mint Madinat al-Salām, year 321. Same.

Mint Niṣībīn, year 320. Same.

Er-Rādī.

Mint Antakiya, year 322. Like *B. M. C.* 456.

Mint Raḥaba, year 322. Same.

Mint Madinat al-Salām, years 324 and 329.

Dirhem :

Mint Madinat al-Salām, year 329.

	لا اله الا	الله
	الله وحده	محمد
Obv.	لا شريك له	رسول الله
	ابو الفضل بن	الراضي بالله
	امير المؤمنين	ابو الحسن بحكم
		مولا

Mint Niṣṭbīn, year 329. Like *B. M. C.* 456.

'ALIDS OF TABARISTAN.¹

Dirhem : Mint Jurjān, year 268.

Obv. area :

لا اله الا
الله وحده
لا شريك له
الداعي الى الحق

Inner margin :

بسم الله ضرب هذا الدرهم بمدينة جرجان سنة ثمان وستين ومائتين

Outer margin :

ولا يسالكم (sic) عليه اجراً الا المودة في القربى و من يقترب حسنة
نزد له فيه حسناً (See *Ḳorān*, Sura xlii. 22)

Rev. area :

الله
محمد
رسول
الله
الحسن بن زيد

Margin :

أذن للذين يقاتلون بانهم ظلموا وان الله على نصرهم لقدير
(*Ḳorān* xlii. 40)

The Ḥasan bin Zaid² who struck this coin was an independant chieftain ruling in Ṭabaristān from A. H. 250 to 270. Al-Ṭabarī gives an account of his being

¹ Lane-Poole, *Mohammadan Dynasties*, p. 127.

² *Encyclopaedia of Islam*, s. v.

summoned from Rayy by the people of Ṭabaristān to take the governorship of the province since they were oppressed by their former ruler. He was a direct descendant of 'Alī. Abu 'l Fidā' tells us that he invaded and occupied Jurjān in A. H. 257 and it would seem that he held it until his death, or at least until 268 (A. D. 881-2), the date of this coin.³

AHMAD B. 'ABD ALLĀH.

al-Khujistānī.

Dirhem: Mint Nīsabūr, year 268.

Obv. area:

باليمن
لا اله الا الله
محمد رسول الله
المعتمد على الله
والسعادة

Margin:

اللهم مالك الملك توتي الملك من تشاء وتنزع الملك ممن تشاء وتعز من
تشاء وتذل من تشاء بيدك الخير (Kor. iii. 25)

(This formula is found on a coin of Yusūf I of the Beni Naṣr, *B. M. C. II*, 171.)

Rev. area:

بالنصر
الملك و القدرة لله
الحول و القوة بالله
الوافي احمد بن عبد الله
والظفر

Inner margin:

بسم الله ضرب هذا الدرهم بنيسابور سنة ثمان و ستين و مئتين

³ Sir Percy M. Sykes recently presented to the British Museum a similar dirhem of the mint Amul, year 254. Coins are also known of a descendant of his, al-Hasan b. Kāsīm, cf. *British Museum Catalogue of Oriental Coins*, vol. ix, *Addenda*, p. 257, No. 617 f.—J. A.

Outer margin :

قاتلوا الذين يلونكم من الكفاد و ليجدوا فيكم غلظة واعلموا ان الله مع
المشققين (Kor. ix. 124)

Aḥmad bin 'Abd Allāh is mentioned several times by at-Ṭabarī. He says that in A.H. 265 he took Nīsābūr and in 266 he attacked Ḥasan ibn Zaid, who issued the previous coin, and raided Jurjān. He also defeated 'Amru ibn Laith, of the Saffārid dynasty, and killed or expelled his adherents from Nīsābūr. He seems to have made this place his head-quarters for it was there that his coins were struck. Ṭabarī mentions his institution of a coinage with the above inscriptions on the *obv.* and *rev.* areas of both dinars and dirhems in A.H. 267 (A.D. 880-1), the year before the date of the above. He seems to have been one of the chieftains that assumed independent authority during the disintegration of the 'Abbāsīd caliphate, but I do not find that he founded a dynasty. He was called al-Khujiṣtānī from the district whence he came, in the neighbourhood of Herāt.

UNCERTAIN DYNASTY.

1. Dinar : Mint Filistīn, year 359 ? (357 ?).

Obv. area :

لا اله الا
الله وحد
لا شريك له
الحسن بن
عميد الله

Inner margin :

بسم الله ضرب هذا الدينير بفلسطين ستة تسع و خم و ثلث مائة (sic) ^{سبع} ؟

Outer margin as usual :

لله الامر من قبل ومن بعد الخ

Rev. area :

٥ لله ٥
 محمد
 رسول الله صلى
 الله عليه وآله
 (sic) المطيع لله
 احمد بن علي
 طبعه (طاج)

Margin as usual :

محمد رسول الله ارسله الخ

Weight 76 grains.

2. Dirhem : Same mint, but date has خمس instead of تسع or سبع with the same apparent abbreviation for fifty, making the probable date 355. The inscriptions are the same as on the dinar above except that بن at the end of the fourth line of the *obv.* is transferred to the beginning of the fifth. No pellets on *rev.* area. Beneath *obv.* مصر. Size 1 inch.

I have not been able to determine clearly to what family Ḥasan bin 'Ubaid Allāh of these two coins belongs, nor that of Ahmad bin 'Alī of the *rev.* The latter name points to Abu 'l-Fuwaris Ahmad, the last of the Ikshidid dynasty, but the date of the dirhem does not agree with the date of his reign which began after the death of Kafūr in 356, and Ahmad was deposed in 358 by al-Mu'izz al-'Alawi who then took Egypt. The date on the dinar may be 357, as the distinction between 7 and 9 in the Cufic character is sometimes wanting, so that the dinar may have been struck while he was still on the throne. The presence of the name Taghj beneath is confusing, for although al-Iksheed was the son of Taghj his name does not appear on any coins of the dynasty as far as I can find. There is another Taghj mentioned in connexion with the account of the conquest of Syria and Palestine by al-Mu'izz in 358 as given by Abu 'l-Fidā' under this date. He says that when the army of Mu'izz reached Ramleh

in Palestine they came into conflict with al-Hasan ibn 'Abd Allah ibn Tagh̄j and defeated him and took him prisoner. This may have been the Hasan mentioned on these coins though they read 'Ubaid Allāh instead of Abd Allāh.

KARMAṬIANS IN SYRIA.

1. Dinar: Mint Filistin, year 361.

Obv. area: لا اله الا الله
وحدده
لا شريك له
السادة
الروسا

Margins as usual.

Rev. area: لله
محمد رسول الله
صلى الله عليه
و على آله
المطيع لله
الحسن بن احمد

Margin as usual.

Weight 73 grains.

2. Dirhem: Mint Dimashq, year 361.

Obv. area: لا اله الا
الله وحدده
لا شريك له
السيد
الحسن بن احمد

Inner and outer margins as usual.

Rev. area: لله
محمد
رسول الله
صلى الله عليه
و على آله
المطيع لله
سادة الروسا

Margins as usual.

Size, 1.1 inch.

It would seem that this Ḥasan bin Aḥmad mentioned on this dirhem was the chief of the Karmaṭians, a band of ruthless sectaries who arose in the region of Kūfa about A.H. 278 (A.D. 891-2) and were for near a century a terrible scourge to the dominions of the caliphs of Baghdād. They invaded Syria at various times, plundering and murdering the inhabitants, Moslems as well as Christians without distinction. We learn from Abu 'l-Fidā' under the year A.H. 360 (A.D. 971-2) that they ravaged Palestine and south Syria and took Damascus and then went through Palestine and Egypt, but were driven back from there to Syria. He states that their leader at this time was Ḥasan b. Aḥmad b. Bahrām, whom I take to be the one referred to on this coin. He takes the title Sayyid, lord or chief, and although the *rev.* bears the name of the caliph, he in no way acknowledged his authority. The term, "al-Sadat al-Ruasa" found on the *rev.* of this coin and on the *obv.* of the dinar above, is rather peculiar. The first word is the plural of Sayyid and the second is the plural of the word rayyis, head or chief, and the two would seem to be in apposition, meaning much the same. We find in Abu 'l-Fidā', under date of A.H. 363 (A.D. 974) that the Karmaṭians were still in Syria, but that they invaded Egypt again and were severely defeated by Mu'izz, the Egyptian caliph, who pursued them into Syria and killed many of them, and the remainder retired to their headquarters in Bahrein on the Persian Gulf. The date on the two coins corresponds to the period of their occupation of Damascus.

HARVEY PORTER.

XVII.

INDIAN COINS ACQUIRED BY THE BRITISH
MUSEUM.

(PLATE IX.)

THE following notes describe some of the more remarkable Indian coins acquired by the British Museum in recent years. This part, which will be continued in future numbers of the *Chronicle*, covers the period A. D. 300-1300, from the Gupta period to the end of the Khaljī family's rule in Delhi.

GUPTA DYNASTY.

Samudragupta.

Battle-axe type, var. δ .

Obv.

Rev.

King standing to r. on l. holding long shafted battle-axe in r. hand: on l. boy or dwarf to r. holding dagger in l. hand. Crescent-topped standard in background. *Samudra* between the figure.

Lakṣmī seated facing holding fillet in r. and lotus in l. hand. Her feet rest on lotus.

On r. *Kṛtāntaparaśu*.

Symbol B.M.C. No. 39 on l.

Around *Kṛtāntaparaś*[- - -
- - -] *jajetājitaḥ*

[Pl. IX. 1.]

This is the coin illustrated in *Ar. Ant.*, Pl. xviii. 10,

pp. 424-5, from the Swiney collection and now lost. It is described in the B.M.C., p. lxxiii and p. 15. Impressions of it were found too late to illustrate there and the opportunity is now taken to publish it.

Mr. R. B. Whitehead has sent me casts of another specimen of this rare coin from a find in the Hissar district of the Panjab, which is now in the Lahore Museum. The obverse is identical with the above except that the legend

Kṛtāntaparaśurjajaty[~ ~]tarājajetājitaḥ

is practically complete. The reverse is identical with that of B.M.C. No. 39, differing from the above in that the goddess is not nimbate.

Aśvamedha type.

The acquisition by the British Museum of a fine specimen of the Horse-Sacrifice type from the collection of the late General Malcolm Clerk enables me to return to the subject of its legend (cf. my note in the *J.A.S.B.*, 1914, p. 255). In the B.M.C. I was unable to illustrate coins giving the full legend. The portion there given from the coins then known is

Rājādhivājah pṛthivīm vijitya

Divaḥ jayaty[- ~ - ~ - ~]

which shows that the legend is an Upajāti couplet. On B.M.C., Pl. v. 10, two *akṣaras* follow the *tya*, of which the second is certainly *t*. Remembering the epithets *apratiratha* and *aprativāryavīrya*, I read the first of these two characters as *pra* and suggested the latter epithet to complete the couplet. The late Dr. Venis examined the coin and pointed out that the character was really *h*?. He then proposed to

vocalize the concluding letters *v-j-m* on a coin from the recently discovered Ballia hoard as *vājime*.

Thomas in his *Records*, p. 22, says that the restored legend of the *Aśvamedha* type is

Navajamadhaḥ Rājādhirāja pṛthivī jiyatya

reading from the left instead of the top. The reading *na* for *ta* is easily explained, and we do not doubt that Thomas saw a coin which ended *t-v-j-m-dh*. This supplies *dh*, and Dr. Venis proposed the epithet *āhṛtavā-jimedhaḥ* "he who has restored the horse-sacrifice". *Vājimedha* is a synonym of *aśvamedha*, although the latter is the commoner name. We may recall the *civotsannāśvamedhāhartṛ* of the Allahabad inscription and the root *ā-hṛ* is used in both.

The coin now described supplies the *-tavājimedhaḥ* of Thomas's coin. The legend on this coin seems to be a new variant. It is

Rājādhirāja[h] pṛthivīm vijayatyāhṛtavājimedhaḥ

[Pl. IX. 2 (obv.).]

This seems to be quite complete and it suggests there are three varieties of the legend instead of two. The second is that of B.M.C., Pl. v. 10, which undoubtedly contains *jivā* and reads fairly fully

*Rājādhirāja pṛthivī[- ∪ ∪]jivā
Divān jayatyāhṛtavājimedhaḥ*

B.M.C. No. 60, beginning on l., has the same legend. On No. 62, Pl. v. 14, the *akṣara* before *trā* is not *-j-* but *v*, and I have suggested *pṛthivīmarivā* for the first half of the couplet. We still require specimens with

clear inscriptions to settle definitely the variants of the first part of the legend.

Candragupta II.

Lion-slayer type, Class I, var. ϵ .

Obv.

Rev.

King to l. shooting lion.
Traces of usual legend.

Identical with B.M.C.
No. 113.

Spink, 1920. \mathcal{A} -S. Wt. 118.

Although the king is facing the left instead of the right, the fact that he holds the bow in his r. hand and string in l. shows that this is not a new variety, but an engraver's error.

Kumārāgupta I.

Lion-slayer type, var. a .

Obv.

Rev.

As B.M.C. No. 233.
Around *Sakṣād' iva Narasiṅha* on r.

As B.M.C. No. 233.

\mathcal{A} -S. Wt. 124.7. [Pl. IX. 3 (*obv.*).]

This is the coin described in the Addenda to the B.M.C., p. 155, No. 233a, received too late for illustration. It is here illustrated as it shows the suggested restoration of *Narasiṅha* to complete the legend was justified.

CANDELLAS OF JEJĀHUTI.

Prthvī-Vārman, A.D. 1122-9.

Obv.

Rev.

Parvati seated facing.

*Srimat-Pr
thvī-Varmma
deva*

Thornhill sale, 1918, lot 291. \mathcal{A} -45. Wt. 16.2.

[Pl. IX. 4.]

The coinage of Pṛthvī-Varman was hitherto only known from the copper coin in the B.M. (*C.M.I.*, Pl. viii. 18, p. 79). For the denomination compare the coin of Hallakṣana Varman, *C.M.I.*, Pl. viii. 15.

RAHTORS OF KANAUJ.

Govinda Candra, A.D. 1115-65.

<i>Obv.</i>	<i>Rev.</i>
Four armed Parvatī seated facing.	<i>Śrīmad-Govinda-Candra-Deva.</i>

A .5. Wt. 16.6. [Pl. IX. 6.]

The rarity of this small denomination, which was unknown to Cunningham, is remarkable when one considers how common coins of this ruler are. It was formerly in General Malcolm Clerk's collection.

UNCERTAIN DYNASTY.

Vira Siṅha Rāma.

<i>Obv.</i>	<i>Rev.</i>
Four armed Parvatī seated facing.	<i>Śrīmad-Vira Siṅha-Rāma.</i>

A .8. Wt. 55. [Pl. IX. 5.]

This coin is new. It is one of two specimens obtained together by the late Dr. W. Hoey; I am inclined to attribute it to the Virasiṅha of the Narwar copper plate of 1177 Samvat,¹ although in style it seems to be earlier.

¹ Cunningham, *A. S. R.*, ii., p. 313.

SULTANS OF DELHI.

*Muḥammad b. Sām.**Obv.*

الله
لا اله الا
محمد
رسول الله

Rev.

السلطان الاعظم
معز الدنيا و الد
ين ابو المطفر
محمد بن سام

Around, between two con-
centric circles, في شهر
تسعين و خمس مائة

R base .55. Wt. 49.5. [Pl. IX. 7.]

This coin is a new type for Muḥammad bin Sām. Although the coin bears no mint name its Ghorid fabric suggests Ghazna as the mint. The date is incomplete, but the absence of the name of *Ghiyāth-al-Dīn al-Ghori*, who died in 599 A.H., limits the possible date to this year (cf. my note in *J.A.S.B.*, 1911, p. 698).

Obv.

In circle of dots.
Horseman galloping to l.

Rev.

In circle of dots.
السلطان
الاعظم محمد بن
السلطان

Bill. .6 (Bleazby). [Pl. IX. 8.]

*Tāj al-Dīn Yildiz.**Obv.*

السلطان
الشهيد محمد
بن سام

Rev.

عبد
الملك المعظم
سلطان الشدى تاج
الدنيا و الدين
يولد *

. . . غزنة في شهر سنة احد
عشر و ستما (ية)

Ghazna, 611 A.H. \bar{N} .75. Wt. 61.

This coin from the Cunningham collection seems to be the same as that described by Thomas, No. 22; if so, Thomas's reverse reading should be corrected accordingly. Thomas's coin is described as in the E. I. C. collection. If so it did not come to the British Museum with the India Office collection. It was published by Gibbs in *Num. Chron.*, 1885, p. 214, Pl. xi. 1, with an incomplete reading. For the reverse compare the following coin :

<i>Obv.</i>	<i>Rev.</i>
Horseman galloping to l.	[عبدہ]؟ الملك المعظم تاج الدنيا و الدين
Bill. -6.	

The following copper coin, now not uncommon, was first published by Rodgers in *J. A. S. B.*, 1881, Pl. xviii. 16:

<i>Obv.</i>	<i>Rev.</i>
معز الدنيا و الدين	عبدہ يلدز
Æ -6.	

Ārām Shāh, A. D. 1210.

As Mr. Nelson Wright pointed out in the *Indian Museum Catalogue*, vol. ii, p. 28, the coin No. 34 in the B. M. C. attributed to Ārām Shāh is really of Bahrām Shāh, and it has been moved accordingly. For a suggested coin of Ārām Shāh see Mr. Longworth Dames in the *J. R. A. S.*, 1908, p. 406 (Pl. 18).

Shams al-Dīn Altamish, A. D. 1210-35.

From the Bleazby collection the Museum acquired a specimen of the rare coinage of the mint of Bilād al-Hind.

<i>Obv.</i>	<i>Rev.</i>
Cf. I.M.C. No. 39.	Cf. I.M.C. No. 39.
Around . . . الفضة في بلاد الهند . . .	Around . . . الفضة سنة اثني و
Bilād al-Hind, [63]2 A. H. AR 1.1. Wt. 168.	

Of the next two coins of Delhi the first is from the Bleazby and the second from the Cunningham collection.

<i>Obv.</i>	<i>Rev.</i>
In double square within circle; دهلي in top segment. others empty.	In double square within circle; دهلي in top segment, others empty.
لا اله الا الله محمد رسول الله المستنصر بالله امير المؤمنين	السلطان الاعظم شمس الدنيا و الدين ابو المظفر ايلتتمش السلطان
Around . . . خلق ليظهرة على الدين ولو . . . (Kor. ix. 33).	Around . . . في شهر سنة ثلث و ستمائة . . .
Delhi, 6[x]3 A. H. AR 1.1. Wt. 164. [Pl. IX. 9 (<i>obv.</i> .)]	

<i>Obv.</i>	<i>Rev.</i>
As preceding and showing the same part of the marginal legend.	As preceding. Around . . . سنة ثمان وعشرين و ستمائة
Delhi, 624 A. H. AR 1.1. Wt. 166.	

The presence of the quotation from the Koran on these two coins and on the coin of Fīrūz below does not seem to have been previously noted.

The following bronze coin from the collection of the late Sir Denzil Ibbetson, unfortunately in poor condition, appears to be new. It recalls B.M.C. No. 46 (I. M. 41).

<i>Obv.</i>	<i>Rev.</i>
In centre ابانتتمش	शीसुलदा
Inner circular inscription الاعظم ابو المظفر . . .	लिततिमि
Outer circular inscription un- certain.	सि सं . .

Æ .6. Date illegible.

Rukn al-Din Firūz Shāh, A.D. 1235-6.

Silver tankas of this short reign were unknown to Thomas. The Museum now possesses two. The first is from the Bleazby and the second from the Cunningham collection :

<i>Obv.</i>	<i>Rev.</i>
In double square within circle, with two pellets in each segment, Kalima and Caliph's name as on I.M. 90.	Contained as obverse. Sultan's titles as I.M. 90.
Around . . . ين لى . . . (i. e. Kor. ix. 33).	Around : ... حضره دهلى سنه ...
Delhi, date illegible.	AR 1.2. Wt. 165.7.

<i>Obv.</i>	<i>Rev.</i>
In square within circle. دهلى in upper segment and a semicircle with pellet on either side in the others.	In square in circle with pellet in each segment.
فى عهد الامان المستنصر امير المؤمنين فى شهر سنة ثلث و ثلثين و ستمائة	السلطان الاعظم شمس الدنيا و الدين السلطان المعظم ركن الدنيا و الدين فيروز شاه
Delhi, 633 A.H.	AR 1.1. Wt. 165.5.

This remarkable coin is described by Rodgers in *J.A.S.B.*, 1894, p. 66, Pl. iv. 11, and by Gibbs in *Num. Chron.*, 1885, p. 215, Pl. xi. 3. It was at one time in the

collection of Mr. J. G. Delmerick, and like most of his rarities passed into the Cunningham collection, and thence to the B. M.

Raziya, A. D. 1236-9.

In name of Altamish.

<i>Obv.</i>	<i>Rev.</i>
In double square within circle with three pellets horizontally in each segment.	As obverse but pellets form triangles.
في تهاد الامان المستنصر امير المومنين	السلطان الاعظم شمس الدنيا و الدين التمش السلطان نصره امير المومنين
Around شهر سنه خمس وثلثين	Around ... الغصة في شهر...
635 A. H. R 1.1. Wt. 166.8.	

In name of Altamish and *Raziya*.

<i>Obv.</i>	<i>Rev.</i>
As preceding. Margin quite illegible.	As preceding but annulet on each side of the triangles; single square and الدين in bottom segment.
	السلطان الاعظم شمس الدنيا و الدين السلطان المعظم رضية الدنيا و الدين
	No trace of marginal legend.
R 1.1. Wt. 165.5. [Pl. IX. 12 (rev.).]	

Both the above coins are from the Bleazby collection.

As I had recently an opportunity of examining the fine collection formed by the late Sir Thomas Dennehy,

formerly Political Agent at Dholpur, I take the opportunity of mentioning that his square gold mohr of Raziya mentioned by Gibbs in *Num. Chron.*, 1885, p. 216, was a forgery. He possessed a remarkable set of gold forgeries of coins of all the Pathans and early Moghuls.

Nāṣir al-Dīn Mahmūd, A. D. 1246-65.

The Museum now possesses two gold coins of this king, both of the type of I.M.C. No. 133 :

Cunningham : A 9. Wt. 168.5. Delhi, 657 A. H.
 Bleazby : A 1.1. Wt. 169.1. Delhi, 662 A. H.

More interesting, however, is the following little silver coin :

<i>Obv.</i>	<i>Rev.</i>
ناصر الدنيا و الدين	السلطان المعظم
A 45. Wt. 11.66 (Cunningham). [Pl. IX. 10.]	
A 45. Wt. 13.8 (Rodgers, <i>J.A.S.B.</i> , 1894, Pl. v. 21).	

Ghiyāth al-Dīn Balban, A. D. 1265-87.

The B. M. now has gold coins of the years 669, 670, 672, 674, 675, 678, and 680, all of the Delhi (*Ḥaṣrat*) mint. Among the silver I might note that B.M.C. No. 105, which Lane Poole describes as "badly engraved and blundered" is really of a new mint, probably *خطه الور*. The *Khita* is quite certain but it is perhaps advisable to await a finer coin before adding Alwar to the few mints of the early Sultans of Delhi. Among the other silver coins in the B.M. is the following counterpart of the above little coin of Nāṣir al-Dīn Mahmūd :

<i>Obv.</i>	<i>Rev.</i>
غياث الدنيا و الدين	السلطان الاعظم
AR 45. Wt. 13·8 (Rodgers).	[Pl. IX. 11.]

The design of the following coin is unusual: cf. Thomas, 115, and I.M.C. 160:

<i>Obv.</i>	<i>Rev.</i>
In square within circle. Circle in each segment.	As obverse.
عدل غياني	بحضرت دهلي
Æ 6.	

Shams al-Dīn Kaiūmarth, A.D. 1290.

<i>Obv.</i>	<i>Rev.</i>
In double square within circle.	As obverse.
الامام المستصم امير المومنين	السلطان الاعظم شمس الدنيا و الدين ابو المظفر كيو مرث السلطان
Around . . . دهلي . . .	
Delhi. AR 1·2. Wt. 157·3 (pierced).	[Pl. IX. 13 (rev).]

This is the Bleazby specimen of this short-lived ruler's coinage. The other specimen belonged to the late Pandit Ratan Narain of Delhi and was published by J. G. Delmerick in the *Proc. A.S.B.*, 1881, p. 157, and by Gibbs in the *Num. Chron.*, 1885, p. 217, Pl. xi. 5. The latter specimen is now in the museum of the American Numismatic Society in New York. It is identical with the above except that the mint is gone while the date 689 is legible, the marginal legend being:

ضر تسع و ثمانين و ستماية . . .

<i>Obv.</i>	<i>Rev.</i>
الد شمس نياو الد(ين)	السلطان الاعظم

Æ .6. Wt. 64.

This coin was published by Dr. Codrington, from whose sale it came to the Museum too late for illustration here, in the *Num. Chron.*, 1898, p. 266, as a coin of the Bahmanī Shams al-Dīn Dāūd, 799–800 A.H. In style, however, it is readily identifiable as a Dehli coin of about a century earlier of a type popular from Balban to 'Alā al-Dīn Muḥammad, and there is no reason to doubt its attribution to Kaiumarth.

'Alā al-Dīn Muḥammad, A.D. 1295–1315.

The British Museum now has a fine series of gold of this ruler. Of Delhi (*Ḥaẓrat*) of the type of B.M.C. 157 (I.M. 191) it has the following years 696, 697, 698, 701, 704, 705, 710, 713, 714, and 715. The square gold coin published by Gibbs in *Num. Chron.*, 1885, p. 219, Pl. xi. 8, from the Cunningham collection is now in the Museum along with another specimen from the same collection, which differs only in having the reverse inscription perpendicular instead of diagonal.

Of the rarer Dār al-Islām mint (B.M. 159, I.M. 194), the Museum has the years 704, 705, 708, 713.

Deogīr, قلعة دیوگیر, is represented by two gold coins of the year 715, which between them give a fine marginal legend. The year 714 of this mint is represented in silver only.

Shihāb al-Dīn 'Umar, A.D. 1315-16.

Obv.

السلطان الاعظم
شهاب الدنيا و الدين
ابو المطرف عمر شاه
السلطان

Rev.

In circle

سكندر الثاني
يمين للخلافة ناصر
اميرا المؤمنين

Around

ضرب هذا [السكة بحضرت] دهلي في
سنة خمس عشر و سبعاية

Delhi, 715 A.H. *N* .95. Wt. 168. [Pl. IX. 14.]

This unique gold tanka of the brief reign of *Shihāb al-Dīn 'Umar* was acquired at the Thornhill sale at Messrs. Sotheby's, December 1919, lot 295.

The similar silver tanka, published by Mr. G. B. Bleazby in the *J.A.S.B.*, 1904, p. 229, Pl. iii. 2, is also now in the Museum. Its legends are identical except that it has الفضة for السكة, and the marginal legend is perfect.

Delhi, 715 A.H. *AR* 1.05. Wt. 172.*Kuṭb al-Dīn Mubārak*, A.D. 1316-20.

Obv.

خليفة رب العالمين
قطب الدنيا و الدين
ابو لمطرف

Rev.

مبارك شاه
السلطان ابن
السلطان

Square. *N* .6. Wt. 55.7.

This interesting coin is evidently a third of a gold tanka, which is a new denomination. It has been suggested to me that it is a proof in gold for a billon coin, but I am unaware of any billon coin which offers this combination of legends and the coincidence of weights would be remarkable. The coin was formerly in the Leitner collection (Sotheby's sale, 1911, lot 80).

The Museum acquired from General Cunningham in 1888 a gold tanka of the Kuṭṭbābād mint which is identical with the specimen figured by Thomas, No.142, there said to be in the Guthrie collection :

Obv. and *Rev.* as B.M.C. 206 (I.M.C. 243) but margin reads

ضرب هذه السكة بقلعة قطب اباد في سنة ثمان عشر و سبعماية

Kuṭṭbābād, 718 A.H. *AR* 1.0. Wt. 163.4. Square.

Some of the silver coins are worth noting. The mint Dār al-Mulk is represented by a coin of 717 A.H. from the Bleazby collection, similar to I. M. 245. The margin reads :

ضرب هذه الفضة بحضرة دار الملك سنة سبع و عشر و سبعماية

Dār al-Mulk, 717 A.H. *AR* 1.1. Wt. 165.6. [Pl. IX.15 (*rev.*).]

The Indian Museum has a square Dār al-Islām of 717 A.H. (Cat. 248). The British Museum has a round one of 719 A.H. which offers a new combination of legends :

Obv.

الامام الا عظم
حليفه رب العالمين
قطب الدنيا و الدين
ابو المظفر

Dār al-Islām, 719 A.H. *AR* 1.2. Wt. 169.4. Round.

Rev.

B.M.C. 213 ; but margin
ضرب هذه الفضة بدار الاسلام في
سنة تسع عشر و سبعماية

This Kuṭṭbābād rupee from the Bleazby collection is, I believe, unique :

Obv. and *Rev.* B.M.C. 213 (I.M.C. 245).

Margin : ضرب هذه الفضة بقلعة قطب اباد في سنة سبع عشر و سبعماية
Kuṭṭbābād, 717 A.H. *AR* 1.1. Wt. 166. [Pl. IX.16 (*rev.*).]

Nāṣir al-Dīn Khusrū, A.D. 1320.

The Bengal Asiatic Society's specimen (I. M. 271) of the silver coinage of this reign, published by Gibbs in *Num. Chron.*, 1885, p. 220, Pl. xi. 10, and Thomas, Pl. iii. 73, was unique until Mr. Bleazby acquired his finer specimen now in the British Museum. The former specimen does not justify Gibbs's reading of the margin, and it is impossible to say of what mint it is.

Obv. and *Rev.* as B.M.C. 235 (gold) (I.M. 270). But margin

- ضرب هذه السكة بقلعة ديوكير في سنة عشرين و [سبماية]

Khila Deogir, 720 A.H. \bar{A} 1.0. Wt. 168.7. [Pl. IX. 17 (*rev.*).]

The following billon coin differs from the usual type and is dated:

<i>Obv.</i>	<i>Rev.</i>
السلطان ال	ابو المظفر
عظم ناصر الدنيا	خسروشاه
و الدين in circle	۷۲. السلطان in circle
Bill. 720 A.H. .65.	[Pl. IX. 18.]

In addition to a copper coin exactly like the preceding from the Bleazby collection the Museum now has the interesting little copper coin published by Rodgers (*J.A.S.B.*, 1896, Pl. iv. 17):

<i>Obv.</i>	<i>Rev.</i>
عدل	محصرة
خسروشاه	دهلي
Delhi. \bar{A} 45.	[Pl. IX. 19.]

J. ALLAN.

(To be continued.)

REVIEWS.

Anglo-Saxon Coins found in Finland. By C. A. NORDMAN
(published by the Finnish Archaeological Society,
Helsingfors, 1921. 92 pages quarto and 2 plates).

MR. NORDMAN has rendered a useful service to students of Anglo-Saxon coins in describing, on the lines of Hildebrand's work on coins found in Sweden, the Anglo-Saxon coins found in Finland. The descriptions produce but few readings not already known, and these (see p. 89) should be regarded with caution: Rithnwe is surely either mis-engraved or misread, Siward is suggestive of Lincoln rather than London; but another specimen of the rare mule of Cnut (Hildebrand E) with reverse of Æthelred (Hildebrand E) is interesting and adds support to Hildebrand's view that the Helmet type of Æthelred was later than his Long-cross type. The coins are almost entirely of the reigns of Æthelred and Cnut; there are also one coin of Edward the Martyr, seven of Harold I, thirteen of the Confessor (none later than the PÆCX type), four of William I (one of the sixth or Sword type and three of the last or PÆXS type), and one of the second type of William II.

The finds are all from the south-western district of Finland, and in this respect they agree with other archaeological evidence as marking this as the populous or trading district of that period. It is interesting to find that the Anglo-Saxon coins are invariably mingled with German or other coins which prove that the hoards were trade deposits and not the spoils of adventurers who took part in the Viking raids. Only three finds contained Anglo-Saxon coins in any considerable number. The find at Nousis in 1895 contained about 300 Anglo-Saxon (1 of Edward the Martyr, 186 of Æthelred, 103 of Cnut, and 1 of Harold I) with more than 1,300 German coins; the latest are the coin of Harold I (not before 1085) and two of Count Albert III of Namur (not before 1037); there are several coins of Conrad II who died in 1039 and none of his successor; it must therefore have been buried between 1037 and 1040. The Reso find of 1834 contained, in addition to several not

described, 172 coins of Æthelred II and 131 of Cnut with 195 German coins, of which the latest are four of the Short-cross type of Cnut, a Dortmund coin of Conrad II (died 1039), and an Augsburg denarius of Bishop Eberhard (1029-1047) bearing the name of Conrad II; the date of the deposit seems to be about 1035. In the Lundo find 22 coins of Æthelred II and 25 of Cnut were found with 2 of Harold I and 6 of the Confessor among more than 800 German coins; one of Archbishop Siegfried of Mainz (1060-1084) suggests that the hoard was buried about 1060, which is a date sufficiently late to cover all the other coins examined. In the remaining finds the Anglo-Saxon coins that were described were few in number and were in most cases part of large hoards of Continental and Arabic money.

The classification of the types is examined in the light of the Finland finds, but these coins do not seem to advance the subject materially in view of their small number. In relation to the question of Æthelred's coinage the author draws attention to the point that the Small-cross coins in finds in Scandinavia (nos. 8, 12, and 13 on p. 27), which contained coins of Small-cross, Hand, and Crux types, bore the *Monetarius* abbreviations instead of *ON* in the reverse legend; this evidence of the early issue of the Small-cross type is similarly but more strongly illustrated by the find described by Mr. Hill (*Num. Chron.*, 1920), where all the Small-cross coins bear this style. Perhaps the author lays rather too much stress on the three varieties of the Hand type of this reign in regarding them as chronologically distinct; the two varieties with the sceptre *pommé* or *patté* are very rare in comparison with the sceptreless type.

The Irish coins found in Finland are included and fully described, but they number only 17, of which 13 are of Sihtric's reign.

The finds of Anglo-Saxon coins are well tabulated, showing the number of coins of each type that the finds produced, and another table shows the mints at which the various types found in Finland were struck. There are two plates of illustrations at the end of the paper, but the printing of the plates is unfortunately not good enough to make the coins legible. The plate-reference to the Short-cross type of Cnut on p. 55 (I. 15) is incorrect; it should be Pl. II, fig. 6.

G. C. B.

Ertog og Øre: den gamle norske vegt. Av A. W. BRØGGER (Videnskapselskapets Skrifter, II. Hist.-flos. Klasse, 1921, no. 3). Kristiania, 1921, pp. 112, 58 figs. and 2 plates.

THE main object of this laborious treatise by Dr. Brøgger is to determine the cultural relations that gave birth to the old Norse weight-system; and coins, ring-money, and weights are all pressed into the service. The mark was about $6\frac{3}{4}$ oz. Troy, equivalent to 8 ører = 24 ertogar = 240 penninger; and a careful examination of extant weights yields a value for the øre of 26.8 grammes (418 grains or 17 dwt. 5 gr. or 0.86 oz. Troy). The Republican division of the Roman ounce into seven was known in Norway through trade with the Rhine; and local gold ring-money of the fourth and fifth centuries indicates the use of the Roman pound of 12 ounces. It is from this gold currency, as opposed to the Viking silver, that the øre is derived (*aureus*); and its value sinks in Viking times to 24 and even 22 grammes. Various finds of coins stamped for use as weights show a reduction of the unit from 4 scripula to 3 (2.9 grammes instead of 3.8 grammes); and the old system of 7 denarii to the ounce (øre) is thus maintained in the cheese-shaped weights of the Viking period, when the ertog (about 7.9 grammes) becomes more important than the øre, but its division into 10 penninger is found to go back to the fifth century. A fuller treatment of the international aspect of the Norse weight-system is promised, which will considerably add to the indebtedness of numismatists and archaeologists to the author. In conclusion, a coincidence may be pointed out that may or may not be of historical importance: the weight of the øre deduced from a set of weights found at Colonsay on the west coast of Scotland and dating from the early tenth century (25.81 grammes), is exactly one-twelfth of the unit-weight (309.7 grammes) of the iron currency-bars which Caesar mentions and probably saw in use in Britain, 54 B. C.

REGINALD A. SMITH.

Numismatic Notes and Monographs. Nos. 1-6. The American Numismatic Society, 1920-1921.

THE American Numismatic Society has ceased to issue its *Journal*, the place of which is now taken by these separate notes and monographs, with which the subscriber can do as he prefers. He can bind separately or in batches those which he wishes to keep, and throw the rest away. (They are so small that he can also lose them without intending to do so.) There is much to be said for this plan, if well carried out; but we cannot congratulate the Publications Committee on the form which they have adopted. It is at once mean and extravagant. Mean, because the format is small ($6\frac{1}{2} \times 4\frac{1}{2}$ inches) and the page, with its unnecessary marginal lines, ugly. Extravagant, because of the area of these tiny pages (some two-fifths are left blank), and it is impossible to illustrate more than one coin, say of dollar size, on a page. Thus Mr. Howland Wood takes twenty-six plates to illustrate seventy-two coins of various sizes. The expense of printing collotypes in this way must be out of all proportion to any advantage thereby gained. We trust that, having made the experiment—which may be suitable for the *Hispanic Notes and Monographs* which suggested it, but is altogether unsuitable for numismatic publications—the Publications Committee will find it possible to adopt a more reasonable format. Standardization, to be efficient, should be intelligent.

Our grumble over, let us say that the matter of the six monographs is interesting. Mr. S. P. Noe writes on Coin Hoards. Mr. E. T. Newell on Alexander Hoards and on the octobols of Histiaea. Everything that Mr. Newell writes is worthy of attention; but the letters AOA which he has discovered on the styliis cannot possibly be expanded into AΘANA, for the Histiaeans did not speak Doric. Mr. Westervelt collects the known medals and tokens of Jenny Lind, and Mr. Howland Wood has done well to rescue from the oblivion which would otherwise inevitably overtake it what is now known of the Mexican Revolutionary coinage of 1913-1916. Finally Mrs. Baldwin-Brett discusses five Roman gold medallions, the most important of which represents one of the gates of Trèves, which she shows to be the Porta Inclyta. She seems, however, to attach too much importance to Lampridius's statements about Roman medallions, which are no better than the other numismatic information conveyed by the *Scriptores Historiae Augustae*, that is, as Menadier has shown in an essay which Mrs. Baldwin-Brett does not cite, merely fantastic.

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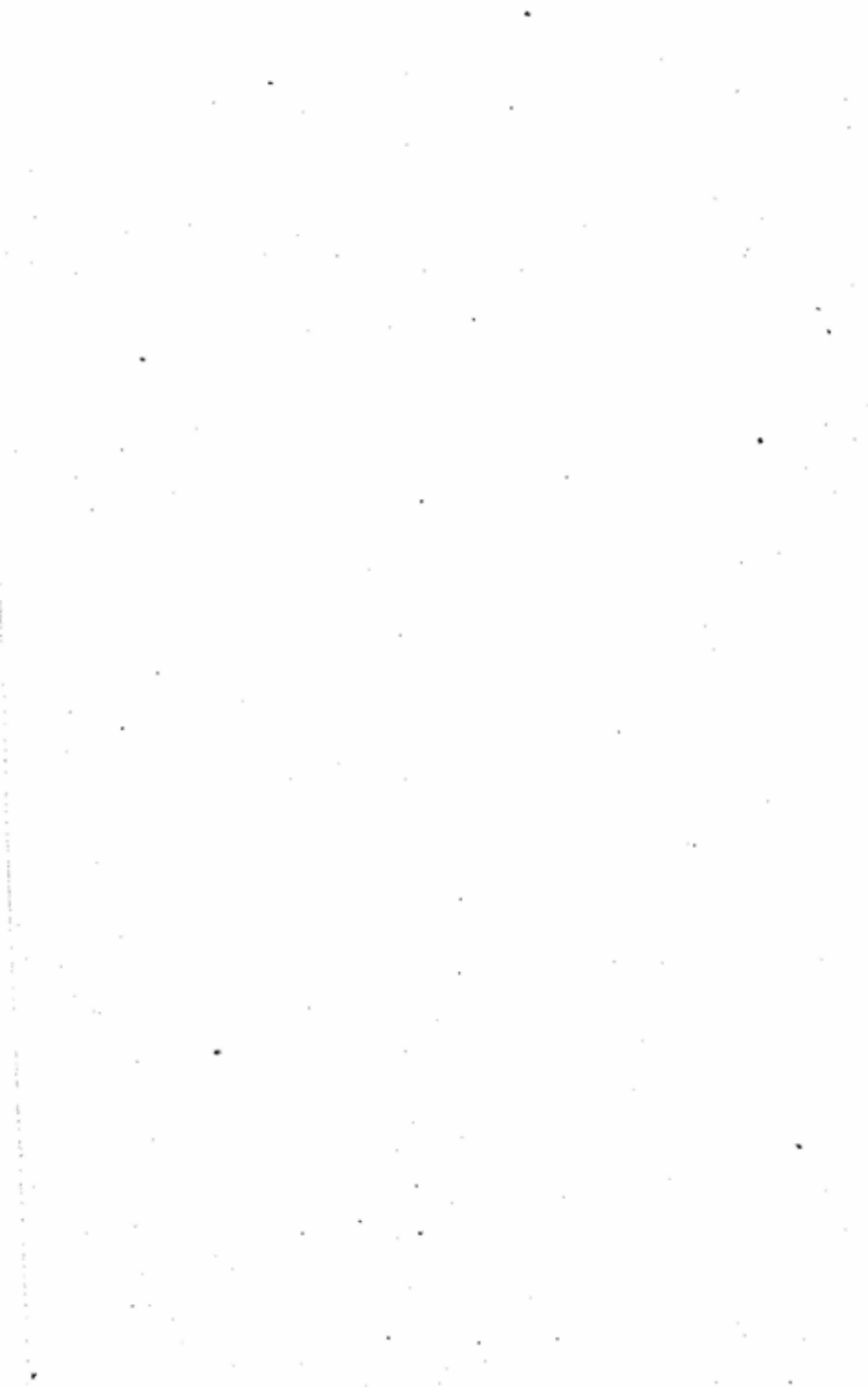
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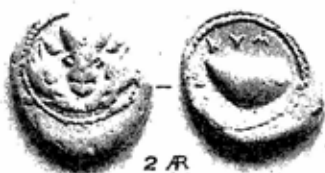
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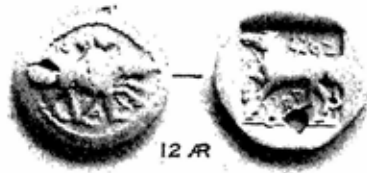
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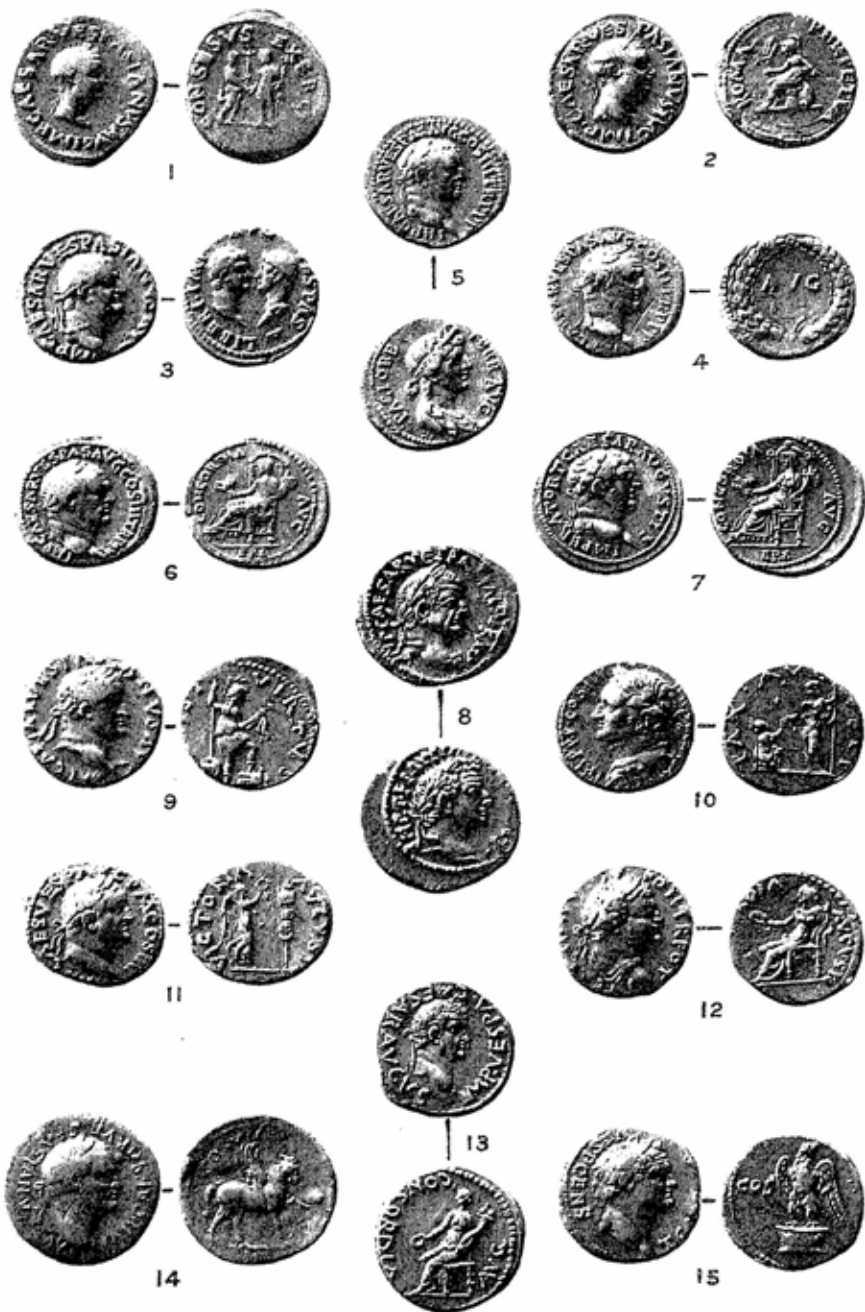


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- 1878 HOWORTH, SIR HENRY H., K.C.I.E., D.C.L., F.R.S., F.S.A., 45 Lexham Gardens, W. 8, *Vice-President*.
- 1921 HUBBARD, MAJOR T. O'BRIEN, Royal Aero Club, 3 Clifford Street, W. 1.
- 1883 HUBBARD, WALTER R., Esq., 6 Broomhill Avenue, Partick, Glasgow.
- 1885 HÜGEL, BARON F. VON, D.D., 13 Vicarage Gate, W. 8.
- 1908 *HUNTINGTON, ARCHER M., Esq., Governor of the American Numismatic Society, Audubon Park, 156th Street, West of Broadway, New York, U.S.A.
- 1911 HYMAN, COLEMAN P., Esq., Royal Colonial Institute, Northumberland Avenue, W.C. 2.
- 1911 JOHNSTON, LEONARD P., Esq., The Cottage, Warningcamp, Arundel, Sussex.
- 1911 JONES, FREDERICK WILLIAM, Esq., 22 Ramshill Road, Scarborough.
- 1874 *KENYON, R. LLOYD, Esq., M.A., J.P., D.L., Pradoc, 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 Finchley, N. 2.
- 1901 KOZMINSKY, DR. ISIDORE, 20 Queen Street, Kew, near Melbourne, Victoria.
- 1917 LAMB, MISS WINIFRED, Holly Lodge, Campden Hill, W. 8.
- 1920 LAST, H. M., Esq., St. John's College, Oxford.
- 1910 LAUGHLIN, DR. W. A., M.A., Box 456, Virginia City, Nevada, U.S.A.

ELECTED

- 1877 LAWRENCE, F. G., Esq., Birchfield, Mulgrave Road, Sutton, Surrey.
- 1885 *LAWRENCE, L. A., Esq., F.S.A., 44 Belsize Square, N.W. 3.
- 1888 *LAWRENCE, RICHARD HOE, Esq., Fifth Avenue Bank, New York, U.S.A.
- 1918 LEVIS, HOWARD COPPUCK, Esq., F.S.A., 40 Egerton Gardens, S.W. 3.
- 1920 LEWIS, JOHN CAMPBELL, Esq., Rhun Cottage, Gbantaff Road, Troedyrhiw, Merthyr Tydfil.
- 1900 LINCOLN, FREDERICK W., Esq., 69 New Oxford Street, W.C. 1.
- 1907 LOCKETT, RICHARD CYRIL, Esq., F.S.A., J.P., Clonterbrook, St. Anne's Road, Aigburth, Liverpool.
- 1911 LONGMAN, W., Esq., 27 Norfolk Square, W. 2.
- 1893 LUND, H. M., Esq., Waitara, Taranaki, New Zealand.
- 1908 LYDDON, FREDERICK STICKLAND, Esq., 5 Beaufort Road, Clifton, Bristol.
- 1885 *LYELL, ARTHUR HENRY, Esq., F.S.A., 9 Cranley Gardens, S.W. 7.
- 1895 MACDONALD, GEORGE, Esq., C.B., M.A., LL.D., F.B.A., 17 Learmonth Gardens, Edinburgh.
- 1901 MACFADYEN, FRANK E., Esq., 135 Osborne Road, Newcastle-on-Tyne.
- 1917 MARNO, CAPT. C. L. V., 26 Collingham Gardens, S.W. 5.
- 1895 MARSH, WM. E., Esq., Northend, 60 Kent House Road, Beckenham, Kent.
- 1897 MASSY, COL. W. J., 30 Brandenburgh Road, Chiswick, W. 4.
- 1912 MATTINGLY, HAROLD, Esq., M.A., British Museum, W.C. 1.
- 1905 MAVROGORDATO, J., Esq., 6 Palmeira Court, Hove, Sussex.
- 1921 MAVROJANI, CAPTAIN S., M.A., LL.B., Clyro Court, Clyro, Hereford.
- 1901 McDOWALL, REV. STEWART A., 5 Kingsgate Street, Winchester.
- 1905 McEWEN, HUGH DRUMMOND, Esq., F.S.A.(Scot.), Custom House, Leith, N.B.
- 1868 McLACHLAN, R. W., Esq., 310 Lansdowne Avenue, Westmount, Montreal, Canada.
- 1916 MEIGH, ALFRED, Esq., Ash Hall, Bucknall, Stoke-on-Trent.
- 1905 MESSENGER, LEOPOLD G. P., Esq., 151 Brecknock Road, Tufnell Park, N. 19.
- 1897 MILNE, J. GRAFTON, Esq., M.A., Bankside, Lower Bourne, Farnham, Surrey.
- 1921 MILNE, MRS. J. GRAFTON, Bankside, Lower Bourne, Farnham, Surrey.

ELECTED

- 1910 MITCHELL LIBRARY, THE, Glasgow, F. T. Barrett, Esq., Librarian.
- 1898 *MONCKTON, HORACE W., Esq., F.L.S., F.G.S., 3 Harcourt Buildings, Temple, E.C. 4, and Whitecain, Wellington College Station, Berks.
- 1920 MONTAGU, ALFRED C., Esq., 8 Abingdon Villas, W. 8.
- 1888 MONTAGUE, LIEUT.-COL. L. A. D., Penton, near Crediton, Devon.
- 1919 MONTGOMREY, MISS LAURA H., Huntingdon, 76 Pope's Grove, Twickenham.
- 1905 MOORE, WILLIAM HENRY, Esq. (address not known).
- 1879 MORRIESON, LIEUT.-COL. H. WALTERS, R.A., F.S.A., F.R.S.A., 42 Beaufort Gardens, S.W. 3.
- 1904 MOULD, RICHARD W., Esq., Newington Public Library, Walworth Road, S.E. 17.
- 1916 MYLNE, EVERARD, Esq., Mount Stuart, 81 Bristol Road, Weston-super-Mare.
- 1900 †*MYLNE, REV. ROBERT SCOTT, M.A., B.C.L., F.S.A., F.R.S.E., Great Amwell, Herts.
- 1909 NAGG, STEPHEN K., Esq., 1621 Master Street, Philadelphia, U.S.A.
- 1910 NESMITH, THOMAS, Esq., c/o J. Munro & Co., 7 Rue Scribe, Paris.
- 1905 NEVALL, PROF. HUGH FRANK, M.A., D.Sc., F.R.S., Madingley Rise, Cambridge.
- 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.
- 1898 OGDEN, W. SHARP, Esq., F.S.A., Naseby, East End Road, Finchley, N. 3.
- 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., LL.D., F.S.A., F.B.A., All Souls College, Oxford, *President*.
- 1911 OPPENHEIMER, HENRY, Esq., F.S.A., 9 Kensington Palace Gardens, W. 8.
- 1904 d'ORBELIANI-RUSTAFJAELL, ROBERT, Esq., F.R.G.S., Crédit Lyonnais (Services des Accrédités), Boulevard des Italiens, Paris.

ELECTED

- 1903 PARSONS, H. ALEXANDER, Esq., 29 Park Road, S.E. 23.
- 1915 PEARS, LT.-COL. G.B., R.E., c/o Cox & Co., Charing Cross, S.W.1.
- 1896 PEERS, C. R., Esq., M.A., F.S.A., 14 Lansdowne Road, Wimbledon, S.W. 19.
- 1894 PERRY, HENRY, Esq., Middleton, Plaistow Lane, Bromley, Kent.
- 1920 PHILIPSEN, HR. GUSTAV, Castelsvej 23^{iv}, Copenhagen, Denmark.
- 1917 PHIPPS, LIEUT.-COL. P. RAMSAY, F.R.G.S., 17 St. James's Court, S.W. 1.
- 1888 PINCHES, JOHN HARVEY, Esq., Whitehill Cottage, Meopham, Kent.
- 1910 PORTER, PROFESSOR HARVEY, American University, Beirut, Syria.
- 1915 POYSEK, A. W., Esq., M.A., 64 Highfield Street, Leicester.
- 1903 PRICE, HARRY, Esq., Arun Bank, Pulborough, Sussex.
- 1911 PRICHARD, A. H. COOPER-, Esq. (address not known).
- 1906 RADFORD, A. J. VOOGHT, Esq., F.S.A., Vacye, College Road, Malvern.
- 1918 RAFFIN, ALAIN, Esq., 67 Eardley Crescent, S.W. 5.
- 1913 RAO, K. ANANTASAMI, Curator of the Government Museum, Bangalore, India.
- 1890 RAPSON, PROF. E. J., M.A., M.R.A.S., 8 Mortimer Road, Cambridge.
- 1915 RASQUIN, M. GEORGES, Tanglewood, Bushey Park, Herts.
- 1909 RAYMOND, WAYTE, Esq., 489 Park Avenue, New York City U.S.A.
- 1903 REGAN, W. H., Esq., 124 Queen's Road, Bayswater, W. 2.
- 1876 *ROBERTSON, J. DRUMMOND, Esq., M.A., 65 Ladbrooke Grove, Notting Hill, W. 11.
- 1911 ROBINSON, E. S. G., Esq., B.A., 34 Kensington Park Road, W. 11.
- 1910 ROGERS, REV. EDGAR, M.A., 5 Essex Villas, Kensington, W. 8.
- 1919 ROSE, EDWARD E. PILKINGTON, Esq., I.C.S., Loughton, Essex.
- 1911 ROSENHEIM, MAURICE, Esq., 18 Belsize Park Gardens, N.W. 3.
- 1903 RUBEN, PAUL, Esq., Ph.D., Alte Rabenstrasse, 8, Hamburg, Germany.
- 1919 RYAN, V. J. E., Esq., Thomaston Park, Birr, King's County, Ireland.
- 1916 SAINT LOUIS NUMISMATIC SOCIETY, 4365 Lindell Boulevard, St. Louis, Mo., U.S.A.

ELECTED

- 1872 *SALAS, MIGUEL T., Esq., 247 Florida Street, Buenos Ayres.
- 1916 *SALISBURY, F. S., Esq., M.A., Limbrick Hall, Harpenden, Herts.
- 1877 *SANDEMAN, LIEUT.-COL. JOHN GLAS, M.V.O., F.S.A., Whin-Hurst, Hayling Island, Havant, Hants.
- 1919 SAVAGE, W. LISLE, Esq., 14 Mill Street, Maidstone, Kent.
- 1917 SEABY, B. A., Esq., c/o Messrs. Spink & Son, Ltd., 17 Piccadilly, W. 1.
- 1921 SEAGER, RICHARD B., Esq., c/o Baring Bros., Ltd., 8 Bishopsgate, E.C. 2.
- 1907 *SELTMAN, CHARLES T., Esq., 24 Fulbroke Road, Cambridge.
- 1890 SELTMAN, E. J., Esq., Kinghoe, Berkhamsted, Herts.
- 1900 SHACKLES, GEORGE L., Esq., Wickersley, Brough, E. Yorks.
- 1913 SHIRLEY-FOX, J. S., Esq., R.B.A., Kingsbury Hill House, Marlborough, Wilts.
- 1896 SIMPSON, C. E., Esq. (address not known).
- 1893 *SIMS, BRIG.-GENERAL R. F. MANLEY, C.M.G., D.S.O., 163 Strand, W.C. 2.
- 1896 SINHA, KUMVAR KUSHAL PAL, M.A., RAIS OF KOTLA, Kotla, Agra, India.
- 1918 *SLIGO, THE MARQUESS OF, F.S.A., F.R.G.S., 7 Upper Belgrave Street, S.W. 1.
- 1890 SMITH, W. BERESFORD, Esq., Kenmore, Vanbrugh Park Road West, Blackheath, S.E. 3.
- 1905 SNELLING, EDWARD, Esq., 26 Silver Street, E.C. 2.
- 1909 SOUTZO, M. MICHEL, 8 Strada Romana, Bucharest.
- 1894 SPINK, SAMUEL M., Esq., 17 Piccadilly, W. 1.
- 1902 STAINER, CHARLES LEWIS, Esq., Woodhouse, Iffley, Oxford.
- 1920 STEWART, K. D., Esq., 17 Todd Street, Manchester.
- 1869 *STREATFEILD, REV. GEORGE SYDNEY, 12 Upper Lattimore Road, St. Albans.
- 1914 *STREATFEILD, MRS. SYDNEY, 22 Park Street, W. 1.
- 1910 SUTCLIFFE, ROBERT, Esq., 21 Market Street, Burnley, Lancs.
- 1914 SYDENHAM, REV. EDWARD A., M.A., The Vicarage, Wolvercote, Oxford.
- 1885 SYMONDS, HENRY, Esq., F.S.A., Staplegrove Elm, Taunton.
- 1896 *TAFPS, H. W., Esq., 35 Greenholm Road, Eltham, S.E. 9.
- 1879 TALBOT, LIEUT.-COL. THE HON. MILO GEORGE, C.B., Bifrons, Canterbury.
- 1919 TARAPOREVALA, VICAJI D. B., Esq., 190 Hornby Road, Fort, Bombay.

ELECTED

- 1917 TAYLOR, GLEN A., Esq., Middleton House, Briton Ferry, Glamorgan.
- 1892 *TAYLOR, R. WRIGHT, Esq., M.A., LL.B., F.S.A., 8 Stone Buildings, Lincoln's Inn, W.C. 2.
- 1887 THAIRLWALL, F. J., Esq., 12 Upper Park Road, N.W. 3.
- 1920 THOMAS, J. ROCHELLE, Esq., Elm House, Ellison Road, S.W. 13.
- 1918 THORBURN, PHILIP, Esq., Hascombe, Godalming, Surrey.
- 1903 THORPE, GODFREY F., Esq., United Service Club, Calcutta, India.
- 1894 TRIGGS, A. B., Esq., Bank of New South Wales, Yass, New South Wales.
- 1921 VALENTINE, W. H., Esq., 60 Upper Kennington Lane, S.E. 11.
- 1912 VAN BUREN, DR. A. W., American Academy, Porta San Pancrazio, Rome.
- 1916 VANES, REV. J. A., 1 Trinity Road, Bangalore, India.
- 1899 VLASTO, MICHEL P., Esq., 12 Allée des Capucines, Marseilles, France.
- 1905 WACE, A. J. B., Esq., M.A., Leslie Lodge, Hall Place, St. Albans.
- 1883 WALKER, R. K., Esq., M.A., J.P., Watergate, Meath Road, Bray, Ireland.
- 1897 WALTERS, FRED. A., Esq., F.S.A., 28 Great Ormonde Street, W.C. 1, and St. Mildred's, Temple Ewell, Dover, *Honorary Secretary*.
- 1911 WARRE, MAJOR FELIX W., O.B.E., M.C., 128 Church Street, W. 8.
- 1920 *WATSON, COMMANDER HAROLD NEWALL, R.N., Belmont, 10 Cuzon Park, Chester.
- 1901 *WATTERS, CHARLES A., Esq., 152 Princes Road, Liverpool.
- 1917 WATTS, GERALD A., Esq., Drumlerry, Londonderry.
- 1901 WEBB, PERCY H., Esq., M.B.E., 4 and 5 West Smithfield, E.C. 1, *Hon. Treasurer*.
- 1885 *WEBER, F. PARKES, Esq., M.D., F.S.A., 13 Harley Street, W. 1.
- 1904 WEIGHT, WILLIAM CHARLES, Esq., Erica, The Broadway, Letchworth.
- 1905 WEIGHTMAN, SURGEON-CAPTAIN A. E., R.N., F.S.A., O.B.E., Junior United Service Club, Charles Street, St. James's, S.W. 1.
- 1899 WELCH, FRANCIS BERTRAM, Esq., M.A., Wadham House, Arthog Road, Hale, Cheshire.

ELECTED

- 1920 *WHEELER, ERNEST H., Esq., 56 Caledonian Road, N. 1.
- 1915 WHITEHEAD, R. B., Esq., I.C.S., M.R.A.S., Bootle Rectory, Cumberland.
- 1869 *WIGRAM, MRS. LEWIS, The Rookery, Frensham, Surrey.
- 1921 WILKINSON, SURGEON - COMMANDER E. A. G., H.M.S. Egmont, Malta.
- 1908 WILLIAMS, T. HENRY, Esq., 85 Clarendon Road, S.W. 15.
- 1910 WILLIAMS, W. I., Esq., Beech Villa, Nelson, Cardiff.
- 1881 WILLIAMSON, GEO. C., Esq., F.R.S.L., Burgh House, Well Walk, Hampstead, N.W. 3.
- 1906 WILLIAMSON, CAPT. W. H. (address not known).
- 1906 WOOD, HOWLAND, Esq., Curator of the American Numismatic Society, 156th Street, W. of Broadway, New York, U.S.A.
- 1920 WOODWARD, W. H., Esq., Crooksbury Hurst, Farnham, Surrey.
- 1920 *WOODWARD, A. M. TRACEY, Esq., Chinese P.O. Box No. 60, Shanghai, China.
- 1920 WOOLLCOMBE, DR. ROBERT LLOYD, M.A., LL.D. (Dublin Univ.), LL.D. (National Univ.), F.I.Inst., F.R.C. Inst., F.R.G.S., F.R.E.S., F.S.S., M.R.I.A., F.R.S.A. (Ireland), Barrister-at-Law, 14 Waterloo Road, Dublin.
- 1903 WRIGHT, H. NELSON, Esq., I.C.S., M.R.A.S., Bareilly, United Provinces, India.
- 1920 WYMAN, ARTHUR C., Esq., Assistant Curator of the American Numismatic Society, 156th Street, W. of Broadway, New York, U.S.A.
- 1889 YEATES, F. WILLSON, Esq., 28 Dawson Place, W. 2.
- 1880 YOUNG, ARTHUR W., Esq., 12 Hyde Park Terrace, W. 2.
- 1898 YOUNG, JAMES SHELTON, Esq., Great Camberton, Pershore, Worcestershire.
- 1919 ZIEGLER, PHILIP, Esq., Lilly Villa, Victoria Park, Manchester.
- 1900 ZIMMERMANN, REV. JEREMIAH, M.A., D.D., LL.D., 133 South Avenue, Syracuse, New York, U.S.A.

HONORARY FELLOWS

ELECTED

- 1898 HIS MAJESTY VICTOR EMMANUEL III, KING OF ITALY,
Palazzo Quirinale, Rome.
- 1891 BABELON, M. ERNEST, Membre de l'Institut, Bibliothèque
Nationale, Paris.
- 1908 BAHRFELDT, GENERAL DER INFANTERIE M. VON, D.Phil.,
9 Humboldtstr., Hildesheim, Germany.
- 1898 BLANCHET, M. ADRIEN, Membre de l'Institut, 10 Bd.
Émile Augier, Paris XVI.
- 1899 GABRICI, PROF. DR. ETTORE, S. Giuseppe dei Nudi 75, Naples.
- 1893 JONGHE, M. LE VICOMTE B. DE, Rue du Trône, 60, Brussels.
- 1878 KENNER, DR. F. VON, K. u. K. Museen, Vienna.
- 1904 KUBITSCHKE, 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.
- 1891 SVORONOS, M. JEAN N., Conservateur du Cabinet des Médailles,
Athens.
-

MEDALLISTS

OF THE ROYAL NUMISMATIC SOCIETY

ELECTED

- 1883 CHARLES ROACH SMITH, Esq., F.S.A.
 1884 AQUILA SMITH, Esq., M.D., M.R.I.A.
 1885 EDWARD THOMAS, Esq., F.R.S.
 1886 MAJOR-GENERAL ALEXANDER CUNNINGHAM, C.S.I., 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 MONSIEUR 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 MONSIEUR ERNEST BABELON, Membre de l'Institut, Conservateur des Médailles, 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 MONSIEUR 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 VINCENT HEAD, Esq., D.Litt., D.C.L., Ph.D., Corr. de l'Inst.
 1908 PROFESSOR DR. HEINRICH DRESSSEL, 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.

PROCEEDINGS

OF THE

ROYAL NUMISMATIC SOCIETY.

PROCEEDINGS OF THE ROYAL NUMISMATIC SOCIETY.

SESSION 1920—1921.

OCTOBER 21, 1920.

SIR CHARLES OMAN, K.B.E., M.P., LL.D., President,
in the Chair.

The Minutes of the Meeting of May 20 were read and approved.

The following Presents received since the May Meeting were announced, laid upon the table, and thanks ordered to be sent to their donors :

1. Académie royale de Belgique, *Annuaire*, 1915-20.
2. American Journal of Archaeology, Vol. xxii, Pt. 4.
3. British Numismatic Journal, Vol. xiv, 1917 ; *presented by Miss Helen Farquhar.*
4. Journal of Hellenic Studies, Vol. xl, Pt. 1.
5. Proceedings of the Society of Antiquaries, 1918-19.
6. Revue Belge de Numismatique, 1920, Pts. 1 and 2.
7. Rivista Italiana di Numismatica, 1920, Pts. 1 and 2.
8. Suomen Museo, Vols. xxv-xxviii.
9. Syria, 1920, Pts. 1 and 2.
10. Zeitschrift für Numismatik, Vol. xxxii, Pts. 1-4.
11. C. J. Brown. Catalogue of Mughal Coins in the Lucknow Museum. 2 Vols. ; *from the Delegates of the Clarendon Press.*

12. G. F. Hill. *Medallic Portraits of Christ*; from the *Delegates of the Clarendon Press*.

13. G. F. Hill. *Coins and Medals*; from the *S.P.C.K.*

14. Percy J. Marks. *History of Paper-Money in Australia*; from the *Author*.

15. J. Grafton Milne. *The Shops of the Roman Mint of Alexandria*; from the *Author*.

Messrs. J. Campbell Lewis and K. D. Stewart were elected Fellows of the Society.

The Marchese Roberto Venturo Ginori, Colonel E. J. King, C.M.G., Monsieur Édouard Bernays, and Mr. C. G. Gunther were proposed for election as Fellows of the Society.

Mr. Henry Garside showed a pattern nickel half-anna of India, 1908.

Dr. Codrington exhibited a small bronze medal of Antony Durand:

Obv. AD in monogram. Arms below: NUMISMATICUS around.

Rev. Londinium in monogram: NATUS ANNO MDCCCIV around,

presented by him to the Society in October, 1862, of which only 14 specimens were struck, and read the following note on him:

"According to a necrology in the *Revue Belge de Numismatique*, 1875, A. Durand was born in London in 1804. He travelled a good deal, and made a large collection of Greek and other Coins, Medals, and Jetons. In 1863 he settled near Geneva; in 1865 published his *Médailles et Jetons des Numismates*, in which this Medal is figured on the title-page and described on page 57. Having parted with most of his collection of Greek and Roman coins, he made, in their stead, one of the Medals of the French Revolution of 1789, and proceeded to make a descriptive Catalogue of them, which however, was not printed. The MS. of it is a fine specimen of calligraphy and careful work. This he presented to this Society. I have not ascertained his parentage. He does not appear to have been a member of the Society, but he made two or three gifts of medals to it in the early years, and it is suggested that he was the son of Amédée Durand, who engraved many English medals between 1818 and 1846."

Very fine selections of coins of Vespasian were exhibited by Mr. F. A. Walters, Mr. Sydenham, Mr. Percy H. Webb, and the President.

M. Édouard Bernays read a note on an esterlin of John the Blind, struck by Arnould, Sheriff of Arlon, in 1346, and copied from a penny of Edward III. (This paper is printed in this volume of the *Chronicle*, pp. 126-133.)

Mr. Harold Mattingly read a paper on the "Mints of Vespasian", in which he discussed the characteristic features of the mints, and attempted to date the issues as far as possible. A feature of the mint of Rome was the constant echoing of the coin-types of Augustus. In discussing the Spanish coins it was suggested that one series at present attributed to Tarraco might really belong to Illyricum. Ephesus was the chief Asia Minor mint, but Byzantium must also have been important, especially while it was the headquarters of Mucianus. Tacitus refers to Vespasian's coinage at Antioch, and there were coins to be attributed to other Syrian mints. A small series of coins dated A. D. 74 to A. D. 76 should, as their types suggest, be attributed to Lycia, which with Pamphylia was reconstituted in the Empire in A. D. 74. (This paper will be printed in the *Numismatic Chronicle*, 1921.)

NOVEMBER 18, 1920.

PERCY H. WEBB, Esq., M.B.E., Treasurer, 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 Report of the Smithsonian Institute, 1917.

2. Bulletin de la Société des Antiquaires de l'Ouest, 1920, Pt. 1.

3. H. C. Drury. The later Nineteenth-century Farthing Tokens of Ireland; *from the Author*.

4. Miss Helen Farquhar. Royal Charities; touch-pieces for king's evil; *from the Author*.

5. G. F. Hill. Grains and Grammes; *from the Trustees of the British Museum*.

6. Dr. Viktor von Müller zu Aichholz: Oesterreichische Münzprägungen, 1519-1918; *from the Staatssammlung der Medaillen, Vienna*.

7. E. T. Newell. Myriandros; *from the Author*.

8. Count Nicolò Papadopoli Aldobrandini, *Le Monete di Venetia*, Vol. iii; *from the Author*.

Monsieur Édouard Bernays, Colonel E. J. King, C.M.G., Mr. Charles E. Gunther, and the Marchese Roberto Ventura Ginori were elected Fellows of the Society; and M. Gustav Philipsen was proposed for election.

Mr. Henry Garside exhibited an Egyptian gold 100 piastre piece of 1916.

Mr. G. C. Haines showed a silver medallion of Valentinian II. *Obv.* DN VALENTINIANVS P.F. AVG. *Rev.* VIRTVS EXERCITVS:—TRPS.

Mr. Fredk. A. Walters, F.S.A., showed two profile groats of Henry VII. 1. *Obv.* Mm. lys.; *rev.* greyhound's head, a very rare mm. 2. *Obv.* Pheon; *rev.* mm. pheon and crosslet, a rare and interesting combination.

Rev. Edgar Rogers exhibited three Seleucid tetradrachms of the winged diadem type; one of Antiochus Theos, symbol, feeding horse (Larissa) and two Hierax, symbols, bee (Gentinus) and owl (Sigeium).

Mr. J. Allan exhibited on behalf of Mr. C. S. Gifford, of Boston, the half-dollar issued to commemorate the Mayflower tercentenary. Half-length bust of General Bradford I;

below, **PILGRIM HALF DOLLAR UNITED STATES OF AMERICA**; above, in field **IN GOD WE TRUST**.
Rev. The Mayflower I; **PILGRIM TERCENTENARY CELEBRATION 1620-1920**.

Mr. L. A. Lawrence, F.S.A., read a paper on "A Second Specimen of the Crown of the Rose". This paper is printed in this volume (pp. 102-107) of the *Numismatic Chronicle*.

Mr. G. C. Brooke read a paper entitled "PERERIC", in which he dealt with a suggestion by Mr. H. W. C. Davis that **PERERIC M** might stand for **EMPERERIZ M**, i.e. the Empress Matilda, *Empereriz* being an old French form of the feminine of *Empereur*. This paper was printed in the *Numismatic Chronicle*, 1920, pp. 273-276.

DECEMBER 16, 1920.

SIR CHARLES OMAN, K.B.E., M.P., LL.D., 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. Académie Royale de Belgique, 1920 Bulletins; Beaux-Arts, No. 8, Lettres nos. 7 and 8.
2. Finska Forminnesföreningens Tidskrift xxx.
3. Mémoires de la Société des Antiquaires du Nord, 1918-1919.
4. Numismatische Zeitschrift, 1914-1920.
5. Proceedings of the Royal Irish Academy, vol. xxxv, C 6 to C 12.
6. Report of the Government Museum, Madras, 1919-1920.

7. Syria, 1920, Pt. iii.

8. H. S. Job. The Coinage of the Mahdi; *from the Author.*

M. Gustav Philipsen was elected a Fellow of the Society, and Mrs. J. Grafton Milne and Captain S. Mavrojani were proposed for election.

Mr. Lionel M. Hewlett exhibited the two Anglo-Gallic coins described in his paper in this volume of the *Chronicle*, pp. 100-101, a sterling of the Black Prince of the D'Ax mint, and a pavilion of the Figeac mint.

Mr. Fredk. A. Harrison exhibited four specimens of German baptismal and marriage thalers.

Mr. Garside showed the new Canadian cent of 1920, and the 5, 10, and 50 nickel centesimi pieces of Italy of 1920.

A General Meeting then took place to discuss the Council's recommendations regarding the subscriptions to the Society. It was unanimously decided that to future Fellows the annual subscription should be £2 2s., and the composition fee for Life Fellowship £31 10s.

After a discussion it was decided not to increase the subscriptions to present Fellows compulsorily, and the Secretaries were instructed to issue an appeal to Fellows to double their subscriptions voluntarily.

A discussion then took place on the new coinage, and the following resolution was passed unanimously. The President was asked to hand it to the Chancellor of the Exchequer:—

“That this Meeting of the Royal Numismatic Society desires to call the attention of the Chancellor of the Exchequer to the appearance of the coinage recently produced by the Royal Mint, more especially of the latest issue of base silver. The execution of the British coinage, irrespective of the design, has during the last twenty-five years become steadily worse; and the latest issue is without exception the worst and most carelessly struck that has been produced in any great mint since the establishment of the

coining press in the seventeenth century. The Society would accordingly beg for the appointment of a commission to inquire into the possibility of remedying what is nothing less than a national disgrace."

JANUARY 20, 1921.

SIR CHARLES OMAN, K.B.E., M.P., LL.D., President,
in the Chair.

The Minutes of the Meeting of December 16 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, 1918.
2. The Antiquaries' Journal, 1921, Pt. 1.
3. Mitteilungen der Num. Gesellsch. in Wien, Nov.-Dec. 1920.
4. Revue Belge de Numismatique, 1920, Pts. 3 and 4.
5. Rivista Italiana di Numismatica, 1920, Pts. 3 and 4.

Mrs. J. Grafton Milne and Capt. S. Mavrojani, M.A., B.C.L., were elected Fellows of the Society.

The President referred to the great loss sustained by the Society through the death of Dr. Oliver Codrington, who had been its Librarian for over thirty years. He had done a great deal of work for the Society, and his place would be very difficult to fill. He had always been ready to place his wide knowledge at the disposal of members of the Society. A vote of sympathy with his relatives was passed.

Mr. Percy H. Webb showed a very fine series of Roman third brass of the early fourth century from a Belgian find.

Mr. Fredk. A. Walters, F.S.A., showed five brass coins of Valerian and Postumus restruck on older coins of denominations no longer current.

Mr. Leopold Messenger showed a third brass of Carausius overstruck on Claudius Gothicus, found at Cirencester, and an unpublished brass coin of Ephesus, *obv.* jugate heads of Augustus and Livia, and *rev.* Statue of Diana.

Mr. Henry Garside showed a mule between reverse of St. Helena halfpenny of 1821 and reverse of a Guernsey four doubles of 1830.

Mr. H. Mattingly read a paper by Mr. E. S. G. Robinson on a tetradrachm of Alexander with the name *Aspeias* in the genitive. This paper is printed in this volume of the *Chronicle*, pp. 37-38.

Mr. L. A. Lawrence read a paper by Mr. L. Woosnam on the alleged Anglo-Saxon mints of Bridgnorth and Harwich. This paper is printed in this volume of the *Chronicle*, pp. 92-99.

FEBRUARY 17, 1921.

SIR CHARLES OMAN, K.B.E., M.P., LL.D., President,
in the Chair.

The Minutes of the Meeting of January 20 were read and approved.

The following Presents to the Society were announced, and thanks ordered to be sent to their donors :

1. American Journal of Archaeology, 1920, Pt. 4.
2. Archaeologia Aeliana, 1920.
3. Journal of Hellenic Studies, 1920, Pt. 2.
4. Syria, 1920, Pt. 4.
5. C. J. Brown. Catalogue of Gupta Coins in the Lucknow Museum ; *from the Author.*

Mr. William James Faulkner was proposed for election as a Fellow of the Society.

Mr. William Gilbert exhibited and read a note on an unpublished seventeenth-century token of Staines, Middlesex.

Obv. RICHARD . BARNATT . IN . (the Bakers' Arms).
Rev. STANES . MALLSTER . - R . E . B .

The token was in very fine condition, the patina indicating its having been buried. The E in centre of reverse is the initial of his wife's name. This was Elizabeth, as in the parish register of Staines from 1654 to 1660 there is mention of the birth of Mary, Joseph, James, and Sarah, children of Richard and Elizabeth Barnet.

Mr. Gilbert also has a token of a John Barnatt, of Staines, which is dated 1653, and which is described (incorrectly) in Williamson. He was probably the brother of the above Richard Barnatt. A John Barnet married Anne Pool at Staines on May 25, 1655. It is a curious fact that the surname Barnet (which is also a well-known place-name) is very rarely met with on the seventeenth-century tokens. Williamson only gives the one example (John Barnet mentioned above) for the whole of the British Isles.

Rev. Edgar Rogers exhibited three tetradrachms, three drachms of the Seleucid mint of Tyre of unpublished dates, and officinae.

Mr. Frederick A. Harrison exhibited two very fine double thalers of Augustus, Duke of Brunswick and Lüneburg, 1665, and Adolph, Duke of Holstein, 1592.

The President exhibited six fine tetradrachms of Philip II of Macedon.

Mr. John H. Pinches read a paper entitled "Recollections and Experiences of a Medallist", in which he surveyed the changes made by the introduction of machinery in the work of the medallist and die-engraver in the past fifty years. The most revolutionary measure had been the invention of the reducing machine, which automatically engraved a die of the size required from a model of any size. The art of the medallist as formerly understood seemed at present to be

threatened with extinction. An interesting discussion followed on the merits and demerits of the reducing machine, with special reference to the deterioration in the art of the British coinage since its introduction. Among those who took part were the President, Mr. F. A. Harrison, Mr. John Pinches, junr., and Mr. J. Rochelle Thomas.

The President announced that he had received the following reply from the Chancellor of the Exchequer in answer to the resolution passed by the Society in December :

(Copy)

Treasury Chambers, Whitehall, S.W. 1.

Jan. 28, 1921.

DEAR OMAN,

I have considered the proposal made by the Royal Numismatic Society in their resolution of which you forwarded me a copy on December 20.

The terms of the resolution invite comment, but I will confine myself to saying that the Society appears to have given insufficient attention to the difficulties attaching to the work of the Mint at the present time, and to the overriding necessity of speed of output. I hope that as the issue proceeds it will be improved, and without accepting the Society's criticisms as accurate or well-founded, I am free to admit that there is room for improvement. I am not, however, of opinion that any public advantage would be derived from the institution of a Commission at the present time.

Yours sincerely,

(Sd.) AUSTEN CHAMBERLAIN.

Professor Sir Charles Oman, K.B.E., M.P.

It was decided to send copies of the correspondence to the Press.

MARCH 17, 1921.

SIR CHARLES OMAN, K.B.E., M.P., LL.D., 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. Académie Royale de Belgique, 1920, Pts. 9 and 10.
2. Sotheby's Sale Catalogue of Coins, 1914-1920: priced and bound; *presented by Messrs. Sotheby, Wilkinson, and Hodge.*
3. Papers of the British School at Rome. Vol. ix.

Mr. William James Faulkner was elected a Fellow of the Society, and Surgeon-Commander E. A. G. Wilkinson, R.N., was proposed for election.

The President exhibited a series of coins illustrating the Mint of London from Carausius to Constantine II, including some early "folles" of abnormal type.

The Rev. Edgar Rogers exhibited a series of Seleucid bronze coins remarkable for their preservation, including an unpublished half-chalcous of Demetrius I of Tyre.

Mr. Lionel L. Fletcher showed twelve Irish seventeenth-century tokens, including one of Richard Greenwood, Dublin, with a figure of St. Patrick, and unpublished varieties of Ballymena and Kilmallock.

Mr. Henry Garside exhibited a specimen of the bronze memorial plaque, designed by E. Carter Preston, and presented to the next-of-kin of members of His Majesty's forces who fell in the war 1914-1918.

Mr. Fredk. A. Walters, F.S.A., exhibited a medallion of Marcus Aurelius (Cohen, No. 994; Gneecchi, Pl. lxiii. 8)

Obv.: M. ANTONINVS AVG TRP XXVIII.

Rev.: IMP VI COS III—VICT GERM victory in
Quadriga.

struck in lead, and described by Gneccchi as a proof. He gives two examples of this type in lead—one found in Rome in 1908; the other at Rheims in the Colson Collection.

Mr. Walters also showed a groat of the second coinage of Henry VIII of fine work, m.m. *obv.* and *rev.* rose. *Rev.* has floriated ends and the Cross of exceptional design. The legends on *both sides* are of an ornate early Renaissance type of transitional character. This coin is extremely rare, and possibly unique, in having both sides from corresponding dies—other rare examples have only one side of this type, but the other from an ordinary die. A common rose-marked groat was shown for comparison.

Mr. Percy H. Webb then read a paper on "Roman Mints of the Third Century", which is to be published shortly in the *Numismatic Chronicle*.

A discussion followed, in which the President, Sir Henry Howorth, Mr. F. A. Walters, the Rev. Edgar Rogers, Mr. A. Messenger, and Mr. H. Mattingly took part.

APRIL 21, 1921.

SIR CHARLES OMAN, K.B.E., M.P., LL.D., President,
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. American Journal of Archaeology, 1921, Pt. 1.
2. Bollettino del Circolo Numismatico Napoletano, 1921, Pt. 1.
3. Syria, 1921, Pt. 1.
4. Transactions of the Society of Antiquaries of Scotland.

5. E. T. Newell's Alexander Hoards.

6. Do., Octobols of Histiaea; *presented by the American Numismatic Society.*

Surgeon-Commander E. A. Wilkinson, R.N., was elected a Fellow of the Society, and Major T. O'B. Hubbard was proposed for election.

The President exhibited a florin of the new issue of 1920 corroded and discoloured in a remarkable fashion owing to the bad alloy.

Mr. Henry Garside showed the Canadian 50 cents, 25 cents, 10 cents, and 5 cents, all dated 1920, and coined in an alloy composed of 800 parts of silver and 200 parts of copper; and a Canadian bronze cent of 1920 of the old type.

Mr. H. P. Hall exhibited a very fine series of Roman first brass of the first century A.D.

Mr. H. Mattingly read a paper on "Some Historical Roman Coins of the First Century A.D." An aureus of Caligula, with *rev.* head of Emperor radiate r. between two stars, was shown to refer to the unfulfilled intention of Caligula to consecrate his predecessor: the features of the Emperor on *rev.* are sometimes strikingly like those of the living Tiberius. The aureus of Nero with *rev.* **IVPPITER LIBERATOR** was attributed to a mint in Greece (? Corinth), A.D. 67. Juppiter Liberator suggests Nero himself, who was hailed under this magniloquent title by the grateful Greeks to whom he gave liberty; and the coins supplied the real explanation of two passages in Tacitus, *Annals* xvi; Seneca and Thræsea Paetus, as their life-blood flows, declare that they are pouring libation to "Jupiter Liberator". The point of the epigram has been missed by the editors. A sestertius of Vitellius (in Mr. F. A. Walters's collection) with *rev.* **VRBEM RE . . .** was assigned tentatively to Lugdunum: the *rev.*, which should be completed "Urbem Restituit S.C.", suggests by the ambiguous word "Urbs"

(instead of the normal "Roma") a side reference to Lugdunum itself, restored by Vitellius after its disgrace under Galba. The unique denarius (in the collection of Sir Arthur Evans) with *obv.* Head of Mars, **ADSECTOR LIBERTATIS**, *rev.* Victory erecting trophy, **LEGION XV PRIMIG.**, was interpreted as an issue by Civilis and his Gallic allies, commemorating the fall of Vetera with its garrison, the fifteenth legion.

In the discussion that followed, the President, Mr. Percy H. Webb, Mr. F. A. Walters, and Mr. Messenger took part.

MAY 19, 1921.

PERCY H. WEBB, Esq., M.B.E., Treasurer, 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. Journal of Royal Society of Antiquaries of Ireland, 1920, Pt. 2.

2. Société des Antiquaires de l'Ouest : Transactions 1920, Pts. 3 and 4.

3. Forvännan, 1917.

4. A. W. Brögger. Ertog og øre ; *from the Author.*

5. The Marquess of Milford Haven. British Naval Medals ; *from the Author.*

Major T. O'B. Hubbard, R.A.F., was elected a Fellow of the Society, and Mr. W. H. Valentine was proposed for election.

Messrs. W. Gilbert and Leopold Messenger were appointed to audit the Society's accounts.

Mr. G. F. Hill, F.B.A., read a paper on ancient methods of coining. As regards the engraving of dies, the alleged use of the gem-engraver's drill was disputed, and it was shown that all the work on the dies could equally well and more conveniently be done with punches and scorpers. The various methods of preparing blanks by casting or cutting were also deduced from the appearance of the finished coins. (This paper will be printed in the *Numismatic Chronicle*, 1921.)

In the discussion, Mr. Cecil Thomas argued that the treatment of details showed that the use of the hub for making dies was known to the ancients. Messrs. Harold Stabler, Manning Pike, and John Pinches also contributed to the technical discussion.

JUNE 16, 1921.

ANNUAL GENERAL MEETING.

PROFESSOR SIR CHARLES OMAN, K.B.E., M.P., LL.D., &c.,
President, in the Chair.

The Minutes of the Annual General Meeting of June 17, 1920, were read and approved.

Messrs. Henry Garside and H. W. Taffs were appointed scrutineers of the Ballot for the election of office-bearers for the following year.

Mr. W. H. Valentine was elected a Fellow of the Society.

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 death of the following Honorary Fellow of the Society :

Direktor Dr. Heinrich Dressel ;

and of the following ordinary Fellows of the Society :

Oliver Codrington, Esq., M.D., F.S.A., M.R.A.S.

John Cooper, Esq.

Dudley B. Fay, Esq.

Professor Henry Goudy, M.A., LL.D., D.C.L.

M. Adam Magnus E. Lagerberg.

A. J. Lawson, Esq.

Rev. Robert Scott Mylne, M.A., B.C.L., F.S.A.

Edward Shepherd, Esq.

They have also to announce the resignations of the following Fellows :

Colonel Gerald Boyle.

Rev. Herbert A. Bull, M.A.

Colonel R. J. Carthew, J.P.

Evelyn W. Rashleigh, Esq.

Charles Thomas-Stanford, Esq., M.P., M.A., F.S.A.

Charles Winter, Esq.

On the other hand they have to announce the election of the following new Fellows :

M. Édouard Bernays.

William James Faulkner, Esq.

Marchese Roberto Venturo Ginori.

Charles Gunther, Esq.

Major T. O'B. Hubbard.

Colonel E. J. King, C.M.G.

John Campbell Lewis, Esq.

Captain S. Mavrojani, M.A., B.C.L.

Mrs. J. Grafton Milne.

Mr. Gustav Philipsen.

K. D. Stewart, Esq.

Surgeon-Commander E. A. Wilkinson, R.N.

W. H. Valentine, Esq.

The number of Fellows is therefore :

	Ordinary.	Honorary.	Total.
June, 1920	285	14	299
Since elected	13	—	13
	298	14	312
Deceased	8	1	9
Resigned	6	—	6
	284	13	297

The Council have also to announce that they have decided to award the Society's Medal this year to Mr. Percy H. Webb, in recognition of his services to the study of Roman numismatics, especially his work on the coinages of the third and fourth centuries.

The Honorary Treasurer's Report, which follows, was then laid before the Meeting :

STATEMENT OF RECEIPTS AND DISBURSE-

FROM JUNE 1ST, 1920,

Dr.

THE ROYAL NUMISMATIC SOCIETY IN ACCOUNT

	£	s.	d.	£	s.	d.
<i>To cost of Chronicle—</i>						
Printing	407	7	2			
Plates	61	14	6			
				469	1	8
„ <i>Lantern Expenses</i>				10	8	0
„ <i>Rent, &c.</i>				50	7	11
„ <i>Refreshments, &c.</i>				15	4	3
„ <i>Repayment of Subscription</i> (paid in error)				1	1	0
„ <i>Sundry Payments</i>				13	16	0
„ <i>Balance—</i>						
General Account	137	12	8			
Research Account	26	14	2			
				164	6	10
				£724	5	8

MENTS OF THE ROYAL NUMISMATIC SOCIETY

TO MAY 31ST, 1921.

WITH PERCY H. WEBB, HON. TREASURER.

£r.

	£	s.	d.	£	s.	d.
<i>By Balance in hand—</i>						
General Account	88	18	2			
Research Account	25	6	2			
	<hr/>			114	4	4
<i>By Subscriptions—</i>						
Ordinary Subscriptions	327	16	2			
2 Life Subscriptions	31	10	0			
1 Additional Life Subscription	25	0	0			
14 Entrance Fees	14	14	0			
	<hr/>			399	0	2
<i>By Donations</i>				66	2	3
„ <i>Sales of Chronicles</i>				61	18	9
„ <i>Contributions to Plates for Chronicle</i>				34	10	0
„ <i>Dividends on Investments</i>				26	7	6
„ <i>Return of Income Tax</i>				22	2	8
	<hr/>			£724	5	8
	<hr/>					

PERCY H. WEBB, *Hon. Treasurer.*

Audited and found correct,

LEOPOLD G. P. MESSENGER, } *Hon. Auditors.*
 WILLIAM GILBERT, }

June 9, 1921.

The Reports of the Council and of the Treasurer were adopted on the motion of the President.

Sir Charles Oman then presented the Society's Medal to Mr. Percy H. Webb, and addressed him as follows :

There is a special pleasure in presenting the medal of the Society to-day to a recipient known, as you are, Mr. Webb, to all the members present—not only on paper, as the contributor of many articles full of valuable research to our *Journal*, but in flesh and blood, as a familiar acquaintance, one of the most regular visitants at our monthly assemblies. It is, no doubt, always satisfactory to take part in honouring merit, even that of some *savant* over-seas, whom one has never seen, and probably never will see. But it is much more satisfactory to join in the award of distinction to a personal friend, and to be able to assure him face to face of the sincere gratification which the ceremony gives us. And, I may add, pleasure comes not only from showing our appreciation of the services of an individual member to Numismatic science, but also from recognizing that our Society continues to produce such distinguished members, now as in its earlier years, and gives promise of maintaining the high level of knowledge and research which it has always set before its eyes.

You have, I believe, been one of us for just twenty years, having joined our ranks in the year 1901. But what is more important as showing our indebtedness to you, is that you have for fourteen years discharged the very important functions of Treasurer, which post you were good enough to take over on the death of Mr. W. C. Boyd in 1907. It is an office always responsible, and sometimes rather onerous : I must particularly express our indebtedness to you for bringing the Society safely through the financial crisis of 1920, when we had to face not only the expensive details of a removal from Albemarle Street to Russell Square, but also the more difficult problem of the rise in the price of printing. Thanks to your exertions and your wise counsels,

we may say that the difficulty has been settled, and that our finances are once more in a promising condition.

But even the most painstaking and resourceful of Treasurers would not earn the Society's medal by discharging his official duties. It is given for the encouragement of Numismatic research, and it is as a researcher in the field of the coinage of Imperial Rome that you have won your title to this distinction. We have many collectors of coins among us—in fact I should imagine that there are very few of us who maintain a purely academic attitude towards Numismatics, and are content to study coins without possessing them. But among many collectors only a limited number have the ability to turn their hobby into a science, and to advance the general knowledge of the learned world by producing new deductions, and adding to the number of ascertained historical facts. It is only too easy to gloat over one's cabinet, to rejoice in the beauty or the rarity of its contents, without endeavouring to turn one's specialized knowledge to literary account. But the collector's knowledge dies with him, and profits the world little, unless he is resolute enough to set down his discoveries on paper. Some of the owners of very great cabinets have failed to see their moral responsibility in this respect, with the result that facts which they discovered have had to be rediscovered by a succeeding generation.

But you, from the very first moment of your entry among our ranks, have enriched the *Numismatic Chronicle* with a long series of papers, each of which contributes something to the advancement of our science. Within two years of your election you started as a contributor to the *Chronicle* by giving us some notes of coin-finds made during excavations at the Hall of the Carpenters' Company. It was ominous of the direction which your researches were to take that these finds were mainly of coins of the Roman Empire. After this small preliminary exercise, your energy worked itself up to a very great achievement—a logical study of the coins of the two great British emperors (or usurpers) of the third century. In 1906 you gave us your

monograph on Allectus and his issues, in 1907 that on Carausius and his still more numerous and interesting emissions. Since the days of the over-ingenious Stukely no one had taken seriously in hand the study in detail of the mintage of these two notable men, probably the first strikers of Roman money in this island, for it seems more than doubtful whether Clodius Albinus or any of the other earlier usurpers who held power in Britain established a mint there. I have read more than once these studies of the coinage of Carausius and Allectus, and have much admired the energy which collected notes from so many cabinets, and the discrimination shown in the arrangement of them. If any one in the future wants to know what is to be known about these two emperors, they have only to turn to the *Numismatic Chronicle* of 1906 and 1907. The articles are no mere lists of coins, but serious historic studies, in which not only all Roman authorities about these two careers are collected, but some attention is given to the strange and fantastic stories of Geoffrey of Monmouth and Fordun, which one ought to know, though one must not pay too much attention to them.

Your next contributions to the *Chronicle* were a series of articles on the Empress Helena—or, as M. Maurice would have us believe, the two Empresses Helena. They extend over the years 1908 to 1915—five papers in all, which contain a very full collection of all the types of this ancient Saint, and much controversy with your French friend—whose views I am bound to say that you contested with complete success. For despite of all his arguments, I do not think that any one will believe in Helena Junior as a coin-striker, when once he has gone carefully through your monographs. I suppose she existed—but the evidence is slender; the wife of Crispus is the most shadowy of figures.

Led on by the connexion of the name Helena to the third of the ladies of that name, the wife of the last monarch of the house of Constantine, you described the issues of that prince, the well-intentioned, pedantic, and reactionary

Julian, classifying them into the three periods, when he was Caesar under his cousin Constantius II, then an unacknowledged Augustus in Gaul, and finally ruler over the whole Roman Empire. There is enough evidence on his coinage to enable us to see that he was no ordinary personage, but not so much as we might have expected from an historical knowledge of his life. Unfortunately his whole silver coinage was struck with the single and most uninteresting type of his quinquennial and decennial vows written in a wreath. One does not get the explosion of reactionary heathenism that we should have expected; it is only in Egypt, indeed, that the pagan gods made their appearance again after a generation of Christian coinage. And he never allowed his wife Helena to coin at all—the supposed portraits of her are only the goddess Isis.

The war which interrupted your numismatic writing turned all your energies into the service of your country. We are proud to know that your services were recognized when our King granted you membership of the Order of the British Empire, while the King of Belgium conferred on you the Médaille du Roi Albert avec Rayure for your care of his compatriots who had become refugees in this country.

The moment that the war was ended your pen again became busy in our behalf.

Quite an important paper was your long note on the monetary reforms of Aurelian in the *Chronicle* for 1919, which brought to bear evidence drawn from the actual coins upon the vague and puzzling story given us by the historians. I quite agree that Aurelian's real attempt seems to have been to get back to the shape and outer appearance of the original "Antoninianus" of Caracalla. When one finds a good and unspoiled specimen of his later coinage, with the silver plating still thick upon it, one sees at once that it *was* a reform to produce such decent-looking coins. They compare most favourably with the wretched ill-struck pieces of Claudius Gothicus, which are (on an average) the most disgraceful production of the third-century

mint. The only thing that remains a puzzle is what precisely was the grievance of the Roman moneyers which made them indulge in the bloody insurrection which historians record.

Your pen is still working vigorously, and in this last year you have given us two excellent monographs—one on Four Years of the Mint of Roman Alexandria, between 308 and 312 A. D. ; the other on the Provincial Mints of the third century from Gallienus to Diocletian. The *Chronicle* will, I am sure, be the richer by many other products of your pen, for this medal will (I know) serve as a stimulus to your activities, and not be regarded as the reward given to the warrior whose campaigns are over. When the Society organizes that great book on the Roman Coinage as a whole which is now in the air, we rely upon you for many important chapters of it. For you have a kingdom of your own in the third and fourth centuries, and must not cease to let us know that your domination over it remains complete.

In reply Mr. Webb said :

MR. PRESIDENT AND BROTHER FELLOWS,

I receive with the greatest pleasure the honour which you have conferred upon me. It fills me with pride and humility : pride because I recognize it as the very "blue riband" of numismatics ; humility!—well, when my old school, Marlborough, then young and unproven, sent a cricket challenge to Harrow, the answer came back : "Eton we know, and Winchester we know : but who are ye?" I fear that when I climb the slopes of high Olympus I shall meet some guardian at the top who will say to me, "Head and Hill I know, Babelon I know, but who art thou?"

I owe many happy hours to the Royal Numismatic Society, and any small services I may have rendered to it have been so rendered in all gratitude. I well remember when, nervous and ignorant, I first stepped across its threshold, and received the hand-grasp of admission from Sir John Evans. From that day to the present I have received nothing but kindness and assistance from all the members : Sir John himself, my

predecessor in the Treasurership, Mr. Boyd—I should weary the Society by repeating all the names, but I must particularly express my indebtedness to you, Sir Charles Oman, for the most interesting and valuable information as to the Roman Legions which you so freely gave me when I was writing on Carausius. I have often wished to tell you also that I owe to you one of the proudest moments of my life, when, on opening a certain history, I found myself quoted as having added at least one fact to human knowledge. I think that there is reason to be proud as well as fond of the Royal Numismatic Society, for I believe that, at all times, it seeks the truth. I believe that its Fellows all feel that it is better not to write at all than to write that which may mislead; and I think that the criticism of the Society on that which is written is always kindly and helpful, rather than destructive. It is so easy, on the one hand, to write brilliantly and plausibly in the attempt to add to the writer's own distinction, and not in the cause of truth, and on the other to publish scathing attacks which tend to prevent future effort by the author of the paper. I venture to think that the Society does neither of those things, and if, in my own poor efforts, I have observed the principles that I believe it holds, I am indeed content.

Again I thank the Society most heartily for the great honour which it has conferred upon me.

The President then delivered the following address :

THE PRESIDENT'S ADDRESS.

We have lost nine members by death during the twelve-month, some of them regular visitors to our monthly meetings, others not so familiar here, but very well known in the learned world.

The most distinguished of them was my very good old friend Dr. Henry Goudy, Regius Professor of Civil Law in the University of Oxford. His name was more familiar to lawyers than to numismatists—and he was at the head of those who were versed in his own special science. He joined

the Society late, not as a collector, but as one who in his legal studies was continually running across the mention of coins, and liked to know in metal as well as on paper their meaning. He collected a small typical series of Roman coins, one specimen of each sort mentioned in the Jurists, from the As and its fractions of the early republic, down by the sesterce, the denarius, and the aureus to the gold solidus of Justinian. These he was wont to exhibit to his pupils and friends, to illustrate his lectures. They were all picked specimens, and he was very proud of them.

Dr. Oliver Codrington, our Librarian for so many years (35 in all I believe) was also in his way a very distinguished personage. In his earlier years he was in the Army Medical Corps, and possessed the war medal for the New Zealand campaign of 1863. While serving in India he became secretary to the Bombay branch of the Royal Asiatic Society, and wrote much in its journal. From the day that he settled down in London in 1886 he became a frequent visitor to our meetings, and a very regular contributor to the *Chronicle*. We were then, and are still I fear, less rich in Orientalists than we should like to be, and as an ever-available specialist in that line Dr. Codrington was most valuable to us. Only a year after he had joined the Society, he was elected Librarian, in succession to Mr. Hoblyn, a sufficient proof of the way in which he had from the first commended himself to its members. Under his management the Library has swelled to its present satisfactory condition: he did his best to see that no available book of importance was absent from its shelves. He wrote us many a paper—the one that remains most in my mind is one concerning some extraordinary Persian coins struck in the name of Baktanus, king of the fairies—the “believing Jinns”.

Our genial old friend Captain Shepherd—I never attend a meeting even now without instinctively looking round for his pleasant and familiar face—was an omnivorous collector of very nearly every sort of coin. Perhaps he had a preference for the ancients, but he was almost as much interested

in the moderns. As an accumulator of "puzzles"—coins hard to identify—he was indefatigable, and has often convinced me of my own deficient knowledge. A visit to his collection, which he was very fond of showing, involved a circuit round nearly every field of numismatic lore. He served several times on the Council, and was always most welcome there.

The Rev. Robert Scott Mylne, of Oriel College, Oxford, was not, I think, a collector, but he was interested in topography, architecture, and the literary records of our coinage. He contributed once or twice to the *Chronicle* during the twenty years of his membership (1900–1920), and read also papers which have not been printed. He descended from the old Scottish architect-family of Mylne, who were master-masons to the Stuart kings in the seventeenth century, and published a large book concerning the work of his ancestors. His interests were, naturally, artistic and architectural rather than purely numismatic.

Mr. Alfred Lawson, of Smyrna, a very old member, for he joined in 1871, and was 50 years with us, was not personally known to me, since he spent his whole life in the Levant. But he was a worthy member of that group of English families settled in Turkey for generations, which produced many collectors, of whom Mr. Whittall was the best-known example; and like Mr. Whittall he accumulated a nice collection of Greek and other ancient coins, from his position of exceptional opportunity, in the central mart of Anatolia.

Mr. F. W. Hasluck, Fellow of King's College, Cambridge, sometime Librarian of the British School at Athens, though he joined us as far as 1903, had never contributed anything to the *Chronicle* till, in the very year of his death, he took in hand a most interesting paper on a Turkish monetary crisis of the seventeenth century, of which I shall have more to say when dealing with the recent contents of our periodical. It is so admirable that one feels bitter regret that our editors had never before extracted anything from Mr. Hasluck's repertory of Oriental knowledge. The main memorial by which his name will be remembered is his

monograph on the city of Cyzicus—archaeologically not numismatically treated.

Lastly, we have lost one honorary member—Dr. Heinrich Dressel, for many years director of the coin department of the Kaiser Friedrich Museum at Berlin. He was elected by the Society in 1898, and received its silver medal in 1908. He was not such a prolific writer as his predecessor Dr. Alfred von Sallet. Of his few publications the most noteworthy were Vol. III, Pt. 1, of the Berlin Catalogue of Greek Coins (1894) and his extremely clever defence of the genuineness of the Aboukir Gold Medallions (1906).

That this time of desperate financial stress for the classes from which we draw our membership should not have resulted in any great loss to our number, is an eminently satisfactory sign of the strength of the Society. Clearly we supply what the journalist loves to call a “felt want”, and our colleagues think that the fact that two guineas must be paid instead of one is no deterrent to their continuance in our company. Only six of our members have resigned this year, and I do not think that we can say that it is the rise in the subscription which has caused their departure—in several cases at least it is known to be change of residence, or other circumstances quite unconnected with the two guinea innovation. A negligible number of others have taken advantage of the option offered to old members to continue to pay the old composition: how small that number is may be worked out by those who have a curiosity to know it, by a simple arithmetical process in the Treasurer's accounts. The doubled fee sets us on a firm footing financially.

I am in hopes that the position may be improved ere long by a diminution in the extortionate price now charged for printers' labour. It is clear that wages in the printing trade will have to go down within a few months, like those in every other trade. Our editors will then be enabled to restore the *Chronicle* to something like its former dimensions, and it will (we trust) compare favourably in 1922 with the shrunken volumes of 1919 and 1920. I may mention that

our Secretary was authorized by the Council and by a meeting to append the name of the Society to that of the other learned bodies which joined in the general protest to the printing trade against the prohibitive prices for labour which have been permitted to prevail down to the present crisis. An eminent member of the Council of the Society of Publishers assures me that we have their sympathy, and that they hope that our agitation may improve their position no less than our own. The greater part of the present enhanced price of printing is due solely to the extortionate demands of the printers' and binders' trades unions—for the price of material is now falling, and should be soon not so very remote from the valuation of 1914.

I have nothing cheerful to announce regarding the present state of the British coinage. You will remember that the Society addressed an appeal in the strongest terms to the Chancellor of the Exchequer, in his capacity as Master of the Mint, to beg him to cease striking the horrible base-metal issue which he started in 1920, on the pretext that silver had then attained the unprecedented price of 88 pence per oz. Since then it has fallen to 34-5 pence, and has remained in the neighbourhood of those figures for the greater part of the year. Mr. Chamberlain, however, refused to give the least consideration to our appeal, on the plea that the operation had been started on a great scale, and could not conveniently be discontinued. The experience of a few months has shown us the full effect of the debasement: the new alloy is so badly compacted that it splits and flakes—I am exhibiting coins to-night in which the milling has begun to break away from the rest of the coin in some cases, while in others large portions of the surface have come off in strips. But the worst thing is that the general colour of the whole of the issue has now begun to assume a pale yellow sickly tinge, which in many coins verges into a deep brown, so that some of the more unhappy cases show a general result more like a penny than a florin. In others, exposed for a short time to damp, a green verdigris has begun to appear in spots. I am told that this phenomenon

is specially common in the specimens of the issue which have been sent to the trying climate of British West Africa. But despite of many questions raised in the House of Commons, the Government gives no signs of any appreciation of the disgrace which it has inflicted on the country by circulating this ringstraked and speckled currency, which for general disreputability can only be compared to the last and most-debased groats of Henry VIII, or the early testoons of his short-lived son. Passing through Switzerland in April I was made thoroughly ashamed of my country, when I found that an immense issue of new silver, of the usual *Union Latine* quality, was being put forth by that small but sound country. The feeling of having new, heavy, well-struck, bright silver in one's hand was so pleasurable, that one could only drop into melancholy when one recrossed the Channel, and began to finger once more the dull, badly-struck, and dingy British money of the Chamberlinian issue.

The futility of one of the excuses given for the continuance of the new emission, viz. that the mint was too busy to meddle with new types, was sufficiently emphasized by the fact that the mint of the U.S.A. has found time this year to strike a commemorative dollar of pleasant appearance for the three-hundredth anniversary of the arrival of the Pilgrim Fathers in New England. Yet the Philadelphia mint has been, like our own, very busy in producing both medals and ordinary coins also during the whole of the past year. It is not the means but the will that is wanting in the establishment on Tower Hill.

There have been several coin-finds in Great Britain during the past year, but only one very notable hoard has come to light since I last had the honour of addressing you. It will be described at full length by our Scottish specialist, Mr. George Macdonald, in the pages of the *Chronicle*, before the year runs out. But since his account of it has not yet been published, I may mention (with his permission) that the find consisted of no less than 1,128 coins, Scottish with a sprinkling of contemporary English, as is usually the case

in discoveries north of the Tweed. There were 18 gold pieces, 611 silver, and 499 billon. It was made at Perth on August 2, 1920, by workmen engaged in demolitions, and the date of its deposit could be fixed to within a single year, 1488-9, by the fact that while it contained no less than 660 coins of James III, who perished that summer after the battle of Sauchieburn, there were just six of his son and successor James IV. Evidently, then, the hoard was buried within a very few months of the accession of the young king. The coins were, of course, mainly fifteenth century, but a few scattered pieces of Alexander III and Edward III of England show that very old money was still in circulation in 1480. Nearly all the English coins (mostly of Henry VI, of which there were no less than 138) had been clipped, obviously in order to bring them down to the inferior weight of the contemporary Scottish currency. Mr. Macdonald informs me that the hoard enables him to settle several vexed points concerning the succession of the issues of the first three Scottish Jameses. Of the 18 gold pieces all but one were of James III, and they included 14 "unicorns", and only 3 of the much rarer "riders", with the king charging on horseback. I saw the find at Edinburgh last August, only a few days after its discovery: the silver and billon were then in a mass of green mould, but Mr. Macdonald informs me that scientific cleaning has succeeded in making every one of them identifiable, and that many are very fine.

I should perhaps note that coin-sales have not been up to their usual standard of importance in London this year, though there were some interesting pieces in the Talbot Ready sale of English coins and the Fisher sale of Italian medals. Quite the most notable auction of the year took place at Lucerne in April, when the immense and most important collection of Dr. Pozzi was sold. It was entirely ancient Greek, and was distinguished not only by its numerous lots, but by the immense proportion of rare and even unique specimens, and the general high level of condition. It is to be regretted that the British Museum was unable to become a competitor for some of the more im-

portant lots. But after indulging in the Weber purchases last year from the special fund granted for that purpose, it had no surplus whatever to spend on the Pozzi coins—which indeed ruled so high in price that no ordinary funds would have been required for any purchaser who intended to make a serious inroad on the collection.

It is the laudable custom of this Society that after its President has given some account of the more important numismatic events of the year, he should turn to comment on the members' own researches, as displayed in the pages of the *Numismatic Chronicle* for the current twelvemonth.

Our venerable periodical continues, I may assert, to be interesting to many diverse classes of readers. This year our attentions have not been so much concentrated on the Roman coinage as was the case in 1919-20, though we have nothing to complain of in the amount of papers devoted to that most important field of study, either in quantity or in quality. The Greek section, however, has been much better represented than in the preceding volume. We have a paper on Seleucid copper from one ever-welcome contributor, the Rev. Edgar Rogers, in which he publishes (as usual) a very considerable number of new types, including a Demetrius I with a full-face head of Pallas, which is very unlike anything known hitherto in Seleucid numismatics, and a new coin of Alexander Zebina with an elephant's head—a type more common in earlier than in later Syrian currency. Mr. Robinson gives us two papers—a long one on coins recently found in the Dardanelles, mostly of the Roman colonial period, but leading up to one new attribution in a different age. For by emphasizing the prevalence of the beardless Asclepius on coins of Cierium-Prusias in Bithynia, he has given us good reason to conclude that the fourth-century silver coins with a similar god upon them, hitherto always attributed to Cierium in Thessaly, are more probably from this greater town in the Propontis, whose earlier history has got obscured by its later name given it by the Bithynian king. Considered as a Thessalian coin this rare didrachm is an anomaly, for coins of this large size were in

that country issued only by three very great cities—Larissa, Pharsalus, and Gomphi. And that such an insignificant place as Cierium should have struck so heavy a denomination ought to have provoked suspicion—more especially when its types have no reference to the usual divinities found on its other smaller silver. But owing to the fact that the early name of the great Bithynian capital had been wholly forgotten, it would seem that no student before Mr. Robinson ever made this plausible reattribution, on which we may congratulate him.

Mr. Robinson also gave us a short paper on an unknown variety of Alexander the Great, a silver tetradrachm with the name **ΑΣΠΕΙΣΟΥ** written in full across the field. As he shows, this is most certainly a coinage of Aspisas, a satrap set up in Susiana by Antigonos in 316 B.C., who chances to be mentioned by Diodorus—otherwise we should have had no chance of identifying the issuer or the mint.

Mr. Grafton Milne publishes for us in the new number of the *Chronicle* a silver drachm of Smyrna, with the figure of Homer seated,—a type well known on Smyrniot copper, but hitherto never found in the more precious metal. It is of very good style, and can hardly be later than 280 B.C.

Another discovery of the year is a small bronze coin bearing the name of a King Antiochus, introduced to us by Mr. Robinson, who points out that it is wholly unlike any Seleucid copper both in style and in fabric, being of a decidedly western appearance. As it was bought at Palermo there is good reason to guess that it was issued by the adventurer Eunos, the king of the slave-revolt in Sicily in 136 B.C., who is recorded to have taken the royal style and to have assumed the name Antiochus. He maintained himself for four years, so had plenty of time to strike money before the rebellion was put down.

In the Roman sphere of study we have papers this year from all three of our specialists, the Rev. E. A. Sydenham, Mr. Percy H. Webb, and Mr. Mattingly—fragments, as I hope, of the great Roman Manual which we hope that they may one day publish in common. Mr. Sydenham's communi-

cation dealt with the bronze coinage of Nero, and distributed his numerous but rather puzzling issues into a logical sequence—it still remains a problem why there is such a gap in the copper series during his earlier years. The writer suggests that during his “quinquennium” of constitutional government, when he gave up the right of coining in silver and gold, which his predecessors had used so freely, as part of a programme for conciliating the senate, that body being engaged in issuing coins in the precious metals, neglected for a time the subsidiary coinage of copper, which had hitherto been their sole prerogative. It was, perhaps, not very necessary to add to the copper currency at the time, because of the immense quantity of it recently issued by Claudius, whose asses with the combatant Pallas are probably the most common of all Roman coins. Anyhow, the entire absence of a copper coinage during Nero’s first five regnal years remains an established fact.

Mr. Mattingly has given us two valuable papers—the more important and controversial of them deals with the “Restitution” coins struck by Titus, Domitian, and Nerva in honour of the earlier emperors and empresses, and discovers in the issue of them a definite resolve on the part of the Flavian emperors to identify themselves with the imperial tradition of the Julian house by copying their types. That Caesars of doubtful reputation, like Tiberius and Claudius, are taken into the commemorative series, he ascribes to the fact that Tacitus had not yet written his scathing annals and histories of the earlier empire. He holds that until their characters had been finally demolished by that venomous writer, they were still regarded as great administrators, on to whose succession a Flavian emperor would have no objection to be tacked. If Mr. Mattingly wants a further corroboration for this thesis, I think it may be found in the fact that even Trajan at the commencement of his reign honoured Tiberius with a gold “restitutionary” coin—a very rare thing: but Tacitus having published his books during Trajan’s central years, the reputation of Tiberius became so besmirched that no one at any later

date ever thought of commemorating him—not even Philip when in the millenary year of Rome he issued the long series of silver coins giving the portraits of his predecessors, in which even such a doubtful character as Commodus found a place. I have myself a suspicion that while there is much to be said for Mr. Mattingly's theory of the object of "restitutionary coins", another possible cause of their issue may be suggested—viz. that at a time when early coins were being withdrawn from circulation in great mass, and new issues set forth, as was the case with the Julian copper during the Flavian period, the mint may have emitted these coins as a sort of *souvenir* of a familiar currency which was being finally withdrawn. I believe that the bronze issues of Augustus and Tiberius are seldom found in hoards buried after A.D. 100, just as their gold and silver are not often found in hoards later than the time of Trajan. The issue of the "restitutionary" coins of Trajan, which reproduce the types of republican issues of some forty magistrates, can certainly have had no political intention of connecting the reigning emperor with long-forgotten senatorial families like the Horatii, Didii, Quinetii, or Scribonii. And he actually "restored" money of well-known enemies of the first Julian emperors, such as Pompey the Great, L. Cornuficius, the last republican governor of Africa, M. Eppius, a great partisan of Pompey, and (what is most surprising) Brutus the tyrannicide himself. For among the "restitutions" of Trajan we find that of the well-known denarius with the head of Liberty and the representation of Brutus senior, the first consul, walking between his two lictors. These can only have been *souvenirs*, without any political meaning; since if such meaning must be attributed to them it would have had an anti-imperial flavour altogether.

Mr. Mattingly in another paper dealt with the mints of Vespasian, more especially with regard to the coins issued in his early years, when the chaotic results of the civil wars of 68-9 were still working, and money was being struck in places which had never been mint-centres under the early empire. It is curious to find that Galba's Spanish mint

continued working for some time into Vespasian's reign, though Mr. Mattingly suggests that some of the coins attributed to Tarraco may possibly belong to a temporary Illyrian mint. Money would have been required for the armies which invaded Italy in 69, and may possibly have been struck at Sirmium, Nauportus, or some other concentration spot of the Illyrian legions. The Ephesus mint was certainly striking denarii at the same time, and it is suggested that Byzantium may also have been a coining-centre, while it was the head-quarters of Vespasian's lieutenant Mucianus. A small series dated A. D. 74-76 may possibly be attributed, on the authority of their types, to Lycia, though the Lycian league had been formally annexed to the empire in 74. But, as is generally known, there are denarii of Lycian issue as late as Trajan: why not therefore of Vespasian? Altogether Mr. Mattingly's paper does a good deal toward the arrangement of Vespasian's rather chaotic mintage. He has also given us a note on some notable coins of the early empire—including the rare Nero with **IVPITER LIBERATOR** and an unpublished denarius naming the Fifteenth Legion, which he attributes to the Gallic rebels who destroyed that unit.

Our Treasurer, ranging through his kingdom in the third century, gives us a paper on the mints of Alexandria in A. D. 308-12, and another on the general history of the coinage from Gallienus to Diocletian, as I had occasion to mention when presenting him with his well-earned medal. The latter paper has not yet been printed, so I have only my memory to draw upon for a summary of its contents. But it certainly gave us some definite data as to exactly what the monetary reform of Aurelian meant, and suggestive indications as to what must have been the chief minting places of the legitimate emperors during the troubled times between the revolt of Postumus in A. D. 258 and the restoration of Gaul to the Empire by the abdication of Tetricus in A. D. 273. Since the Gallic usurpers were in possession of the great Lyons mint for these fifteen years, and also held Spain and Britain, we must attribute all the later coins of

Gallienus, the whole of the issues of Claudius Gothicus, and those of Aurelian between 270 and 278 to Italian, Illyrian, or Oriental centres of emission—which facilitates classification, but still leaves us with plenty of problems, concerning Ticinum, Cyzicus, Sirmium, &c., which I shall hope to study at leisure when Mr. Webb's paper has appeared in print.

As regards English numismatics, we have had this year no contribution of the bulk of Mr. Lockett's monograph on the coinage of Offa, published last year, but a number of interesting notes on smaller points. The keeper of the coins gave us in October a paper on a hoard of coins of Edgar, Edward II, and Ethelred II found at Chester in 1914. About 122 pieces came to hand, some few having been dispersed: the main interest of the find was in the proof that the mint of Guildford was already existing under Edward the Martyr—hitherto none of its pennies had been known earlier than Ethelred the Unready. The quantity of the coins of the last-named king with the reverse of the "small cross" type serves to corroborate the now generally accepted conclusion that this was the first issue of that unlucky sovereign.

The oft-disputed meaning of the inscription **PERERIC** on certain coins of the time of King Stephen has received one more conjectural explanation in our columns.—My friend Mr. W. H. Carless Davis, of Balliol College, sends a note to the effect that it may be a shortened or blundered shape of **EMPERERIZ**, an Old-French form of the Latin *Imperatrix*, so that the pieces might be ascribed to the Empress Matilda. I think that there is an absolute bar to this theory in the fact that the coins belong to places like Canterbury, Lincoln, and Stamford, which were never in Matilda's hands, and to London, which she only held for a day or two, being expelled long before she had time to strike money. However, Mr. Davis's suggestion is certainly more plausible than some which I have lately seen put forth in the proceedings of the British Numismatic Society, to the effect that the letters are to be interpreted as **PER ERICAM** = through the Plantagenet badge of the *Erica* or broom-twig, or **PER**

ERICUM = PER [H]E[N]RICVM "through King Henry". I lean, with Mr. Brooke, to the view that the inscription is designedly obscure, a muddle of letters committing the moneyer to no allegiance, and exculpating him from disloyalty, whether Matilda should win the whole realm, or the captive Stephen recover his former power and dignity.

Another puzzle of interpretation comes in Mr. Woosnam's paper on the alleged Anglo-Saxon mints of Bridgenorth and Harwich. I think that he most conclusively demonstrates that **BRYD** or **BRYDIGA** or **BRYDG** could not represent any conceivable contraction of **BRYCGE** or **BRICGE**, the only pre-conquest names of the little town of Bridgenorth, while they could conceivably stand for Bridport in Dorsetshire, whose early name was Brydian, and whose Anglo-Norman issues bear the letters **BRIDI**.

Harwich as the striking place of coins with the inscription **HAMPIC**, the suggestion of Hildebrand, is also clearly impossible; Hamwic can have nothing to do with a place whose first name was Herewic. And since we have a clear use of the name Hamwic for Southampton in the *Life of St. Willibald*, who embarked, as his biographer says, "at the mouth of the Hamble, near the mart called Hamwic", we may without doubt follow Mr. Woosnam in transferring the whole series from Essex to Hampshire.

Going a little later down the list of English kings, we may note a paper on Anglo-Gallic coinage during the reign of Edward III, in which Mr. Hewlett has identified a very pretty "Pavilion" of the Black Prince from the obscure mint of Figeac, which was hitherto not known to have struck gold money, while Mr. Henry Symonds contributes a paper on the Irish issues of Edward IV. It is founded on his researches in the newly-printed *Parliament Rolls of Ireland*, which fortunately contain a number of hitherto unknown acts of the Dublin legislature dealing with the currency. They necessitate some changes in the classification made by Dr. Aquila Smith, and supply some new facts. For example, we discover in 1470 a new mint-master, one William Grampe, whose initial **G** may now be identified as the mint-mark on

the king's breast in the groats of that year—attributed up to now to German Lynch, his predecessor, whose real mint-mark would undoubtedly have been an L instead of a G. Lynch was re-appointed in 1473, but fell into evil practices—he is soon indicted for having made light money, i.e. he had coined the pound of bullion into 48 instead of 44 shillings-worth of groats. Pardoned for this, German relapsed ere long, and is finally described in a statute of 1483 as “daily making counterfeit money in the purlieus of Waterford with the assistance of certain Irish tinkers”, wherefore all grants to him are revoked. A certain Thomas Galmole was appointed master in his stead—but if this person struck any coins they have yet to be identified. It casts a lurid light on the Irish mint to find that an authorized official of long-standing could issue false groats struck by tinkers. But indeed the execrable work of much of the Irish money of Edward IV is easily understood if we allow that artists of the tinker denomination made it. Not one piece in ten allows the whole inscription to be read, and a great proportion are weakly struck by a die that did not “bite”.

Our old friend, and new Librarian, Mr. Lawrence gives us a paper on the rarest of the gold coins of Henry VIII, the “crown of the rose”. Only one specimen of it was hitherto known, and that Mr. Lawrence discovered as recently as 1908, though there was good documentary evidence that it had existed. Now a second specimen has come to hand, and has been (very properly) given to the National Collection by the generosity of Mr. Sanford Saltus. It is interesting to find that this piece is not, as might have been expected, from the same dies as the crown discovered in 1908. They differ, as Mr. Lawrence shows, in many details, especially in the number of stops between the words of the legend. It is curious to learn that a coin of such excessive rarity must have been issued in some quantity—but this tallies with the fact that pictures of it are found in the contemporary Netherland “Placaet”, proclaiming the relative values of various foreign coins. Evidently, then, it is not beyond the bounds of possibility that more “crowns of the

rose" may yet be found, to gladden the cabinets of private collectors.

On modern English coins we have not many contributions this year. Colonel Morrieson gives us notes on the old hoard of Stuart silver which forms part of the Society's not too numerous possessions. They were obviously buried at the very beginning of the Civil War, as the last-dated coin is a Charles I shilling with the triangle in circle mint-mark, which was used in 1641-42. And Mr. Barnard contributes a list of unpublished trade tokens of the eighteenth century.

In continental numismatics we have one most interesting paper by Mr. Hasluck, who most unfortunately died before he could correct the proofs for the press. It deals with the coinage of the Levant in the seventeenth century—a subject which I have never seen touched on in any of our earlier numbers. One knew that during the decay of the Ottoman empire much foreign money crept into the currency of the Turks, whose native issues had grown so scarce and so debased in metal that Western issues were gladly taken by all traders, Christian and Moslem—imperial eagle-dollars and Dutch lion-dollars being both eagerly sought after. But till I had read this paper, I was wholly unaware of the fact that the smaller currency, owing to the discredit of the native aspers and paras, was mainly composed of base silver imported from Poland, Italy, and even France. Some of the minor states entered into a disgraceful competition in foisting base and yet baser small change on the Levant trade—especially Massa, Monaco, Arquata, Fosdinovo, Torriglia, Tassarolo, and the French principality of Dombes. In 1669 the Turkish government had recourse to the heroic experiment of calling in all these debased monies, and recoining them in mass into native currency—all being melted down together, so that the different degrees of baseness at least mixed into one common degree of billon. The owners of the less-alloyed pieces of course had to bear the loss, those of the baser ones may have profited a little. It is satisfactory to know that the English Levant Company had steadily refused to dabble in the import of this base

stuff—to the profit no doubt of English credit. Mr. Hasluck's paper ends with a number of excerpts from contemporary documents dealing with the crisis in this extraordinary financial chaos—the most interesting is a long one from Rycaut's well-known *History of the Turkish Empire*.

Another continental contribution of this session is a paper by our Belgian member M. Bernays on a Netherland "sterling" closely imitating the English Edwardian penny. It is what objurgatory Acts of Parliament called a "Lushbourne", i.e. a Luxemburg penny. The obverse is a shameless copy of the English original, commencing with EDWAR and ending in REG YB: the imitator can only be identified by the mint name ERLONS on the reverse. He was Arnold, provost of Arlon, striking by the authority of the blind King John of Luxemburg, who fell at Cressy. The career of this Arnold has been worked out by M. Bernays: he was a man of obscure origin, who by general pushfulness, and especially by lending King John money, obtained from him a succession of grants of territory and regalities which finally made him governor over the whole southern half of the duchy of Luxemburg. One of Arnold's money-making expedients was this issue of false sterlings—"lushbournes of the worst type", says M. Bernays, "the best work of an unscrupulous man".

Passing from coins to other numismatic topics, we must note a paper on the renaissance medals of Christ with Hebrew inscription by the Rev. Prof. A. R. S. Kennedy, dealing in particular with the often corrupt Hebrew words on the reverse, which are shown to have been engraved by persons very imperfectly acquainted with the language, and even the alphabet of the Jews. Mr. Hill's monograph on these strange pieces, which have deceived so many inexperienced medal collectors, dealt with their age and origin—Prof. Kennedy confines himself to their epigraphy.

Mr. Pierrepont Barnard gives us a very full paper—fifty pages and more—on Italian "Jettons" or reckoning counters—objects not so well known in England as the immensely common German jettons, which the rural finder

indifferently calls "abbey tokens" or "gravediggers' tokens", and vainly endeavours to decipher. A good many of those here catalogued must have paid visits to England in the boxes of the Lombard merchants who lent so much money to the Edwards. They differ in general appearance from the usual Nuremberg stuff by being seldom inscribed, and showing much less elaborate designs. Usually they have a very simple coat-of-arms, or a mere badge that looks like a merchant's mark rather than a heraldic shield. Sometimes there are nothing more than initials. A very few show the lion of St. Mark or a figure of St. George.

There only remain two papers which I must notice—that of the Keeper of the Coins on the machinery by which ancient coins were struck, and that of Mr. Pinches on the "Reminiscences of a Medallist". Mr. Hill, interested in the technique of the ancient moneyers, gave us reasons for believing that classical coins were never engraved with the gem-cutters' tools, though this theory has long been held, but only with punches and scorpers. This view led to a capital discussion between specialists in the technique of engraving—of whom several happened to be present and agreed to differ. Mr. Pinches called his paper "Reminiscences"—it really consisted in a very interesting discussion on the tendencies of modern medallic art, illustrated by a very fine series of medals designed by himself or in his atelier. The sight of them gave the Society much pleasure, and proved that even the treacherous "reducer", when applied with wisdom and restraint need not ruin a modern design. It is the misuse rather than the use of that very double-edged artistic weapon that has rendered so many medals and coins issued by the Mint to be unsatisfactory. Many of Mr. Pinches' specimens had been prepared with the aid of the "reducer", and yet gave very satisfactory results. The confidences of a medallist on his difficulties and his successes were a new line of study for the Society, which went away with some very suggestive conclusions.

So much for our work of the session of 1920-21. I trust that 1921-22 may see us varied as ever in our sources of

interest, as amicable in our discussions, and even better furnished with mental pabulum for the most divers tastes by a *Numismatic Chronicle* restored to something like the pleasant and portly dimensions of pre-war days.

Col. H. Walters Morrieson proposed a vote of thanks to the President for his address. The result of the ballot for office-bearers for 1921-1922 was announced as follows:

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Dr. G. H. Abbott, President of the Australian Numismatic Society, conveyed a message of greeting from his Society to the Royal Numismatic Society, and Sir Charles Oman replied, wishing success to the Australian Numismatic Society.

The President proposed a vote of thanks to the Auditors and Scrutineers of the ballot, and adjourned the Society till October.

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