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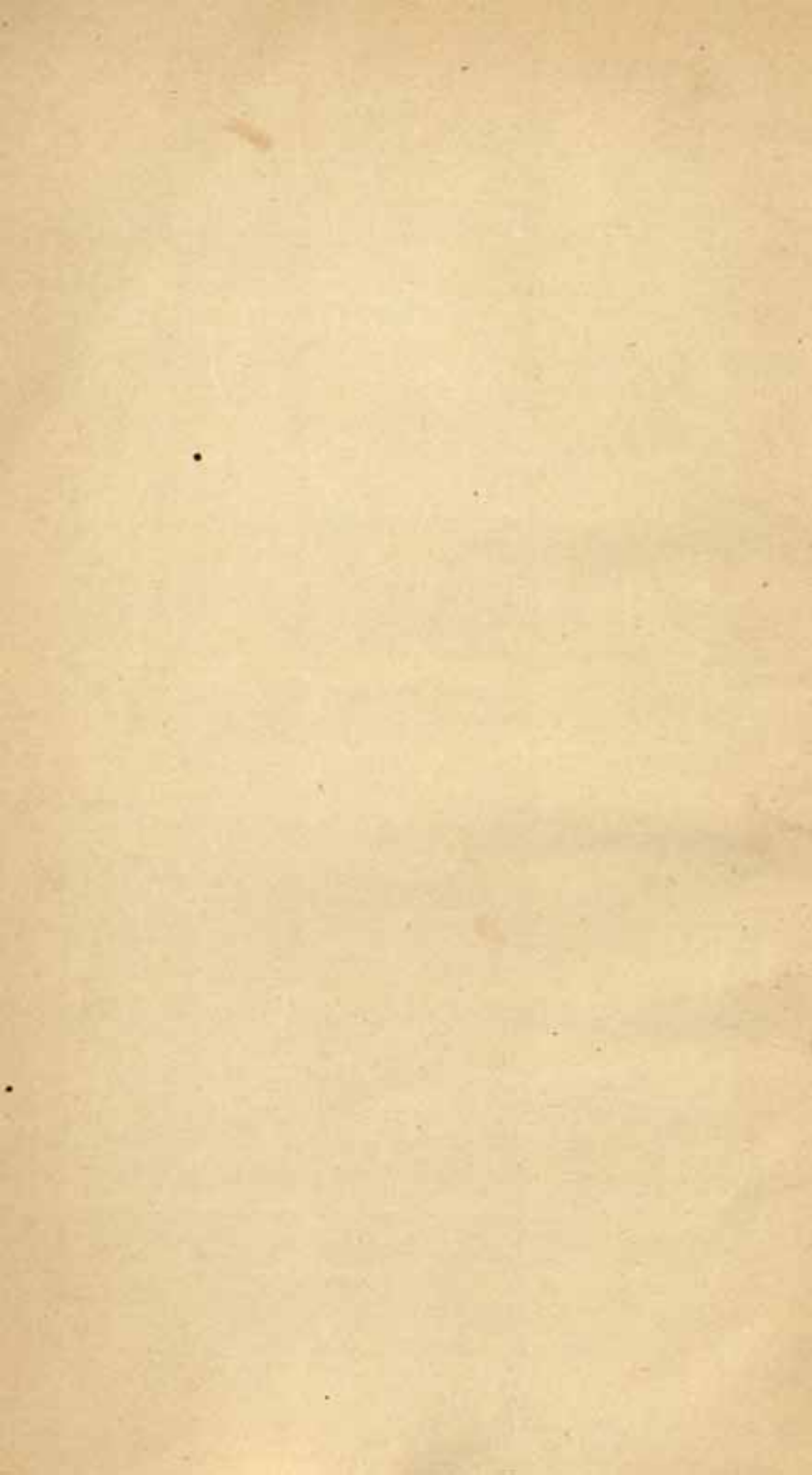
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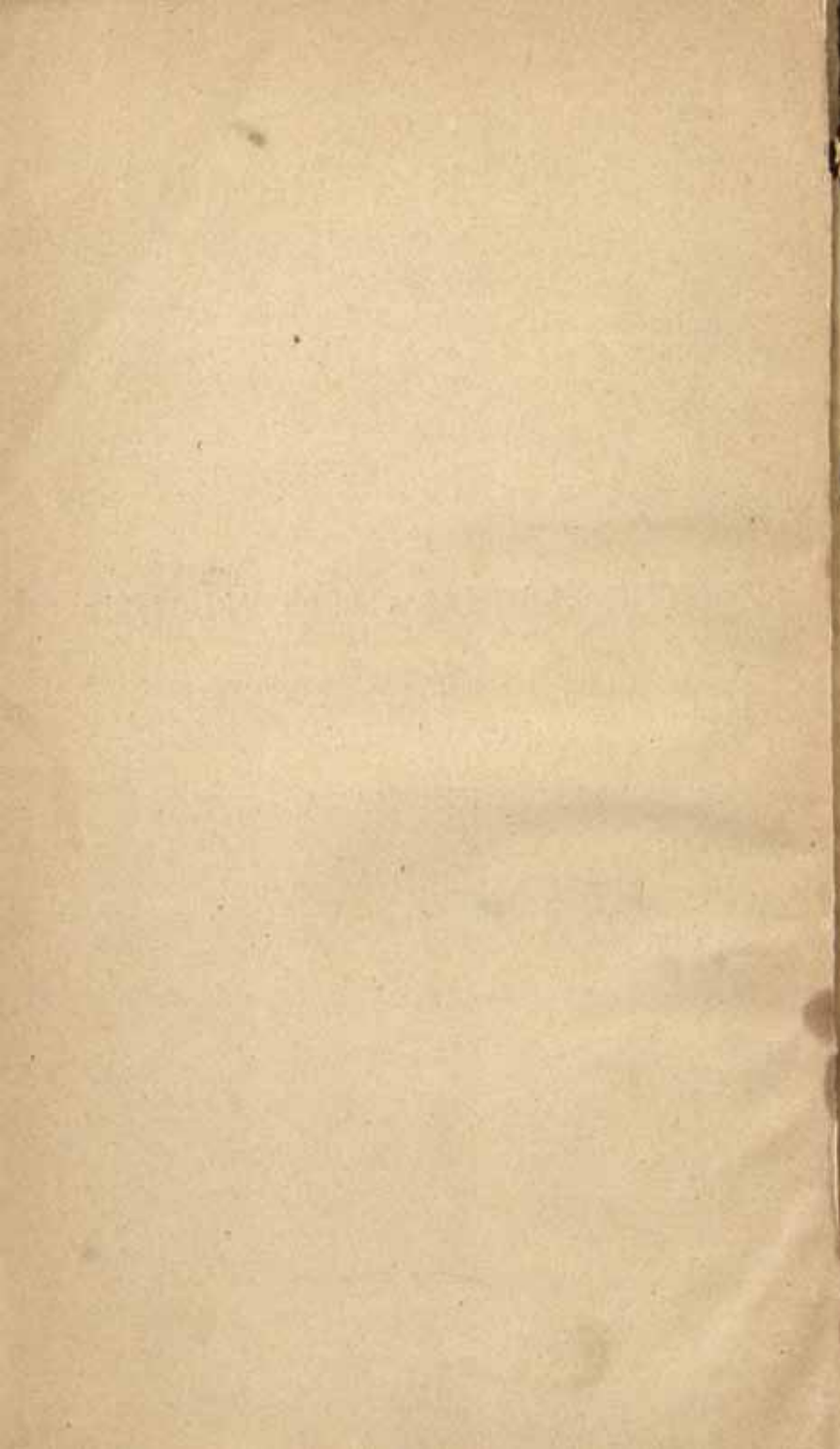
Vol. V

D.G.A. 79.

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THE
NUMISMATIC CHRONICLE
AND
JOURNAL OF
THE ROYAL NUMISMATIC SOCIETY



THE
NUMISMATIC CHRONICLE
AND
JOURNAL
OF THE
ROYAL NUMISMATIC SOCIETY

EDITED BY

G. F. HILL, LL.D., F.B.A.

KEEPER OF COINS, BRITISH MUSEUM

J. ALLAN, M.A., M.R.A.S.

DEPUTY-KEEPER OF COINS, BRITISH MUSEUM

AND

G. C. BROOKE, M.A.

FIFTH SERIES—VOL. V



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PROCEEDINGS OF THE ROYAL NUMISMATIC SOCIETY

(separately paged) 1-40

I.

GREEK COINS ACQUIRED BY THE BRITISH
MUSEUM IN 1924.

[SEE PLATES I, II.]

IN preparing this report I have followed the customary lines, and have as usual to thank Mr. Stanley Robinson for much assistance.

Bruttium. Croton.

- Obv.*—Head of Apollo r. laureate, with long hair.
Rev.—KPO on r. downwards; tripod-lebes; on l., filleted laurel branch. Concave field.
R ↓ 21 mm. Wt. 6.91 grm. [Pl. I. 1.] From the Benson (118) and Bement Collections (Neville sale, VI, lot 303). Presented by Mr. C. S. Gulbenkian. Same dies as Neville Sale, V, No. 717 (7.21 grm.) = Merzbacher, 1910, No. 168; same obv. die as Ratto Sale, 26. iv. 1909, lot 1024 (7.27 grm.), and probably the Cambridge coin, Grose, *McClellan Catal.*, Pl. 55, No. 12 (5.72 grm.!). This same obv. die is also used with reverses on which the branch is on the right and the inscription on the left, e.g. Hirsch, VIII. 847 and Sambon and Canessa, 24. iii. 1902, No. 365 = Bachelor, 1907, No. 22 = Paris Sale, 22. v. 1908, No. 91 = Feuardenet, 9. v. 1910, No. 100 (7.26 grm.).
- Obv.*—Eagle standing r. on thunderbolt, head reverted; in field l., above **K**; r., below, wreath (of oak?).
Rev.—Inscription on l. obliterated. Tripod-lebes; on r., small Nike flying l. placing a taenia on one of the rings. Concave field.
R ← 22 mm. Wt. 6.38 grm. [Pl. I. 2.] From the Collection of Marchese Ginori. Same obv. die as *Num. Chron.*, 1915, Pl. VIII, Nos. 12-14, and Bourgey Sale, 7. vi. 1909, No. 112.

These two coins belong to the reduced series, the date of which was established by Grose (*Num. Chron.*, 1915, pp. 178 ff.). The monogram on No. 2 is apparently for **KP**, a magistrate's initials. The series with the Apollo head to which the Benson-Bement coin belongs is not, it is true, included by Grose in the light series; by far the greater number of coins with this type are of the heavier standard. But the difference in weight between the various specimens of this group with the laurel branch on the left of the tripod (two weigh 7.27 and 7.21 grm., and two 6.91 and 5.72 grm.) seems to indicate that the reduction was made while this Apollo die was in use.

Sicily. Eryx.

3. *Obv.*—Hound l., pointing; behind it, wheat plant with three ears; below, in linear panel, traces of inscription. Border of dots.

Rev.—Head of nymph r., hair in sling, wearing small round ear-ring and necklace. Shallow incuse circle.

AR ↗ 23.5 mm. Wt. 8.43 grm. [Pl. I. 3.] From the Palermo (1924) Find.

Struck on a Corinthian stater; the outline of the bowl of the helmet is visible at the right-hand edge of the reverse. This is perhaps from the same dies as the specimen engraved by Salinas [Pl. XXII, No. 10]; the reverse (head) is from the same die as Hirsch, XXXI, No. 153, and the obverse of that coin is very close to ours, but comparison of the ears of the wheat shows a difference.

4. *Obv.*—Similar to preceding, but type r., and hound's head not so near the ground; below, in panel [] **RVKAIB**

Rev.—Head of nymph r., from same die as preceding. Shallow incuse circle.

AR ↑ 23.5 mm. Wt. 8.68 grm. From the same find.

Didrachms of Eryx with the hound to l. are apparently earlier and much rarer than those with the hound to r. No. 4 affords a link between the two series.

Selinus.

The Museum owes to the generosity of Mr. A. H. Lloyd the acquisition of no less than five tetradrachms and seven didrachms of the transitional period from a recent remarkable find. As we may shortly expect from Mr. Lloyd a detailed study of the contents of this hoard, I do no more at present than illustrate two of the finest specimens from his welcome gift.

5. *Obv.*— $\text{O}\Sigma\text{E}\Lambda\text{W}\text{ONT}\text{I}\text{O}\Lambda$ Apollo (shooting) and Artemis (driving) in slow quadriga l. Border of dots.

Rev.— $\text{O}\Sigma\text{E}\Lambda\text{I}\text{N}\text{O}\Sigma$ River-god Selinos, nude, standing l., sacrificing with phiale over garlanded altar, in front of which stands a cock l.; he holds lustral branch in l.; in field r. statue of bull l. on base, above which leaf of wild celery.

R. \downarrow 27.5 mm. Wt. 16.78 gm. [PL I. 5.] Traces of re-striking visible across the body of the bull. Same dies as B.M.C., No. 28.

6. *Obv.*— $\text{O}\Sigma\text{E}\Lambda\text{I}\text{V}\text{O}\text{L}\text{I}\text{O}\Lambda$ Heracles nude r., catching bull by the horn with l., raising club in r. to strike it. Border of dots.

Rev.— $\text{O}\text{H}\text{V}\text{Y}\text{A}\Sigma$ River-god Hypsas, nude, standing l., sacrificing with phiale over garlanded altar round which twines a serpent; he holds branch downwards in l.; in field r., long-legged aquatic bird stalking r.; above which, leaf of wild celery.

R. \leftarrow 24.5 mm. Wt. 8.59 gm. [PL I. 6.] Same obv. die as B.M.C., Nos. 34 and 36, but in an earlier state.

Chersonesus Taurica. Cercinitis.

7. *Obv.*—Lion r. bringing down a bull; below, a club, below which $[\text{H}]\text{P}\text{A}\text{K}\text{A}\Sigma$

Rev.—Nike advancing r., both hands extended, holding wreath (?); in field r. downwards, **KAPK** Concave field.

Æ. ↑ 18 mm. Wt. 3.47 grm. From Sotheby's, 2. vi. 1924, lot 20. Cp. *Z. f. N.* xxi (1898), p. 202, Pl. IV. 1.

8. *Obv.*—Head of Artemis l., hair tied in knot behind, quiver (?) showing behind neck; on r. ~**KEP**

Rev.—Stag l., r. forefoot raised; above, **EP**, on r. **M**, on l. below **A** Traces of incuse circle.

Æ ↑ 17 mm. Wt. 3.10 grm. From same sale and lot. Cp. Oreshnikov, *Materials*, p. 11, No. 11; Burachkov, Pl. XIII. 9.

There seems to be little ground for distinguishing two places, Carcine and Cercinitis. Head follows Imhoof-Blumer in doing so, and the latter refers to Latyshev, but Latyshev, as Oreshnikov points out (*Excursions*, 1914, p. 24: analysis in Brit. Mus. copy by E. H. Minns), refuses to make up his mind on the point, and inclines to believe that the distinction did not exist. Coins reading **KAPKI** and **KEPKI** are both found at Eupatoria.

Panticapaeum.

9. *Obv.*—Head of Silenus facing, slightly inclined to r.

Rev.—**ΓΑΝΤΙ** in exergue. Lion r., l. foreleg raised, jaws open. Incuse circle.

AR → 18 mm. Wt. 5.13 grm. [Pl. I. 9.] Presented by Mr. R. J. Eidlitz. Cp. Burachkov, Pl. XIX. 45 (the weight of which is given as 9 grm.) A smaller denomination (2.18 to 2.02 grm.) is also known with the same types (Bur., Pl. XIX. 44, Minns, Pl. V. 11).

Theodosia.

10. *Obv.*—Head of Heracles l., bearded.

Rev.—**ΘΕΥΔΟ** on l. downwards. Club downwards.

AR ↑ 19 mm. Wt. 4.69 grm. [Pl. I. 10.] From the Bertier de la Garde Collection (Naville Sale, V, lot 1669). Presented by Mr. C. S. Gulbenkian. See B. de la Garde, *Monetary Novelties* (Russian, Odessa, 1912), pp. 15-16; Minns, p. 559.

This unique coin, unfortunately in bad condition, was found at Theodosia. It is not earlier than the fourth century B.C., though it is difficult in its present state to be precise about its date. Minns dates the earliest small silver coins to the fifth century.

Bosporus. Teiranes.

11. *Obv.*—ΘΒΑCΙΑΛΕΩCΤΕΙΡΑΝΟΥ Bust r., with pointed beard, diademed and draped. Border of dots.

Rev.—Bust of Emperor r., diademed and draped; below, ΓΟΦ Border of dots.

Æ. ↑ 20 mm. Wt. 7.54 gm. From Sotheby's, 2. vi. 1924, lot 82. Cp. Koehne, *Mus. Kotsch.*, ii, p. 357; Minns, *Scythians and Greeks*, Pl. VIII, No. 25.

The date corresponds to A. D. 276.

Thrace. Aenus.

12. *Obv.*—Head of Hermes r., in petasos, decorated with small knob at top and row of small knobs round the narrow brim. Large flaw in die, which is also cracked across the eye.

Rev.—ΑΙΝΙ Goat r., looking down at spray of ivy which is held up to him by small nude boy squatting on the ground. Incuse square.

Æ ↓ 25 × 22 mm. Wt. 16.25 gm. [Pl. I. 12.] From the Allatini and Bement (Neville, VI, lot 810) Collections.

The other tetradrachms of this issue (Corpus, No. 284) which have been illustrated seem all to be from the same obverse die and from two very similar reverse dies. On one (Corpus, no. 284. 3) the hair along the contour of the goat's neck, back, and hind-quarters and leg is carefully indicated, as on the present specimen, and the two legs of the *N* are parallel; on the other (Hirsch, XIII. 533, and Samml. Warren, 463) the hair is not so indicated, and the left

leg of the *N* slopes more than the right one. The present reverse die has the parallel-legged *N* and the hair; the goat's horn extends backwards over the second *I* of the inscription, whereas in the others it does not go so far. I have not found any other obverse from the same die as our new coin. The crest of hair on the goat is not apparently a criterion of date. It is found sporadically on coins of Periods I, III, and IV.

Lysimachus.

13. *Obv.*—Head of Athena r., wearing crested Athenian helmet r., decorated with serpent and necklace.

Rev.—ΛΥΣΙΜΑΧΟΥ on r. downwards, ΒΑΣΙΛΕΩ[Σ] on l. downwards. Nike walking l., holding wreath in r., standard in left; in field l., forepart of lion l. above Ⓛ outside inscription, and bucranium within inscription. Faint circular border. Concave field.

N ↑ 18.5 mm. Wt. 8.54 grm. [Pl. I. 13.] From the Berlin Duplicate Sale (Hirsch, XXVI, No. 137) and Bement Collection (Naville, VI, No. 885). Berlin Catal., i, p. 298, No. 3. Another specimen (same *obv.*, different *rev.* die) in Montagu Sale, I, lot 292.

The following staters of the usual types are all from the collection of the Grand Duke Alexander Michailovich, and for the addition of them to the National Collection we have to thank the kindness of Mr. C. S. Gulbenkian (Nos. 14–26, 28) and Mr. S. L. Courtauld (Nos. 27, 29–31). These are only a selection from the number acquired in this way.

14. *Rev.*—In field l. ΓΥ. in exergue Ⓜ ↑ 18.5 mm. Wt. 8.50 grm. Cp. Egger Sale, XLI, Nos. 288, 289; XLV, No. 457; Hess, 15. x. 1903, No. 193.

Of these the last is from the same dies as ours; Egger, XLI. 289 and XLV. 457 share its obverse.

15. *Rev.*—In field l. $\Sigma\Phi$, on seat ΓV , in exergue trident.
 ↑ 20.5 mm. Wt. 8.45 gm. [Pl. I. 15]. Good style. Cp. Müller, No. 142 (tetradrachm with $C\Phi$).
- 16.—*Rev.*—In field l. $N\Gamma$, on seat BY , in exergue trident.
 Style late, flat and bad. ↑ 21 mm. Wt. 8.23 gm.
17. *Rev.*—In field l. Φ , on seat BY , in exergue trident.
 Style fairly late. ↑ 20 mm. Wt. 8.61 gm.
18. *Rev.*—In field l. $\Sigma\Gamma$, on seat BY , in exergue trident.
 Style late, flat and bad. ↑ 23 mm. Wt. 8.25 gm.
19. *Rev.*—In field l. Σ (or monogram of which that letter forms part), on seat BY , in exergue trident.
 Style poor, but not flat. ↑ 20 mm. Wt. 8.26 gm.
20. *Rev.*—In field l. Σ , on seat BY , in exergue trident.
 Style late and bad. ↑ 20.5 mm. Wt. 8.12 gm.
21. *Rev.*—In field l. $\Gamma\Phi$, on seat BY , in exergue trident.
 Style fairly good. ↑ 20.5 mm. Wt. 8.50 gm.
22. *Rev.*—In field l. Φ , on seat BY , in exergue trident.
 Style fairly good. ↑ 20 mm. Wt. 8.49 gm.
 Cp. the tetradrachm Müller 200 with a monogram containing most of the same letters.
23. *Rev.*—In field l. $\Sigma\Lambda$, on seat BY , in exergue trident.
 No mask on shield on rev. Style poor.
 ↑ 21 mm. Wt. 8.35 gm.
24. *Rev.*—In field l. Γ , on seat BY , in exergue trident.
 Style fair. ↑ 21 mm. Wt. 8.36 gm.
25. *Rev.*—In field l. $\Gamma\Phi$, on seat BY , in exergue trident.
 Style late but not bad. ↑ 19.5 mm. Wt. 8.52 gm.
26. *Rev.*—In field l. ΛY , on seat KAA , in exergue trident.
 Late but not bad style. ↑ 20 mm. Wt. 8.42 gm.

27. *Rev.*—In field l. $\text{I}\Sigma$, in exergue $\text{M}\Lambda$. Good style. \uparrow 19 mm. Wt. 8.47 grm. [Pl. I. 27.] The gold staters of Istrus usually show the trident in the exergue. See Lederer in *Blätter für Münzfreunde*, 59, Nov. 1924, p. 106.
28. *Rev.*—In field l. **B**, in exergue bull charging l. Fair style. \uparrow 21 mm. Wt. 8.31 grm. Cp. Müller 358 and 359, with the same animal.
29. *Rev.*—In field l. $\text{M}\Lambda$, in exergue R . Fair style. \uparrow 18.5 mm. Wt. 8.56 grm. Cp. Hirsch, XXXI, No. 241, XXXIII, No. 584; Hess, 15. x. 1903, lots 185 and 157; Pozzi, lot 1166. All these are from the same pair of dies.
30. *Rev.*—In field l. ME , in exergue eagle's head l. Fair style. \uparrow 19 mm. Wt. 8.45 mm. Cp. Hess, 15. x. 1903, lots 178, 180 (= Sandeman, 156); Schlesinger y Guzman, 126; Sambon and Canessa, 22. vi. 1906, lot 268; Bourgey, 27. iii. 1912, lot 148. For all these there is but one obv. die and two rev. dies; our rev. is shared by the Hess, Schlesinger and Bourgey coins.
31. *Rev.*—Nothing in field l.; on seat small **T** (?) under a large saltire. Style fair. \uparrow 20 mm. Wt. 8.53 grm. [Pl. I. 31.] The saltire looks as if it were part of a monogram, but is unusually large and thin compared with the **T**.

Macedon. Chalcidian League.

32. *Obv.* Head of Apollo l., laureate; behind, **H**

Rev.—**X A A** above, **K I Δ** on r. downwards, **E Ω N** on l. upwards. Kithara of seven strings. Traces of incuse square.

At \uparrow 26 mm. Wt. 14.33 grm. [Pl. I. 32.] From the Hirsch Auction XIV, (1905), lot 287, Paris 22. v. 1908, lot 239, and 9. v. 1910, lot 307, and finally Bement (Neville VI, lot 646).

The kithara is represented without the strap across the right arm, as in some other specimens (B.M.C., No. 5; *Num. Chron.*, 1890, Pl. XIX, No. 5).

I doubt whether **H** is an artist's signature. Other letters that occur in the same position on the six dies are Δ (B.M.C., No. 16) and Θ (Hirsch, XXV, lot 357); on lot 358 of the last-mentioned sale a prow appears in the same place.

Philip II.

33. *Obv.*—Male head r., beardless, laureate.

Rev.— $\Phi\Lambda\Gamma\Gamma\Omega\Upsilon$ in exergue. Biga r.; under horses' legs, dolphin r. Concave field.

N \uparrow 19 mm. Wt. 8.53 grm. Presented by Mr. S. L. Courtauld, from the collection of the Grand Duke Alexander. Cp. O'Hagan Sale, lot 291 (from Bunbury Collection); same rev. die.

34. Another, symbol on rev. fly r.

N \swarrow 19 mm. Wt. 8.57 grm. Presented by Mr. S. L. Courtauld, from the same collection. Other specimens (none from the same dies as this): Feuardent, 9. v. 1910, lot 323 (= Dugniolle, 1885, lot 95); Hirsch, XXVI. 149; Merzbacher, 15. xi. 1910 (= Egger, XXXIX. 247).

This insect seems to me to be different from the bee which Müller (190) assigns to *Melitaea*.

Bithynia. Cius.

35. *Obv.*—Head of Apollo r. laureate.

Rev.—Prow of vessel l., the bulwark decorated with a star; in front, eagle standing l.; above club, horizontal, handle to r.; in ex. $[\Gamma\text{P}]\text{O}\Xi\text{E}\text{N}\text{O}[\Xi]$

N \uparrow 18 mm. Wt. 8.50 grm. From a Rawalpindi dealer.

The coin is unfortunately in rather poor condition; but the head is of fine broad style. It is from the same obverse die as the Paris specimen (*Traité*, 2853), but the reverse die is quite different; and the club is here placed in the opposite sense.

Asia Provincia.

36. *Obv.*—**IMPVESPCAESA VGPONTMAXTRIBPOT
COSIII** Head of Vespasian r. laur. Dotted border.

Rev.—Temple of Roma and Augustus containing statue group of Roma crowning the Emperor; on architrave **ROMETA V G**; across field **COM ASI** Dotted border.

R ↓ 25.5 mm. Wt. 10.22 grm.

No "cistophoric medallions" of Vespasian seem hitherto to have been recorded.

Mysia. Cyzicus.

37. *Obv.*—Male head l., laureate, bald on crown, with closely cropped beard; hair in short curling locks on neck; below neck, tunny l.

Rev.—Mill-sail incuse square, with coarse granulated surface.

EL. 21 × 16 mm. Wt. 16.04 grm. [Pl. I. 37.] Presented by Mr. C. S. Gulbenkian. Cp. H. v. Fritze in *Nomisma* vii (1912), p. 14, No. 199, Pl. VI. 11.

This belongs, like the two¹ other staters with realistic portraits (H. v. Fritze, Nos. 197, 198), to the period 410–334 B.C., and may be placed early in that period, about 406–390. No one now denies that these are portrait heads. Von Fritze (p. 32), mentioning Six's suggestion that the laureate head turned to the right (the only one known in 1898 when he was writing) might be Timotheos, son of Konon, now considers it doubtful whether, in view of the existence of no less than three such portrait coins, we are justified in supposing them to be historical persons. In any case, he adds, it is possible that they are Cyzicene citizens

¹ The genuineness of the stater with a fourth portrait of this class (Neville Sale, X, lot 644) is open to doubt.

who received for some reason or other the honour of portraiture. Regling (*die Münze als Kunstwerk*, p. 82) regards it as impossible that these should be likenesses of living persons; they are only the portraits, perhaps fictitious, of men long dead, who had served the state well or were otherwise famous—like the portraits of Homer at Ios, of Aleuas at Larisa. I am bound to say that I consider Six to have been on the right track, though we shall doubtless never know who the persons represented are. The Cyzicene coinage was meant for international circulation; the city-badge, the tunny-fish, is relegated to a subordinate place, and a design of general interest selected to fill the field. As this design was not the city-type, the representation of a portrait would not be a breach of the unwritten law against portraiture of living persons on coins which was so strictly observed by the Greeks of this time when not under Oriental influence. It seems to me much more probable that the portraits should represent men of international reputation, and not mere Cyzicene citizens who were of no interest to the majority of the users of the coins. In view of the known influence of Athenian monuments on the selection of Cyzicene coin-types, it may be suggested that we have in these heads copies of portrait statues of Athenians. It is customary to speak of realism as alien to the art of the time. But it was just about this time that Demetrios of Alopeke was making the portrait-statues which won him the reputation of the classical representative of realism. These coins, especially the supposed Timotheos, show that Lucian's description of the portrait of Pellichos need not be in any way an exaggeration (*Philops.* 18: προγάρστορα,

φαλαντίαν, ἡμίγυμνον τὴν ἀναβολήν, ἠνεμομένον τοῦ πάγωνος τὰς τρίχας ἐνίας, ἐπίσημον τὰς φλέβας, αὐτοανθρώπων ὅμοιον), and it is likely that they give us a much better idea of the style of Demetrios than the busts of strategi (such as those illustrated in Arndt, *G. u. R. Portr.* 271-290) which have been called in evidence.

Pergamum.

38. The Wace tetradrachm (*Journ. Int.*, 1903, Pl. VII. 8; *J.H.S.* 1905, Pl. X. 5; H. v. Fritze, *Münzen v. Pergamon*, p. 25, Pl. II. 10) has been acquired by the Museum. I mention it here in order to say that the Museum has long possessed (ever since the acquisition of the Payne Knight Collection) another specimen, from the same obverse but different reverse die. The fact that it is a rather shabby-looking piece doubtless accounts for its having been put away among the duplicates; it has now been restored to a more honourable position. Von Fritze has given strong reasons for regarding the portrait as that of Philetaerus, and not Attalus I.

39. At the same time, the whole of Mr. Wace's find—so far as it came into his hands—has been secured, including the rare early tetradrachm of Attalus I with ΦΙΛΕΤΑΙΡΟΥ and the shield behind Athena (cp. von Fritze, Pl. II. 5).

Ionia. Phocoea.

40. *Obv.*—Two boars' heads downwards, the foreheads touching; immediately above, a minute seal l.

Rev.—Mill-sail incuse square.

EL. 11 × 9 mm. Wt. 2.60 gm. [Pl. II. 40.]

With the type compare the Lesbian billon, B.M.C., *Troas*, &c., Pl. XXX, 6 ff.

The coin came from a hoard found in the peninsula of Erythrae, consisting chiefly of Lesbian and Phocaean electrum.

Ionian Electrum.

41. *Obv.*—Gorgon-mask.

Rev.—Two oblong incuse rectangles, filled with crossing lines.

EL. 12 mm. Wt. 4.63 gm. [Pl. II. 41.] Asiatic third. From Rhodes.

The type of Gorgon is quite different from that on the well-known staters (*Traité*, Pl. V, No. 20; B.M.C. *Ionia*, Pl. II, No. 14), and the character of the incuses indicates southern Ionia.

42. *Obv.*—Surface covered with network of lines.

Rev.—Two square punches, one placed diagonally.

EL. 10 mm. Wt. 2.41 gm. [Pl. II. 42.] Asiatic sixth. From Rhodes.

The treatment of the surface is more irregular than in the ordinary *typus fasciatus*, such as the sixth already in the Museum (B.M.C. *Ionia*, p. 3, No. 9, Pl. I, No. 9).

Lycia.

43. *Obv.*—Forepart of boar l., truncation dotted.

Rev.—Lion's scalp in dotted incuse square. Chisel-mark.

R ← 19 mm. Wt. 8.89 gm. [Pl. II. 43.] Cp. *Traité*, Pl. XCIII, No. 16 (obverse type to r.).

Cyprus. Salamis. Euagoras I.

44. *Obv.*—Heracles, nude, seated r., holding empty horn in l., club in r., as on the tetrobols. Traces of Cypriote inscription (?).

Rev.—Goat lying r. on dotted exergual line; of the inscription, the Cypriote signs for $\beta\alpha$ (in front), $\sigma\iota$ (above the animal's back), and $\sigma\epsilon$ (in exergue) are alone visible. Incuse circle.

R ↓ 25 × 21 mm. Wt. 10.80 gm. [Pl. II. 44.]

This very rare stater is unfortunately very imperfect, being struck from worn dies and also somewhat worn by circulation. So far as is possible to judge, it is not from the same dies as Mr. Newell's specimen from the Cilician find (*Num. Chron.*, 1914, p. 18, Pl. III. 8). Six (*Rev. Num.*, 1883, p. 284, No. 14) describes what is, if there is not a misprint in the weight of 9.09 grm., another very badly preserved specimen of this denomination.

Laodicea ad Mare.

45. *Obv.*—Bust of City r., wearing turreted crown, veil, coiled ear-ring, and necklace. Fillet border.

Rev.—ΛΑΟΔΙΚΕΩΝ | ΤΩΝΠΡΟΣ on r. downwards, ΘΑΛΑΣΣΗ on l. downwards. Zeus seated l., r. holding Nike with wreath, l. resting

on spear. In field l. Ξ , under chair ⌘ , letters
 Λ
 H

in exergue chiefly off the flan (perhaps ΚΑ). The whole in laurel-wreath.

AR ↑ 26. Wt. 15.09 grm. [Pl. II. 45.]

46. *Obv.*—Bust of City r., wearing turreted crown, veil, single drop ear-ring, and necklace. Fillet border.

Rev.—ΛΑΟΔΙΚΕΩΝ | ΤΗΣΙΕΡΑΣΚΑΙ on r. downwards, ΑΥΤΟΝΟΜΟΥ on l. downwards. Zeus seated l., r. holding Nike with wreath, l. resting on spear; in field l. under hand Λ , in front of legs $\text{I}\Sigma$ downwards, under seat ⌘ , in exergue ΚΑ The whole in laurel-wreath.

AR ↑ 26 mm. Wt. 14.68 grm.


47. *Obv.*—Bust of City r., wearing turreted crown, veil, coiled ear-ring, and necklace. Fillet border.

Rev.—ΙΟΥΛΙΕΩΝ | ΤΩΝΚΑΙ on r. downwards, ΛΑΟΔΙΚΕΩΝ on l. downwards; in field l. under hand Γ , in front of legs $\text{A}\Sigma$ downwards, under chair Δ , in exergue $\text{K}\Phi$ The whole in laurel wreath.

AR ↑ 28.5 mm. Wt. 14.84 grm.

48. *Obv.*—Similar to preceding (same die).

Rev.—Similar type and inscription to preceding; same monograms in exergue; in field l. under hand Ε,

in front of legs upwards ΑΛ, under seat 

The whole in laurel-wreath.

Α ↑ 27.5 mm. Wt. 14.02 grm.

Silver tetradrachms similar to No. 45, with the inscription *Διοδικέων τῶν πρὸς θαλάσση*, seem to be hitherto unrecorded. It would seem natural to place it at the beginning of the series, since that inscription occurs on the earlier coinage under the Seleucid kings, and on the autonomous copper assigned to the second century B.C. But comparison with the well-known tetradrachms reading *Α. τῆς ἱερᾶς καὶ αὐτονόμου* and those reading *Ἰουλιέων τῶν καὶ Α.* shows that it comes between these series. The series *Α. τῆς ἱερᾶς καὶ αὐτονόμου* (which I will call series A, the Julian coins being series C) have dates running from 10 (Hirsch, XXV. 2791) to 31 (B.M.C., 7); the latest two specimens (No. 46 above and B.M.C., No. 7) show the same arrangement of date with two other letters under it in front of the legs of Zeus, as is seen on our new tetradrachm; all the earlier ones have the date alone in the left field. While our new coin has $\frac{\text{II}}{\text{H}}$, the coin of year 31 of series A has $\frac{\text{H}}{\text{I}}$. The monogram under the seat (for ΠΑ or ΑΠ) occurs on a number of tetradrachms of series A, frequently combined with the exergual letters ΚΑ (which are probable though not certain on our new coin); the dates of these are 12 (B.M.C., 4), 13 (ΣΕ in ex., Egger, XLVI. 2515), 17 (ΣΕ in ex., B.M.C., 6), and 30 (No. 46 above). On the showing of this last coincidence, however, our new coin might

as well be earlier than series A. But the proof that it is later is clinched by the fact that on all coins of series A that I have been able to examine up to year 30 Tyche wears a drop earring; on that of year 31, on our new coin, and on all the coins of series C, the ornament is a coil or ring. In general style, also, the new coin (which we may regard as forming series B by itself) is nearer in style to the latest of series A and the earliest of series C than to any others.

The title Julia is reasonably supposed to have been taken by Laodicea on the occasion of Caesar's visit to Syria in 47 B.C. Newell has made it clear² that the series of Antiochene tetradrachms imitating the types of Philip Philadelphus are dated by the Caesarian era (beginning aut. 49 B.C.). The dates on this series begin with year 3 (Oct. 1, 47-Sept. 30, 46 B.C.). It is something more than a coincidence that the first date so far recorded on our series C of Laodicea is also 3. It may be suggested, therefore, that that coin was struck in 47-46 B.C. It is a corollary to this suggestion that our new coin of series B, which bears the letter A, dates from the inception of the Caesarian era, and was struck in 49-48 B.C.

Reckoning back 31 years from 49 B.C. in order to find the beginning of the era by which series A is dated, we come to 80-79 B.C. Either in that year, or a year or two earlier,³ on the collapse of the Seleucid power, and the invasion of Tigranes in 83 B.C., it may

² *Num. Chron.*, 1919, pp. 69-113.

³ For there may be coins of Series A with higher dates than 31 which have not survived. Bouché-Leclercq, *Hist. des Séleucides*, p. 396, note 1, says that Laodicea proclaimed her autonomy in 96 B.C., but gives no authority.

be conjectured that Laodicea took the opportunity of asserting her autonomy and adopting a new era. The history of the city at this period seems to be a blank. She may have obtained favourable terms from Tigranes; at any rate, there was nothing unprecedented in a city really subject to a king of Syria being called autonomous; the coins of Tripolis which began to be issued in 112 B.C. are an instance in point. Why, however, Laodicea should drop the claim and go back to its old title in 49 B.C. I cannot explain.

Syria. Seleucus I.

49. *Obv.*—Head of Athena r. in crested Athenian helmet, decorated with seated sphinx; she wears single-drop earring and necklace.

Rev.—ΣΕΛΕΥΚΟΥ on r. downwards, ΒΑ ΣΙΛΕΩΣ on l. downwards. Nike l., holding wreath in extended r., standard in l.; in field l. facing head of Helios radiate, r. ΑΡ; in exergue Μ.



A ↑ 18 mm. Wt. 8.60 grm. [Pl. II. 49.] From the collection of Rev. E. Rogers.

The Museum already possessed (B.M.C., *Seleucid Kings*, Seleucus, No. 13; cp. Babelon, *Rois de Syrie*, p. 3, No. 10, Pl. I. 6) the silver tetradrachm of this issue, with the same symbol and monograms.

The seated sphinx is rare as a helmet decoration. On the Alexander stater of Babylonian origin (*Journal of Hellenic Studies*, xliii, 1923, p. 157), which has this decoration, the monster does not, as here, extend one of its forefeet.

Antiochus I.

50. *Obv.*—Head of Antiochus I r., diademed (middle-aged portrait).

Rev.—**ΒΑΣΙΛΕΩΣ** on r. downwards, **ΑΝΤΙΟΧΟΥ** on l. downwards. Apollo seated l. on omphalos, looking along arrow held in r., l. resting on bow. In field l. , r.  Concave field.

R ↗ 22.5 mm. Wt. 16.96 grm.

51. *Obv.*—Head of Antiochus I r., diademed (elderly portrait).

Rev.—Similar type to preceding; in exergue **ΑΙ**
Slightly concave field.

R ↑ 28 mm. Wt. 16.57 grm. From Mr. A. J. B. Wace's Collection. Cp. Hirsch, XVIII. 2502 (same *obv.* die).

The reverse monograms connect this with B.M.C., No. 19, and Jameson, 1669; the *obverse* die, on the other hand, is the same as that of Hunter, Pl. LXIV, No. 3, and *Num. Chron.*, 1917, Pl. III, No. 4.

Antiochus II.

52. *Obv.*—Head of Antiochus II r., diademed. Border of dots.

Rev.—Apollo seated l. on omphalos, two arrows in r., l. resting on bow. **ΒΑΣΙΛΕΩΣ** on r. downwards, **ΑΝΤΙΟΧΟΥ** on l. downwards; in exergue **ΑΝΙΗ** Concave field.

R ↑ 29 mm. Wt. 17.07 grm. [Pl. II. 52.] - From Mr. A. J. B. Wace's Collection.

Antiochus Hierax (?)


53. *Obv.*—Head of Antiochus r., diademed.

Rev.—Apollo seated l. on omphalos, arrow in r., l. resting on bow. On r. downwards **ΒΑΣΙΛΕΩΣ**, on l. downwards **ΑΝΤΙΟΧΟΥ**; in exergue **ΑΗ** Concave field.

R ↑ 27 mm. Wt. 17.09 grm.

Antiochus III.

54. *Obv.*—Head of Antiochus r., diademed. Border of dots.

Rev.—**ΒΑΣΙΛΕΩ[Σ]** on r. downwards, **ΑΝΤΙΟΧΟΥ** on l. downwards. Apollo as on preceding. In field l.  Slightly concave field.

R ↑ 29 mm. Wt. 16.47 grm.

55. Similar.

Rev.—**ΒΑΣΙΛΕΩΣ** on r. downwards, **ΑΝΤΙΟΧΟΥ** on l. downwards. Apollo as on preceding. In field l. **ΜΕ**

R ↑ 30 mm. Wt. 16.63 grm. From Mr. Wace's Collection.

56. Similar.

Rev.—Similar type and inscription to preceding; in field l., **Α** Slightly concave field.

R ↑ 28 mm. Wt. 17.02 grm. [Pl. II. 56.] Same obv. die as Egger, XLVI. 2440, and Luneau, 726, with the monogram **Α**

57. Similar. No border.

Rev.—**ΒΑΣΙΛΕΩΣ** on r. downwards, **ΑΝΤΙΟΧΟΥ** on l. downwards; in field l. **Μ**, r. **Π** Slightly concave field.

R ↑ 29 mm. Wt. 16.96 grm.

57 bis. Similar. No border.

Rev. Similar, but no monograms. Concave field.

R ↑ 28 mm. Wt. 17.41 grm.

58. Similar. Border of dots.

Rev.—**ΒΑΣΙΛΕΩΣ** on r. downwards, **ΑΝΤΙΟΧΟΥ** on l. downwards; in field l. rose (? lotus), r. **Α**

R ↑ 29 mm. Wt. 17.02 grm. Same obv. die as the Sandars specimen, B.M. 1922-11-15-21. Cp. Babelon, *Rois de Syrie*, p. 46, No. 346.

59. Another, same obv., different rev. die.

R ↑ 29 mm. Wt. 16.81 grm.

60. Another, obv. die different, but same as Ward 783.

Rev.—Similar, but mon. **Α**

R 28 mm. Wt. 16.20 grm. Mionnet, V. 22. 200 has the same monogram on rev. (from different die), and obv. from same die as 58 and 59.

61. Another, same obv. die as preceding; rev. similar, but in field r., **ΠΔ** instead of monogram.

R ↑ 28 mm. Wt. 16.98 grm.

For other specimens of this rose or lotus series, see Egger, XLI, No. 664, XLV, Nos. 664 and 665, Hirsch, XXI, No. 4051, Riechmann, 1921, No. 952.

There has evidently been a large find of coins of the early Seleucids down to Antiochus III; they are gradually being placed on the Western market.

Bactria. Diodotus under Antiochus II.

62. *Obv.* Head of Antiochus II r., diademed.

Rev.—ΒΑΣΙΛΕΩΣ on r. downwards, ANTIOXO[Y] on l. downwards. Zeus, nude, striding l., aegis on extended l. arm, r. raised wielding thunderbolt; at his feet l. eagle; in field l. N

N ↓ 17 mm. Wt. 8.30 grm. From the collection of Rev. Edgar Rogers. Macdonald in *Cambr. Anc. Hist. of India*, i, p. 437, note.

This unique stater represents the first coinage of Diodotus with his own reverse type of the thundering Zeus; but it retains the portrait and name of the reigning Seleucid, Antiochus II. It is valuable, apart from its historic interest, as giving an undoubted portrait of that king. The next stage was to substitute the portrait of Diodotus for that of Antiochus, while still keeping the latter's name: this is represented by the stater published in *Num. Chron.*, 1881, Pl. II, No. 9, and two others from Cunningham in the British Museum. It has, it is true, been maintained by von Sallet and Babelon (*Rois de Syrie*, p. lx) that the head on these coins is not Diodotus, but Antiochus II; but Babelon gives his case away by admitting that, on the coins which he struck in his own name, Diodotus assumed "une effigie royale assez rapprochée de celle d'Antiochus II". If so, it is equally admissible that the head on the staters in question, being "assez rapprochée de celle de" Diodotus may actually be his.

The mint-mark **N** occurs also on staters of the second stage and on silver tetradrachms (e.g. B.M.C., Antiochus II, No. 18), as well as on staters with the name of Diodotus (one in the British Museum, from Cunningham). The usual mint-mark of the coinage, in the name whether of Antiochus or of Diodotus, is the wreath.

The historical bearing of these coins has been ably discussed by Macdonald in the *Cambridge Ancient History of India*, vol. I, pp. 436 ff.

G. F. HILL.

Note. I regret that in describing the Lysimachean staters on p. 7 I was unable to avail myself of the results of Mr. Zograph's paper printed on pp. 29 ff. of the present number; and likewise that, without unduly delaying the appearance of the issue, it was not possible to place the British Museum materials at his disposal.

II.

ON A HOARD OF UNINSCRIBED AGATHOCLEAN "PEGASI".

[SEE PLATE III.]

At the Brandis sale in Naples, April 1922, I had the opportunity of adding to my special collection of "Pegasi" a choice set of Syracusan uninscribed Agathoclean eight-litrae Pegasi. The fact that so many examples of these very scarce coins figured in a single sale, all in mint state, led me to suppose that they might come from some recent find.

After investigation, which met with the usual difficulties, I have been able to collect the following data about these Pegasi; they were in fact a selection from a hoard reported to have been found in September 1921, near Pachino (Syracuse).

The hoard had been dispersed, and though no record of its composition had ever been made, I still managed to see what I believe to be the bulk of it in the hands of several dealers in Sicily and Southern Italy.

The initial find seemed to include about one hundred coins. I have been able to trace ten Agathoclean gold staters of eighty litrae, seventy light Pegasi of Syracuse, and several varied Corinthian staters very poorly preserved.

The gold pieces were all in mint state, four of them figuring in the above-mentioned sale (Nos. 253, 254, 255, 256); most of the uninscribed Pegasi were

strongly oxydized, but the balance was in brilliant condition.

The latter, of rather conventional design, are of a very pleasing style and are probably the work of the same artist who made the beautiful tetradrachms of Agathocles with the head of Persephone (Kore).

Encouraged by what our President said in his last address, concerning communications from new writers, I venture to publish the Pegasi that I have been fortunate enough to secure, hoping that my modest contribution may be of some interest, especially as these coins, with which I am dealing, are but sparingly represented in most cabinets.

Over forty Pegasi have come under my notice, and I have detected eleven varieties of dies for the obverses, and nine for the reverses. As usual the same obverse die has been employed with several reverse dies. The combination of the dies does not seem to follow any fixed rule; therefore, instead of giving a description of the coins, I give the list of the various dies, and note hereunder all the die combinations I have been able to trace.

OVERSES.

- Die A.*—Head of Athena to l., wearing plain Corinthian helmet without crest, with flap of leather cap covering neck; ear-rings and necklace.
- Die B.*—Similar head of Athena, but larger.
- Die C.*—Head of Athena to r., wearing plain Corinthian helmet without crest, with flap of leather cap covering neck; ear-rings and necklace.
- Die D.*—Similar head of Athena, but smaller.
- Die E.*—Head of Athena to r., wearing crested Corinthian helmet, adorned with running griffin. No leather cap. Hair falling in curls on neck, tied behind and ending in a bunch of locks; ear-rings and necklace.

- Die F.* Similar head of Athena to r. ; behind, ☉.
- Die G.* Head of Athena to r., wearing crested Corinthian helmet without crest. No leather cap. Hair falling in curls on neck, tied behind and ending in a bunch of locks ; ear-rings and necklace. Behind head, ☉.
- Die H.*—Similar head of Athena to r. Behind, in place of ☉, several sharp cuts in the die.
- Die I.*—Similar head of Athena to r. Behind head, trident upwards.
- Die K.*—Similar head of Athena to r., but smaller bunch of locks. Trident smaller and differently placed.
- Die L.*—Similar head of Athena to r. ; behind, owl.

REVERSES.

- Die a.*—Pegasus unbridled flying l., one wing visible. No symbol.
- Die b.*—Same ; beneath, triskelis.
- Die c.*—Same ; above, star.
- Die d.*—Same ; beneath, thunderbolt.
- Die e.*—Pegasus unbridled flying l., both wings visible. No symbol.
- Die f.*—Same ; beneath, small triskelis.
- Die g.*—Same ; beneath, large triskelis.
- Die h.*—Same ; above, star.
- Die i.*—Same ; beneath, thunderbolt.

DIE-COMBINATIONS.

<i>No. 1.</i> —My collection, dies <i>A/f</i>	g.	6,86
(a) Cat. B.M., Corinth, Syracuse No. 14, same dies		6,85
(b) M. c., dies <i>A/a</i>	"	6,50
<i>No. 2.</i> —M. c., dies <i>B/f</i>	"	6,59
(a) Coll. de Luynes, No. 1277, same dies	"	6,52
(b) Coll. Weber, No. 1686, same dies	"	6,35
(c) Coll. Bement, No. 540, same dies	"	6,82
(d) Coll. McClean, No. 2847, dies <i>B/g</i>	"	6,79
(e) Coll. Jameson, No. 869, same dies	"	6,80

No. 3.—M. c., dies <i>C/b</i>	g.	6,55
(a) Coll. de Luynes, No. 1275, same dies	"	6,60
(b) Coll. Weber, No. 1687, same dies	"	6,67
(c) Cat. B.M., Corinth, Syracuse No. 16, dies <i>C/g</i>	"	6,70
No. 4.—M. c., dies <i>D/a</i>	"	6,55
(a) M. c., dies <i>D/b</i>	"	6,60
No. 5.—M. c., dies <i>E/g</i>	"	6,75
(a) M. c., same dies	"	6,30
(b) Coll. de Luynes, No. 1279, dies <i>F/b</i>	"	6,70
No. 6.—M. c., dies <i>G/d</i>	"	6,85
(a) M. c., dies <i>G/h</i>	"	6,55
(b) Coll. Bement, No. 542, dies <i>G/c</i>	"	6,80
(c) Coll. Jameson, No. 868, same dies	"	6,86
No. 7.—M. c., dies <i>H/c</i>	"	6,75
(a) M. c., dies <i>H/a</i>	"	6,79
No. 8.—M. c., dies <i>I/i</i>	"	6,75
(a) M. c., dies <i>I/f</i>	"	6,75
No. 9.—M. c., dies <i>K/e</i>	"	6,75
(a) B.M. acquisitions, 1921, <i>N. C.</i> , 1921, Pl. VI, same dies	"	6,77
(b) Coll. Stiavelli, No. 214, same dies	"	—
No. 10.—M. c., dies <i>L/h</i>	"	6,75
(a) Cat. B.M., Corinth, Syracuse No. 17, same dies	"	6,75
(b) M. c., dies <i>L/i</i>	"	6,75
(c) Coll. McClean, No. 2846, same dies	"	6,67
(d) Coll. Bement, No. 541, dies <i>L/e</i>	"	6,79

With the exception of coins Nos. 1*a*, 2*a*, 2*c*, 2*d*, 2*e*, 3*a*, 3*b*, 3*c*, 5*b*, 6*c*, 9*b*, 10*a*, and 10*c*, all these coins come from the Pachino find.

The most interesting coin of the hoard is certainly No. 5. It is a copy of the inscribed Pegasos of the previous issue (B.M., Corinth, Syracuse No. 9), with the only difference that the leather flap is now missing. Mr. Head, in the Catalogue of B.M., Corinth (Intr., p. lii), says these eight-litrae may be distinguished from the inscribed Pegasi of Euboic-Attic standard,

not only by their diminished size and light weight, but among other peculiarities by the helmet of the goddess, which is plain and without crest. Our No. 5 is apparently the missing link between both issues.

The fact that this coin was not known no doubt prompted Mr. J. Babelon to say, in his *Catalogue de la Collection de Luynes*, that No. 1279 was similar to Jameson, No. 862; whereas No. 1279 is the only specimen of my No. 5 published before the find, but of different dies, and No. 862 is an ordinary Pegasos of the above-mentioned previous issue.

Among the coins of the hoard that I have seen, there were only two examples of this coin, and both from the same die combination *E/g*, the reverse die *g* being of the series with both wings of the Pegasos visible, while the de Luynes coin, from the die combination *F/b*, has the reverse die *b*, belonging to the series with a single wing represented. Both coins have the same well-known Agathoclean badge, the triskelis.

Another interesting coin, of which I noticed only three specimens in the hoard, is No. 6. This coin has no symbol behind the head of the goddess, but in its place there is a letter which can distinctly be read as \odot . This initial, quite minute, can be seen only on very fine examples; this explains why it escaped notice on Bement, No. 542, and Jameson, No. 868. The same letter is found on the coin de Luynes, No. 1279.

It is the only letter we find on Pegasi of this issue. It is certainly not a mint-mark, as the combination of the dies proves that they all come from the same mint. It is probably not a magistrate's initial, there

being no reason for such an exception. It is therefore, in all probability, the initial of the engraver, who, being proud of his work, imitated the great artists, his predecessors, in signing his dies.

Coin No. 7 (*H/c-H/a*) presents a peculiarity that is rather puzzling. Die *H* is strikingly similar to die *G*; behind the head on die *H*, in the place of the \odot , there are several striations, like rough cuts made in the die.

They are certainly not flaws, as they seem to have been made with a sharp tool. Is it not possible that they are the result of deliberate erasure of the signature, which was probably not approved by the mint master?

The examination of the reverse dies leads to the conclusion that there were two distinct series of reverses, the first with one wing of the Pegasos visible, the second with both wings represented. We find the same symbols repeated on both series.

I think that this may be explained by the hypothesis that after the first series of dies with one wing were cut, the engraver preferred the new type with both wings, and duplicated all the types. But why repeat one die without symbol, and the others with the star, triskelis, and thunderbolt? This exact repetition on the whole series seems to indicate that the symbols were not only considered as mere official devices, but were necessary for some serial purpose which we cannot at present ascertain.

Mr. Giesecke in his *Sicilia Numismatica* propounds a very ingenious hypothesis about these light Syracusan Pegasos; he says that they were struck by the Mamertini, under the influence of secret Roman emissaries, previous to leaving Syracuse, after the death of

Agathocles (288-287 B. C.), in order to pave the way for the Roman Quadrigati (g. 6,984). He calls these coins "Roman-Sicilian Didrachms".

Without discussing this theory, I venture to say that if Mr. Giesecke had known my No. 5 (Pl. III, die E), he would probably have modified his possibly over-bold opinion.

If we compare our No. 5 with the gold stater of Agathocles (Pl. III, A'), we are surprised to see how similar the two coins are to each other. Not only the style and fabric are absolutely the same, but the smallest details of composition and design are absolutely similar; one could easily say that one coin is the enlargement of the other.

Both gold and silver coins belong undoubtedly to the same issue, and we may safely conclude that the light uninscribed Pegasi were struck by Agathocles at the same time as his gold staters, which would bring the date of their issue between 305 and 289 B.C., and probably to 305 B.C., the year in which he was named king.

The Pachino hoard happily confirms this fact. All the gold staters were in mint state, and the light Pegasi, although partly strongly oxydized, were all fresh from the mint at the time of the concealment, which may be dated *circa* 303 B.C. The gold coins would not have been all in such fine preservation if they had been struck twenty years earlier.

I think I am justified in concluding that these uninscribed Pegasi are really 8-litrae pieces struck by Agathocles, and not Roman-Sicilian didrachms, as recently suggested by Mr. Giesecke.

III.

THE TOOAPSE HOARD.

WITH SOME NOTES ON THE LYSIMACHEAN STATERS
STRUCK AT BYZANTIUM.

(WITH SIX TABLES OF WEIGHTS.)



THE interesting paper by Mr. G. F. Hill,¹ which marks the importance of hoards including coins of the same issue, and especially such as are struck with the same dies, turned my attention to the Tooapse hoard of Lysimachean staters preserved in the National Numismatic Collection of the Hermitage. This hoard, which was dug up in 1908, has remained till now unpublished. A preliminary communication about it was made by Prof. B. Pharmakowsky.² The circumstances of the finding are shortly as follows. In the month of October, 1908, the guardian of a country-

¹ *Num. Chron.*, 1924, p. 82, "The Frequency-Table".

² *Archaeol. Anz.*, 1911, p. 194 (with the reproduction of the golden objects and of one of the coins), and 1912, p. 323. Thence quoted by L. Tudeer, "Die Tetradrachmenprägung von Syrakus", *Ztschr. f. Num.* xxx, p. 216, and the fact of finding 61 coins from one die discussed by Kubitschek, *Num. Ztschr.*, vii, 1914, p. 212.

house midway between Toopse and Sotchi (Black Sea District), while repairing the watercourse, found near the house two gold coins. Some days later he dug up on the same place, at a depth of no more than three feet, a hoard consisting of a child's gold torque, a gold breast-pendant, and a considerable number of gold coins. There is no mention of any potsherds or human bones found on this spot. Thus the character of the deposit remains open to question. At all events, a tomb would hardly be admissible on account of the quantity of coins. Likewise there is no agreement concerning the number of coins, the various testimonies fluctuating between 90 and 96 pieces. As the finder, assisted by his kinsmen, tried to conceal the find and to realize it in an illegal manner, more than three years passed away before the Archaeological Committee, after a lengthy official correspondence, could secure the hoard by refunding its value to the banker with whom it had been pledged. The number of coins which the Archaeological Committee obtained was 61; some of them were distributed among various Russian Museums, while the bulk of the coins and the golden objects entered into the Hermitage Collection. We can only guess what became of the remaining coins, more than thirty, which did not reach the Archaeological Committee. There are indications in the records that before the beginning of the inquiry some coins were sold abroad. The fact is proved by the presence of a specimen struck without any doubt with the same pair of dies as the pieces of the hoard, in the Egger Sale catalogue of 1912.³ However, all

³ Egger, *Catal.*, xxxix, 1912, No. 209. I am not sure whether the specimen of the British Museum, published by Mr. Hill (*Num.*


the 30-35 pieces can hardly have suffered the same fate, for in this case we should expect the appearance of a larger number of pieces in the market. It is more probable that they were realized on the spot, perhaps even melted down.

It is useless to regret that the coins were not weighed separately before being partly dispersed. We must be satisfied that we can examine the 52 specimens preserved in the Hermitage, which constitute nearly three-fifths of the whole hoard.

All 52 pieces are preserved in mint-state, and apparently have never been in circulation. That they were all struck with the same pair of dies is beyond all doubt and dispute. Every detail of arrangement of the hair and of the diadem-fringes is identically repeated on the obverses, just as the reverses preserve constantly the same minute peculiarities of the figure of the goddess, of the trident, of the letters and monogram, and even a defect of the die—a line running from the summit of the **A** in **ΛΥΣΙΜΑΧΟΥ** towards the monogram. The metal is of very good alloy. The obverse type is always well centred, and the head fully visible, while on the reverses a part of the type is frequently off the flan of the coin. This is due to the fact that, as can be concluded from circular concave traces of the die-edge on the reverses of a few pieces, the upper die was larger than the flan. The surface of the dies outside the type is quite plain. The dies were

Chron. 1923—"Greek Coins acquired in 1922," No. 10), proceeds from the same source, although to judge by its weight and description it would be probable. [It is actually from the same dies. The illustration at the head of this article is taken from it. G.F.H.]

fixed, as appears from the invariable † correlation of the types on all the pieces. The striking is very careful: only three specimens offer slight traces of double-striking on the obverse, and none on the reverse. The flans are flat, about 1.5 mm. thick, with perpendicular edges and of irregular shape. Only three specimens can be called real circles of 19–20 mm. in size; all the remaining are ovals, the smaller diameter ranging from 17,5 to 20 mm., the larger from 19 to 22,5 mm. Most of the coins show two opposite sides of the oval flan flattened, so that they become almost rectilinear.⁴ These peculiarities of fabric are familiar to every one who has paid attention to the staters and tetradrachms of Lysimachean pattern struck at Byzantium. I have thought it necessary to note them in order to show that they are not accidental, but typical at least for a certain period of this coinage.

The types of the staters are the usual Lysimachean. On the obverse, the head of Alexander the Great wearing Ammon's horns and diadem to right. The head is conventionally idealized, and lays no claim to portraiture. The reverse shows Athena sitting on the throne to the left, with a figure of Nike in her extended right hand, the inscription ΒΑΣΙΛΕΩΣ-ΛΥΣΙΜΑΧΟΥ in two vertical lines at the sides, and a trident in the exergue. Further, there are the letters BY on the throne, and the monogram  in the field under the extended arm of the goddess.

This variety of the gold stater was unknown to Mueller, but he mentions two tetradrachms with the

⁴ In such cases the obverse head is placed so that the forehead and nose line runs parallel to the rectilinear edge of the flan.

same types and monogram, also struck at Byzantium.⁵ Thus we have here one more example to add to a number of parallel series of Byzantine staters and tetradrachms bearing the same monograms recorded by Mueller. Their contemporaneity is proved by this fact, as well as by the same peculiarities of fabric which have been noted above.

Though it was known long ago that staters and tetradrachms, bearing the letters **BY** on the throne of Athena, and a trident as accessory symbol, were issued at Byzantium, Mueller⁶ was the first to state that coins bearing Lysimachean types, like those with Alexandrine types and Ptolemaic coins in a considerable degree, were struck after the death of this king and the fall of his kingdom. Especially with regard to these coins struck at Byzantium, he maintained that on account of their fabric and their degenerate style, as well as for historical reasons, they could by no means have been issued by Byzantium in the lifetime of Lysimachus. He preferred to refer them to the time of the Gallic supremacy in Thrace during the last three quarters of the third century B.C. Later indeed he corrects himself by observing that such of these coins as bear indications of later date, but lack any trace of barbaric style, might have been issued in the beginning of the second century B.C., when the city, delivered from the barbarous yoke, arose again. Unfortunately Mueller's book still remains the only general work concerning the coins of Lysimachean type. The section of the German *Corpus Nummorum* concerning

⁵ L. Mueller, *Die Münzen des thracischen Königs Lysimachos*, Copenhagen, 1858, p. 55, No. 231.

⁶ *Op. cit.*, p. 27.

Thrace stopped after the first part, and the corresponding material of the British Museum is not yet published. Meanwhile the necessity of revising the opinion of Mueller became evident, particularly after it had been ascertained that analogous staters, struck by cities of Moesia, which show direct connexion with those of Byzantium and therefore were similarly referred by Mueller to the period of Gallic dominion, belong to the time of Mithradates the Great.⁷ In fact, the flat fabric of some Byzantine staters and tetradrachms, and the peculiarities of lettering, bring them into connexion with the flat tetradrachms issued by many cities of Asia Minor and European Greece during the second century B.C., and consequently require for them a later date than that of Mueller. Indeed, Head refers them to his sixth period (190-100 B.C.).⁸ Similarly, Pick considers them as ranging from the end of the third century B.C. to the time of Mithradates the Great.⁹ I cannot deny that he is right in asserting that some of the latest Byzantine staters show Mithradatic features in the obverse head, like those of the Moesian cities. It must, however, be stated that among the Byzantine coins such specimens are few, and the most part of them offer a conventionally idealized Alexander head, whereas in the coinage of Tomi and Callatis the quantitative relation of the groups is the opposite. This very fact induces us to assume an earlier date for the bulk of the Byzantine

⁷ Imhoof-Blumer, Pick, Regling, *Die antiken Münzen Nordgriechenlands*, Bd. I, pp. 64, 92, 154, 606.

⁸ *A Guide to the Coins of the Ancients*, p. 95, Pl. 53, 3; cf. *Hist. Num.*, 269.

⁹ *Op. cit.*, p. 67, note 2; p. 92, note 1.

coinage than that of the Moesian cities. It could only be conclusively proved by grouping the coins of Byzantium in a complete list of the extant specimens. That can be done only in the corresponding part of the *Corpus Nummorum*. Materials for such a research are not at my disposal. My task is only to show that a comparison of weights of both groups of coins with those of the Lysimachean staters in general confirms this supposition, and to attempt an approximate grouping by means of the material accessible to me.

The weights of the 52 staters of the Tooapse hoard appear from the following table¹⁰ :—

TABLE I.

WEIGHTS OF THE STATERS OF THE TOOAPSE HOARD.

8,51.	x	x	x	x								
8,50.	x	x	x	x	x							
8,49.	x	x	x	x								
8,48.	x	x	x	x								
8,47.	x	x	x	x	x	x	x	x	x	x	x	x
8,46.	x	x	x	x	x	x	x					
8,45.	x	x	x	x	x	x	x					
8,44.	x	x	x	x	x							
8,43.	x											
8,42.												
8,41.	x	x										
8,40.	x											

The average weight—8,467 grm.—agrees well with the summit of the table, showing 12 specimens of 8,47, but it seems at first sight too high in comparison with the weights of Lysimachean staters in general.

¹⁰ For reasons which compel me to treat the weights of the staters comprised in the hoard separately from other pieces of Byzantium, discussed below, see Kubitschek, *Num. Ztschr.* xi, 1918, p. 218.

Indeed, the lower weight of the staters struck at Byzantium was one of the important reasons which induced Mueller to deny that they were issued in the lifetime of Lysimachus. But he states¹¹ the average weight of the Lysimachean stater to be round 8,5 grm., and adds that specimens exceeding 8,6 grm. are exceptional, while those of 8,4 and 8,3 grm. are frequent. As the metrological statements of Mueller have not been revised in works of more recent date, I was compelled to verify them by weighing the specimens of the Hermitage Collection, which is very rich in this section, thanks to the famous Anadol hoard.¹² Wishing to get a list consisting exclusively of coins issued in the lifetime of the king, I not only excluded the above-mentioned staters of Byzantium and Moesian cities, as well as all bearing any trace of degenerate or barbaric style, but confined myself to the obverse types—Mueller, pl. I, 7-9—leaving aside all those coins which in spite of their comparatively good style and full weight offer an obverse head of greater size, resembling that of the earlier staters of Thracian and Moesian cities.¹³ The few specimens bearing Alexandrine types have also been left out of the list. The remaining 131 staters of pure Lysimachean types and fine style are disposed in the following frequency table. It is worth noting that as an effect of such selection only three pieces from the contents of the

¹¹ *Op. cit.*, p. 18.

¹² E. Pridik, *Bullet. of Archaeol. Comm.* (Russian), vol. iii; E. H. Minns, *Scythians and Greeks*, pp. 459, 585; Sidney P. Noe, *Coin Hoards*, New York, 1921, p. 34; E. T. Newell, *Americ. Journ. of Numism.*, 1918, p. 126.

¹³ Mueller, Pl. I, 12; Pick, *op. cit.*, Pl. V, 6; Macdonald, *Hunter. Coll.*, I, Pl. XXVIII, 15.

Hermitage Collection, previous to the accession of the Anadol hoard, fall into the list, while all the rest must be left aside. 128 pieces on the contrary have been furnished by the hoard, only two being excluded—No. 48,¹⁴ which, although in size and form of the obverse head resembling the classical type, shows manifest signs of ornamental treating of the hair, typical of the barbaric imitations, and No. 42,¹⁵ particularly discussed below.

The average weight is round 8.49 grm. A similar table taking into consideration all the specimens of the Anadol hoard, as given in Mr. Pridik's publication, shows a very high proportion of pieces (153 out of 250) in the group of 8.50 grm., and like the former table isolated single specimens in the groups of 8.65 and 8.35. The average is 8.51 grm. I do not reproduce this table fully because it can be drawn by every one on the basis of this publication. Finally, a third smaller table is composed from descriptions of European collections and sale-catalogues accessible to me in the Hermitage.

Abbreviations used in the following tables: He., Hermitage; B., Berlin, *Beschreibung d. antiken Münzen*, by v. Sallet, vol. i.; B. M., British Museum, *A Guide to the Coins of the Ancients*, by Head; H., Hunterian Collection, *Catalogue of Greek Coins*, by G. Macdonald; N., Northwick Collection, sale-catalogue, Sotheby and Wilkinson, 1859; P. and R., the corresponding parts of *Die antiken Münzen Nordgriechenlands*, by Pick and Regling.

¹⁴ Pridik, *op. cit.*, Pl. XII.

¹⁵ *Ibid.*

TABLE III.

WEIGHTS OF LYSIMACHEAN STATERS OF FINE STYLE IN THE EUROPEAN COLLECTIONS.

8,65.	8,67 ¹													
8,60.	8,58 ²	8,62 ³	8,64 ⁴	8,59 ⁵										
8,55.	8,55 ⁶	8,56 ⁷	8,55 ⁸	8,55 ⁹	8,56 ¹⁰	8,54 ¹¹	8,55 ¹²	8,55 ¹³	8,54 ¹⁴					
8,50.	8,49 ¹⁵	8,48 ¹⁶	8,52 ¹⁷	8,50 ¹⁸	8,49 ¹⁹	8,50 ²⁰	8,52 ²¹	8,50 ²²	8,50 ²³	8,52 ²⁴	8,52 ²⁵	8,52 ²⁶	8,52 ²⁷	
8,45.	8,45 ²⁷	8,45 ²⁸	8,45 ²⁹	8,47 ³⁰	8,45 ³¹	8,45 ³²	8,45 ³³	8,43 ³⁴						
8,40.	8,42 ³⁵													
8,35.														
8,30.														
8,25.														
8,20.	8,20 ³⁶													

- ¹ Hirsch, cat. xx, No. 215. ² B., No. 137. ³ N., No. 528.
⁴ N., No. 531. ⁵ Hirsch, cat. xxxi, No. 241.
⁶ B. M. Guide, Pl. 31, No. 19. ⁷ B., No. 135. ⁸ N., No. 527.
⁹ O'Hagan Coll. (Sotheby, Lond. 1908), No. 374.
¹⁰ Coll. Kreling (Schulmann, Amsterd. 1913), No. 189.
¹¹ Hirsch, cat. xiii, No. 696.
¹² Samml. Lambros (Hirsch, 1910), No. 193.
¹³ Samml. Philipsen, Copenhagen. 1909, No. 250.
¹⁴ Moscow University, catal. by Oreshnikow, p. 15, No. 118.
¹⁵ B., No. 54. ¹⁶ H. No. 7. ¹⁷ H., No. 17.
¹⁸ Coll. Jameson, No. 1074. ¹⁹ *Ibid.*, No. 1075. ²⁰ N., No. 529.
²¹ N., No. 530. ²² Coll. Laugier, No. 2374.
²³ Hirsch, cat. xx, No. 213. ²⁴ Egger, cat. xli, No. 288.
²⁵ *Ibid.*, No. 289. ²⁶ Samml. Philipsen, No. 251. ²⁷ B., No. 136.
²⁸ H., No. 16. ²⁹ *Cabinet de l'Acad. de sciences d'Amsterdam*, 1863, p. 10.
³⁰ Coll. Hartwig (Jandolo e Tavazzi, Rome, 1910), No. 701.
³¹ Hamburger, cat. vii, No. 413. ³² Hirsch, cat. xiii, No. 695.
³³ Samml. Lambros, No. 192. ³⁴ Hirsch, cat. xx, No. 214.
³⁵ H., No. 15. ³⁶ B., No. 26.

It shows once more the average 8,51.

As the tables show, Mueller was almost right in his round average, but he was wrong when he asserted the frequency of specimens of 8,3 grm. These are hardly less exceptional than those exceeding 8,6 grm. Thus we can safely assume 8,6 grm. and 8,4 grm. as extreme limits, between which range the weights of

the classical Lysimachean staters. The slight difference (0,02 grm.) between the averages of the first table and that of the Anadol hoard is due to inaccuracy of the balance. Just the same difference, constantly recurring, between the weights of the Anadol pieces which entered the Hermitage Collection, as given in the publication of the hoard, and those in the catalogue struck me. A careful weighing once more convinced me that the weights in the catalogue in almost all cases were correct. Indeed, Mr. Pridik told me that the balance used by him when he was treating of the hoard was very bad, and was replaced soon afterwards by a new one because of its inaccuracy. The higher average of the third table is possibly also merely accidental, and owing to the sale catalogues, which pick out specimens in the best condition, while worse pieces, as less accurately described, must be omitted from the list. Therefore it will be reasonable, to my mind, to take as point of departure the first statement (of 8,49 grm.), as attested by the material lying to my hand. But this statement, based upon extant specimens, takes no account of the loss of weight by attrition, and consequently must be much lower than the normal weight of Lysimachean staters of fine style, whereas the coins of the Tooapse hoard, as preserved in mint-state, present perhaps just the norm of the corresponding group. Mr. Hill¹⁶ proposes for that purpose an addition of 1% to the result of weighing. Increasing in this way the average of 8,49 grm. we get 8,575 grm. as the norm. The coincidence of this result with that attested by the largest number of specimens from a little hoard of Lysimachean staters

¹⁶ *Num. Chron.*, 1924, p. 81.

in mint-state, mentioned by Mr. Hill,¹⁷ is perhaps not fortuitous.

If it is so, we can say that the normal weight of the staters struck at Byzantium was about 0.1 grm. lighter than that of the coins of fine style. Such a conclusion is confirmed by examining the weights of other extant specimens of the first group of coins. Here follows a list of staters with the letters **BY** on the throne, based upon descriptions and catalogues, and completed by 13 pieces in the Hermitage.

TABLE IV.

WEIGHTS OF LYSIMACHEAN STATERS STRUCK AT BYZANTIUM.

8,60.	8,58 ¹						
8,55.	8,53 ²						
8,50.	8,52 ³	8,50 ⁴	8,50 ⁵	8,48 ⁶	8,50 ⁷		
8,45.	8,47 ⁸	8,46 ⁹	8,46 ¹⁰	8,46 ¹¹	8,45 ¹²	8,44 ¹³	8,43 ¹⁴
8,40.	8,41 ¹⁵						
8,35.	8,34 ¹⁶	8,33 ¹⁷	8,33 ¹⁸	8,33 ¹⁹			
8,30.	8,32 ²⁰	8,32 ²¹	8,29 ²²	8,28 ²³			
8,25.	8,26 ²⁴	8,25 ²⁵	8,23 ²⁶	8,23 ²⁷	8,24 ²⁸		
8,20.							
8,15.	8,17 ²⁹						

¹ H., No. 8.² He., *Artinchois Barrow*, Minns, p. 430.³ He., No. 148.⁴ N., No. 532.⁵ B., No. 52.⁶ B.M., *Num. Chron.*, 1923, p. 218, No. 10.⁷ He., tomb near Anapa, *C.-R. Arch. Comm.*, 1882-88, p. xix.⁸ Egger, cat. xxxix, No. 209.⁹ He., No. 149.¹⁰ He., No. 151.¹¹ B., No. 49.¹² B., No. 51.¹³ Egger, cat. xlvi, No. 395.¹⁴ B., No. 53.¹⁵ B., No. 50.¹⁶ He., No. 143.¹⁷ B., No. 48.¹⁸ Egger, cat. xlvi, 396.¹⁹ H., No. 9.²⁰ He., No. 145.²¹ He., No. 146.²² He., No. 150.²³ Samml. Philipsen, Copenhagen, 1909, No. 252²⁴ He., No. 147.²⁵ Coll. Prowe (Egger, 1904), No. 514.²⁶ He., No. 144.²⁷ B. M. Guide, pl. 53, No. 3.²⁸ He., dupl., dies = No. 145.²⁹ He., No. 152 a

¹⁷ *Ibid.*, p. 83. Unfortunately the paper dealing with this interesting hoard in detail (*Num. Chron.*, 1919) remains inacces-

The table shows weights ranging between the approximate limits of 8,50 and 8,20 grm., and an average of 8,38 grm. Corrected in the same way by addition of 1% we get 8,465 grm., or just the result of the Tooapse hoard.

It will be interesting to compare for comparison similar tables of the gold coinage of Moesian cities. The tables are based upon lists given by Pick and Regling,¹⁵ and have been completed by the specimens of the Hermitage Collection and some pieces from sale catalogues.

TABLE V.

WEIGHTS OF LYSIMACHEAN STATERS STRUCK AT CALLATIS.

8,45.	8,44 ¹								
8,40.	8,38 ²	8,38 ³							
8,35.	8,35 ⁴								
8,30.	8,28 ⁵	8,28 ⁶	8,28 ⁷	8,28 ⁸	8,29 ⁹	8,32 ¹⁰			
8,25.	8,27 ¹¹	8,27 ¹²	8,27 ¹³	8,26 ¹⁴	8,26 ¹⁵	8,26 ¹⁶	8,24 ¹⁷	8,23 ¹⁸	
8,20.	8,22 ¹⁹	8,20 ²⁰	8,19 ²¹	8,18 ²²	8,21 ²³				
8,15.	8,17 ²⁴	8,15 ²⁵	8,15 ²⁶						
8,10.	8,08 ²⁷								

¹ H., No. 10. ² P. 266/2. ³ He., dupl., dies = No. 157.⁴ Samml. Lambros (Hirsch, 1910), No. 190. ⁵ P. 258/4.⁶ P. 260/6. ⁷ P. 263/1. ⁸ He., No. 158 = P. 260.⁹ He., No. 157 = P. 266. ¹⁰ N., No. 533. ¹¹ P. 258/5.¹² P. 266/1. ¹³ Prowe Coll. (Egger, 1904), No. 515.¹⁴ P. 259/2. ¹⁵ P. 263/2. ¹⁶ B.M., *Nism Chron.* 1923, p. 219, No. 12.¹⁷ Samml. Weber (Hirsch, 1908), No. 1010. ¹⁸ P. 260/3.¹⁹ P. 259/4. ²⁰ P. 259/1. ²¹ P. 258/1.²² He., No. 156 = P. 258. ²³ Egger, cat. xxxix, No. 2.²⁴ P. 260/1. ²⁵ Egger, cat. xlvi, No. 397. ²⁶ P. 260/5.²⁷ P. 258/2.

sible to me, and I can judge of it only by means of references in the above quoted article by the same author.

¹⁵ *Op. cit.*, pp. 105 f., 649 f.

TABLE VI.

WEIGHTS OF LYSIMACHEAN STATERS STRUCK AT TOMI.

9,50																			
8,50.	8,45 ²																		
8,45.	8,47 ³	8,45 ⁴	8,44 ⁵																
8,40.	8,40 ⁶																		
8,35.	8,36 ⁷	8,36 ⁸																	
8,30.	8,32 ⁹	8,32 ¹⁰	8,31 ¹¹	8,31 ¹²	8,30 ¹³	8,30 ¹⁴	8,30 ¹⁵	8,30 ¹⁶	8,30 ¹⁷	8,30 ¹⁸	8,29 ¹⁹	8,29 ²⁰	8,29 ²¹	8,28 ²²					
8,25.	8,27 ²³	8,27 ²⁴	8,265 ²⁵	8,25 ²⁶	8,25 ²⁷	8,24 ²⁸	8,24 ²⁹	8,24 ³⁰	8,23 ³¹	8,23 ³²	8,23 ³³	8,23 ³⁴							
8,20.	8,22 ³⁵	8,22 ³⁶	8,22 ³⁷	8,22 ³⁸	8,22 ³⁹	8,21 ⁴⁰	8,21 ⁴¹	8,20 ⁴²	8,20 ⁴³	8,20 ⁴⁴	8,18 ⁴⁵	8,18 ⁴⁶							
8,15.	8,17 ⁴⁷	8,13 ⁴⁸	8,13 ⁴⁹																
8,10.	8,12 ⁵⁰																		
8,05.	8,07 ⁵¹																		
	7,83 ⁵²	7,78 ⁵³	7,75 ⁵⁴	7,60 ⁵⁵	7,60 ⁵⁶	7,59 ⁵⁷													

¹ (sic!) He., No. 165 = R. 2482.² R. 2471/2.³ R. 2473/2.⁴ He., No. 163 = R. 2480.⁵ R. 2477/4.⁶ R. 2473/1.⁷ R. 2476/2.⁸ R. 2479/1.⁹ R. 2475/2.¹⁰ He., No. 161 = R. 2479.¹¹ R. 2476/4.¹² R. 2480/6.¹³ R. 2476/1.¹⁴ R. 2477/2.¹⁵ R. 2480/3.¹⁶ R. 2480/5.¹⁷ R. 2480/7.¹⁸ R. 2481/5.¹⁹ R. 2476/3.²⁰ R. 2480/1.²¹ R. 2480/20.²² R. 2475/1.²³ R. 2480/18.²⁴ He., No. 166 = R. 2477.²⁵ R. 2480/8⁴.²⁶ R. 2477/1.²⁷ He., No. 164 = R. 2481.²⁸ R. 2480/9.²⁹ R. 2480/13.³⁰ R. 2481/1.³¹ R. 2476/7.³² R. 2476/17.³³ R. 2481/11.³⁴ He., No. 159 = R. 2476.³⁵ R. 2478/1.³⁶ R. 2480/26.³⁷ R. 2480/29.³⁸ R. 2481/10.³⁹ R. 2485/1.⁴⁰ R. 2480/8.⁴¹ He., No. 160, probably = R. 2475.⁴² R. 2480/2.⁴³ R. 2480/28.⁴⁴ R. 2481/13.⁴⁵ R. 2481/2.⁴⁶ He., No. 162 = R. 2480.⁴⁷ *Histor. Mus., Moscow* = R. 2485.⁴⁸ R. 2481/14.⁴⁹ R. 2485/3.⁵⁰ R. 2485/2.⁵¹ R. 2480/4.⁵² R. 2476/18.⁵³ R. 2480/25.⁵⁴ *Coll. Van-Belle (Schulmann, 1913), No. 2143.*⁵⁵ R. 2476/11.⁵⁶ R. 2482/1.⁵⁷ R. 2477/3.

The tables, leaving aside the unique exceedingly overweighted and some underweighted pieces of Tomi, offer extreme limits of round about 8,45 and 8,10 gm. The average is in the case of Callatis 8,25 gm.; in the case of Tomi, rejecting the same pieces, 8,265 gm. These averages fit well into the groups represented by

the largest number of specimens in the tables. The unique issue of analogous staters at Istros¹⁹ is quite near with its weights ranging from 8,27 grm. to 8,08 grm. The average weight resulting from the six specimens given by Pick, with the addition of the Hermitage piece (8,14 grm.)—8,18 grm. seems a little too low, but possibly it is due only to the incompleteness of the list. Quite by itself stands the gold coinage of Odessus,²⁰ which contains side by side staters of Alexandrine and Lysimachean types, bearing the same magistrates' names, and yielding a much higher average of about 8,40 grm., being also of a much better style.

Recapitulating the results proceeding from the tables, we see a successive sinking of the extreme limits confining the weights, and at the same time a decrease of the norm represented by the averages. The staters struck at Byzantium are intermediate between the purely Lysimachean staters, which come quite close to the original Alexandrine gold coins,²¹ and those struck in the Moesian cities, the date of which is fixed by the Mithradatic character of their obverses. It would be very attractive, in view of the striking gap in the middle of the Byzantine weight-table, to distribute the coinage of that city into two distinct groups, separated by a considerable space of time. Indeed, the specimens bearing Mithradatic features

¹⁹ *Op. cit.*, p. 170. The scanty number of weights given by Pick in this case is particularly to be regretted, as according to him all the extant specimens are of the same issue.

²⁰ *Op. cit.*, pp. 530, 532.

²¹ L. Mueller, *Numismatique d'Alexandre le Gr.*, p. 1; Fr. Hultsch, *Griech. u. röm. Metrologie*, 2^e Aufl., 1882, p. 243.

known to me—Hermitage, No. 152^a, from the same obverse dies as Brit. Mus. *Guide*, pl. 53, No. 3, and Hermitage, No. 147, with an obverse head closely resembling those of the Tomi staters—fall among the lightest. On the other hand, there are a fair number of coins in the latter group with idealized heads on the obverse, and Mueller is quite right²² in observing the abundance of transitional stages in the Byzantine gold coinage. Indeed, the ten different obverse dies furnished by thirteen specimens (besides the Tooapse pieces) accessible to me in the Hermitage present in respect of their style not less than seven distinct groups.²³ Moreover, there are specimens from the same dies which fall on either side of the gap. It will therefore be more reasonable to explain the gap in the table by the incompleteness of my list, and to admit rather an almost uninterrupted gold coinage at Byzantium till the first quarter of the first century B.C. without any considerable change in the weight norm. Nevertheless for the same reason of abundance of issues and stages of style the beginning of this coinage must be removed somewhat farther from this later limit, and can hardly be placed later than the second half of the third century B.C. The staters of the Bosporan rulers,²⁴ which bear the same trident as accessory symbol, and thus seem to have been copied

²² *Op. cit.*, p. 56, note 46.

²³ In respect of fabric (see below) there would be also at least three groups.

²⁴ E. H. Minns, *op. cit.*, p. 584 f., and the Russian literature quoted there; cp. Hill, *Num. Chron.*, 1924, p. 10. W. Škorpil (*Miscellaneous papers in honour of C. Bobrinskoi*, 1911, p. 41) seems to be alone in supposing that the trident with dolphins was a particular symbol of the Spartocid kings. Cp. the objections by Oreshnikov (*Miscellaneous Numismatic Papers*, Moscow, 1912, vol. ii, p. 42).

from one of these Byzantine issues, would also require an earlier dating of their models. On the other hand, the absence of any Byzantine stater in the Anadol hoard shows that at the time of its being buried²⁵ these staters were not yet standard coins for the shores of the Black Sea, as they apparently became later.

It would be too risky, on the evidence of the coins proceeding from a single issue, to base upon the Tooapse hoard alone a decision on the question of a wide circulation of these staters in the Bosporan district. But we can adduce at least three more cases of the finding of Byzantine staters in the same north-east corner of the Black Sea. These are: the specimen found by Tiesenhausen in the second tomb of the Artinchow barrow, together with a gold stater of King Paerisades,²⁶ the piece dug up by the same savant

²⁵ There is a difficulty caused by the presence in the hoard (Pridik, *op. cit.*, p. 25, No. 42, pl. XII) of a stater bearing the trident in the exergue and the letters **CI** on the throne of Athena. It looks like a rude imitation of the just-mentioned group of staters. Can it have been issued by Istros, as proposed by Mr. Pridik? At all events it stands quite isolated among the other pieces assigned to that city (Mueller, *op. cit.*, p. 63; Pick, *op. cit.*, p. 170) in style as well as in lettering. On the other hand, can it not stand in some connexion with the Alexandrine tetradrachms bearing the same letters in the field in inverse order, Mueller, *Num. d'Alex. le Gr.*, p. 272, No. 1258? If we should on account of this very piece remove the date of the deposit of the hoard to the second quarter of the third century B.C. (cp. Minns, *op. cit.*, p. 585) it would still remain the earliest exactly dated instance known to us of a stater with a trident in the exergue.

²⁶ *Comptes-Rendus of the Archaeol. Committee for the years 1878-79*, p. xlvi f. Minns, *op. cit.*, pp. 351, 430 f. The stater is from the same obverse die as the Tooapse staters (!), and shows the same flat fabric, while the reverse bearing the monogram **KP** gives a new variety corresponding to the tetradrachm, Macdonald, *Hunter. Coll.*, i, p. 430, No. 38.

in a tomb near Anapa,²⁷ and No. 149²⁸ of the Hermitage numismatic collection, noted in the catalogue as found by diggers also at Anapa. On the other hand, one piece, coming without any doubt from Kertch,²⁹ though bearing a butting bull in the exergue instead of the trident, shows a larger flan and an obverse head of greater size resembling in style that of the earlier Byzantine issues and the already cited piece of Odesus.³⁰ Another specimen bought for the Archaeological Committee at Kertch (Herm., No. 85) is characterized by the same flat fabric, large flan, and a later style of the obverse head very closely resembling that of the former coin. In the field it has the monogram Γ ,³¹ and a trident in the exergue. In spite of the absence of the usual dolphins on the trident handle, according to Mueller³² the coin ought to be nevertheless assigned to Byzantium. At least the Lysimachus stater found in the Nereid coffin at Anapa,³³ without any accessory symbol and bearing only the monogram Λ ,³⁴ presents

²⁷ *C.-R. Arch. Comm.*, 1882-1888, p. xix: the piece is of the same obverse die as Herm. No. 151, but offers on the reverse instead of the \mathbf{K} monogram of the former the monogram \mathbf{K} . Both varieties were unknown to Mueller.

²⁸ M. 173.

²⁹ *Antiquités du Bosphore Cimmérien*, pl. LXXXV, 10; p. lxii. Cp. Minns, *op. cit.*, p. 384, No. 6. = M. 359 = Herm. Catal., No. 89.

³⁰ The Hermitage possesses (No. 88) another variety of this type, probably from the same obverse die. The provenance of the coin is unknown. It bears the monogram \mathbf{ME} on the reverse, a variety unknown to Mueller.

³¹ The form of the upper letter is not distinct enough to connect it certainly with the Byzantine monogram $\mathbf{\Gamma}$ (see below).

³² *op. cit.*, p. 56, Nos. 143, 141.

³³ *C.-R. of Arch. Comm.*, 1882-1888, p. xxi; Minns, *op. cit.*, p. 328.

³⁴ This variety has been met with in the Anadol hoard, cp. Pridik, *op. cit.*, p. 27, Nos. 90-93.

also a larger flan, and differs in style from the purely Lysimachean staters, though it comes much closer to them than all the former coins.

It must be added that I have enumerated only those coins of which the provenance can be stated with certainty, while previously to the great enlargement due to the Anadol hoard this section of the Hermitage collection contained almost exclusively Lysimachean staters of later date (see above), and it seems to be probable that a great part of them similarly came from South Russia. Thus it seems to follow that, while in the Anadol hoard the gold coins of classical Lysimachean type are abundantly represented, on the north-east coast of the Black Sea we find instead of them almost exclusively staters of posthumous issues. That is not to be wondered at in respect of the fact that at the turn of the fourth and third centuries B.C. the Cimmerian Bosphorus still possessed its own gold currency in the staters of Panticapaeum. These, together with the Alexandrine staters frequently enough found in tombs of the Bosphoran kingdom,²⁵ could preclude the spread of early Lysimachean gold issues over this remote corner of the Black Sea. No more reasonable would it be to deduce from this fact a conclusion about lesser circulation of posthumous gold issues of Lysimachean pattern over the western coast of the Black Sea. The contrary seems to be sufficiently proved by the already mentioned gold issues of Moesian cities, as well as by the bar-

²⁵ Minns, *op. cit.*, pp. 391, 429. *C.-R. of Arch. Comm.*, 1911, p. 40; 1912, p. 48, and especially the opinion expressed by W. Škorpil, *Bull. Arch. Comm.*, vol. 65, p. 170.

barian imitations from Transylvania,³⁶ which always consistently show the trident in the exergue.

As to the date of the Byzantine gold issues, the Tooapse staters do not furnish further evidence. Significant is the identity of their obverse die with that of the coin found in the Artinchow barrow, together with a stater of Paerisades. But this barrow again contains tombs of several generations, ranging over the second half of the third century and perhaps the beginning of the second, and the Paerisades question still remains the crucial point of Bosporan numismatics.

It is clear from reasons given above that none of the Byzantine issues can belong to the lifetime of Lysimachus.³⁷ Whereas all the Lysimachean staters

³⁶ R. Forrer, *Keltische Numismatik der Rhein- u. Donauländer*, 1908, pp. 205 ff., 376, 377. Unfortunately I have not been able to ascertain the provenance of the six specimens of this class of coins preserved in the Hermitage Collection. A Caucasian origin is also possible for them. For a similar group of imitations of Alexandrine staters (Forrer, 190 ff., 357-359) such an origin can be stated with certainty (cp. Pridik, *Materials for Archaeol. of Russia*, vol. 34, p. 95, note 1^a).

³⁷ If we should, against the view of Mueller, seek for such staters, they could be only those of fine style bearing in the field the monograms Π and Π', and therefore ascribed to Byzantium by Sallet (*Beschreibung d. Antik. Münzen d. Berlin. Mus.*, i, p. 304, No. 35, p. 306, No. 56 = M. 100). Indeed, the second form of the monogram is met with on Byzantine autonomous tetradrachms assigned to the third century B. C., where it occasionally replaces the usual ΠΠΥ (cf. B. M. C., *Thrace*, p. 95, No. 26; Σβορώνος, 'Εφημ. 'Αρχ., 1889, p. 107, pl. I, 3). It occurs also on copper coins (Head, *Hist. Num.*,³ 268; *Berl. Beschr.*, i, p. 147, No. 56), and in the Byzantine countermarks on Ptolemaic tetradrachms (Σβορώνος, *Νομισμματα τοῦ κράτους τῶν Πτολεμαίων*, i, p. 217), both of the same date. The conjecture of Sallet as to the identity of both above-mentioned monograms could be proved by the fact that one piece in the

of fine style have thick circular flans with a dull rounded edge, all the Byzantine issues differ widely from them with regard to fabric. There can be traced among them the three following groups. The first (of which the Hunterian specimen³⁸ may be taken as representative) is characterized by a still regular but larger flan (about 21 mm.) with a head in somewhat high relief almost fully covering the obverse field, slightly concave reverse field, and sharper edges. The second (see figure, p. 29) displays an equally large, but irregular, rather oval than circular, flan, with perpendicular edges and quite flat surface beyond the type on the reverse as well as on the obverse. Both these groups furnish metal of very good alloy, while the third group (cp. Head, *Coins of the Ancients*, Pl. 53. 3) shows a pale gold, often resembling electrum. There the large flan again is given a regular contour and sharp edges, but the surface remains flat on both sides as on the preceding class. It can hardly be contested that the order in which they are set out corresponds to

Hermitage Collection bearing Π (No. 79 = Pridik, iv, 16-18 = M. 99) and two pieces with Γ (Nos. 126, 127 = Pridik, iv, 114-118, all three from the Anadol hoard) have the same obverse die. But at the same time this obverse die recurs once more (No. 141 = Pridik, iv, 59 = M. 429), with a reverse bearing none of these monograms, and bearing instead of them the bee and the monogram \mathcal{R} , while with the two latter staters it is connected by the same \mathcal{E} monogram in the exergue. By Mueller the last-mentioned piece is assigned to Ephesus. Thus the attribution of Sallet is open to question, and the claims to be regarded as constant mint-marks in connexion with this obverse die are equally distributed between the two former monograms on one side and the \mathcal{E} monogram on the other. The question can only be solved by comparison of a larger number of specimens.

³⁸ Maedonald, i, p. 426, No. 8, pl. XXVIII, 15.

the chronological sequence of the groups. Indeed, the first group by its convex obverse and concave reverse is closely connected with the classical Lysimachean coins, and the specimens of it, like that in the Hunterian collection, belong to the heaviest, while those of the last group are the lightest, and occasionally show Mithradatic features in the obverse head. The second group is the largest in number; it comprises the Tooapse hoard and about a half of the other Byzantine staters in the Hermitage. Almost all the corresponding tetradrachms of Lysimachean type struck at Byzantium also fall into this class, although they often are much ruder in style than the stater.³⁹ This group of issues doubtless lasted over a considerable space of time.

If we should now attempt, of course without any claim to finality, a chronological disposition of these groups, we might place the first group, on the evidence of the unique stater with trident in the Anadol hoard showing the same peculiarities of fabric, close to the middle of the third century B.C. The second group then would last over the final part of this century and the first half of the second, contemporary with or perhaps in some cases followed by the abundant tetradrachm issues. The attribution of the last group of staters to the time of Mithradates the Great is quite uncertain.

Great interest is presented by the Tooapse hoard in respect of the conclusions which can be drawn from it on the question of the exactitude of ancient coin-weighing. The accuracy is here almost twice as great

³⁹ It must be kept in view in this case that some of them may be merely barbaric imitations of Byzantine originals; cf. Mueller, p. 56, note 28; Head, *Hist. Num.*², 269.

as in the groups of coins quoted by Mr. Hill.⁴⁰ These give a variation of 2,3% and 2,66%. In the case of the Tooapse states the difference between the extreme weights 8,51 and 8,40 is 0,11 grm., which gives about 1,3% of exactitude. Nevertheless the differences of about 0,045 between the average (8,467 grm.) and the higher weight on one hand and of about 0,065 between the average and the lower weight on the other, rather confirm the conjecture of Mr. Hill that 0,5 grm. was the term hardly surpassed in respect of exactitude by ancient weighings.

Hermitage.

A. ZOGRAPH.

⁴⁰ *Num. Chron.*, 1924, p. 83.

IV.

THE AES GRAVE.

ITS CHRONOLOGY AND THEORY.

THE earliest coinage of the Roman Republic, commonly known as Aes Grave, presents certain problems and difficulties which, despite repeated and often laborious attempts on the part of numismatic scholars, still await a satisfactory solution.

Mommsen was the first to approach the subject scientifically,¹ and though some of his conclusions are demonstrably wrong, his work remains a monument of sound scholarship. The more recent researches of Samwer, Bahrfeldt,² and Haeberlin have completely revolutionized the metrology, dating, and general conception of the Aes Grave; Dr. Haeberlin in particular having furnished a mass of valuable material in his *Corpus* and record of existing specimens.³

But whilst throwing much light on what is admittedly an involved and difficult subject, these later writers, by the very meticulousness of their work,

¹ Mommsen-Blacas, *Histoire de la monnaie romaine*, vol. i.

² *Gesch. des ält. röm. Münzwesens* (Vienna, 1883).

³ *Zum Corpus Numorum Aeris Gravis. Die Systematik des ältesten römischen Münzwesens* (Berliner Münzblätter, 1905) and *Aes Grave: das Schwergeld Roms und Mittelitaliens*, Band I, 1910. (See also abridgement of Haeberlin's theories in *Num. Chron.*, 1907, pp. 111 ff., and Hill, *Hist. Rom. Coins*, p. 5 f.).

cannot altogether be acquitted of the charge of having created fresh difficulties.

For example, some of the weight-systems which they propose are of so complex a character that, to an unmathematical people such as were the Romans of the fourth and third centuries B.C., they would have been utterly unthinkable. They tend, moreover, to look for systematic intricacies in what are in all probability merely vagaries due to imperfect methods of coin production. And in some cases the theories, propounded ostensibly as explanations, threaten to become more bewildering than the Aes Grave itself.

At the same time, one or two important factors have certainly been overlooked, or have not been recognized as fully as they deserve. So that there seems full justification for venturing on a reconsideration of the Aes Grave and some of its problems on lines that hitherto have not been completely explored.

Except for a much-criticized and somewhat misleading statement of Pliny,⁴ the material for our study is practically limited to the coins. But although the Roman Aes Grave differs in many respects from all other ancient coinages, it is not an isolated series, and can only be understood in relation to the Central Italian cast coinages, of which it forms a part, and the struck silver and bronze coinages of Latium-Campania.

In adopting its first coinage the Roman Republic seems, somewhat strangely, to have flung defiance at all existing monetary systems. The Greek-speaking people of Southern Italy had long used coins remarkable for their artistic excellence and convenient for

⁴ Pliny, *N. H.* xxxiii. 13.

business purposes. With these the Roman must have been familiar, nevertheless he chose to adopt a form of money that could boast of little in the way of art, and still less of practical utility.

The explanation is that the Roman was essentially a tribesman of Central Italy, and his coinage was essentially Central Italian in character, designed primarily for inter-tribal rather than foreign commerce.

From remote times the peoples of Central Italy used rough lumps of bronze (*aes rude*) as media of exchange. This barbarous species of money, which could only have been reckoned by weight, appears to have lasted down to the time of the introduction of the Libral As. Between the *aes rude* and the Aes Grave there is no transitional form of money, unless the rare lenticular species of unstamped bronze may be regarded as such.⁵ The so-called "aes signatum" is collateral rather than transitional, and throws practically no light on either the origin or the development of the Aes Grave.

From the *aes rude* to the Aes Grave seems a long step; and indeed the introduction of a full-blown monetary system, consisting of the As, as unit, with its fractional denominations, Semis, Triens, Quadrans, Sextans, and Uncia, all bearing distinctive types as well as marks of value, and approximating to a definite weight-standard, indicates an extraordinary advance in Roman monetary ideas. Yet as regards metal and its system of weight-values the Aes Grave is simply an improved form of *aes rude*, and as such would have been readily understood by the peoples of Central Italy.

⁵ Specimens of these rough bronze disks have been found mainly in Etruria. (See examples in Museo Archeologico, Florence.)

The problems before us are concerned with

- (1) The date of the introduction of the Libral As, and of its subsequent reductions.
- (2) The weight-system on which the Aes Grave was based.
- (3) The relation of the Aes Grave to Italian silver currencies.

THE LIBRAL SERIES.

Date of its introduction.

We need not linger over the view found in most ancient numismatic treatises that the Libral As was introduced by Servius Tullius. This originated from a misunderstanding of Pliny, who in turn seems to have been misled by Timaeus. Mommsen proposed 451 B.C., and connected the inauguration of the first Republican coinage with the Decemvirs. This date, again, is far too early. Though the Libral Asses and their fractions are rough in fabric, their style is by no means archaic. Artistically they show unmistakable Greek influence, not of the finest period, but of the earlier decline.

That they were not introduced till late in the fourth century may be regarded as certain; and modern numismatic opinion is in favour of fixing the date between 338 B.C. (Babelon, Grueber) and 335 B.C. (Haeberlin).

This view rests mainly on the evidence of the ship's prow, which appears as the reverse type on all denominations, and is supposed to refer to the victory at Antium (338 B.C.), when the prows of the Antiate

battleships were carried to Rome in triumph and affixed to the Rostra in the Forum.⁶

While admitting the possibility of this view, it is well to consider whether or not the evidence on which it rests is conclusive.

Allusions to contemporary events are decidedly rare on coins of the fourth and third centuries B. C., and in every case when they do occur they are restricted to a single issue, lasting for only a limited period. The "Prow", however, remains as the standard reverse type on the bronze of the Republic down to about 81 B. C. It is inconceivable, therefore, that a single victory—and that not of overwhelming importance—should be commemorated, to the exclusion of all others, for a period of something like two and a half centuries.

It seems pretty safe to assume that the "Prow" type alludes not so much to any single event as to the claim on the part of Rome to the mastery of the sea. Now this is precisely what the victory at Antium did not give her. By it she gained control over the Latin coast; but the victory was won on land, and at the time the Roman fleet was inconsiderable.

If, as will probably be admitted, the evidence for assigning the Aes Grave to 338-335 B. C. is unconvincing, we are led to inquire whether any other date is more plausible.

Here the following points are worth consideration :

(1) The introduction of the Aes Grave cannot certainly have occurred earlier than 338 B. C. on account of its style. It may, however, be later.

(2) In 311 B. C. a special naval command was created

⁶ Hill, *Hist. Rom. Coins*, p. 4.

by the appointment of *Duoviri navales*, and it may be doubted whether Rome's claim to be a sea-power can be seriously entertained very much before this date. Here, it may be suggested, is a definite motive for the "Prow" type.

(3) It is probable that the issue of heavy Asses (i.e. Libral standard) did not continue for more than 40 years at the outside. (Dr. Haeblerlin suggests a slightly longer period, and assigns them to 335-286 B.C.) It is, however, practically certain that the heavy As lasted down to 275 B.C., and very probably to 271 B.C., before its weight was definitely reduced. (See later.) If, therefore, we fix 271-270 B.C. as the lower date of the Libral series, the higher may reasonably be placed somewhere about 310 B.C.

(4) On historical grounds 311 B.C. is a likely date for the introduction of a new and extensive coinage. The last phase of the second Samnite war had been reached, and Rome was in the ascendent. But a serious crisis arose in 311 B.C. when the Etruscans declared war against Rome, and Rome was forced to sustain armies on two fronts simultaneously.

Monetary reforms have not infrequently been connected with military crises, as for example in 242 and 217 B.C. Thus the crisis of 311 B.C., rather than the settlement of 338-335 B.C., may be regarded as a likely occasion for the introduction of the Aes Grave.

In adopting this distinctive species of money Rome appears to have taken the lead; but within a very short time her example was followed by her neighbours in Latium, Campania, Umbria, Apulia, and Etruria. Specimens of the Roman Aes Grave ("Prow" type) are on the whole a good deal commoner than

those of the collateral series; some of the examples of the latter being of the highest degree of rarity, the reason being that the Roman pieces were issued for a longer period and over a wider area than those of other Central Italian mints.

Original weight-standard.

Although the Libral As was normally reckoned as a pound of bronze (i.e. 12 ounces, or 288 scripula), numismatists are not agreed as to what the Roman pound actually weighed.

Grueber⁷ inclines to the natural view that it was the Attic pound (327.45 grammes), Mommsen⁸ considered that the coins were issued normally at a standard of about 10 ounces, while Haeberlin maintains that originally the Romans adopted the Oscan pound (272.87 grammes), but subsequently abandoned it in favour of the Attic, which he designates the "Neo-Roman".⁹

In attempting to calculate the normal or theoretical weights of the Aes Grave an obvious difficulty arises from the fact that the coins vary so much in weight that they seldom correspond with the theoretical standards to which they are supposed to belong. This is mainly due to the haphazard method of casting, and the absence of any attempt to adjust the weight of the coins after they left the mould. It is clear, therefore, that accuracy of weight was not deemed important by either the makers or users of the Aes Grave.

Both Mommsen and Haeberlin base their conclusions

⁷ B. M. C., i, p. xxii.

⁸ *Hist. mon. rom.*, i, p. 206.

⁹ Die metrologischen Grundlagen der ältesten mittellitalischen Münzsysteme (*Zeit. für Num.*, xxvii).

on average weights; but it is open to question whether this method yields satisfactory results in cases where the difference between the extremes is as great as in the Aes Grave. But whereas Mommsen gives a reasonable estimate of the actual weight of the heavier coins, Haeberlin's hypothesis that a change of standard occurred at the Roman mint is in itself highly improbable, and lacks proof.¹⁰ There is no question that some time before the middle of the third century B. C. the Roman coinage was regulated solely by the Attic standard, and this continued in force down to the end of the Empire. To prove, therefore, that at the end of the fourth and beginning of the third centuries B. C. some other standard, such as the Oscan, was in force necessitates the production of far stronger evidence than that supplied by the illusive weights of the Aes Grave.¹¹

Our conclusion at this point is that in Rome the Attic pound of 327.45 grm. was in force at the time that the Aes Grave was instituted (311 B. C.) and for many centuries after. In practice, however, no attempt was made to produce coins of exact weight. That is to say, the As *represented* but did not actually *weigh* a pound.

The Attic was not the only standard recognized in the districts of Central Italy. In Picenum, Apulia,

¹⁰ The details of this change are considered later.

¹¹ Haeberlin's theory is rendered still more improbable by his interpolation into the Roman issues of the "Janus-Mercurius" group. This not only breaks into the sequence of types, but reverses the natural order of development by placing a light issue before a heavy one. The opposite is the invariable rule. Rome's policy was not to adjust her coinage to that of her neighbours in Central Italy, but gradually to impose her standard on them.

Eastern Umbria, and parts of Campania, for example, the standard in force was somewhat heavier. Whether or not these differences are rightly traced to Phoenician and Babylonian sources is perfectly immaterial. In effect, they are merely localisms; and when, under Roman influence, the people of these districts adopted Aes Grave, they naturally issued the coins in accordance with the weight-standard to which they were accustomed.

As all the cast coinages of Central Italy were more or less influenced by the Roman, it follows that within a short space of time the local weights are either brought into line with the Roman, as for example the "Janus-Mercurius" and "Apollo" series, or else become extinct, as in the case of the coinage of Hatria.

No non-Roman coinages appear to have been issued *below* the current Roman standard, e.g. the various series assigned to Etruria and Western Umbria do not begin till the Roman As had fallen considerably below its original weight.

Duration of Libral issues.

We have next to determine how long the As maintained its original, or approximately its original, standard before any serious reduction was made in its weight.

D'Ailly, Samwer, and Bahrfeldt are of opinion that the Libral As ceased before 280 B.C. Haeberlin places its first reduction in 286 B.C. Mommsen's view is not quite clear, but he appears to favour a somewhat later date.

We have suggested above that the Libral standard was certainly in force down to 275 B.C., and probably

for a few years later. This conclusion is based on the close relation that evidently exists between certain cast coins of Latium-Campania and the series of silver didrachms commonly known as "Romano-Campanian". This relationship is concerned with both type and weight, so that it seems impossible to doubt that the two classes of coins were issued at one and the same time.¹²

Mommsen and others have assigned the Romano-Campanian didrachms, without any very strong reasons, to 330-290 B.C., but Mr. Mattingly maintains that they were struck during the war against Pyrrhus (280-275 B.C.).¹³

In support of this he points out that the "horse's head" and other characteristically Carthaginian types allude unmistakably to an alliance between Rome and Carthage.

As regards some of the Romano-Campanian didrachms, Mr. Mattingly's date is undoubtedly right, but it seems improbable that all the eight varieties were issued within as short a period as that of the Pyrrhic war.

The didrachms fall naturally into two groups according to their weight-standard, three being heavy (7.45 grm. = 115 grs.), and five light (6.69 grm. =

¹² Haeberlin recognizes this relationship, and goes so far as to associate with each of the seven varieties of didrachm a quadrilateral, or "brick-shaped", piece and a series of Aes Grave. With regard to the bronze "Bricks" (commonly called *aes signatum*), his argument is strained, to say the least, and is open to several serious objections which scarcely concern our present subject. If, however, as we suggest, the didrachms and Aes Grave were issued simultaneously in the same district there can be little question that together they practically form a single coinage.

¹³ "Coinage of the Pyrrhic War," *Num. Chron.*, 1924, pp. 181 ff.

102 grs.). The heavier are undoubtedly the earlier, and not improbably begin several years before the weight reduction took place. This view finds some support from the style of the coins, more particularly the heavy didrachms with obverse bearded head of Mars l., and reverse horse's head and corn-ear (Bab., vol. i, p. 10, No. 4), which are unquestionably a good deal earlier than any examples of the lighter group. (Cf. Mommsen, *Head*, Babelon, Grueber.)

During the period to which the didrachms may be reasonably assigned Livy mentions two alliances between Rome and Carthage, in 306 and 279 B.C. (Livy, ix. 43 and *Epit.* xiii). The emendation to Mr. Mattingly's dating which I venture to suggest, therefore, is that the didrachm (Mars bearded—horse's head) was issued about 306 B.C.; the other two varieties of heavy weight, viz. head of Hercules—wolf and twins (Bab. 8), and head of Apollo l.—prancing horse (Bab. 6), probably between 306 and 280 B.C.; while the five lighter didrachms belong to the time of the Pyrrhic war.

Of the eight series of Aes Grave connected with the Romano-Campanian didrachms, the heavy "Apollo" and "Janus-Mercurius" are of the heavy, or non-Roman, standard (norm about 350 grm.), and evidently belong to the period of the heavy didrachms.

The "Apollo" series is connected with the didrachms by its types, Apollo and horse's head; and as the latter contains a Punic allusion the issue may reasonably be connected with the alliance of 306 B.C. The "Janus-Mercurius", though unrelated by type to the didrachms, must on account of its weight-standard be more or less contemporary with the "Apollo" series.

The large number in which specimens of these two series occur suggests that their issue extended over a fairly long period, certainly longer than the first two years of the Pyrrhic war, which, according to Mr. Mattingly's dating, is the maximum time allowed for them. Far more probably they were issued between 306 and 280 B.C.¹⁴

Eventually both these series were reduced in weight. That is to say, the local Campanian standard was abandoned in favour of the Roman. At the same time the "Janus-Mercurius" series was brought into relation with the didrachms by the addition of the *falx* as a symbol on all denominations.

The connecting types between the Campanian Aes Grave (Roman standard) and the lighter didrachms are :

Head of Roma in Phrygian helmet—Didr. (Bab. 7).

As, "Wheel" series (Gar. 39, 1).

As, Head both sides (Gar. 35, 1).

Prancing horse—Didr. (Bab. 32, 37).

Triens, "Wheel" (Gar. 39, 3).

Head of Apollo r.—Didr. (Bab. 37).

As, light "Apollo" series.

Dog walking—Small bronze ($\frac{1}{2}$ Litra?), (Bab. 42).

Quadrans, "Wheel" (Gar. 39, 4).

Symbols—Club, Didr. (Bab. 32).

All denominations of Roma in Phryg. helm. series
(Gar. 35).

¹⁴ Aes Grave must have been adopted in Campania very shortly after its introduction at Rome. To postulate an interval of something like thirty years, as Haeberlin's theory necessitates, is inconceivable. If we are right in dating the first Roman issue about 311 B.C., or soon afterwards, it is reasonable to place the early Campanian issues appreciably near 306 B.C.

Falx, Didr. (Bab. 34).

All denominations of light "Janus-Mercurius" series (Gar. 36).

From this comparison we may conclude—(1) That when the Campanian Aes Grave was brought into harmony with the Roman weight-standard a corresponding reduction was made in the weight of the didrachms. This seems to have happened early in the Pyrrhic war; probably about 280 B.C. (2) That since the series of Aes Grave related to the didrachms are all of full Libral weight, this standard must have been in force, at any rate, down to 275 B.C.

Towards the end of the Libral period two minor changes occur in the Roman series, i.e. (1) the "Prow" is turned to left instead of to right, and (2) the Uncia disappears.

The change of type seems to possess no special significance, and evidently does not denote any change of standard, although very shortly the coins show a tendency to lose weight. The rarity of specimens with "Prow to left" indicates, moreover, that the issue was of short duration.

The Uncia seems to have disappeared simultaneously from the Roman and Campanian systems. It is absent from the "Wheel" series, which, for this reason, cannot very well be dated earlier than 275 B.C.

But though the *cast* Uncia ceases, it is replaced very shortly, both in Rome and Campania, by a *struck* Uncia, weighing about half an ounce, thus indicating an As of 6 ounces. The struck Uncia, as we shall show, cannot precede the Denarius (268 B.C.) by more than two or three years at most. Therefore the disappearance of the Libral As, which evidently

synchronizes with the introduction of the struck Uncia, must have taken place sometime between 275 and 268 B.C., and it seems reasonable to suggest that the date is about 272-271 B.C.

Weight Reductions.

Within the space of rather less than a century from the date of its introduction the As had fallen from a pound to an ounce in weight.

The bare fact is simple enough. But to determine when and how the successive stages of the decline were reached is the crux of the study of the Aes Grave. And here, needless to say, we are confronted by a number of divergent theories, of which some notice must be taken in passing.

First comes Pliny's statement, supported by Varro and Verrius Flaccus, that the As was reduced from a pound to two ounces sometime during the First Punic War.¹⁵ Literally this was not the case, as the coins themselves show. But as no intermediate standards between the Libral and the Sextantal appear to have been recognized officially, the statement may be said to contain a substratum of truth.

Mommsen accepts Pliny's date for the Sextantal reduction, but maintains that the Libral As fell suddenly to 6 ounces, and in 268 B.C. to 4 ounces. With this Grueber is mainly in agreement.

D'Ailly and others suggest that a series of reductions, which they distinguish as Semi-Libral, Triental, Quadrantal, and Sextantal, occurred at more or less regular intervals, the last being reached in 268 B.C.

¹⁵ Pliny, *N. H.* xxxiii, 13; Festus (*De Verb. Sig.*, s.v. *Sextantarii*) appears to confuse the Sextantal and Uncial reductions, and assigns the former to the Second Punic War.

Samwer and Bahrfeldt do not accept the Semi-Libral and Quadrantal reductions, but maintain that by the time of the war against Pyrrhus (280-275 B. C.), the As had fallen to the weight of a Triens, and in 268 B. C. was further reduced to that of a Sextans.

Haeberlin places the Semi-Libral reduction in 286 B. C. and the Sextantal in 268 B. C.

Before attempting to reconstruct the chronology of the Roman coinage during the first half of the third century B. C. we must clear the field of such artificial terms as "Triental" and "Quadrantal", which are merely concessions to modern numismatic theory, and have only a superficial application to the coins.

First to take the more general evidence of the coins.

It is well known to every collector of Aes Grave that specimens of the Roman "prow" series of Libral weight are far commoner than those of reduced weights. The so-called "Semi-Libral" Asses are decidedly rare—at least ten times as rare as the Libral. Those of still further reduced weights are rather less rare than the Semi-Libral. But specimens of the Triens and Quadrans of these reduced standards are almost unobtainable.

The inference is fairly obvious. The As maintained its original, or approximately its original, weight for a fairly long period. But when the decline set in, the reduction of the As was extremely rapid. With only the briefest transition its weight dropped to a half; thereupon the As degenerated into a coin of indeterminate standard, fluctuating in practice between 4 and 2 ounces, until it was eventually superseded by struck Asses of definitely Sextantal weight.

Next, on the basis of this general view, let us see

how far a more exact chronology can be arrived at by examining the coins of the period in detail.

We have already given reasons for believing that from about 311 to 271 B.C.—a period of forty years—the Roman As maintained approximately its Libral weight. Towards the end of the period, however, the weight shows a tendency to fall. But in or about the year 271 B.C. there occurs an almost sudden drop to a half. This is generally described as the "Semi-Libral" reduction.

Here Dr. Haeberlin's elaborate theory calls for passing comment. He maintains that the As was reduced from a normal weight of 273 grm. (Oscan) to 136.5 grm., but that the fractional denominations from the Triens downwards were issued at half the *Attic* standard (i.e. Triens = 54.5 grm., &c.). Thus the result was a decimal weight-relation between the denominations, although the coins continued to bear duodecimal marks of value. According to Dr. Haeberlin, this complicated arrangement was an attempt to strike a compromise between the coinages of Rome and Campania.¹⁶

The ingenuity of this theory is undeniable; nevertheless it is open to serious objections.

(1) Since the weights of the coins are so variable it is hazardous to make deductions of a highly particularized nature from them. Moreover, the ascertained weights of specimens (cf. Haeberlin's tabulation) do not altogether go to support his theory, e.g. the average weight of the Semis is shown to be actually higher than the norm which he suggests!

¹⁶ *Metrol. Grundlagen*, pp. 104 ff.; see also Hill, *Hist. Rom. Coins*, p. 21; and "Roman Monetary System", *Num. Chron.*, 1918, p. 162.

(2) Casting is too uncertain a method of coin-production to render so intricate a system of weights possible. And had it been possible, it would have been utterly at variance with Roman modes of reckoning.

(3) So long as the coins retained their duodecimal marks of value it is difficult to conceive by what process they could have been reckoned decimally. Assuming a decimal system was introduced, no explanation is given as to why within a year or two the coins are reckoned duodecimally, as if nothing had happened.

(4) The inherent improbability of a change from the Oscan to the Attic standard has already been commented on. But that both the Oscan and Attic standards were dovetailed into one system, in the way Haeberlin suggests, seems to exceed the bounds of credibility.

In reality the change, or "reform", made in the Roman coinage about 271 B.C. seems to have been a comparatively simple affair. Nevertheless it possesses certain features of importance.

(1) It was Rome's first step towards the abandonment of her cast coinage. That is to say, by the reduction of the As to half its weight it lost stability, and soon became a token coin of no fixed standard. Thus the cast As ceased to be an intelligible factor of the monetary system, and in natural course became extinct.

(2) By issuing the smaller denominations, Sextans and Uncia, as struck coins we see Rome's policy of gradually substituting a new species of coinage for the inconvenient cast pieces without dislocating the system unduly.

It seems reasonable to suggest that the "Semi-Libral" reform was not occasioned by state bankruptcy or any financial crisis, but was a perfectly natural, though clumsy, development, prompted by a desire to expand Roman commerce. That is to say, so long as Roman trade was confined to Central Italy the cumbersome Aes Grave served as a medium of exchange, but when regular negotiations were opened with the Greco-Italians, Sicilians, and other peoples around the shores of the Mediterranean, Rome found it necessary to adopt a more convenient form of money, and one which would interchange more readily with the Greek coinages.

The failure of Pyrrhus had added in no small measure to the prestige of Rome. In 273 B.C. Ptolemy Philadelphus entered into an alliance with Rome. In 271 B.C. friendly relations were opened with the Mamertini and with Hiero of Syracuse, from whom Rome received corn supplies. Not improbably the introduction of struck coins was the first attempt on the part of Rome to bring her coinage into line with the bronze currencies of her allies.

The Roman Sextantes and Unciae bear a stylistic resemblance to the contemporary bronze of Bruttium, the Mamertini, and Hiero of Syracuse. Possibly, too, in the production of her new coins Rome was to some extent indebted to craftsmen imported from these southern districts.

The next date on which our chronology hinges is 268 B.C., when, as we are told circumstantially by Pliny and Livy,¹⁷ the Denarius was introduced.

¹⁷ Pliny, *N. H.* xxxiii. 13 ". . . quinque annis ante primum bellum Punicum." Livy, *Epit. lib.* xv.

The period 271-268 B.C., which opens with the "Semi-Libral" reform, is really one of transition from the monometallic cast coinage to a newer system which combined the metals silver and bronze. But though it is clearly stated that the Denarius was equated to 10 Asses, we are left in the dark as to what particular stage of reduction the As had reached at the time.

It is fairly obvious that no satisfactory adjustment between silver and bronze was arrived at until the Denarius was made equal to 10 "Sextantal" Asses, which gives a ratio of silver to bronze as 120:1. Hence most modern writers have not been able to resist the temptation to assign the struck Sextantal Asses to 268 B.C. But as Pliny and the ancient authorities state definitely that the Sextantal As began during the First Punic War—as if to discountenance the obvious conclusion which has nevertheless gained credence—it is worth while trying to discover which view is supported by the evidence of the coins.

(1) To the period 271-268 B.C. undoubtedly belongs a remarkable series of cast multiples of the As, viz. *Decussis* (10 Asses), *Tripondius* (3 Asses), and *Dupondius* (2 Asses). The *Tripondius* and *Dupondius* also occur in the "wheel" series assigned to Latium-Campania, and of reduced weight in series of Volaterrae, and elsewhere in Etruria. The *Decussis*, however, is peculiar to Rome.

In effect, the *Decussis* is a bronze Denarius. But as coins of this denomination could have served no practical purpose *after* silver Denarii were introduced, it may be assumed that they were issued shortly before. The general uniformity of their style suggests that

their issue cannot have extended over more than a year or two at the outside. Their weights, however, vary considerably (e.g. Kircherian, 1,106.6 grm.; Paris, 1,091.5 grm.; Collegio Romano, 1,074 grm.; Pesaro, 721 grm.; Gneccchi, 680 grm.; B.M., 653 grm.).

Of these the heaviest implies an As of about 4 ounces, and the lightest an As of just over 2 ounces, the average weight of the implied As being about $2\frac{1}{2}$ ounces.

(2) The struck Sextantes and Unciae, introduced, as we have suggested, about 271 B.C., were soon reissued at approximately half their weights,¹⁸ and the denominations Triens and Quadrans added to the series.¹⁹

It is evident that this reissue was made prior to the Sextantal reform, as the weights imply a unit of about 3 ounces. These coins must, therefore, be placed either just before or contemporary with the Denarius. The latter arrangement certainly appears the more natural.

(3) Mommsen²⁰ points out that when Brundisium was made a colony in 245 B.C. its coinage was instituted on a "Triental" standard. Hence he argues that at this date the same standard must have been in force at Rome. But as the Brundisium coinage

¹⁸ Grueber has confused these two issues by placing them together (cf. B. M. C., vol. i, pp. 20 ff.). Although specimens of the earlier Sextantes frequently fall below an ounce, there is a clearly marked division between them and the Sextantes of the second issue. This, however, Grueber notes. On the Unciae of the first issue the head of Roma is to left, on those of the second, to right.

¹⁹ For some reason, not easy to explain, the Triens and Quadrans are rare coins, especially the latter, and appear to have had a short issue; whereas the Sextans and Uncia were evidently struck in large quantities.

²⁰ *Hist. mon. rom.*, vol. ii, p. 4.

consists of small denominations only, the inference may not be wholly justified. However, there seems no doubt that the standard officially recognized was higher than the Sextantal.

(4) The non-Roman, or collateral, *aes* shows pretty certainly that cast coins continued to be issued after 268 B.C.—e.g. the cast coins of Firmum are probably not earlier than 264 B.C., at which date Firmum became a colony. The extensive cast coinages of Etruria do not begin till after 271 B.C., and undoubtedly continue for several years.

The foregoing evidence leaves little doubt that—(1) cast coins were issued by the Roman mint after 268 B.C. (2) When the Denarius was introduced the weight of the *As* had not fallen as low as the Sextantal. Its standard does not appear to have been fixed, but fluctuated between four and two ounces till the cast *As* disappeared. (3) In 268 B.C. the effective coinage consisted of the Denarius (perhaps also Quinarius and Sestertius) and the struck bronze Triens, Quadrans, Sextans, and Uncia, referred to above.

The question then naturally arises, if the *As* had degenerated into a coin of uncertain value, how could the equation of a Denarius to 10 Asses have any intelligible meaning?

Pliny's statement, "*placuit denarium pro decem libris aeris,*" gives rise to some difficulty. (1) If the Denarius = 10 *Libral* Asses (i.e. 4 scr. of silver = 2,880 scr. of bronze) the relative value of silver to bronze would be 720 to 1. While admitting that our evidence as to the relative values of the metals in Central Italy is very scanty, this ratio certainly seems disproportionately high. (2) If the *As* was suddenly

retariffed at a sixth of its former value, as Pliny suggests, a good deal of financial confusion would have resulted. It is not impossible, of course, that something of the kind happened, particularly at so critical a time as the First Punic War, but the diminishing weight of the coins seems to indicate that a more gradual, if less intelligible, method was adopted.

Whether or not the As in theory continued to represent a Libra, the fact is clear that by 268 B.C. the As in practice had shrunk to about 3 ounces or less.²¹

A somewhat different view may be suggested, namely, that the coinage of 268 B.C. may have been adjusted on the basis, not of the As, but of the Libra in relation to silver; the As being reckoned, as it actually was, at a fraction of a Libra of bronze.

This Libral mode of reckoning seems to have been in force in Campania, where the silver Didrachm probably equalled 3 Libral Asses.²² The reduction in the weight of the bronze coins would not change the relative values of the metals, and the "Quadrigratus" Didrachm, which circulated concurrently with the Denarius, would still have been worth 3 Librae of bronze (i.e. 6 scr. of silver = 864 scr. of bronze, thus giving the ratio of silver to bronze as 144:1). The

²¹ It is not impossible that a denarius exchanged for 10 Libral Asses, although it is inconceivable that this represented the relative values of silver and bronze. In 268 B.C. the current As weighed 3 ounces, or even less, and any Libral Asses that remained in circulation would have depreciated in currency to the level of the smaller coins; just as in Italy to-day the purchasing value of the nickel Lira is about 2½d., but silver Lire, which are still current, are worth no more than their debased successors.

²² See Hill, *Hist. Rom. Coins*, p. 12. Grueber's view that the silver scruple was equal to a Libral As (Attic) is highly improbable. He also miscalculates the ratio. (B. M. C., vol. ii, p. 117.)

Denarius of 4 scr. would, therefore, have been worth 2 Librae of bronze.

The average weight of the As, inferred from the Decusses, is about $2\frac{1}{2}$ ounces, which seems a fair average for the irregular Asses issued shortly before and after 268 B.C. An As of $2\frac{1}{2}$ ounces is approximately a fifth of a Libra, so that 2 Librae would represent the equivalent of 10 of these Asses.

Obviously an arrangement of this kind was far from ideal. But considering the practical difficulty of instituting a silver coinage without unduly disturbing existing monetary conditions, it is scarcely surprising if the Romans failed to hit upon the most scientific adjustment all at once. This was not attained till struck Sextantal Asses were introduced.

In passing, it may be pointed out that in all probability the first silver issues of the Roman mint were far less extensive than they are generally represented to have been; and that down to the latter part of the First Punic War the Denarius was comparatively a scarce coin. To discuss this in detail lies outside the scope of this article, but it tends to corroborate the view that the relation of the Denarius to the bronze was not wholly satisfactory.

It only remains to suggest a date for the introduction of the "Sextantal" Asses, by which time, we may well believe, the cast coinages of Rome and Central Italy had come to an end.²³ Mommsen's inference

²³ It does not necessarily follow that the degenerate cast Asses were issued continuously down to the introduction of the Sextantal As. That there were intervals of inactivity on the part of the Roman mint in the third century B.C., just as there were later under the Republic and Empire, is not only a reasonable hypothesis, but offers an explanation of several otherwise perplexing features of both the bronze and silver coinage.

from the coinage of Brundisium is that it cannot have occurred until after 245 B.C., almost at the close of the First Punic War, the period to which Pliny assigns the inauguration of the Sextantal standard.

Here a reference to history enables us to fix a date that is at any rate plausible. The final crisis of the war was reached just before the victory of Catulus at Aegusa (March 10, 241 B.C.). The fleet of 200 ships, manned by 60,000 men, by which the battle was won, was provided by private subscription. But for this purpose a special issue of money must have been necessary. Thus the institution of a new bronze coinage, consisting entirely of struck pieces, may reasonably be placed some time in the previous year (242 B.C.).

E. A. SYDENHAM.

CHRONOLOGICAL SUMMARY OF THE AES GRAVE.

B. C.	Rome (and probably Latium).	Other Central Italian districts.	Contemporary events.
<i>Circa</i> 311	<i>Aes Grave</i> issued at Libral standard. ("Prow" r.)		Crisis of Second Samnite war. <i>Duoviri navales</i> appointed at Rome.
306		<i>Didrachms</i> and <i>Aes Grave</i> issued in Latium-Campania.	
298			Third Samnite war.
294		<i>Aes Grave</i> issued in Apulia, Picenum.	
280		<i>Didrachms</i> reduced in weight. Campanian weight standard assimilated to the Roman.	War with Pyrrhus begins.
275	Libral series with "Prow" l. <i>Uncia</i> not issued.		Pyrrhus retires from Italy.
271	"Semi-Libral" As, &c. Struck bronze (Sext. and Unc.).	<i>Aes Grave</i> issued in Etruria. "Quadrigratus" didrachms.	
268	Multiples of As, <i>Decussis</i> , &c. Silver coinage. Cast Asses (4-2 oz.) Struck bronze of reduced weight.		
264			First Punic War begins.
242	(Cast coinage ceases) "Sextantal" standard adopted.		

V.

ADDITIONAL NOTES ON SILVER COUNTERS
OF THE SEVENTEENTH CENTURY.

[SEE PLATE IV.]

IN 1916 I was permitted to publish in the *Numismatic Chronicle* a study of the "Silver Counters of the Seventeenth Century". Within the years which have elapsed since this publication a few hitherto unnoticed specimens of small engraved portrait pieces have been discovered, a fact which may perhaps justify me in again claiming the attention of the Royal Numismatic Society to this subject.

Counters of Frederick, Count Palatine of the Rhine, and Elizabeth his wife.

I have recently acquired an unpublished silver jetton portraying Elizabeth, daughter of James I of England, with her husband the Elector Frederick, Count Palatine of the Rhine, the one on the obverse, the other on the reverse.

Let us first examine the inscription surrounding the portrait of Frederick illustrated on our PL. IV. 2, and the misleading title will be noticed. The legend reads: **FRIDERICVS D.G. COMES PALATINVS RHENI ELECTOR.** I say misleading because this title suggests a date prior to August 1619, when Frederick accepted the throne of Bohemia, or more properly, before the following November, when he was

crowned. The same absence of any regal title is observable on the side of the jetton representing Elizabeth, where the encircling words read: **ELISABETHA D.C. COMITISSA PALATINA RHENI**, see Pl. IV. 3. The portraiture and the dress suggest on the contrary a later date than that above mentioned.

The Princess was formally betrothed to Frederick on December 27, 1612; their marriage was celebrated on the 14th of February following, and the youthful pair, both born in 1596, are brought before us on many a medal commemorating their nuptials.¹ Neither do we lack prints and paintings showing the Prince at that time still beardless, and the Princess with her hair piled up in a very different style from the jetton now before us.

Dress is always a useful guide in a matter of date, and the shape of the ruff may be regarded as some indication of the changes in fashion from decade to decade. However, the custom of wearing ruffs continued through various exaggerated modes from the closely-fitting frill of Henry VIII to the "falling band" until the final supersession, in the middle of Charles I's reign, of this very uncomfortable article of dress, by the graceful collar first introduced into England by Van Dyck, *circa* 1630. But the changing shapes of the ruff cannot be taken as an infallible guide whereby to date medals or pictures, because several differing fashions ruled contemporaneously. We may nevertheless state that the form of the falling ruff worn by

¹ On the New Year's Day intervening between the betrothal and the marriage Frederick presented to each of Elizabeth's ladies-in-waiting a medal bearing his portrait, but these so far have not been identified.

Frederick in the portrait under discussion is that which is seen in nearly every picture of him from about the year 1621 to 1629, when this style entirely disappears from his prints and pictures. The same may be said of the plaited lace frill worn by Elizabeth, high behind and meeting at the neck for a short way in front, and opening again to show the bosom below.

It will therefore be safe to assume that the date of the jetton lies within the third decade of the seventeenth century, although the coronation of Frederick on the 2nd of November and that of Elizabeth on the 3rd of that month in 1619 is ignored in the legend.

From the style of the engraving and the lettering employed one might suppose this little medallion to be a companion piece to the better executed of the well-known series representing James I and Charles, Prince of Wales (*Med. Ill.*, vol. i, p. 376, No. 372). The finest of these jettons were engraved about 1618-20, or possibly somewhat earlier, and they were continually reproduced with gradually ageing portraits of Charles, proving that the later types must have been issued after that Prince had succeeded his father on the British throne.

I ventured to suggest with regard to the better examples of these little silver portraits, that they were given singly as small presents rather than used as counters. At the time when my article in the *Numismatic Chronicle* was published, in 1916, I had never seen a set of this particular type enclosed in a contemporary box. I have, however, since met with one uniform set, a very fine one, which I believe to be as issued. I have indeed myself a box of the Carolean period containing a collection of thirty counters of

James and Charles, but in this case, although both box and counters are good, the latter range over a period of three or more years from the unbearded to the slightly-bearded type, and they must be regarded as a later collection rather than as evidence that these portraits were originally issued in sets. The frequency with which a single jetton appears in the treasure chest of an old country house leads me to adhere to my former impression of special presentation. If I am right, it might be possible that James I ordered as a pair to his portrait with that of his son, a companion medallion to be engraved, representing his daughter and her husband, perhaps to be sent to Spain or France, or some other Catholic country, where the titles of "King" and "Queen" as applied to Frederick and Elizabeth would not have been acceptable. It is known that James in 1623 sent a great number of jewels and valuables to Spain, when a Spanish match for Charles was under discussion, and we may glance at the possibility that the Infanta may have desired a portrait of her intended sister-in-law. James, never much in favour of his son-in-law's pretensions to the crown of Bohemia, may well have thought it time to drop as an obstacle to peace the regal titles which were obsolete after Frederick had been obliged in 1621 to retire a pensioner to the Hague. It is noted that Elizabeth, even in the first flush of her brief enjoyment of the throne, dared not, in the picture she sent over to her father, be painted wearing a crown.² It is even remarked that James, sending Sir Henry Wotton on

² Strickland's *Queens of Scotland and Princesses of England*, vol. viii, p. 112: "As her father denied her husband's regality, she dared not assume the antique crown of Bohemia as her head-dress."

October 14, 1620, on an embassy to Frederick and Elizabeth, forbade him to give her the title of Queen, so that the envoy offended her by inscribing his letters to the "Prince and Princess Palatine". When addressing her as "Your Majesty" he informed her that it was "with a solemn protestation that I give you this title and not as ambassador", and he compromised matters by speaking of Frederick as the "Crowned Elector".³ Even after the accession of Charles I, who laboured, so far as his limited means would allow, for the restoration of his sister's rights, this British King's efforts were directed towards the restitution of the Palatinate and the Electorship, not of the Bohemian crown.

In a letter addressed to Buckingham, who immediately after the death of James visited Elizabeth at the Hague, Charles speaks of the "Prince Elector Palatine our brother".⁴ Although invited to England on the death of her husband on 19/29 November, 1632, Elizabeth preferred to remain in Holland, where at the Dutch Court during the period of her exile she was always courteously addressed as "Majesty". It was not until immediately after the Restoration of Charles II to the British throne that Elizabeth was accorded in England the title of "Queen of Bohemia", and she purposely delayed her arrival in London until after the coronation of her nephew, so as not to embarrass him with questions of precedence. A some-

³ *Elizabeth of Bohemia*, by Mrs. Everett Green, p. 161, 2nd edition, with notes by Mrs. Lomas; see also *Sir Henry Wotton*, by Logan Pearsall, vol. ii, p. 194, note 1, Letter of Walter Balcanquhall, English chaplain at Prague, Oct. 14, O.S. 1620.

⁴ *Elizabeth of Bohemia*, p. 250.

what tardy recognition, however, of her late position came more than forty years after her own coronation in the order given by Charles II that a royal crown should be carried on a black velvet cushion before her body to the grave, and that the inscription on her coffin should read: "Princess Elizabeth, Queen of Bohemia, relict of Frederick by the Grace of God King of Bohemia".⁵

But in endeavouring to assign a date to our little medallion let us see how far the actual portraiture will guide us. Let us glance at Frederick's extremely pointed beard, like that upon his medals of 1632.⁶ With the exception of one print by Crispin Queboren, engraved in 1622, we find no presentment of the King of Bohemia with a "pique devant" or stiletto beard earlier than 1628, when Adriaen Van de Venne produced in grisaille a fine equestrian portrait with the pointed beard, and it is to this latter date that the fashion more generally belongs.⁷ Nevertheless, Crispin Queboren's print assures us that the Prince did sometimes wear a piqued beard in 1622. It is known that he shaved in March, 1622, to facilitate his disguise in a secret journey to the Palatinate, and he may have temporarily altered the shape of his beard on growing it again.⁸

In seeking for the earliest prototypes in prints we are by no means limiting portraits to the date of the

⁵ *Elizabeth of Bohemia*, p. 411.

⁶ *Med. Ill.*, vol. i, p. 263, No. 55.

⁷ No. 2499 in the Rijks Museum, when I saw it in 1924, by the courtesy of the Director, but the gallery is under revision, and the catalogue numbers subject to alteration.

⁸ *Elizabeth of Bohemia*, p. 195.

engravings. Firstly, these dated prints were usually copied from oil paintings bearing no date. Secondly, a picture which pleased was often reproduced in print form long after it had become obsolete in fashion. But a dated print often gives us the proof of the early existence of its prototype. In our former article⁹ we carried the portraits of Frederick and Elizabeth on the smaller counters to their prototypes in Willem van de Passe's "Family of James I", of which the two states were executed in 1624 and 1627 respectively.¹⁰ But the counters were probably not engraved until 1636, when Frederick had long been in his grave, and the prints of Willem van de Passe were not in themselves original portraiture, even in 1624. The well-known heads by Jacobszoon Delff¹¹ after Michiel Jansz van Miereveld, engraved in 1622 and 1623, had probably served van de Passe as models for his James I and his family, Delff being in Holland with the Prince and Princess, whilst Willem van de Passe had arrived in England in 1621-2. Being, therefore, dependent for the newest portraiture on an engraving after Miereveld, Van de Passe wisely neglected his own study of the year 1621, when he had executed a group

⁹ *Num. Chron.*, 1916, pl. V, No. 10. See also *Med. Ill.*, vol. i, p. 380, No. 282.

¹⁰ The date 1624 is fixed by the presence without obit marks of Ludovic, seventh child of Frederick and Elizabeth. He was born on August 21, 1623, and died on December 22, 1624. Edward, the eighth child, does not appear, so the print was probably engraved before the birth of the little prince, which took place in October, 1624.

¹¹ Delff, the son-in-law of Miereveld, was in the habit of reproducing this artist's pictures, and in this instance met with so much success that the Estates of Holland ordered 29 copies. See Franken's *L'Œuvre de Willem Jacobszoon Delff*, Nos. 8-10.

of Frederick, his wife, and five children, although this earlier portrait was signed by him as *ad vicum figurator*.¹² The new Miereveld, pleasing in dress and coiffure, persists in the second state of "James I and his Family", published after the accession of Charles I to the British throne, the figure of his bride, Queen Henrietta Maria, being introduced. Three extra children were also added to the list of James's grandchildren. It is noticeable that in neither version do Frederick and Elizabeth wear their crowns, which are held suspended over their heads by a cherub, a symbolism applied also to Charles during his father's lifetime. In the second state the young King and Queen of England are crowned; the regal titles are, however, accorded to Frederick and Elizabeth, but this suspension of the crown indicates, as in the little medallion, the attitude of England towards their pretensions to the throne of Bohemia.

We have seen that prior to their coronation the type of portraiture on our jetton is not found in prints, medals, or pictures. Elsbrack, it is true, shows Frederick with an incipient beard, and the base coinage issued by him as King in 1620 indicates this more strongly. However, the great proportion of prints by Crispin, Simon, and Willem van de Passe, by Renold Elsbrack, Francis Delaram, and Boëtius Bolswert, between 1613 and 1621 inclusive, and more particularly the medals executed at the time of the marriage, and

¹² Passe, however, continued to use this plate, adding more children as the royal family increased. The last state, under date 1632, is much reworked; very similar portraits exist by Queboren, Vaughan and Visscher, but the new Miereveld portraiture was evidently more popular, and gained a footing in England.

Simon van de Passe's engraved plaque of 1616, give us definitely an unbearded portraiture. Even the pictures and medals of the few short months of Frederick's reign, as that above mentioned from the hand of Elsbrack, are so slightly bearded as to discountenance any assignment of our little medallion to the period of Simon van de Passe's residence in England, although the engraving thereof is almost worthy of his signature. But he was joined *circa* 1620-21, and succeeded a year later at the court of James I, by his brother Willem, who was not greatly his inferior in skill, and to his workmanship I might perhaps venture to attribute the double portrait.

Whilst looking through the collection of engravings illustrative of the royal pair in the Print Room of the British Museum, I came across a line engraving which from its retrograde inscription is obviously taken from a plate which is not designed for printing, but like the Passe medallions, an engraved metal disk, probably silver, and complete for presentation as a plaque. This print, see **PL. IV. 1**, is no doubt by a different hand from our little medallion, but the dress, even to the substitution of the Garter¹² ribbon and the lesser George for the more usual collar of the Order, suggests that both are slight variants from the same portrait by Miereveld, Honthorst, or Moreelse. The larger metal plate has in the field the monogram **MP** appearing reversed in the print, and it

¹² The Garter was conferred on Frederick on December 21, 1612, in private, because of the illness of James, who, however, invested him from his bed with the ribbon and star. At the public investiture, on the following February 7, the King gave him a splendid collar studded with diamonds.

has been suggested to me that this stands for the signature of the painter "Miereveld pinxit", or possibly Paul Moreelse, for this artist sometimes signed P.M. in monogram, although I have not met with it precisely in the above form. But, laying aside this interesting print, the nearest prototype that I have personally seen to the jetton is an oil painting attributed to Honthorst in the collection of Canon Gilbertson, undated, but closely followed so late as 1629 by a dated engraving from the hand of Willem Hondius. Elizabeth follows exactly a picture belonging to Viscount Cobham. Her plumed head, her carcanet of gold and diamonds, probably that presented to her on her marriage by the Estates of Holland, her "ouche" or clasp¹⁵ surmounted by a jewelled crown, her pearls,¹⁶ her ear-rings, and the pendant plait of hair are all reminiscent of the Miereveld in Lord Cobham's gallery at Hagley Hall, and it may easily have served Willem

¹⁴ Without making any definite assertion that the jetton is the work of the Passe school, I may call attention to the fact that Simon van de Passe engraved at least one portrait after Miereveld, namely, that of Thomas Howard, second Earl of Arundel and Surrey, in 1616.

¹⁵ This clasp appears in nearly every picture of Elizabeth, and a second, not unlike it, is sometimes seen upon her arm. An early example of this is in a print with standing ruff, by Bolswert after Miereveld, in 1613; both ornaments may be seen in the Hagley picture, and are visible in Delf's print.

¹⁶ In most paintings the Princess instead of the collar wears a triple string of pearls on her bodice, presented on her marriage by the City of London. Examples may be seen in the National Portrait Gallery and the miniature at Windsor Castle. Although the royal crown and many papers of importance were lost in Elizabeth's hurried flight, most of her portable jewels had already been sent to Holland with her son Prince Frederick Henry, who preceded her there in September, 1620.

Jacobszoon Delff for his engraving in 1623.¹⁷ The hair ear-ring has by some writers been thought to point to the remembrance of a relation recently dead, such as Elizabeth's champion, Christian of Brunswick, who died in 1626, and from the circumstance that the Princess wears a single dark strand in her ear, her picture at Hampton Court has been tentatively ascribed to that year.¹⁸ But we may remark that such a plait is noticeable in nearly all Elizabeth's portraits from about 1621 onwards, and is prominent in her miniatures by Peter Oliver at Windsor Castle and in the Buccleuch Collection dated in that year. Indeed, this plait, either worn as an ear-ring or grown directly upon the head, was a fashion affected by both men and women from the year 1606, and developed into the more graceful lovelock worn with the Van Dyck collar in the third decade of the seventeenth century. In fact, turn we to Peter Oliver with his admirable and varied miniatures of Frederick and Elizabeth, turn we to prints which help us with their dates, turn we to Van de Venne, to Ambrosius Paix, to Moreelse, turn we to Miereveld or Honthorst, the two most celebrated painters of the Palatine family, we may be sure that the little medallion cannot be, as its legend implies, prior to the coronation of 1619, but must be dated at the earliest 1622 and at the latest 1629. The most probable period would be between 1623 and 1628. I say 1629 at the latest, because at this time the style of dress completely alters, and the later prints of both

¹⁷ Franken, No. 10. This portrait is the companion engraving to that of Frederick which was printed on satin for the Estates of Holland at 4 florins the pair. See Note 11.

¹⁸ No. 458 at Hampton Court.

Frederick and his wife are swayed by the fashions brought in by Van Dyck continuing after the death of the Prince in 1632. The plainer garments assumed by Elizabeth in her widowhood were never discarded by her, and are outside the limits of our discussion, seeing that there appears no reason to believe the medallion to be a memorial.

*Gustavus Adolphus, King of Sweden, and his wife
Maria Eleanora.*

I have lately acquired a somewhat rare medallion (size 1.10 in., **PL. IV. 4**) bearing on the obverse a portrait of Gustavus and on the reverse that of his wife, the daughter of the Elector of Brandenburg, to whom he was married in 1620.¹⁹ A smaller and better known jetton of the same type is described in *Medallic Illustrations of British History*,²⁰ and is there reckoned to be one of a set of counters similarly surrounded with a broad band with incuse lettering. Amongst these are jugate portraits of Charles and Henrietta Maria, *Med. Ill.*, vol. i, p. 378, No. 279, which I noticed in my former article on p. 168. The larger portrait of Gustavus is unpublished in England, but Dr. Hildebrand mentions two analogous, although slightly varying, examples known to him in Sweden.²¹ The obverse inscription + **CVST.**

¹⁹ Maria Eleanora was the mother of Christina, who succeeded her father on the Swedish throne in 1632.

²⁰ *Med. Ill.*, vol. i, p. 379, No. 280, figured on Pl. xxxiv, No. 8.

²¹ Bror Emil Hildebrand's *Sveriges och Konunga Husets Minnespenningar*, p. 238, No. 304, note *. One variety noted is in the collection of the Swedish Riks Banken, and the other, in that of Herr Wedberg, more nearly resembles my own specimen. The measurements of these jettons agree with those of our large counter.

ADOLP. D.G. SVEC. GOT. WAND. REX. M. P. F.D.E. ET. C. I. DO. might apply to any date subsequent to 1617, when the Tsar surrendered Ingria and Nöteborg, the keys to Finland, into the hands of the Swedes. The legend on the reverse concerning **MARIA. ELEANORA.** refers to the same possessions, but the date of her marriage carries us to a later period, 1620 at earliest. The absence of any reference to Livonia suggests that the medal was executed prior to 1629, when the truce of Altmark confirmed Gustavus in his Livonian conquests.

Dr. Hildebrand gives no date, but carries the jetton to its prototype in a larger medal (Hildebrand, No. 304) bearing the same inscriptions and almost identical portraits. The medal being in high relief whilst the jettons are engraved, there is no suggestion that they are by the same artist. Neither, giving my opinion for what it is worth, do I think that the larger counter is by the same engraver as the smaller examples; the little counters being school-pieces produced in quantities, whilst the larger is a quite satisfactory little medallion in itself, although not nearly so well engraved as that of Frederick and Elizabeth, which we have just discussed.²² Again, we must note that another small counter of Gustavus (described in *Medallic Illustrations*, vol. i, p. 382, No. 285) is a slighter and less finished performance. It bears the same portrait of the King, but it lacks the surrounding legend, and the cross-hatching of the reverse is very mechanical. This reverse, however, gives many of the titles borne by Gustavus, although here again no

²² See *ante*, pp. 78 ff.

reference is made to Livonia. The date of this jetton is 1632, the year of the King's death. The careful editors of *Medallic Illustrations* stated their belief that it belonged to a set engraved in 1638, and they referred the figures '32 to his demise only.²³ We cannot therefore feel that the similarity in portraiture helps towards dating its prototype on the larger counters. There is in the British Museum a uniface medallion giving a different portrait of Gustavus, and measuring 1.9 in. Here again we have a different hand, and the signature W.S. has been interpreted in *Medallic Illustrations* as possibly standing for the Dutch medallist Walter Schultz. It resembles in style of engraving a rare and large version of the James I and Prince Charles jetton similarly signed in the Cochran-Patrick collection.²⁴ The medallion of James and Charles is bearded, and would normally be dated about 1622-1623. But Mr. Forrer, in his *Dictionary of Medallists*, tells us that in 1676 Schultz published a work on travels in which he engraved several plates, and it is more probable that the medallic works attributed to him were memorials.

It is clear that all the jettons were copied and re-copied, but one would be inclined to think the large counter of Gustavus, like that of Frederick and Elizabeth, preceded the smaller and less well-engraved versions. Judging, therefore, from the inscription and from the portraiture of the Swedish hero at the time on his coins and medals, our medallion, which cannot

²³ See also "Silver Counters", *Num. Chron.*, p. 181, where by an unfortunate misprint the page referring to *Med. Ill.* is given as 388 instead of 382.

²⁴ See *Medallic Illustrations*, vol. i, p. 376, No. 273.

be before 1620, is probably of 1628 or 1629, whilst, as we have seen, the smaller counters are thought to be *circa* 1630 and 1638 respectively.

The costume of the Queen at first sight calls for an earlier date, about 1626, the time to which I should personally have assigned the jugate counter of Charles I and his Queen, Nos. 278 and 279, but the high Medici collar worn by Henrietta at the time of her marriage persisted, especially abroad, and a charming little leaden plaque in the British Museum, representing Christina of Sweden, the daughter of Gustavus, in 1634, gives evidence of its popularity even after her accession, for she wears this type of collar.²⁵

The London Cries Counters.

Mr. L. A. Lawrence, writing in the year 1918,²⁶ published in the *British Numismatic Journal* an article on a set of counters representing the Street Cries, now in the London Museum, but then in his possession. He was good enough to refer to some remarks made by me on the same subject two years previously.²⁷ Opportunity has recently occurred of discovering a little more about these counters, and of adding one more to the collection. At the time of writing my article in the *Numismatic Chronicle* I regretted my inability to discover the original designs of the counters

²⁵ Christina was a minor at the time of her father's death and she retained his portrait on her coins instead of substituting her own, until 1634. The lead plaque to which I refer is figured by Baron de Bildt in his *Médailles de Christine de Suède*, Pl. I, fig. 1, but the example in the British Museum is round, whilst that illustrated by Baron de Bildt is oval.

²⁶ *British Numismatic Journal*, vol. xiv, pp. 49-55.

²⁷ *Num. Chron.*, 1916, pp. 184-186.

in prints, a task which Mr. Lawrence subsequently was successful in performing at the British Museum, whilst I in my turn, by the kind co-operation of Mr. Owen Morshead, Fellow and Librarian of Magdalene College, Cambridge, identified a similar series in the Pepysian Library. Unfortunately both sets of plates are undated, so that our knowledge of the time when the counters were made still depended mainly upon the internal evidence of style and fashion. A third set of prints has now come to light in America, and these, although also undated, are earlier impressions, and in many ways more consonant with the mid-seventeenth century date, to which we hope to assign the counters. I trust my readers will turn to Mr. Lawrence's excellent illustrations in the *British Numismatic Journal* both of the counters, on his Plates I and II, and of the British Museum set of prints facing his page 52. He also reproduces other little broadsheets of the "cries" on his Plates A to E. I hope also that they will read his convincing arguments, but his kindly reference to my expressed opinion as to the age of the London Cries counters must be my excuse for trying to draw a yet narrower line about the date of issue.

I had suggested that the fashions, especially the rounded bodices and turned-down collars of the women portrayed upon the counters, were fairly represented by the period when Wenceslaus Hollar published his *Ornatus muliebris Anglicanus* in 1640, his *Theatrum Mulierum* in 1643, or his *Aula Veneris* in 1644. Indeed, the hat so frequently found in the *Ornatus Muliebris* of 1640, and worn by his city wife so late as 1649 in a dated print of that year, is that appearing upon

several of the hawkers on the counters. But we must admit that the garments of the working people changed their fashion less rapidly than those prevalent at Court, and there is little difference between such pictures in Elizabethan and Jacobean times, i.e. between the *Omnium poene gentium imagines* drawn by Rutus for Hadr Danman Gandavus in 1577 and a small issue of early prints showing forth the Street Cries, and assigned, mainly on account of the various vendors mentioned in Jonson's *Silent Woman*, to the year 1609, when the above play was published.²⁸ We may, moreover, carry the matter further into Carolean days, for the maps, drawn for Speed's *Theatre of the Empire* in 1610, were still used by Abraham Goos in his revised plates in 1646, the costumes of the figures remaining unchanged.

A broadside in the Luttrell Collection²⁹ in the British Museum persists in much the same dress for country people in 1678.

We turn, however, to the superior style of engraving and the design of the floral reverses on the counters,

²⁸ See Charles Hindley's *History of the Cries of London*, published 1881, p. 31, and Knight's *London*, published 1841, vol. i, p. 132. Of this set, which does not resemble the counters, the sheet in the British Museum Print Room contains plates of twelve hawkers. But at the Pepysian Library at Magdalene College, Cambridge, there are, as I am courteously informed by Mr. Morshead, twelve additional cries making twenty-four in all. The extra plates are: The Crier, Kitchen Stuff; The Fidler's Good-morrow; Wainfleet Oysters; Chimney Sweep; Rosemary and Bays; Bread and Meat for Poor Prisoners; Buy Ropes of Onyons; Ends of Gold or Silver; Hot Pudding Pies Hot; Buy a Matt for a Bed; Hot Codlings. Those in the British Museum are illustrated on Mr. Lawrence's Plate A, facing p. 32, *British Numismatic Journal*, vol. xiv.

²⁹ Narcissus Luttrell's *Collection of Broad-sides*, vol. ii, folio 52.

so reminiscent of the work of Thomas East and other silversmiths in the reign of Charles I, with an instinctive feeling that the mid-seventeenth century rather than the Restoration period saw their issue. I had even placed them earlier, on account of the open backgrounds, which carry us back to the days of Elizabeth, whilst the floral designs remind us of the decorative work of Theodore de Bry. The last-mentioned artist was, however, a foreigner, whilst the counters appear to be of English workmanship, and having, since the publication of Mr. Lawrence's valuable monograph, had the opportunity of studying the designs trade by trade, I cannot help thinking that I ought to have suggested 1640-1650 as perhaps the earliest rather than the latest possible date of issue, and with this the costumes agree. The engravings illustrated by Mr. Lawrence, the set in the British Museum, are printed on paper of somewhat later manufacture, and were at one time provisionally dated to the last quarter and not to the middle of the seventeenth century, partly on account of a title-page in the same portfolio with them, but not necessarily belonging to this particular set of London Cries. This title-page bears the impress of R. W. White as engraver and John Overton as issuer.³⁰ Mr. Lawrence, however, suggested that this title page admittedly and undoubtedly was by a different hand. Although amongst the loose sheets in the portfolio of caricatures, &c., when catalogued by the British Museum authorities in the early part of the nineteenth century, it does not correspond in workmanship, paper,

³⁰ The Overton firm worked at various addresses for a considerable time. John Overton's period at the White Horse, without Newgate, may be roughly placed from about 1670 to 1690. See Arber's *Term Catalogues*. Robert White was not born until 1645.

or even in size with the rest of the set. It at first crossed my mind that the plates, somewhat worn as they are, might however have been reissued by Overton with a title page engraved by White for the purpose. With these arguments my friends in the Department of Prints and Drawings are cordially agreed, and indeed Mr. Hake pointed out to me the very tired state of the prints in corroboration of the theory that earlier pulls probably existed. He also suggested that even the copper plates themselves might not be the first set engraved, for the clothes worn by the itinerant vendors on the counters are in some cases earlier than those on the plates, and both might be from a common original of an earlier date. The sleeves, for instance, of the onion seller on the jetton follow the Jacobean fashion with rolled tops, whilst in the prints they are plain. As regards the British Museum set of "Cries", and the paper on which they are printed, I tried to follow up the matter of watermarks, namely, large branches of grapes sometimes extending from one print to another, and thus giving us an idea of their sequence. The grapes are a very common watermark, but I found none exactly of this size, the nearest being of 1659 and 1664 respectively. The study of the watermarks was, however, not unremunerative, for with the kind assistance of Mr. Hake I learned that the Overton title-page with its watermark, a lis, is on the identical paper used by Overton in a small set of sheets copied from Tempest's *Cryes of the City of London*, a set drawn by Marcellus Laroon, and originally published in 1688-1689.³¹

³¹ Arber's *Term Catalogues*, vol. ii. Forty plates in Hilary Term, 1688, twenty more in Michaelmas, and by Trinity Term, 1689, the

Tempest reissued the set in 1709, or according to some authorities in 1711, after the death of Laroon, and as the name of John Savage appears on one of the plates Mr. O'Donoghue suggests that he was perhaps the engraver from Laroon's drawings. Tempest died in 1717, and the plates were copied and recopied, and a smaller version was at some time issued by Overton, and to that version the title-page apparently belongs. But the fashions portrayed are much later, and throw no light on our counters any more than several other sets of cries in the Museum, one issued by Robert Pricke in 1655, and yet another by Overton undated. John Thomas Smith collected such plates, and etched copies of them with the intention of publishing a volume on this subject, but died leaving the material in the hands of J. B. Nichols, who published the *Cries of London* in Smith's name in 1839. Smith or Nichols ascribed to Overton certain prints which cannot be traced to him, and hence the mistake about the frontispiece probably arose.

But to return to the counters and their possible prototypes.

With respect to the set in the Pepysian Library at Cambridge, I am courteously informed by Mr. Owen Morshead that these prints, like those in London, are cut close to the margin, and were arranged in a book in 1700, not, however, in the same order as the numerals engraved on the counters would lead us to expect, nor in the sequence suggested by the fitting of the watermarks on the loose sheets in the Museum, nor again according to the arrangements followed by

entire seventy-four. Arber repeats the advertisement in 1709 in his third volume.

Charles Hindley in describing a third set of the *London Cries*,³² at one time in the Bridgewater Collection.

Let us now examine this third, or rather I should call it, first set, for therein I find, from photostats kindly sent me from America, an earlier series, perhaps the prototypes of our counters.

Mr. Lawrence referred to the list in Hindley's *Cries of London* obtained from a set of plates in the collection of the second Earl of Bridgewater, who died in 1686, and at the time Mr. Hindley wrote in 1881, the book containing the prints was still at Bridgewater House. From Lord Ellesmere's library it passed in 1918 to that of Mr. Henry E. Huntington, but I was informed on reference to Mr. Strachan Holme, the librarian at Bridgewater House, that there was a press catalogue made by him of the books, and that I could see it at the British Museum.³³ I there noted that these prints when in Lord Ellesmere's possession were assigned to the reign of Charles I.³⁴ My suspicions were aroused by the fact that Hindley had described the Bridgewater tenth sheet as a vendor of "peravinkells", whilst the woman in the London and Cambridge plates calls "New Wallfleete Oysters". Again, a counter, see Pl. IV. 5, missing from Mr. Lawrence's series, "Sum broken Breade and Meat", the cry of those collecting for poor prisoners, found its way into my cabinet, and the position of the suppliant varying slightly from the known sets

³² *A History of the Cries of London*, p. 65.

³³ British Museum Library, A. R. 33. *A Catalogue of the Books of Francis Granville Egerton, 1908.*

³⁴ Under "L", "London Cries, No. 22".
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suggested further inquiries. I therefore felt myself justified in following up the Bridgewater clue, and addressed myself to the courteous Librarian of the Henry E. Huntington Art Library at San Gabriel. Dr. Watson-Cole in response took infinite trouble, sending me at once photostats of the Museum's descriptive catalogue, with an exact list of the titles of the engravings. He also was able to tell me that the book was bound in old calf, with several pamphlets of the years 1640, 1641, and 1642, being as he deemed an attempt on the part of an early owner to bind together works of about the same date. The works thus bound in one volume are: *The Ages of Sin*, n.d., Wenceslaus Hollar; *Parliamentary Mercies, All the Memorable and Wonderstriking*, 1641-1642; W. Hollar's *Ornatus Muliebris Anglicanus*, 1640; *The Manner of Crying Things in London*, n.d.; and *A Poke of Knaves*, n.d. The book was at the moment in transit to the new home of the library at California, but, on its arrival there, I have to record my gratitude for a complete set of photostats of the 32 plates far finer in line and detail than those with which we were before conversant. The figure of the periwinkle crier is the same as that afterwards used for the oyster seller, but much better engraved, and clearly on some accident a new plate was made for the later set with a more popular cry. Other varieties prove that the plates became badly worn as time went on. Thus the print of "Cheese and Cream" has been reworked on the bodice of the hawker. Or, again, the cry of one of the fish vendors, "Macarell—new Maca-rell", has been distorted, the hyphen, intended to show that the note should be held, being misunderstood by the restorer, and

although still just visible converted into a *k*, reading "macakrel". Given then that we have the archetypes of our counters formerly in the Bridgewater, now in the Huntington Collection, and that these appear to be not later than the first half of the seventeenth century, let us glance for a moment at the cries themselves, and compare them with those immortalized in the plays or "fancies" of that period. Let us turn to the several musical settings by Weelkes, Orlando Gibbons, Deering, Cobbold, and others. Our task is made easy by the account recently given us by Sir Frederick Bridge, shortly before his death, in his *Old Cries of London*. Let us see whether the cries themselves prove a stumbling-block to the date we have assigned to the Huntington, late Bridgewater, engravings, a date with which technique, lettering, and spelling agree, a fact more strongly brought out in the floral reverses of the counters.

Apart from duplicates we have at present twenty-four differing designs out of the usual complement of thirty-six counters. Twenty of these jettons are agreeable to the prints, and the irregular numbering of the jettons does not accord with the loose unnumbered prints as arranged in the Pepysian and in the Bridgewater collections. The highest number engraved on a counter is 34, and the design it bears, as also that on No. 33, are amongst those not known in the prints, of which only thirty-two form the series. The cries represented on the counters and absent from the printed sheets are *Old Iron or Sourdes or Rapiers*; *Have you any Cornes on your Feet or Toes?*; *By my maches 4 bunches a farding*, and *New Bookes, newly printed*. The engravings, on the other hand, supply

us with the dozen required to make up the set of jettons: *I have screenes; Codlings hot; Quicke perawinkells, quicke, quicke; Bandstringes or handkercher buttons; Mate for a bed, buy a doore mate; Radishes or lettis, tow bunches a peny; Maribones, maides maribones; I ha' ripe couccumber; New flounders, new; Buy my dish of great smelts; By a cocke or a gelding; Mussels, lillywhite mussels.*

Mr. Lawrence, in an endeavour to see whether any of the cries were unusual at the time of probable issue, selected the two most controversial, one of which is not amongst the copper plates—*By my maches and Chaires to mend*. He points out that the matches were "long spills of wood, possibly for ignition with a tinder box".³⁵ In corroboration of this statement we must remember that although the phosphoric match belongs to the nineteenth century,³⁶ the spill, or "spunk" as

³⁵ *British Numismatic Journal*, vol. xiv, p. 52.

³⁶ One John Walker in 1827 invented a practical friction match, and by 1833 this had become established, although account books of the time show us that they were very expensive. In 1910 the phosphorus match was entirely superseded in England by the safety match. It is true that in 1680 a kind of friction match was invented by Godfrey Hawkwitz under the direction of Robert Boyle, but it was dangerous and costly, and until the beginning of the nineteenth century the tinder box and light wooden spills dipped in sulphur were the common means of obtaining fire, as may be seen in Francis Wheatley's fourth plate issued in 1794. The cry of *Buy a Steel or a Tinder Box* is also amongst the prints and counters. Tempest, in 1688 first issued a series of greatly different prints entitled *The Cryes of the City of London drawn after their Life*. Mauron (the signature of Marcellus Laroon) prints his cries in three languages, and uses "card matches" to translate the French "allumettes", and the Italian "solfanelle". The plates were issued and also copied several times.

it was sometimes called, dipped in sulphur was certainly in use so early as 1632, if not before. Richard Browne, in Act V, Scene ii of his *Court Beggar*, acted in that year, although not published until 1653, makes his mendicant speak of "all the Common Cryes i' the City, as of Oysters, Codlings, Wood to Cleave, Kitchen Stuffe, and the thousand more even to Matches for your Tinder Box". It is, therefore, clear that the word "match" was used in the mid-seventeenth century for the "spunk" supplied to catch the spark. The question of the cane-backed or cane-seated chairs is more problematical, if I be right in thinking that although the bundle held by the crier on the counter appears to be rushes or withies, the chair-mender of the prints seems to be carrying canes. The matter is not, however, beyond explanation even thus, although this cry is quoted, so far as I can discover, in none of the earlier musical pieces described by Sir Frederick Bridge. He mentions indeed "Chairs to Mend" in more modern spelling, but only amongst the *Roxburghe Ballads*, dated about 1747 or 1759.³⁷ As concerns rushes, a Jacobean print represents a crier of these, although it is not specified whether they are intended for strewing on the floor or for mending chairs. Rush-bottomed chairs, which persisted in use even to the time when Francis Wheatley issued his well-known set of plates at the end of the eighteenth century—Plate 10, 1795—were, however, quite common, and are

³⁷ *The Old Cries of London*, p. 38, quoting the *Roxburghe Ballads*, edited by J. Woodfall Ebsworth, vol. vii, 1893, p. 57 of Part I. The date is suggested by a reference to Admiral Hawke, who in 1759 defeated Confans in Quiberon Bay in November of that year. His victory off Finisterre twelve years earlier might be the occasion of his "express" here cried.

mentioned in France as in general use at the end of the sixteenth century.³⁸ We find them in England in James I's day, and even a wicker chair appears in an inventory of 1611, and the late Mr. Percy Macquoid referred to one mentioned in 1571. But these wicker chairs were rough and perishable, and so far as we know none survive to the present day. We have noted that the crier portrayed on the counter may be carrying osier or willow withies for rough wicker chairs, but if they be rushes the date would be the same. The "chayre" as usually described in such books as *Halyburton's Ledger* was either cushioned with velvet or had a seat of "lether gilt". The Wollaton Inventory of 1609 presents "an imbroidered cheare" or a "nydlework cheare", and sometimes a "toured cheyre", but we do not find chairs in every room, and even an "old broken cheare of clothe o' sylver" is thought worthy of the "Duke's chamber". It is obvious that a large quantity of "gylt nayles" were used in the manufacture of chairs made in Elizabethan times.³⁹ The Appendix of *Halyburton's Ledger*⁴⁰ contains a list of commodities mentioned in the *Book of Rates and Customs* issued by James I as James VI of Scotland. Promulgated in 1612 to assist valuations, it gives the approximate price of imported and exported goods on which in 1597 it was decided to levy a charge of one shilling in the pound, but it

³⁸ *Little Books on French Furniture*, by Roger de Félice—(Louis XIII), p. 144.

³⁹ Royal Committee of Accounts MS., *Lord Middleton's Household Accounts*, pp. 485-491, on the "Newe Hall at Wollaton".

⁴⁰ *Ledger and Accounts of Halyburton, from 1492-1503*, published 1887 for the Register House, Edinburgh, with Preface and Appendix by C. Innes.

contains no reference to canes. On the other hand, nearly everything cried by our street vendors appears in the *Book of Rates* framed when Charles I in 1640 granted a charter to the City of London;⁴¹ and "Bundles of Canes" and "Bullrushes" by "the load" are taxed with landing duties, and the former were probably for chairs, as their portorage figures by itself at one penny a bundle, whilst bundles of *basket rods* are also separately mentioned, and were reckoned at only a halfpenny. Nevertheless, in the reign of Charles I the cane-seated chair was still so rare that a well-known authority on old English furniture recently told me that he only remembered to have once seen an example of the round-backed chair of this period in caned work. He said, however, that when the straight low chair of the Commonwealth with wooden back was introduced, the solid seat was in many instances replaced by cane in a rough, open mesh.⁴² Mr. Cescinsky,⁴³ in *English Furniture of the Eighteenth Century*, while carefully explaining that the dates of the introduction of caning differed in various countries, places this fashion in England approximately from 1650 to 1695, but regards the introduction thereof as possibly some fifteen, or as the late Mr. Percy Macquoid and Mr. Ralph Edwards wrote "several years" before the Restoration; but Mr. Cescinsky cautions

⁴¹ See *The Charters of London*, published in 1738, giving abstracts and schedules of the Charters of Charles I's sixteenth year and that of twenty-fourth of Charles II.

⁴² An example of this type appears in Macquoid and Edwards, *Dictionary of English Furniture*, vol. i, p. 208, fig. 27; described p. 211.

⁴³ *English Furniture of the Eighteenth Century*, by Herbert Cescinsky, vol. i, p. 16.

his readers against regarding the date of beginning of a fashion as definitely fixed, as many decorated patterns came from the Continent, and were fore-runners of our furniture, but he places our plain cane chairs fairly early, earlier than the French. In this, therefore, he precedes some writers, such as Monsieur de Félice, who criticizes those who place caned chairs within the reign of Louis XIII rather than Louis XIV.⁴⁴ When "a new fashion" (1660-1679) was mentioned in an earlier work by Mr. Macquoid⁴⁵ he was speaking of the high-backed caned chair which came in with the Restoration. Regarding the rarities of 1645 to 1650 therefore as the precursors of a popular change, we must allow a year or two for wear and tear, and look upon the Commonwealth as the earliest date when the cane-chair mender would have regular employment.⁴⁶ The canes used at the time of the Commonwealth were split into at most four and often only two pieces, and the interlacing was very open, and probably did not wear long. But I shall be

⁴⁴ *Little Books on French Furniture—(Louis XIII)*, p. 145, and (*Louis XIV*), pp. 106-7.

⁴⁵ Macquoid's *History of the Age of Walnut*, p. 6; but in his new *Dictionary of English Furniture* he wrote, on p. 211, "The use in conjunction with caning on back and seats, commenced several years before. Charles II on his return from exile introduced the carved and caned types associated with his name." This author describes the chair of the Commonwealth, with large open mesh and framing, plain and lightly incised whilst "uprights and leg show a simple twist and are connected on a plan that combines full rigidity with economic use of walnut material".

⁴⁶ Monsieur de Félice speaks of the chair-mender as belonging to the company of master turners and probably often the actual makers of the common sort of chairs. See his *Louis XIV*, p. 107. It is therefore not unlikely that the itinerant mender sometimes replaced the existent wooden seat with cane.

accused of similarly splitting hairs in endeavouring to move the counters from a date shortly prior to 1640 to the succeeding decade, and will glance but a moment at an objection which may be raised to the issue of counters in Commonwealth days, when cards and games of chance were equally eschewed. The reckoning counter, however, continued in demand, accounts being still occasionally kept in Roman figures in private houses—a practice which rendered casting in columns inconvenient, and we have no certain evidence of the date when the casting counter became merged in the jetton for play. Can we, moreover, safely declare that cards, although called "Devil's books" by the Puritans, were not privately used in Commonwealth times? The accounts of Lord Rutland reveal that in entertaining Lord Fairfax and Lord Exeter at Haddon, there was play, although on a very moderate scale. Two instances will suffice: "Pd. my Lord November 17^o to play att Cards—001.00.0." "Pd. my lord Decemb 3^o to playe with the Earle of Exeter, 002.00.0".⁴⁷ We might perhaps therefore suggest that these rare counters were issued at a time when, owing to the downfall of the Monarchy, the portraiture of the people was preferred. With the Restoration the popularity of Stuart portraits was more assured than ever, giving rise to the restrikes and fresh casts of the *Sovereigns of England* type of counter.

Counters bearing Heads of the Stuart Family.

The revival of Stuart popularity may be held responsible for certain jettons very roughly engraved in

⁴⁷ *Haddon, the Manor, the Hall, &c.*, by G. Le Blanc Smith, Steward's Accounts, 1549-1671, transcribed by the late W. A. Carrington, Appendix III, p. 138.

freehand line with portraits of this family, likely to commend themselves to those who remembered the exiled Court in Holland. They appear to be of Dutch manufacture, and were probably based upon earlier prints, but cannot be dated before the end of the seventeenth or early eighteenth century. The general design of these counters was copied from the set, probably of early seventeenth-century work, known at the British Museum as the de Bohun counters, on account of the badge of a swan engraved on the box.⁴⁸ This hand-engraved set, consisting of ten female heads and ten male, is enclosed in a silver box with perforated sides representing animals. This box has the words "Elizabeth Regina" engraved on the base, and the respective portraits probably are meant for the King and Queen of Bohemia. The likeness is not great to these persons, and the plain outline of the full face does not remind us of the jetton which formed the theme of our opening discussion. But the lady wears a hooped diadem which may well pass for the Bohemian crown, and the slightly bearded man seems to have an Electoral cap upon his head. Elizabeth was sometimes called "the Swan of Bohemia", and although the bird with coronet and chain is definitely the old de Bohun badge, we have here a possible explanation of the engraving on the lid of the box. The whole is rather a poor example of early sixteenth-century work, obviously engraved freehand, as is shown by the fact that no two counters are exactly alike line for line. Surely in view of the continuation of freehand engraving well on into the eighteenth century the later

⁴⁸ See note 2, on pp. 140-1 of *Num. Chron.*, 1916.

developments of these Stuart counters demand a moment's notice. One set, now by the kindness of a friend in my possession, probably represents Princess Mary, her young husband, and her parents, Charles I and Henrietta Maria, the two latter direct copies of the well-known counters of 1638 (*Med. Ill.*, vol. i, p. 381, Nos. 283 and 284).⁴⁹ The portraits of mother and daughter are so much alike that this identification is quite tentative. The same copy of Charles I's counter appears again as a three-quarter bust in a mass of jettons representing the English Court in Holland during the exile of Charles II, all the other portraits being heads in the same style and size as the "de Bohun" counters. The workmanship is careless, the portraiture poor, the heraldry incorrect, but a certain freedom of line shows them to be the attempt on the part of some early eighteenth-century Dutch workshop to give renderings of great Englishmen and the English relations of William III, who had recently died. The whole collection is contained in a box⁵⁰ roughly copied from that in which the "de

⁴⁹ Six bear a female head, one of which is engraved on the back, "Maria Regina". The other five are presumably her daughter Mary, who in May, 1641, married William, Prince of Orange. Five others bear an approximate resemblance to this prince. The remaining six portray Charles I.

⁵⁰ The box has on the lid a helmet and shield mantled with foliage. On the shield a bugle, a lis, and two Tudor roses. On the bottom of the box are the Arms of England surmounted by a count's coronet. There are twenty-four counters, of which one is that mentioned of Charles I and one of Charles II. The others are in duplicate, and so far as one may guess are meant to represent the younger princes, James and Henry, and perhaps the Palatine family, one being inscribed "Rupert". Others bear the names of Francis Bacon, Philip Sydney, Lord Falkland, and the Duke of Buckingham.

Bohun" is enclosed; the style is the same, although less finished. All these counters have either arms in blundered heraldry or a Tudor rose on the reverse, and the same rose, the same freehand engraving of spirited but rough type, may be found on two larger jettons portraying perhaps William of Orange (?) and probably Mary II(?). In view of these last-mentioned pieces it appears likely that the earliest moment of issue for the majority of these counters would be the end of the seventeenth century, whilst the technique of some of them inclines us to a later date, well on into the time of Anne or even George I, when curiously enough, although silver plate was at its best, the counter became a poor jetton upon which no skill was expended.

The Use of the Counter.

May I be permitted before I close this paper to turn for a while to the use of the counter? The ground has been so fully traversed in 1916 by Professor Barnard in his excellent monograph, *The Casting Counter and the Counting Board*, that I should not venture to trespass on his field, were it not that I have come across in old English and Scottish inventories certain references to the material of which the counters were made, which may be of interest.

We read in Dr. Hubert Hall's *Antiquities of the Exchequer* that originally the counters were actually silver pennies and gold coins. It seems that at the time the *Dialogus de Scaccario*⁵¹ was written, circa

⁵¹ *The Dialogus de Scaccario*, by Richard, afterwards Bishop of London, son of Nigel, Bishop of Ely, was completed by 1179. See edition by Messrs. Crump and Johnson, published 1902. Richard FitzNigel was Treasurer from 1160 to 1198.

1177, a silver obolus was used to represent 10s. or 120 pence, and a gold obolus for 2,400 pence, equalling £10, the different sizes of the obolus and silver penny taken as units preventing confusion. Payments, Dr. Hall tells us,⁵² in the shape of "obsolete or outlandish coins were occasionally received at the Exchequer from distant countries, from foreign merchants or Jewish usurers, and even reached the government in the shape of treasure trove". These were either used as counters or converted with other condemned pieces into plate for the service of the King's chapel. A little later, as Mr. Lawrence has clearly shown us,⁵³ special counters were struck in imitation of our own coin, and these were made for various State Departments, such as the Wardrobe. Probably of this nature are those mentioned in the Wardrobe Accounts of Edward IV, of 1480, appearing under the head of "parchemyn paper ink rede wex threde nedels counters bagges of leder with many other smalle necessarie thinges in the seide office . . . after the rate of lxxvj^s viij^d by the yere".⁵⁴ These counters, as we know them, are usually of brass, copper, or one of its alloys, but the differences of type or size may have taken the place of the old contrasts in colour or metal. Be this as it may, the most frequent description applied in the fifteenth and sixteenth centuries is "in

⁵² "For this purpose", writes Dr. Hall, "besants and solidi of the Eastern Empire were in requisition at an early date"; see *Antiquities of the Exchequer*, p. 124; see also p. 40.

⁵³ At a meeting of the British Numismatic Society on June 16, 1920, Mr. L. A. Lawrence exhibited a brass or latten counter made from the same punches as pennies of Edward I and Edward II.

⁵⁴ *Wardrobe Accounts of Edward IV*, by Nicholas Harris Nicolas, published 1830, p. 128.

latten", a mixed yellow metal of the nature of brass, but in certain instances silver is mentioned, and even silver gilt. An inventory exists in the Library of the Society of Antiquaries of the jewels of Henry VIII, drawn up in January of the third year of Edward VI.⁵⁵ By the courtesy of the Society I have been allowed to examine this manuscript, and I find in it the description of various boxes containing implements for writing. Sometimes these cases are of gold, sometimes of silver, or even of leather. These boxes frequently contain counters ranging in number from twenty-five upwards; thirty-two, forty, forty-two, or forty-three, or even fifty are mentioned. The jettons are mostly described as "of siluer"; in one instance, however, although the boxes were of "Siluer gylte with covers engrave for dustyncke" the "counters standing in three tilles" were only of latten.⁵⁶ One "grene box" contained "twoo square boxes of gold, one for yncke, another for counters, having xxv counters, three paire of Compases a fote rule a penne, a penne-knyfe the hafte gold and twoo pensilles all gold, a whetstone and a penne of Ibonie ungarnished".⁵⁷ But I must not stop to descant on the many useful articles catalogued in this interesting list, such as "a paire of spectacles harnished with silver" . . . "A penne-knife of mettal with a hammer" . . . "twoo paire of Sysers" or "bagges, and purses containing money".

⁵⁵ *Inventory of the Jewelles Plate Stuff Ordinance Munitions and other Goodes belonging to our late Souveraign, Henry Theight.*

⁵⁶ *Ibid.*, p. 166 bis.

⁵⁷ *Ibid.*, f. 172. We find thirty-two counters on f. 172 bis, forty on f. 165, forty-two on f. 173, fifty on f. 171 bis, and some of the boxes contain also coin-weights such as "xviij weights of silver and one of gold", f. 165.

The counters are described in the various standishes, desks and boxes, rather than in bags; indeed, it is apparent that the counters were more usually kept in the late sixteenth and seventeenth centuries in boxes probably designed and fitted to hold a specified number, and shaped like the cylindrical cases shown in Professor Barnard's illustrations.⁵⁸ We still occasionally see such cylinders filled with the milled six-pences of Queen Elizabeth, contemporaneously collected for use as counters,⁵⁹ and I have one with maker's mark of about 1724 engraved with a portrait of Charles I. The expression sometimes used, especially in Scotland, was "a nest of cowntouries",⁶⁰ a nest in this instance meaning a small box, as is shown in the before-mentioned list of valuations in 1612.⁶¹ From this list we also learn that the common latten pieces were sold by the pound weight: "countares of lattown the pound weight viij^d", in July, 1500. Fifty years later one George Medley, in providing for the education of his ward, Margaret Willoughby, writes: "For halfe a pounce of counters for my nece conteynyng in

⁵⁸ *The Casting Counter*, Plates LXI and LXII, of 1595 and 1650 respectively. Professor Barnard shows on Pl. LII, No. 2, in 1546, and Pl. LIX, in 1534, bags to contain counters.

⁵⁹ Professor Barnard, on p. 241, describes a small copper cylinder with "40" engraved on the bottom, containing that number of *quarts d'écus* of about the year 1561, which evidently had been used as counters.

⁶⁰ A "nest of countoures" was supplied to James IV of Scotland at the cost of vii iij^s scots. See *Accounts of the Lord High Treasurer of Scotland*, vol. i, p. 300. The counters were supplied by "the schippere of the bark called Mary", suggesting that they were brought from abroad.

⁶¹ *Halyburton's Ledger* (Appendix), "nest boxes" were valued at "eighteen pounds scots the grose".

all xlth to learne to caste with all viij^d." ⁶² Meanwhile, "my nephew Fraunces" was endowed with "a pounce of sugere plate and greate confettes to make hym learne his booke", at the cost of twenty pence. The children's clothes, lesson-books, "a church service," price 4s., the "penner and inckehorne for my nece" together reckoned at fourpence, and the counters come thus indiscriminately into the ordinary expenses of a well-ordered house. We have seen that in the Wardrobe Accounts of Edward IV the charge for bags of leather immediately followed that for counters, and it seems likely that at the Exchequer, where large quantities would be needed, they were so kept in the fifteenth century. At a much later period in France it is noted that green velvet bags, each containing 50 jettons, were presented to the town councillors of Paris by way of commutation for certain rights and perquisites, and the aldermen likewise received 25 jettons apiece on New Year's Day. ⁶³ In 1557 Henri II decided that half a hundred silver counters in a purse should be given to each town councillor, but that once in a lifetime should suffice. ⁶⁴ But those interested in the "étrennes", whether given to or by the King, will find details set out by Professor Barnard, even to a list of persons permitted to have counters privately made for them by the "balancier" at the Louvre, ⁶⁵ and some were known to have been made at Rouen by special permission for Prince James Stuart in 1714. ⁶⁶ Casting

⁶² Historical Manuscripts Commission, *Accounts of Lord Middleton of Wollaton Hall, Notts., Medley's Accounts in 1550*, p. 400.

⁶³ *The Casting Counter and the Counting Board*, p. 77.

⁶⁴ *Ibid.*, p. 77.

⁶⁵ *Ibid.*, pp. 60-63, 1445-1532.

⁶⁶ *Ibid.*, p. 60.

a light on the subject of rarity is the fact that the gold counters presented to Louis XV found their way at once into the melting-pot, producing a royal dinner service at the rate of half-a-dozen plates a year.⁶⁷ It is obvious that most of the jettons, excepting those of base metal, suffered the same fate, but so long as all private reckoning was modelled on that of the Board of Green Cloth at the Exchequer a "compter buird" either spread with "a clothe for a counter" or a table on which the spaces were specially marked will be found in many an old inventory.⁶⁸ Mr. Warrack mentions in his *Domestic Life of Scotland* that in the inventories of the sixteenth century he has sometimes noted "ane comptarfute weschel" or "an comptarfut", expressions which he interprets as possibly a bowl or cup standing on the tray or transverse beneath the table.⁶⁹ In one instance, in 1542, as he points out, it is remarked that the "counterfut" was of silver, thus ruling out the possibility that *counterfeit* was intended.⁷⁰ It seems not improbable that a cup or bowl might be so placed to contain the bags of counters, a cup being by no means an unusual receptacle for

⁶⁷ *Ibid.*, p. 29.

⁶⁸ In *Henry II*, by E. F. Salzman, on p. 206, we find an exact description of an Exchequer table. It was ten feet long by five wide, and on it were drawn seven vertical lines representing pence, shillings, pounds, tens, hundreds, thousands, and tens of thousands. These columns were in turn divided by horizontal lines, cutting the cloth into squares like a chess-board. Professor Barnard gives, in his Part III on *Methods of Casting*, admirable diagrams from *Recorde*, *Awdley*, and others, making the processes quite clear.

⁶⁹ *Domestic Life in Scotland, 1488-1688*, pp. 24-25, by Mr. John Warrack.

⁷⁰ *Ibid.*, p. 28. Mr. Warrack tells us that the word is distinctly *fut* and not *fat*, the Scottish expression for a salt-cellar.

coins, witness the heralds "shaking their grete cuppe" and crying "The Kinges largesse" at the Christmas feast of James IV of Scotland.⁷¹ Again, to find a parallel in England, we have numerous presentations to Tudor sovereigns, such as the covered cup containing a hundred pounds in gold handed to Queen Elizabeth by the mayor from the citizens of Norwich in her progress to that city in August, 1578.⁷² It does appear, however, that the counter itself was occasionally liable to be counterfeited, for we read of a reward given by Henry VII "to one that brought fifty-three countrefete countres, x^s".⁷³

Mr. Symonds, describing the mints of Henry VIII and Edward VI, tells us that after the accession of the latter in an inquiry in 1549 into some past transactions at the Bristol Mint concerning the alleged malversations of Sir William Sharington, some curious facts were revealed. Forty-three pounds of silver were there found "being coined with the print of angels,⁷⁴ and valued at 4^s 10^d the ounce, amounting to £125". It is clear that these coins were not then gilt, or they would have stood at 5s. 6d. the ounce or more.

It is of course possible that these copies of the angel were made for counters, but the probability that they would be fraudulently gilt and passed might have determined the King against their issue. I possess a silver-gilt angel, of which I think the worn gilding

⁷¹ *Side-lights on the History of Scotland*, p. 276, by Louis Barbé.

⁷² *Holinshed's Chronicle*, vol. iii, p. 1288, edition of 1587.

⁷³ June 16, 1493. Samuel Bentley's *Eccerpta Historica*, p. 94, published 1831. Mr. Bentley adds a note to explain that these were false counters and consequently seized.

⁷⁴ "The Bristol Mint of Henry VIII and Edward VI," *Num. Chron.*, 1911, p. 338.

appears to be early. It follows the type of the last angel of Henry VIII, but with slight differences, and it seems credible that if Henry wished counters resembling angels to be made, these variations were intentional to prevent fraud. There is certainly an order addressed to Robert Amadas, the keeper of Henry VIII's jewels, to the amount of £22 10s. "for so moche money by him deliued to Ramus for to guylde".⁷⁵ This may, however, be explained by the practice of melting foreign gold coins to gild plate or armour, and the Accounts of the Lord High Treasurer of Scotland abound in instances where English gold was used for gilding purposes.⁷⁶

Professor Barnard differentiates between the metal counter used for reckoning and those of gold and silver for private use or for presentation. Those made for the latter purpose were frequently dated, and of such is no doubt a French counter in my collection bearing the date 1586 and a portrait of Henry III.⁷⁷ This I illustrate, PL. IV. 6, because Professor Barnard tells us that engraved counters were rare in France,⁷⁸ and it appears to be unpublished. I possess another engraved counter representing our own King Edward VI with French inscriptions.

Those who attended certain services of the Catholic Church sometimes received "jettons de presentation", called *mereaux*,⁷⁹ and if the same practice could be

⁷⁵ Dec. 19, 1530, Addit. MS., Brit. Mus., 200, 30, f. 51.


⁷⁶ *Accounts of the Lord High Treasurer*, vol. i, p. 24. "1½ Henry noble of gold to gilt a small harnessing" in 1474; or again in 1488, "to gilt ane basing ane ewer and ane saltfat to the King ij royse nobillis". *Ibid.*, p. 99.

⁷⁷ *The Casting Counter*, p. 54.

⁷⁸ *Ibid.*, p. 76.

⁷⁹ *Ibid.*, pp. 80 and 81. These gifts might be described as atten-

traced to some of our English monasteries and nunneries so late as the seventeenth century we might find therein an explanation of the attractive little Biblical jettons to which I referred in my former article.⁸⁰ A singularly well-designed specimen with representations of Our Lord and the Virgin Mary on obverse and reverse appears to be of late seventeenth-century work, and unpublished, but hardly calls for special illustration. The English inscription surrounding the picture of Mary, who is seen holding a Bible, runs: **BEHOLD THROUGH THIS ALL GENERATIONS SHALL CALL MEE BLESSED**, and is a variant from the "from henceforth" of our Bible and Prayer Book.

The lettering with its form  (on the obverse), popular in the time of William and Mary, is suggestive of a period in the history of Protestantism when much stress was laid on the power of the printed word, and the substitution "through this" might refer to the Bible. We have, however, no evidence of the use of "merelli" in Protestant services, and if this be the interpretation it was probably a mere school prize. The literal translation of Luke, chap. i, v. 48, from the Latin Vulgate supplies a better explanation: "Ecce enim ex hoc beatam me dicent omnes generationes" is here literally translated, and "ex hoc" may be carelessly interpreted by the engraver as springing from this recognition of His handmaiden's lowliness. We may, therefore, be fairly sure that the jetton is of Catholic

dance money, and like any other token were eventually changed for money.

⁸⁰ *Num. Chron.*, 1916, pp. 183-184.

origin in the time of James II. For whatever purpose it was made, these words appear in the English translation of neither Bible nor Mass-book.⁸¹

The custom of presenting *mereaux* prevalent in and after the fifteenth century in France grew by the time of Henri IV, father of Henrietta Maria, to be, as we have seen, part of the official salary. It is therefore quite probable that the little silver boxes with the royal portraits were designed by this Princess as New Year's presents. Professor Barnard records the presentation in France of 700 gold and 26,000 silver jettons in 1682 by Louis XIV.⁸²

Few gold counters exist in England, and gold boxes such as the example with a gem inset, in the British Museum, generally contain silver-gilt pieces. It is, therefore, unlikely that these were intended to represent a money gift. But the exact moment is not easily determined when the counter ceased to be a necessary adjunct to the Counting House, and became a plaything. We are not surprised to read that *Recorde's Arithmetic* retained a chapter on operative reckoning at least as late as 1668,⁸³ for the public accounts were kept in Roman figures well into the reign of Anne. We find, however, many of the private accounts kept in Arabic numerals in Stuart times.

The large quantity of ill-struck uniface silver counters beginning in the time of Charles II, and ever on the increase in the days of Anne and the first two Georges, were obviously designed merely as play-

⁸¹ Dr. Williamson was kind enough to make inquiries for me in erudite Catholic circles, and tells me this reading cannot be traced.

⁸² *The Casting Counter*, p. 76.

⁸³ *Ibid.*, pp. 32, 87, and 256.

things at a time when every evening was passed at the gaming tables. I do not mean of course to suggest that the games of cards were in themselves innovations. Far from this, all account-books, royal and private, show the Tudors and their contemporaries recording card losses, especially at Christmas time. By an enactment of the first year of Edward IV (1461) card playing in private houses was prohibited, excepting within "the XII dayes of Christmasse", and in 1463 it was forbidden to import or sell in this country "Cardes for pleiying upon payne to forfeit theym".⁸⁴

When we seek for the Christmas play in the accounts of the Tudors, it appears that instead of counters actual coins were used, most frequently groats, and this coin is that most often mentioned at Court, where play is recorded at all times of the year. For instance, Henry VII on May 24, 1496, had from his treasurer £47 for this purpose in special coins, the denominations separately entered, although all on one day, "to the Kinges grace to play at cards in gold 20^{li}, in grotts 100^s, in grotts 19^{li} and in grottes 60^s".⁸⁵ Anne Boleyn received "£5 in grottes for playing money" on Christmas Eve, 1530.⁸⁶ The Queen of James IV of Scotland in January, 1505-1506, limited herself in her "play at the cartis" to "smal pennyis amounting to xiiij^s" on one occasion and on another to "ij^{li}", still in the same coin. The King, her husband, on this day used the same small pennies, but on another "xl French crounies and iij^{li} xvj^s iij^d" in silver totalling the sum of

⁸⁴ *Appendix of Priey Purse Expenses of Henry VIII*, p. 306. Notes by Nicholas Harris Nicolas.

⁸⁵ *Bentley Excerpta*, p. 108.

⁸⁶ Brit. Mus. Addit. MS., 20,030, f. 51 b.

xxxjⁿ xvj^s iiiij^d". In this instance the species of silver coin is not set down.⁸⁷ Lord Middleton's steward at Wollaton delivers to "my myster on Crystynmas day to play at ye cards iij^s iij^d",⁸⁸ and this play continues in small sums, Sunday inclusive, up to Twelfth Night. The *Rutland Papers* contain many entries of card debts, "dyce", "wagers of horse runnyng", and play "at the tables", especially in the years 1537 to 1550, and so late as in 1646-1647 "my Lord at my Lady Manners" requires ten shillings "in gould to play att cardes".⁸⁹ Nevertheless, although it is clear that the actual money was often staked, it seems likely the counters were used at play, for "ij caste of counters of bone xij^d" were paid for in April, 1541, together with "a sett of chessemèn iiiij^s".⁹⁰ We must, however, remember that at this date it is more usual to find the counter amongst the other household necessities, as specified by Lord Rutland's Controller, "j lb. of sealyng wax viij^d, a cast of latten counters vj^d and ij paper books ij^s iiiij^d".⁹¹ But we have given a sufficiency of instances both of royal and private play, and we leave our readers to form their own conclusions as to the use of the counter so late as the seventeenth century, of which I have here been permitted to make a more particular study.

HELEN FARQUHAR.

⁸⁷ *Accounts of the Lord High Treasurer of Scotland*, vol. iii, pp. 180-181, Jan. 1505-1506.

⁸⁸ The Royal Commission on Historical MSS. *Middleton Papers*, p. 331.

⁸⁹ Royal Commission on Historical MSS. *Rutland Papers at Belvoir*, vol. iv, pp. 360-362, and 534.

⁹⁰ *Ibid.*, p. 309.

⁹¹ *Ibid.*

MISCELLANEA.

A NOTE ON THE SURVIVAL OF ANCIENT COINS.

IN the course of a critical and careful review of a book, the failings of which none knows better than its author, Mr. E. S. G. Robinson devotes a good deal of attention to my theory concerning the occasion of the issue of the Athenian decadrachms and didrachms. Briefly, my contention is as follows: These two denominations hang together—as all numismatists have recognized—and do not commemorate Marathon, since there is another coinage, to wit, the earliest tetradrachm coinage with olive leaves on the helmet and waning moon behind the owl (*Athens, its History and Coinage*, Pl. XVIII, A 272 ff.), to commemorate that victory. This last point is also universally conceded, Dr. Gaebler (*Nomisma*, xii, p. 10 f.) having reached the same conclusion. The decadrachm and didrachm are either commemorative or non-commemorative. If the former, since Marathon is not the occasion of their issue, they must commemorate Salamis.

This is what Mr. Robinson would maintain. He disputes my contention that these coins were non-commemorative and rather a practical expedient on the part of the Treasury paymaster, who had to disburse an annual dole of ten drachmae per annum to each citizen (as recorded by Hdt. vii. 144, and Plut. *v. Themist.* 4) for a possible three years, and disputes it on the ground of the small number of surviving pieces of these denominations. Extremely useful is his calculation that approximately 168,750 didrachms, 56,250 decadrachms would have been coined. Of these there survive, to my present knowledge, 30 didrachms, 11 decadrachms (I knew of 29 and 9 when my book was published), that is to say one didrachm out of every 5,925 struck and one decadrachm out of every 5,112 struck survives.

This, I venture to claim, is not a low proportionate survival, but rather a high one; and in claiming this I have the support of a famous economist, Mr. J. M. Keynes, who has expressed the same opinion to me.

Mr. Robinson is careful to mention that "any argument based on the number of extant coins of an issue should be used with the greatest caution", and there I concur and will confine my argument as regards Athens solely to the Athenian issue between the years 490 and 480 B.C.

Tetradrachms were issued during that decade. It will not be denied that the majority of the tetradrachms I have figured on Plates XIX and XX are contemporary with the decadrachms and didrachms—in fact that only my Nos. A 272 to A 281 can possibly be earlier in date than the decadrachms and didrachms. Therefore, if decadrachms and didrachms commemorate Salamis, all the tetradrachms of later style than Plate XIX, No. A 281, must be dated after Salamis. But we have already seen that A 272 must be placed immediately after Marathon. Result: for the ten years 490–480 B. C., for the whole normal state issue of tetradrachms, a survival of only 11 tetradrachms,¹ or 1.1 per annum.

If the wealth of the Laurian mines during that decade was so great that an annual dole, on the Siphnian model (cf. Hdt. iii. 57), could even be contemplated, what must have been the ordinary normal tetradrachm issue of the State? If the treasury could declare a surplus of 300,000 drachmae in one year, and if we suppose that the normal issue no more than equalled this declared surplus, and if we assign one-third, *i. e.* 100,000 drachmae, of this to the small coinage, then at least 50,000 tetradrachms must have been issued per annum. All this is doubtless understatement, but it will serve.

Now, if it be thought surprising that (on my argument) one decadrachm per 5,112 issued survives and one didrachm per 5,925 issued survives, what are we to say to the conclusion drawn from Mr. Robinson's dating of the decadrachms, didrachms, and (by inference) their contemporary tetradrachms, which would produce the following result for the years 490–480 B. C.: one tetradrachm per 50,000 (minimum) issued survives?

A word or two about the Demareteia, the surviving numbers of which enter into Mr. Robinson's argument. Unfortunately, he seems not to have read the whole of Sir Arthur Evans's paper in *Num. Chron.*, 1894, pp. 189 ff., which he quotes, for he has failed to note that Sir Arthur arrived at the conclusion (*loc. cit.*, p. 195) that at least

¹ The eleven being my Nos. A 272 to A 281 inclusive.

20,070 Demareteia would have been struck. If a round dozen are extant to-day that means that one Demareteion per 1,672 issued survives—a very different matter from the figures quoted by Mr. Robinson, which would imply a survival of one out of every 260 pieces issued!

In any case it is not safe to place too much reliance on the worthy Diodorus and his story about Demarete, and, to borrow Mr. Robinson's phrase, "the intangible but most obstinate argument from general probabilities" leads me to suspect that all that part of the Carthaginian war-indemnity of 2,000 talents² (= 12 million Attic-Euboic drachmae) which was coined in the year 479 B. C., would be coined in the form of Demareteia.

For a very good reason, explained below, a greater proportion exists to-day of ancient coins struck in Italy and Sicily than of those struck farther East, yet even in the West it is possible to find instances of coins, unique at the present time, which must once have formed part of extensive issues. The most obvious case is that of Aetna. Hieron of Syracuse in 476 B. C. expelled the inhabitants of Catania, re-peopling the place, which he renamed Aetna, with 5,000 Peloponnesians and 5,000 Syracusans (Diod. xi. 49. 1), who retained the city for sixteen years. The issue of one tetradrachm per annum per head of the population would not have been remarkable. But, even if far fewer than such a possible 160,000 pieces were struck and the issue confined to a single year, the fact remains that of the whole issue but a single tetradrachm survives to-day.

As for the East, it is only necessary to call to mind the electrum³ staters of Mytilene and Phocaea issued both before

² Diod. xi. 26. 2.

³ Electrum seems to have survived generally in a proportion not far below that of silver; gold tended and tends to be melted. Hence I confine to a footnote the facts concerning the emergency gold issue of Athens in 407-406 B. C. Babelon, *Traité*, iii, col. 88, draws the conclusion that on this occasion gold coins equivalent to 48,000 staters were coined. Svoronos, *Trésor des Monn. d'Athènes*, Pl. 15, 1 to 11, figures all the known coins of the issue with one exception, the Petrograd Hecte (*Z. f. N.*, xxi, p. 7) formerly in the Photiades Collection. Thus we have 3 half-staters (= 1.5 staters), 3 quarter staters (= 0.75 stater), 3 Hectae (= 0.5 stater), and 3 Hemi-hectae (= 0.25 stater): total equivalent to 3 staters surviving out of an issue equivalent to 48,000 staters. One in every 16,000.

and after the monetary convention concluded between these two states (cf. Hicks and Hill, *Hist. Greek Inscr.*, p. 180, No. 94). Of the whole Mytilenean issue there is known a unique stater in the British Museum (B.M.C., *Troas, &c.*, Pl. XXXII, 1), while of the Phocaeen staters in question not a single specimen has been found. Yet their existence is vouched for by the casual mention in Thucydides (iv. 52) of 2,000 Phocaeen staters and in Demosthenes (xl., in *Boeot.* 36) of 300 pieces. Had these two lots been all that ever were minted we should still have to record a survival of 0 in 2,300 coins issued.

Indeed, a little thought, a little reflection, not on the geographical limitations of ancient city states and kingdoms, but rather on their vast energy, resourcefulness, activity, and wealth, forces upon one the conclusion that an average⁴ survival over the ancient world of one coin out of every 5,000 coins struck for circulation would be a very high proportional survival indeed. It must not be forgotten that hoards of ancient coins turned up by the plough or spade went almost regularly into the melting-pot in Italy and Sicily up to the sixteenth century, in Greece up to the early nineteenth century, and in Asia Minor still find their way there frequently at the present day. Only during three or four centuries in Italy, and for a bare century in Greece, have hoards been preserved from extinction. What can those few decades have saved for us more than the most minute fraction of the vast coinages which once circulated during a thousand years among the city states and principalities of Hellenic name?

C. T. SELTMAN.

I must apologize for referring to Sir A. Evans's later article in *Num. Chron.*, 1894, when the reference should have been to his *Syracusan Medallions and their Engravers*, originally published in *Num. Chron.*, 1891 (pp. 325, seqq. contain the relevant passage). The later estimate of 20,070 Demareteia (still yielding a survival rate of 1 to 1,673) is obtained

⁴ I would stress "average". In cases where large hoards of a single city have been unearthed, as in the case of the Avola, Melos, and Mende Finds, it may be presumed that a higher average number survives, while by contrast we must suppose that of early Ionian electrum hardly one out of every 10,000 pieces issued is extant above ground at the present day. Cf. also Mr. S. W. Grose, in *Num. Chron.*, 1916, p. 116.

by supposing that *all* the booty obtained from the Carthaginians, less the tithe dedicated in the shape of the golden tripod, plus the gold crown given to Demarete, was converted into silver decadrachms; it also incidentally ignores the fact that tetradrachms and smaller pieces formed part of the issue. But Diodorus, whose information on Sicilian affairs is in general very good, mentions only Demarete's crown as the source of the bullion, and, apart from Hesychius and Pollux, who say that it came from her jewellery, I know of no other direct evidence on the point.

E. S. G. R.

A PENNY OF HENRY, EARL OF NORTHUMBERLAND,
1139-1153.



THE British Museum has recently acquired a new penny of Henry, the son of King David of Scotland, who was created Earl of Northumberland by Stephen in 1139. It is similar to the coin illustrated in Burns, *Coinage of Scotland*, Pl. III. 24 A. The type is the common type of the first issue of Stephen's coinage. The inscriptions, which are on this specimen very well preserved, read +HENRICFRE, which may perhaps be interpreted *Henricus Filius Regis*, and +EREBALD:ON:COREB: There can be no doubt of the attribution of the coin to the mint of Corbridge, or Corebrige as it was then called. Corbridge was a Royal Manor and was the place of signature of one of Prince Henry's charters. The use of the Stephen type and the absence of the title *Comes* suggest that the coin was struck before the Northumberland earldom was conferred, and this is no doubt an earlier issue than the more common type with Cross Crosslet and small crosses, with which the title *Comes* is used in the obverse inscription. The weight of the coin is 19 grains; its condition is unusually good, though brittle and slightly buckled.

G. C. B.

REVIEW.

Die antike Münze als Kunstwerk. VON KURT REGLING.
Erste Auflage, mit 907 Münzabbildungen auf 45 Tafeln.
Berlin 1924. Schoetz und Parrhysius. 12 gold marks.

148 pages of text accompany in this volume the fine plates which illustrate over 900 coins, selected from all parts of the Greek world, and from the beginning of coinage down to the third century A. D. Of these only 42 represent Roman coins, or coins struck in Greece under Roman rule; a proportion which may be taken as indicating the author's opinion of the relative importance of Greek and Roman numismatic art. We do not quarrel with that opinion; nevertheless, we should have liked to have from his pen a fuller treatment of the neglected period from the fourth to the sixth centuries, so important in its bearing on later developments, and even a page or so on the style of the Byzantine coinage. At present the only study of the latter subject is the author's own contribution of five pages to the Prussian *Jahrbuch* of 1916.

Dr. Regling's treatment is very different from that of Professor Percy Gardner, whose eminently readable and lucid *Types of Greek Coins* has hitherto held the field. He does not spare his readers; the information is as tightly packed into the space as if he were writing an article for Pauly-Wissowa-Kroll. Omitting indices, &c., we find that the 907 illustrations correspond to 119 pages. That means that, to follow the argument, one must at the lowest estimate (i. e. if each coin is referred to only once) break off reading between seven and eight times in a page, turn to the plates, and find the exact illustration referred to. This finding is not facilitated by the arrangement on the plates, on which the coins are placed not in their exact order of numbering, but so as to make a good pattern.¹

¹ This practice of making a plate look symmetrical is the cause of much justifiable profanity in those who have to consult the sale catalogues of a leading continental firm of auctioneers. If they would only realize that a plate illustrating about fifty coins cannot really be made to look artistic, and may as well therefore be arranged in workmanlike order!

It is difficult to keep the thread of the argument with even seven interruptions; but, in fact, our estimate is quite misleading, for many coins are referred to many times. Thus, opening at random at p. 98, we find 22 references, and, on p. 33, 33 references to single coins on various plates. Most pages are like this. We confess we do not know what is the remedy for the complaint; if the subject is to be thoroughly illustrated and discussed, the only alternative is illustrations in the text, which must be either bad or very expensive. The student will, therefore, probably have to renounce the plan of reading the book continuously for any length of time, and regard it rather as a work of reference.

As such, it contains so great a mass of detail, put together with the elaborate learning and scrupulous accuracy which we have learnt to expect from the author, that it would be impertinent to attempt to criticize its contents here. The text is divided, after some introductory matter, into sections dealing with the archaic period (about 700-480 B. C.), the bloom (about 480-323 B. C.), the Hellenistic and Roman Republican period, and the Imperial period. Within these sections we have careful discussions of such subjects as the repertory of types, their significance, composition, designing of the human or animal body, human head, drapery, space-filling with symbols and writing, decoration, &c., and local differences of style. Not the least valuable element in the book is the constant comparison of the art of the coins with other branches of art. The discussions are full of acute observation, as—to take the first instance that comes to hand—on the development of the kneeling-running attitude, where it is remarked that in Thasos later engravers took the old attitude for real kneeling, and, although perfectly equipped in technique, represented the Silenus with the nymph in his arms actually kneeling, as though about to rise from the ground with his prey. It is not often that we find ourselves in disagreement; but a few points, though of small importance, may be mentioned. P. 3: it is very doubtful whether the wheel was ever used in cutting dies. P. 9: the reverse type of the coins of the incuse fabric of S. Italy is not the same as that of the obverse, but a view of the *other* side of the same figure. P. 19: the animal on the coin of Cyrene (no. 116) is probably a gazelle, not a donkey. P. 39: the theta-shaped sign on the coin of Phaselis (no. 54) can hardly be described as meaningless to us; or does Dr. Regling reject its explanation as a form of phi? P. 82: his statement that the portrait-heads on the

Cyzicene staters cannot possibly be of living persons seems to us too positive; as he himself points out, these heads are not city-types, but constantly changing with each issue. They were not therefore subject to the unwritten law against the portrayal of living persons on coins—a law often broken by Greeks on the fringe of the Greek world when they could find an excuse. On this point a reference may be made to p. 11 of the present part of the *Chronicle*.

Dr. Regling's book will, as we have said—at any rate in this country—be chiefly used as a work of reference. We hope then that in the second edition, which is foreshadowed on the title-page, page references may be added to the list of coins illustrated, so that one may be able to find quickly what the author says about any particular coin. We must confess that in more than one case we have given up this search; perhaps our own laziness was to blame, but anyhow life is short. Page headings would also be an improvement. The plates are admirably executed. Altogether we are most grateful to author and publisher for a most useful volume.

G. F. H.

VI.

THE LEGEND ZIZ ON SICULO-PUNIC COINS.

Ziz is a legend whose interpretation has engaged the attention and interest of numismatists and others for a century past. It is a transliteration of the Punic z-z-p which is found upon large numbers of Siculo-Punic coins of various denominations, from tetradrachms downwards, and in association with a variety of types. It appears most frequently alone, but is occasionally found in connexion with other legends of Punic or Greek characters. As is natural with cursive script, the forms of the characters vary, and many of the variants are given by de Saulcy in his *Recherches sur la numismatique punique, Mémoires de l'Académie des Inscriptions et Belles-Lettres*, tome xv, pt. 2, p. 50. Like Greek legends, the Punic are sometimes found retrograde, and, as Semitic writing normally proceeds from right to left, this has introduced a complication most baffling to numismatists who do not claim to be familiar with Semitic epigraphy.

There has not always been agreement upon the exact letters composing the inscription, as may readily be understood in view of the variations in their forms already referred to, but since the examination by de Saulcy, *loc. cit.*, the transcription and transliteration are scarcely any longer in doubt. And, in the main,

the further conclusion reached by de Sauley, that in ZIZ we have the Punic equivalent of the Greek *Panormos*, has been accepted, more or less, by modern numismatists. There are dissentients, foremost amongst them Imhoof-Blumer, *Num. Zeitschrift* (Vienna), 1886, 263-264. There are some who accept the conclusion ZIZ = Panormos hesitatingly, for want of a better, as Poole in *B.M.C.* (Sicily), and Head, *H.N.*², 161-162. Hill, *Coins of Ancient Sicily*, 94, 140, 147; Macdonald, *Catalogue of Greek Coins in the Hunterian Collection*, i. 297 n.; and Grose, *Catalogue of the McClean Collection of Greek Coins*, i. 293, n. 1, hold the meaning of the legend to be uncertain. Others, as Ad. Holm, *Geschichte Siciliens*, iii. 645, and Evans, "Syracusan Medallions," *Num. Chron.*, 1891, 269, accept Panormos as the city striking some at least of the coins bearing the legend ZIZ, though that is not necessarily equivalent to acceptance of the proposition ZIZ = Panormos. Evans, however, goes so far as to write, *loc. cit.*, "It is probable from the occurrence of the legend ZIZ that those early silver types must be referred to the Panormitan mint." De Sauley sees in ZIZ the Punic name for Panormos, and, for him, the attribution of all coins bearing that legend to Panormos follows. He writes, *loc. cit.*, 61, "A mon sens donc, l'obole bilingue offrant à la fois les deux noms Tsits et Panormos suffit à elle seule pour rattacher d'une manière définitive à l'histoire de Palerme toutes les monnaies sur lesquelles le nom punique Tsits se trouve inscrit isolément."

This interpretation of ZIZ, though received with much misgiving, has to-day no serious rival; but, as the interpretation is regarded by many as unsatis-

factory, it has seemed worth while to examine the evidence afresh in the hope of finding another solution of the problem, free possibly from some of the difficulties attending the proposition ZIZ = Panormos.

Before entering upon that task, it is desirable to set out the most prominent of the rival explanations which have been offered from time to time.

Gesenius, *Paleographia Phoenicia*, Lib. I, cap. iii. 42, and Hamaker, *Miscell. Phoenic.* (1828), 137 *et seq.*, read the legend differently with varying results. As there is now general agreement as to the transliteration, it would not be profitable to pursue the suggestions of these two writers.

De Saulcy, *loc. cit.*, 52 (1842), maintains, first, that Ziz is the name of a city: "Nous avons donc en définitive le mot ציץ, Tsits, qui est certainement un nom de ville"; and, second, that the town for whose name it stands is Panormos. He bases his first claim upon an obol in his own collection, bearing the Punic legend ציץ "par les citoyens de Tsits" (*v. B.M.C. [Sicily]*, 249, No. 29, and Grose, *loc. cit.*, No. 2491, pl. 84. 11); his second, upon an obol in the Luynes collection, and another in the *cabinet du roi*, with Tsits (retrograde) on the obverse and ΠΑΝΟΡΜΟΣ on the reverse (*v. Holm*, viii. 19; Luynes Cat., 1077; Hunterian Cat., 208. 2, pl. xv. 10). His argument is not strengthened by his appeals to the name of the still existing Arabo-Norman castle, *La Zisa*, and to the meaning of "germ" or "bud" which may be found in Ziz. On the ground of the latter, he suggests that the name Ziz may have been given to the infant city by the Carthaginians (*sic*) "pour désigner une ville destinée à devenir une des cités les plus florissantes du peuple qui la créait".

Minervini, *Saggio di osservazioni numismatiche*, Napoli, 1856, 146 *et seq.*, recalls Strabo's reference to the Pannonian *Σεγαστική* with its near-by fortified city, *Σισκία*, and Appian's statement that the country was called *Σεγέστη* and its people *Σεγεστανοί*. He deduces from these statements that Siscia is an alternative name for the Pannonian Segesta, and, if for the Pannonian, why not for the Sicilian? Thus fortified, he adduces the didrachm with $\rho\sigma\rho$ and ΣIB on the reverse (Luynes Collection, 1076; Holm, viii. 21; Imhoof, *Num. Zeit.*, *loc. cit.*, pl. vii. 11—the same coin—and another example in Ugdulena, *v. infra*, tav. ii. 6). He claims that $\rho\sigma\rho$ = Sis = Siscia = Segesta, and is therefore the Punic name of the Elymian city. He goes further and maintains that every coin of Sicilian provenance which bears the inscription $\rho\sigma\rho$ is a coin of Segesta. So sweeping an assertion demands the support of its author's own words: "A me basta il vedere la Segesta di Pannonia detta pure Siscia per essere autorizzato a credere che la Segesta di Sicilia fosse ancora punicamente denominata Sis; e perciò reputerò più fondata opinione ritenere per Segestana la medaglia del sig. Duca de Luynes e tutte le altre di Sicula provenienza che offrono la medesima iscrizione punica $\rho\sigma\rho$." He finds in the Ziz-Panormos coin (Luynes, 1077; Holm, viii. 19) evidence of a federation of Panormos and Segesta.

Ugdulena, *Sulle monete Punico-Sicule*, Palermo, 1857, 37-38, reads not $\rho\sigma\rho$ but $\sigma\sigma = \text{AIA}$, which he offers as the Punic name of Himera or Segesta, and claims that the obol with the Punic legend and ΠΑΝΟΡΜΟΣ gives expression to a monetary or commercial alliance between the last and either Himera or Segesta. As

he is admittedly wrong in the reading of the legend it is not necessary to follow him further.

Müller, *Numismatique de l'ancienne Afrique*, Supp., 1874, 50 n., discusses various proposals, but inclines to Segesta as the equivalent of ZIZ. He writes, "Trouvant la même légende correctement écrite sur quelques monnaies aux types de Ségeste (Ugdulena, ii, 6) on est induit à présumer qu'elle exprime le nom de cette ville."

R. S. Poole, in the *British Museum Catalogue* (Sicily), 1876, ascribes the ZIZ coins to Panormos with a query, from which the inference may be drawn that, while not wholly convinced, he regarded that city's mint as being the probable source of the various issues bearing that legend. It does not necessarily follow that the attribution of the coins involved his acceptance of the legend as the Punic name of Panormos.

Imhoof-Blumer, *Monnaies Grecques*, 1883, 26, finds it necessary to class together certain small issues with the legend ZIZ on the ground of identity of fabric and symbol; and as some have the additional legend ΠΑΝΟΡΜΟΣ he feels constrained to ascribe all to that city. On the larger question of the attribution of the numerous coins in silver and bronze bearing the ZIZ legend and reproducing types reflecting Segesta, Agrigentum, Gela, Camarina, Syracuse, Tauromenium, Himera, and other cities of Sicily, he goes no farther than to say that, having regard to the evidence of the small denominations just referred to, it is no longer possible to attribute such coins to Himera or Segesta as has been proposed at different times. He was clearly not happy in feeling constrained to accept ZIZ as the Punic name of Panormos, for he winds up with

the sentence, "Si elle n'a pas une signification plus générale, qui n'aurait pas même besoin d'être géographique, elle doit être le nom phénicien de Panormos, comme de Saulcy l'a vu le premier; et c'est aussi là, que se trouvent classées, au Musée britannique, toutes les pièces à la légende זיז."

But three years later, in his article in *Num. Zeit.*, 1886, 263 *et seq.*, he says it is not possible for him to accept ZIZ as the name of any city. His words are, "Es scheint weder dieser [*sc.* Panormos] noch ein anderer bestimmter Stadtname unter 'ZIZ' verstanden zu sein." He cites the differences of types, and says that given ZIZ = Panormos it must be assumed either (a) that Panormos struck coins for most other important Sicilian cities, or (b) that they all struck coins for Panormos, both propositions being attended with the highest degree of improbability. He observes that ZIZ, amongst its various meanings, has that of "the shining", and suggests that this feature might well apply to Sicily as a whole from the standpoint of the African. He feels that the protagonists of ZIZ = Panormos will confront him with the obol bearing the legend זיזלעבז (v. *supra*, p. 131), and to meet the challenge proposes that, since ZIZ may have the meaning of Sicily *in genere*, there is no reason why *sh'ba'al ziz*, read by them as "of the citizens of Panormos", should not be equally well translated "of the citizens of Sicily".

Holm, *Gesch. Siciliens*, iii. 645 *et seq.*, marshals the coins, examines their types, and considers the views of Imhoof-Blumer, Evans, and others. He attributes some issues definitely to Panormos, but ascribes others bearing the legend to Motya and Eryx. He discusses

the original meaning of *Ziz*, which he agrees may be "the shining", and leads, he thinks, to no definite result, though he regards it as possible that there might, in the later stages of its use, have been some such play upon words as would produce such a value as *Ziz* = *Sik*. Though Holm does not pronounce definitely for the attribution to Panormos of more than a limited class, there is a general tone underlying his observations giving the reader the idea that he is really inclined to believe that Panormos may have had connexion of some sort with all the issues bearing the legend *Ziz*, and even that the possibility of *Ziz* as the Punic name of Panormos is not absolutely to be excluded.

Since the publication of Holm in 1898 the question has been allowed to rest, and it seems permissible to describe the attitude of present-day numismatists as being, on the whole, in line with that of Holm. It is in the hope of carrying the matter a stage further that the evidence is now being examined afresh.

The direct evidence offered in support of the argument *Ziz* = Panormos is very slight. A *litra*, of which there are but few examples, has

Obv.— $\rho\epsilon\rho\rho$. Poseidon seated r. on a rock; in r. hand a trident; in field r. dolphin; border of dots.

Rev.— $\Gamma\text{ANOPMO}\Sigma$. Young horseman cantering r. seated sideways on a man-headed bull; r. hand on rump, l. hand on head of bull.

Luynes, 1077, 0.83 gm. Holm, viii. 19.

There seems no room for doubt that this coin was struck at Panormos, and upon this slender basis it has been assumed that *Ziz* alone on others is evidence for Panormitan issue. But *Ziz* appears also on coins

of Segesta (Luynes, 1076; Holm, viii. 21; and Ugdulena, ii. 6 from Museo Salnitriano), and on tetradrachms which have also the legend of Syracuse (McClellan, No. 2481, Pl. 84. 1; Ugdulena, i. 19); and there would appear to be equally good ground for asserting, on the testimony of these, that Ziz coins were struck at Segesta or at Syracuse.

The litra with the following types has been offered as proving Ziz to be a city name:

Obv.—Youthful head l.; behind, swastika; border of dots.

Rev.— $\rho\epsilon\upsilon\pi\lambda\omicron\gamma\psi$ Man-headed bull standing l., head facing; border of dots.

B.M.C. (Sicily), p. 249, No. 29, 0.88 gm. McClellan, 2491, 0.60 gm.

The Punic legend is transliterated *sh'ba'al ziz*, "of the citizens of Ziz", or *Mibaali ziz* (De Saulcy), "by the citizens of Ziz", but other translations are possible, *v. infra*. Since upon the evidence of the first litra it is claimed that Ziz hails from Panormos, so upon that of the second we are required to agree that Ziz is Panormos.¹

¹ There is one parallel to the Ziz = Panormos coin which must be mentioned. It is that of Solus, *B.M.C.* (Sicily), p. 242, no. 4, of which there are other examples, with $\Sigma\omicron\Lambda\omicron\tau\iota\omicron\Nu\omicron$ and $\kappa\gamma\gamma$, concerning which it is said that the Punic legend is the Phoenician name of the city. Some of the writers who are doubtful as to ZIZ = Panormos have no misgiving as to $\kappa\gamma\gamma$ = Solus, e.g. Head, *H.N.*³, 170; Hill, *Coins of Ancient Sicily*, 141-142; Imhoof-Blumer, *Num. Zeit.*, 1886, 226; Holm, *loc. cit.*, 640. The argument seems to run that $\kappa\gamma\gamma$ is found upon numerous coins attributed to Solus, and as it is found on one die with $\Sigma\omicron\Lambda\omicron\tau\iota\omicron\Nu\omicron$, ergo $\kappa\gamma\gamma$ = Solus. It does not seem at all inevitable that this conclusion flows from the premises, and, indeed, we appear to have the ZIZ = Panormos argument repeated, but more didactically. As against this conclusion, it may be said that Movers, *Phönizier*,

And that is all; it is not claimed even that there is special frequency of ZIZ coins in hoards found in Panormitan territory. We may readily admit that as the legend shows the coins to be Punic and the types are Sicilian, some of them, even without the city name ΠΑΝΟΡΜΟΣ, may not improbably have connexion with that important seat of Siculo-Punic power, but the actual proof offered lies in the two coins described above.

There is no epigraphical evidence, no literary evidence, for the Punic name of Panormos; nay, there is no authority to show that in the fifth century it had a Punic name. It must have had one earlier, for it probably existed as a Punic settlement long before the first formal Greek colony was founded in Sicily. But Panormos, like the Elymian cities of Eryx and Segesta, came largely under Hellenic influence in the two centuries preceding the domination of Carthage in Western Sicily, and the reflection of that influence is to be seen in the coins struck from 480 B.C. onwards, where the legend is the Greek name, Panormos, in some form. That name, the "all harbour" so flattering to Panormitan vanity, may have come into general use by her Punic inhabitants to the exclusion of her Phoenician name.² Therefore, in seeking a

ii. 2, 337, declares that Phoenician Solus is סלע = Sela; and Judas, A., *Revue Archéol.*, 1860, vol. xvi, 658, reads כפרא = CPHRA = Kephra or Cephra, and proceeds, "Je suis fort porté à voir dans Cephra, par une mutation de liquide très fréquente et très naturelle, soit l'origine réelle, soit la transcription du grec au punique de la première partie du nom Cephaloedion". In the bilingual coin he sees an alliance between Solus and Cephaloedion.

² An interesting discussion of the names of Panormos is to be found in Freeman's *Sicily*, vol. i. 567-569.

Punic name for Panormos in the fifth century, it is not at all unlikely that those who propose to fit ZIZ into that position are endeavouring to establish a shadow which had long lost its substance. As already indicated (pp. 136-7) the Punic inscription ZIZ is found on coins with the Hellenic legends and types of Segesta and Syracuse, as well as those of Panormos; ZIZ is also found without Hellenic inscriptions on coins with the types of eight other Sicilian cities, viz. Messana, Akragas, Camarina, Syracuse, Gela, Motya, Segesta, and Thermae Himerenses (Holm, vol. iii, Appendix 18 *et seq.*).

Therefore, if ZIZ = Panormos, we must postulate (1) that Panormos struck coins for all these cities, or (2) that all these cities struck coins for Panormos. This dilemma presented itself to Imhoof-Blumer (*Num. Zeit.*, Vienna, 1886, 263), and with him we may agree that one hypothesis is as untenable as the other. The third possibility, that Panormos minted all the coins with ZIZ for her own use, must be rejected, for it strikes at the root of all conceptions of the purpose of coin types. Whatever varieties of views may obtain as to the origin and meaning of coin types, it is common ground that their purpose, at least at the period of the coins under consideration, is to be distinctive of the cities by which the coins were struck.

What, then, can we suggest as to the nature of the Punic inscription ZIZ? Are we not driven to conclude that it had some meaning more general in its character than the name of any city, Panormos or other? Imhoof-Blumer, *Monnaies Grecques*, 26, indicates such a possibility with a significance non-territorial, and

Holm, *loc. cit.*, seems to consider it also when he suggests, relative to the later issues, that it may be such a play upon words as *Ziz = Sik*. The conclusion, that the legend bore a meaning capable of wide application far beyond the bounds of any city, seems to be demanded by the circumstances of the case. The extensive use of the inscription, its employment with Hellenic legends of at least three cities, and its occurrence on a variety of fabrics with types of many cities, go to show that its meaning must be sought in some attribute, whether territorial or otherwise, that is applicable not to the coins of one city only but to those of all the cities over whose types it extends its sway.

Can we find that attribute in some one of the many meanings of this mysterious word? Holm and Imhoof-Blumer, as well as others, have dwelt upon its meaning of "shining", "*die Glänzende*", which has been proposed, neither happily nor convincingly, as descriptive of a feature of Panormos, or of Sicily itself. Can we not more successfully treat "*die Glänzende*" as applying to a universal attribute of the coins themselves? Dr. S. A. Cook, of Gonville and Caius College (to whom I am much indebted for guidance in the mazes of Punic script and grammar), in giving me "shining" as one of the meanings of *Ziz*, illustrated its quality, though he knew nothing of what was in my mind, by "as a burnished plate". *Ziz*, therefore, might be the Punic word for "shiner", than which no expression could more clearly convey the most obvious quality of a coin, especially a silver coin, as it came from the mint.

The word "shiner" as a slang term for coin was

in use at least as early as the eighteenth century in England. During that period it found its way into literature, and has been used in the manner of which the following illustrations are drawn from the *N.E.D.* and other sources:

1760. *Sir George*. He can't lend me a shilling . . .
Loader. . . To let a lord of lands want shiners; 'tis
 a shame.—FOOTE, *The Minor*, ii, Wks. I, p. 251;

and from the same writer may be quoted:

Has she the shiners, d'ye think?

1806. So I shows him a shiner.

1838. [*Oliver Twist*] Is it worth fifty shiners extra, if it's
 safely done from outside?

1851. I will bring you a mule load of Mexican shiners.

1887. Within my purse and pocket scarce a shiner.

Colloquial words for coins are of all countries and all ages, and probably date from the earliest period of their issue. They stand for all the aspects and qualities of the things they represent, and have frequently grown from their original and vulgar use to be the fully recognized legal and technical terms for particular denominations, or for metals or coins in general. In a paper addressed to numismatists it is not necessary to support this statement with examples, but those interested may refer to the list of coin-names derived from colours compiled by A. R. Frey in the *Year Book of the New York Numismatic Club*, 1918-1921, pp. 36-42.

The words "dollar" and "thaler" as engraved upon eighteenth- to twentieth-century coins are obvious examples of popular or slang names elevated and given official blessing, though in those cases the official use is restricted to a particular denomination. Mr. Stanley

Robinson of the British Museum, who, like his chief, Mr. G. F. Hill, is always so ready to help students of Greek numismatics, tells me of another parallel, more modern but even still more significant as coming from a people who, like the Punic peoples, were issuing coins for the first time. The English (Indian) rupee got into circulation in Yün-nan, and the Chinese authorities then produced a coin generally resembling it; for the head of Queen Victoria they substituted a head of the reigning Emperor, with the words YUN-NAN PROVINCE, and on the reverse, for the words ONE RUPEE INDIA and date, they put SILVER COIN.

The Punic cities of Sicily and their great sister Carthage, with her enormous foreign trade, were probably in full commercial intercourse with the Hellenic cities of Sicily from the end of the eighth century onwards. The cities of Himera, Naxos, Messana, and Syracuse began to strike coins about the middle of the sixth century, and Selinus not much later. Even before that period coins were in circulation amongst them, and the tetradrachms of Athens and staters of Corinth must have been familiar to the Punic people from their trading knowledge of their neighbours. This powerful and wealthy Semitic people issued no coinage of its own until late in the fifth century; conducting, we must suppose, their major trading operations on barter principles, the traders must have needed their customers' coins to balance small transactions and to adjust differences, and in this way they would become accustomed by use to coins for which, lacking official issues of their own, they could have no official terminology. They would, naturally, following the usage of all ages, name them

by one of their characteristics, which, in this case it is suggested, was found in the brilliant appearance of the silver discs, giving rise to the name "shiner", in Punic, *Ziz*. This name, first used in the colloquial intercourse of the market-place, would gradually become established on the lips of the people at large, and, later, in their contracts and other documents, so that, when the time came for the Carthaginians to strike their own coins, the colloquial term of more than a century's standing would enter into official use as the recognized name for coins in general, not of a particular denomination nor of any special place of issue.

It is common ground that the coinage of Carthage was first struck for use in Sicily, and a certain very rare didrachm and a tetradrachm, with the legend *Ziz*, are the earliest Siculo-Punic coins known. The didrachm is illustrated by Holm, viii. 21, from the Luynes collection, and is No. 1076 in the *Catalogue de la Collection de Luynes*, whose most welcome first instalment by M. Jean Babelon, recently issued, supplies a long-felt want. Another example from the same dies, which does not seem to be known to M. Babelon, is illustrated by Ugdulena, *loc. cit.*, *Tav. ii. 6*, from the Museo Salnitriano.³ The Ugdulena example is well centred, and the three dolphins, unlike those on the Luynes coin, are well away from the edge of the flan. The head of the reverse of this didrachm is early transitional in character, and the coin cannot have been issued later than 450 B. C.

The tetradrachm is known in three examples,

³ Cf. *Miscellanea* of this part, p. 274.

McClellan, No. 2481, Luynes, No. 1086 (illustrated by Ugdulena, *loc. cit.*, *Tav.* i. 19), and one in the Lloyd collection, and bears on the head side the legend **OXION** and on the chariot side **ZIZ**, and has naturally been related to Syracusan tetradrachms alike from its types and its depleted legend. The coin has been discussed by Mr. Grose, *loc. cit.*, 293, and *Num. Chron.*, 1916, 232-233, Tudeer, *Tetradrachmenprägung von Syrakus*, 104, and by a writer in the *Hellenic Journal*, 1923, pt. 2, 210. Mr. Grose refers to a coin without the Punic legend which he has placed under Syracuse, and suggests that "a Syracusan die had been appropriated by the Panormus mint". The *Hellenic Journal* writer, reviewing the McClellan Catalogue, thinks it more probable that the Punic engraver copied the Syracusan die, inscription and all, just as, at the same period, "the Eastern Semites were making imitations of Athenian coins inscribed **AΘE**". Tudeer also takes for granted, in discussing the Luynes example, that it is an imitation. That theory provides the more likely explanation of a coin which shows pronounced ignorance on the part of its engraver of the nature and purpose of an ethnic inscription. Tudeer attributes the head to the early fine style, but it is easier to agree with its attribution by Mr. Grose to the transitional period, to which the obverse certainly belongs. The head has the appearance which may properly be associated with a transitional coin, and might well precede the large series of heads with a cord wound four times round the hair. If it be based, as I am strongly of opinion it is, upon a transitional coin, this Punic copy of a Syracusan tetradrachm can be dated with approximate accuracy. It is reasonable

to assume that a current coin of Syracuse would be copied, and such an original would belong to the early issues following those with the pistrix. Head, *H. N.*², p. 173, says that the pistrix symbol continued in use for some time after the fall of the Deinomenid tyranny, and it may have been not earlier than 460-455 that the obverse exergue parted with the sea monster. The Syracusan prototype of the ΖΙΖ coin would be among the early issues of the post-pistrix period, and might therefore be in circulation not later than 455. If we give a lower limit of 450 for the striking of the Punic copy we shall not be far out in our calculation.

Following the coins with types of Segestan and Syracusan origin, there is nothing remaining to us representing Punic issues with the legend ΖΙΖ until we reach the period immediately antecedent to the Carthaginian invasion, when we find the tetradrachms based upon the decadrachms of Kimon and Euainetos. It may therefore be assumed that the tentative effort towards a Punic coinage, indicated by these early didrachms and tetradrachms, was abandoned until its renewal was stimulated by the preparation for that colossal Carthaginian enterprise which was launched by the attack on Selinus in 409.

The special interest of the ΖΙΖ coins of *circa* 450 B. C. lies in the fact that they were efforts of a crude character based in the one case upon one city's die and in the other upon another city's coin, the legend of the originating city being retained in part in each case in a manner suggesting that the identificatory purpose of the inscription was not known or that it was regarded as a feature essentially part of the type for any coin based upon the original, even for

the use of other people.⁴ It is impossible to look upon such a state of things as obtaining in Panormos at the date to which these coins belong; at least as early as 450 (according to Head, as early as 480), and for long after that date, Panormos struck coins with her own types and her own legends (Head, *H. N.*², p. 161). Even if it be supposed that Punic elements of Panormitan citizens sought a coinage of their own free from Greek influence in type or legend, they had examples before them in daily use which would have saved them from the need to grope their way in numismatic art and perpetrate the blunders of these early examples with Ziz. As issues struck at Panormos, these early Ziz coins are excluded by the known examples from the mint of that city of earlier, contemporary, and later date. Cf. Holm, iv. 7; Luynes, Nos. 1074, 1075; Jameson, Nos. 687, 688; Weber, No. 1474.

By whatever authority these early Ziz coins were struck, it is obvious that they were produced by people unacquainted with, or indifferent to, the significance of coin types and legends. The varieties of types used suggest that they were not produced for the same city, and yet the legend in both is the same. It is clear that each engraver sought to put a finishing touch to his work by adding a Punic inscription to his coin, and each engraver adopted the same Punic word for that purpose. Surely it is impossible that the word can have been the name of any city, for that is excluded by the differences of types and of workmanship; nor can it have marked a denomination,

⁴ For other examples of misunderstood inscriptions by barbarous copyists, see Tudeer, *loc. cit.*, p. 74.

for the coins differ in value. Since we are driven to exclude community of origin and identity of value, it is necessary to seek some other feature that would be a common denominator of both and yet within the range of meanings ascribed by Punic scholars to *ZIZ*. For the various reasons advanced above, it is suggested that *ZIZ* (= shining, as of a burnished plate = shiner) may have been the colloquial Siculo-Punic name for coins in general; that it was so used by Punic traders and others of the Greek coins they met and employed in their daily intercourse with their Greek neighbours; that it became established in their formal language, and, when tentative endeavours were made by the Siculo-Punic authorities to produce a coinage of their own, the common name for coin was engraved upon those early issues to mark their Punic source and intended use.

By the time Carthage desired to employ great bodies of troops from Magna Graecia and elsewhere, in *circa* 409, and needed a coinage of her own with which to pay them, in campaigns extending over the length and breadth of Sicily, the word *ZIZ*, with its meaning of coin, was so embedded in Punic speech that it was the natural one to use for coins meant to circulate over the whole of Sicily and in all her cities. When Carthage, by means of her repeated campaigns, had in larger or smaller measure achieved her ends, each of the cities, formerly Hellenic, over which she held sway was directed to strike small coins with its own types but with the Punic *ZIZ* replacing the ethnic or other Greek legend. When, later still, Carthaginian dominion was consolidated within certain defined limits in Sicily, and the period of conquest was

succeeded by that of settlement, it was natural that the use of the general term ZIZ on the coinage should be abandoned, and that its place should be taken by other Punic legends each having direct reference to the city of issue, which explains the use of such inscriptions as Kart chadasat, Ras Melkart, and others. The litra with types Poseidon and ZIZ on one side, youth riding man-headed bull and ΠΑΝΟΡΜΟΣ on the other (*H. N.*², p. 162; Holm, viii. 19), was probably one of the small coins issued at Panormos during the Carthaginian invasion or shortly thereafter. Those with eagle upon hare and scallop-shell and dolphin (Holm, viii. 12) at Akragas, Athena and swan over waves (*ib.* viii. 13) at Camarina, &c., would be issued during the period of Carthaginian occupation following the great invasion.

Some small coins with types of Gela, head of young river-god and forepart of man-headed bull, or the same with whole bull, demand special consideration. They bear the legend *sh'ba'al ziz*, and have provided one of the arguments of those who contend for ZIZ as being a city name; by them the Punic inscription is interpreted "of the citizens of ZIZ" or "of the citizens of Panormos", or of some other city according to the particular geographical value attached to ZIZ. Ba'al is a word with a wide range of meaning; it may mean "God" with the name of a particular locality attached, *e. g.* Baal-peor (*Num.* xxv. 3); it may mean "ruler"; it may mean "citizens". Upon the authority of Dr. S. A. Cook I am able to say that it may also mean "governor" or any person in authority (*cp.* Isa. xvi. 8). Thus it would be entirely justifiable to read "ZIZ of the ba'al"

= ZIZ of the ruler, or ZIZ by the rulers, which, if the meaning it is the purpose of this paper to propose for ZIZ be accepted, would give as the equivalent of *sh'ba'al ziz*, coin issued by the ruler or rulers of the city, or by the controller or controllers of the mint. Such a legend is particularly apposite at the city of Gela, for while Selinus, Akragas, and Himera became dependencies of Carthage, the treaty with Dionysius provided that the position of Camarina and Gela was that of tributaries to Carthage (Diod. xiv. 47). It may well be that the coins with the legend *sh'ba'al ziz* were coins struck in relation to the tributary requirements of Carthage.

These observations upon the Punic inscription ZIZ lead, then, to conclusions which may be summarized thus :

1. ZIZ is not the Punic name for Panormos.
2. ZIZ is not a place-name at all.
3. ZIZ coins may have been struck in large part at Panormos, not because ZIZ has any Panormitan meaning or association, but because that city, at the end of the fifth century, was the main seat of Punic power in Sicily.
4. ZIZ coins struck in Panormos would in all likelihood be those tetradrachms recalling Syracusan types (Holm, viii. 15) that would have wide currency, and those didrachms and smaller denominations (*ib.* viii. 11, 19) having that city's types or Greek legends and intended chiefly for more local use.
5. ZIZ coins of didrachm or smaller weight, with the types of other cities, e. g. Akragas (Holm, viii. 12), Camarina (13), Eryx (14), Gela (16, 17, 18), Motya (20), were struck in the respective cities to which the types belong, under Punic authority.

6. Ziz is clearly a word of general meaning outside any reference to type, denomination, or place of issue. One of its accepted meanings is "shining" (? shiner), and it is suggested that this meaning lies at the base of its use on the Siculo-Punic coins on which it is found inscribed. That interpretation of its use meets the case of every example known to numismatists, and seems to avoid the difficulties of every other interpretation hitherto offered.

A. H. LLOYD.

NOTE 1.—*The coin with the legends $\rho\omega\rho$ and ΣIB .*

FROM time to time various writers (e. g. Müller, as quoted *supra*, p. 133) have found in the association of the two inscriptions upon the same coin proof of their identity of meaning in the Punic and Greek languages; and this view still persists, as may be seen by reference to the Luynes Catalogue, vol. i, where, in commenting upon No. 1076, the coin which bears the two inscriptions, M. Jean Babelon says (p. 210), " ΣIB serait la transcription en caractères grecs du mot punique. La légende est ainsi bilingue". We must agree that, in the most elementary meaning of the term, the inscriptions are bilingual; but M. Babelon clearly intends us to infer that the inscriptions are bilingual in the sense of translating each other, which is the important point upon which it is necessary to join issue. He goes on to say, "Mais il est à remarquer que les lettres ΣIB paraissent seulement sur l'exemplaire de la coll. de Luynes. Voilà pourquoi J. P. Six a conjecturé qu'on a employé pour frapper la présente pièce un coin de Ségeste si imparfaitement modifié que la légende ΣIB est restée visible."

By the courtesy of M. Jean Babelon, the writer examined the Luynes example recently, and the close inspection of this, and of the drawing of the Salnitriano specimen given

by Ugdulena, *loc. cit.*, has convinced him that M. Six was correct in his judgement that the $\text{P}\omega\text{P}\cdot\text{IIB}$ coin is struck from a re-cut Segestan die which has retained the last syllable of its original Elymian legend. No Segestan coin struck from the unmodified die has yet been traced, but an example may exist in one of the many collections not yet published. Holding with M. Six the view expressed above, I am driven to the conclusion that **IIB** on the Luynes example has no more connexion with the accompanying **ZIZ** than has the **OΞION** of the tetradrachms already discussed (p. 142 et seq.).

NOTE 2.—*The Jewish coin Zuz.*

THE name *zuz* given to a denomination of the new Palestinian coinage (*The Times*, February 6, 1925) calls to mind that the Jews had a coin known by that name. The authorities of the Mishna repeatedly refer to the *dinar* or *zuz*. This name was given to a coin whose value was one-fourth of a shekel and the equivalent of the Greek drachm, but it is difficult to determine the etymological value of the term. In the Targum, the plural form *zozim* is used, Exod. xxviii. 19, for precious stone (rendered in A.V. *ligure*, in R.V. *jacinth*), and the *Dictionary of the Targumim*, &c., by Marcus Jastrow (1903), even suggests that *zuz*, the coin or weight, means "glittering", which is so attractively near to the "shining" sense of *ziz* as to demand special caution. For, it must be said, Jastrow's "glittering" value of *zuz* is only a guess and, although the consonants in *zuz* and *ziz* are expressed by the same English letter, there is the same sound-difference in the originals as exists between the *s* of our *is* and the *ts* of our *its*. Philologically this reveals a chasm too wide to be jumped and, if it is ever to be crossed, we must await the discovery of a bridge whose appearance is not yet in sight. In the light of the evidence now available, it would seem that there is no sufficient ground for connecting the Siculo-Punic coin-legend *ziz* with the Jewish coin-name *zuz*.

VII.

A RECENTLY DISCOVERED HOARD OF GREEK AND SICULO-PUNIC COINS.

[SEE PLATES V-VII.]

IN the autumn of 1924 a small hoard of Greek and Siculo-Punic tetradrachms was found in the neighbourhood of Cefalù. The coins have passed into my possession and I am assured that I have the complete find. Before they came into my hands ten or twelve of the coins had been partially cleaned, but the remainder were in the state in which they were found, being covered with a heavy deposit of basic carbonate of copper, and I was in time to secure that the further cleaning should be done under my own supervision. The layer of carbonate of copper was so thick as largely to obscure the types, and the general appearance of the find was of badly-preserved bronzes. It is probable that the coins were buried in a bronze or copper pot, their contact with which was responsible for the unusual chemical action.

The coins are all tetradrachms, and their total number is sixty-seven. Owing to the unequal action of the copper upon the silver it was not felt that uncleaned weights would offer any reliable data, and the weights that are here given are the weights of the coins after cleaning. On the whole, the coins are very well preserved, having been withdrawn from circulation within a short period, a few years at most, after issue. Such rather wide variation in weight as exists should not be attributed to wear, but (1) to original variation,

or (2) to the varying degree of chemical action from greater or less proximity to the bronze or copper pot in which they were buried. After cleaning, the coins are in very fine condition.

The main distribution of the sixty-seven coins is as follows:

1. Agathocles, first period, 317-310.	
<i>Obv.</i> Head of Arethusa.	
<i>Rev.</i> Quadriga. Pl. V. a, b.	8
2. Agathocles, second period, 310-304.	
<i>Obv.</i> Head of Kore.	
<i>Rev.</i> Nike setting up a trophy. Pl. V. d to g.	9
	—
	Total Syracusan coins
	17
3. Siculo-Punic; Cephaloedium.	
<i>Obv.</i> Head of Arethusa.	
<i>Rev.</i> Quadriga. Pl. V. h to l and Pl. VI. m. 6	
4. Siculo-Punic; various Punic inscriptions.	
<i>Obv.</i> Head of Arethusa.	
<i>Rev.</i> Horse's bust. Pl. VI. n to s.	7
5. Siculo-Punic; various Punic inscriptions.	
<i>Obv.</i> Head of Herakles.	
<i>Rev.</i> Horse's bust. Pl. VI. t to w and Pl. VII. y.	15
	—
	Total Siculo-Punic
	28
6. Barbarous imitations of (2). Pl. VII. aa, bb.	20
7. " " of exceptional style.	1
	Pl. VII. cc.
	—
	Total barbarous
	21
8. Alexander of Macedon. Müller Class III.	1
	Pl. VII. dd.
	—
	Total
	67

There is an astonishingly large number of dies represented in the find. In the detailed descriptions

of the coins mere differences of die will be ignored, while each die constituting a variety will be separately described; it will be worth while therefore to indicate briefly the number of obverse and reverse dies in each of the six classes in which there are more than one coin.

Class.	Number of coins.	Number of Obverse dies.	Number of Reverse dies.
1	8	7	7
2	8 (1 uncleaned)	7	8
3	6	6	6
4	7	7	7
5	14 (1 uncleaned)	12	13
6	20	16	20
	—	—	—
	63	55	61

In the following descriptions the weights of all the coins are given, and the weights of those illustrated are shown in heavier type.

Class 1.

SYRACUSE.

No. of coins in division.	No. of coins in class.
---------------------------------	------------------------------

(a) *Obv.* Head of Arethusa l. wearing ear-ring of triple pendant and necklace of pearls; hair bound with reeds; around, three dolphins; beneath neck, **NI**: dotted border

Rev. **ΣΥΡΑΚΟΞΙΩΝ** in ex. Fast quadriga driven l. by bearded charioteer in long chiton holding reins in l. hand, goad in r.; above, triskelis; under the legend, **Α**: dotted border

Pl. V. a.

Weight 16.60 16.66 16.88
16.98 16.91

Size 27 mm.

SYRACUSE (*continued*).

	No. of coins in division.	No. of coins in class.
(b) <i>Obv.</i> As (a), but Φ I beneath neck <i>Rev.</i> As (a)		
Pl. V. b.		
Weight 16.73 16.63		
Size 26 mm.	2	
(c) <i>Obv.</i> As (a), but monogram off the flan		
<i>Rev.</i> As (a); has suffered from cor- rosion	1	
	—	8
Class 2.		

SYRACUSE.

(d) <i>Obv.</i> Head of Persephone r. wearing ear-ring of single pendant and necklace of pearls; hair, bound with wreath of barley, falls in loose strands on each shoulder and on the back, where the strands are tightly tied, the ends hanging loose; behind the head, ΚΟΡΑΣ upwards: dotted border		
<i>Rev.</i> ΑΓΑΘΟΚΛΕΟΣ in ex. Winged Nike putting the finishing touch to a trophy which she has set up r.; in her lowered r. hand a hammer, in her raised l. a punch with which she is piercing the hel- met for its fastening; in field r., triskelis, l., Α: linear circle		
Pl. V. d.		
Weight 16.89 16.75		
Size 26 mm.	2	
(e) <i>Obv.</i> As (d)		
<i>Rev.</i> Type as (d), but with inscrip- tion in field l. ΑΓΑΘΟΚ[] upwards		
Pl. V. e.		
Weight 16.77, and one coin not cleaned		
Size 24 mm.	2	

- | | No. of
coins in
division. | No. of
coins in
class. |
|---|---------------------------------|------------------------------|
| (f) <i>Obv.</i> As (d) | | |
| <i>Rev.</i> Type as (d), but no monogram; the form of the inscription is ΑΓΑΘΟΚΛΕΙΟΣ , and its position in field l. upwards | | |
| Pl. V. f. | | |
| <i>Weight</i> 16.69 16.61 16.71 16.71 | | |
| <i>Size</i> 30 mm. | 4 | |
| (g) <i>Obv.</i> ΑΓΑΘΟΚΛΕΙΟΣ r. downwards. Head of Persephone r. wearing ear-ring of single pendant and necklace of pearls; hair, bound with wreath of barley, falls in loose strands on each shoulder and on the back, where the strands are lightly tied, the ends hanging loose: dotted border. Exceptionally high relief and the hair more florid | | |
| <i>Rev.</i> Winged Nike setting up trophy as before: neither monogram nor inscription | | |
| Pl. V. g. | | |
| <i>Weight</i> 18.78 | | |
| <i>Size</i> 29 mm. | 1 | 9 |

Cf. H.N.², p. 891, and Imhoof, *Zur gr. u. röm. Münzk.*, p. 250.

Class 3.

SICULO-PUNIC.

- Cephaloedum with inscription רש מלקרת (*Ras Melkart*).
- (h) *Obv.* Inscription in ex. Fast quadriga driven r. by charioteer holding reins and goad; above, Nike flying l. to crown charioteer
- Rev.* Female head r. wearing ear-ring of triple pendant and necklace of pearls; hair bound with reeds and elaborately curled and waved; around, four dolphins
- Pl. V. h.
- Weight* 18.36 16.27
- Size* 27 mm.

SICULO-PUNIC (*continued*).

- | | No. of
coins in
division. | No. of
coins in
class. |
|--|---------------------------------|------------------------------|
| (i) <i>Obv.</i> As (h)
<i>Rev.</i> Female head r. wearing ear-ring of triple pendant and necklace of pearls; hair rolled behind and bound with reeds; around, three dolphins, two in front meeting and one behind downwards
Pl. V. i.
Weight 17.00
Size 25 mm. | 1 | |
| (k) <i>Obv.</i> Fast quadriga driven l. by male charioteer in long chiton, holding reins in l. hand, goad in r.; above, Nike flying r. to crown charioteer
<i>Rev.</i> Female head r. wearing ear-ring of triple pendant and necklace of pearls; hair, in broad ampyx, waved and curled; in front, two dolphins meeting; behind, grain of wheat: dotted border. Impressionist style
Pl. V. k.
Weight 16.81
Size 28 mm. | 1 | |
| (l) <i>Obv.</i> The same inscription in exergue but retrograde. Fast quadriga, horse's legs arranged stiffly, driven r. by charioteer holding reins in r. hand, goad in l.; above, Nike flying l. to crown him; double exergual line
<i>Rev.</i> Female head l., wearing ear-ring of triple pendant and necklace of pearls; hair rolled and bound with reeds; around, five dolphins
Pl. V. l.
Weight 16.65
Size 25 mm. | 1 | |

	No. of coins in division.	No. of coins in class.
(m) <i>Obv.</i> Traces only of inscription in ex. As (l), but horse's legs more natural		
<i>Rev.</i> As (l), but three dolphins only, two in front, meeting, and one behind		
Pl. VI. m.		
Weight 16.72	1	
Size 23 mm.	—	6

Class 4.

SICULO-PUNIC.

Head of Arethusa and horse's bust.

With inscription עפ מכנת (Am machanat).

(n) <i>Obv.</i> Head of Arethusa l., wearing ear-ring of triple pendant and necklace of pearls; hair rolled, curled, and bound with reeds; around, four dolphins: dotted border		
<i>Rev.</i> Inscription below. Horse's bust l.; behind, palm tree with fruit: linear circle		
Pl. VI. n.		
Weight 16.61 16.44		
Size 27 mm.	2	
(o) <i>Obv.</i> As (n), but beneath the chin a pellet		
<i>Rev.</i> As (n)		
Pl. VI. o.		
Weight 16.97		
Size 25 mm.	1	
(p) <i>Obv.</i> As (n), but not Greek in style: dotted border visible		
<i>Rev.</i> As (n)		
Pl. VI. p.		
Weight 17.04		
Size 26 mm.	1	
(q) <i>Obv.</i> As (n), but a Semitic type of face		
<i>Rev.</i> As (n)		
Pl. VI. q.		
Weight 16.84		
Size 26 mm.	1	

SICULO-PUNIC (*continued*).

No. of coins in division.	No. of coins in class.
---------------------------------	------------------------------

With inscription Σ .

(r) *Obv.* Head of Arethusa l., wearing ear-ring of triple pendant and necklace of pearls; hair rolled, curled, and bound with reeds; one dolphin behind, and indications of others on the edge of the flan l.

Rev. Inscription beneath. Horse's bust l.; behind, a palm tree with fruit. Cf. Müller, No. 25
Pl. VI. r.

Weight 16.43

Size 26 mm.

1

With inscription Σ .

(s) *Obv.* Head of Arethusa as before, of debased style; around, three dolphins and a (?) tunny

Rev. Inscription beneath. Horse's bust l.; behind, palm tree with fruit: linear circle. Cf. Müller, No. 23

Pl. VI. s.

Weight 16.72

Size 25 mm.

1

7

Class 5.

SICULO-PUNIC.

Head of Herakles and horse's bust.

(t) *Obv.* Head of Herakles in lion's skin r.

Rev. Punic inscription (*Am ham-machanat*) beneath. Horse's bust l.; behind, palm tree with fruit

Pl. VI t.

Weight 16.74 16.04 16.48

16.84 16.94

Size 25 mm.

5

		No. of coins in division.	No. of coins in class.
(u)	<i>Obv.</i> As (t); dotted border <i>Rev.</i> Punic inscription (<i>Mechasim</i>) beneath. Horse's bust l.; be- hind, palm tree with fruit; in front, a club; dotted border Pl. VI. u. Cf. Müller, No. 19 Weight 15.64 16.74 Size 25 mm.	2	
(v)	<i>Obv.</i> As (t); dotted border <i>Rev.</i> As (u), but, instead of club, caduceus, upright Cf. Müller, No. 21 Pl. VI. w. Weight 15.91 Size 25 mm.	1	
(x)	<i>Obv.</i> As (t) <i>Rev.</i> As (u), but no symbol Weight 16.13 16.46 16.70 16.83 16.84	5	
(y)	<i>Obv.</i> As (t), but unusual type of mane <i>Rev.</i> As (t); dotted border, but no legend or symbol visible Pl. VII. y. Weight 16.34 Size 25 mm.	1	
(z)	<i>Obv.</i> As (t) <i>Rev.</i> Horse's bust, but details in- visible as the coin remains in the state in which it was found	1	
		—	15

Class 6.

IMITATIONS OF CLASS 2.

- (aa) *Obv.* Head of Persephone r. wearing ear-ring of single pendant and necklace of pearls; hair, bound with wreath of barley, falls in loose strands on each shoulder and on the back, where the strands are tied, the ends falling loose; behind the head, ΚΟΡΑΣ downwards: dotted border

IMITATIONS OF CLASS 2 (*continued*).

No. of coins in division.	No. of coins in class.
---------------------------------	------------------------------

Rev. ΑΓΑΘΟΚΛΕΙΟΣ l. upwards.
Winged Nike putting the finishing touch to a trophy which she has set up r.; in her lowered r. hand a hammer, in her raised l. a punch with which she is piercing the helmet for its fastening; in field l., triskelis; Nike and the trophy stand on exergual line: dotted border

Pl. VII. aa.

<i>Weight</i> 16-98	16-81	16-91	
16-64	17-04	17-02	16-98
16-87	16-78	16-75	16-62
16-55	16-35		

Size 27 27 25 27 mm.

13

(bb) *Obv.* As (aa), but necklace not always visible, and generally rougher work

Rev. As (aa), but no exergual line

Pl. VII. bb.

<i>Weight</i> 17-09	16-94	16-96	
16-82	16-71	16-69	16-61

Size 27 28 25 mm.

7

— 20

Class 7.

IMITATION OF CLASS 2.

(cc) *Obv.* As (aa), but much better style and finer work; Semitic type of features

Rev. As (aa)

Pl. VII. cc.

Weight 17-37*Size* 28 mm.

1

— 1

No. of coins in division.	No. of coins in class.
---------------------------------	------------------------------

Class 8.

MACEDON.

Alexander the Great.(dd) *Obv.* Head of Herakles in lion's skin r.; dotted border*Rev.* ΑΛΕΞΑΝΔΡΟΥ r. downwards. Zeus Aëtophoros seated l. on throne without back; in front, aplustre; beneath seat, Π: dotted border

Pl. VII. dd.

Weight 16.98

Size 25 mm.

1

Mr. E. T. Newell attributes this coin to Amphipolis and gives it the date 315-310.

—

1

Total

67

The two best-preserved classes are 1 and 2, the Syracusan coins, but this may well be indicative of better engraving, striking, and the use of harder metal by the Syracusan mints rather than of less wear due to shorter periods of circulation. Class 2 is regarded as being struck first about 310, to commemorate the great African victory of Agathocles (*H.N.*², pp. 181-182); it is assumed that the type cannot have continued in use after 304, as in that year the tyrant took the title of king, and ΑΓΑΘΟΚΛΕΟΣ ΒΑΣΙΛΕΟΣ is found upon his gold and bronze coinage, though there is no recorded silver coin bearing the title; the only silver coins remaining from the last period of Agathocles' rule at Syracuse are the staters of Corinthian types without inscription and of the reduced weight of 7.00 grammes or eight litrae (nominal).

By whatever authority, and in whatever circumstances, the coins of Class 6 (imitations of Class 2) were issued, it is not likely that they would continue to be struck for any long period after the issue of their prototype had ceased, if, indeed, they continued so long. If it is justifiable to postulate that the classes of Siculo-Punic character were at least not later in date than those of Syracusan types, it seems reasonable to offer the proposition that the hoard was buried about the year 300 B.C.

In dealing with Classes 1, 2, and 6 no problem of date arises; they are self-explanatory, and Head's chronology is accepted. It is far otherwise with respect to Classes 3, 4, and 5, for which no chronological sequence has been attempted. For Siculo-Punic coins generally Müller, *Numismatique de l'ancienne Afrique*, is still our principal authority, though the coins of Class 3, *Ras Melkart*, are outside his scope. For the other classes he makes no attempt to offer any chronological sequence; he treats them by legends and types, and says generally that they were struck between the end of the fifth century and 241 B.C., when Carthaginian rule in Italy ceased. Head, *H.N.*², pp. 877-879, gives the wide range 410-310, and Holm is no more helpful.

With regard to Class 5, however, all our three authorities quoted are in agreement in ascribing the Head of Herakles in lion-skin type to the influence of the far-reaching tetradrachms of Alexander the Great, Holm saying, *Geschichte Siciliens*, iii, p. 643, No. 270, "Sie sind um 320 geprägt worden". It is of interest in this connexion to note the inclusion in the hoard of a tetradrachm of Alexander [Pl. VII. dd].

*H.N.*², p. 227, assigns the beginning of the Alexander tetradrachms to 334, but, however rapid may have been their spread eastward, they would be much slower in reaching Carthage in such measure as to lead her to adopt the obverse type for an issue of her own. Her maritime trade interests lay to the west rather than to the east, and it is very likely that her contact with the new coins would be in and through Sicily. That, indeed, we are driven to assume if we accept the prevailing opinion that her Herakles/horse's bust coins were struck in Sicily. Holm's suggestion of 320 seems a reasonable one, but in view of the large number of coins of the types remaining to us with various legends it seems permissible to offer for the currency of these types a period beginning in 325 and extending to 310, in which year the activity of Agathocles in Africa might be expected to reflect itself in Siculo-Punic coinage, though the Herakles types may have continued in use later.

In considering the date of the coins of Class 4 of the hoard it is not without importance to observe that they bear in common with those of Class 5 the horse's bust and palm tree on their reverse, and that five of the seven coins of the class have the legend *Am machanat*, which is borne by five coins of the Herakles class. The common use of the same type of reverse for Class 4 and Class 5, especially with the same legend in several cases, seems to point quite clearly to an overlapping, if not wholly contemporaneous, period of issue (cf. Sir Arthur Evans, *Syr. Med., Num. Chron.*, 1891, p. 312). It is true that the inscription *Am machanat* is found upon earlier coins, cf. Müller, Nos. 3, 4, 5, 6, 7, but in each of those instances it is in asso-

ciation with the further inscription *Kart chadasat* and with other types admittedly early, *v. Evans, loc. cit.*, p. 311.

The resort to the use of coinage did not come naturally to the Carthaginians; they seem to have been driven to it, when first they used it in any quantity, under the imminent approach of war, *cf. H.N.*², p. 877, and the lack of orderly evolutionary development suggests spasmodic return to its use at various times during the fourth century under pressure of the like conditions. The coins of Class 4 seem to precede those of Class 5, and the warlike measures which were forced upon the Punic peoples of Sicily by the liberating energies of Timoleon may very likely have been responsible for the first issue of these types. It is therefore suggested that they may be referred to the period 345-325.

Class 3, with the legend *Ras Melkart* or promontory of Melkart, has been variously attributed to Herakleia Minoa and to Cephaloedium, but the weight of Holm's opinion, *Gesch. Sic.*, iii, pp. 642, 673-674, endorsed by Head, *H.N.*², p. 136, in favour of the latter has led to the very wide acceptance of Cephaloedium as the place of issue. The discovery of the six coins with this inscription in this small hoard found at Cefalù cannot be regarded as other than confirmatory of the prevailing attribution. But their date is less clear; Head, *loc. cit.*, places them in the period 409-396, which even their style alone makes incredible.

Cephaloedium, whose modern representative is Cefalù, distinguished only by its magnificent Arabo-Norman church, lay within the territory of Himera at about twelve miles distance eastward of the city, as

Thermae lay seven miles to the west. Thucydides (vi. 62) says definitely that Himera was the only Greek πόλις in this part of Sicily, and we must conclude from that statement that Cephaloedium was a military outpost such as its splendid situation, a headland standing boldly towards the sea, would make specially suitable for the protection of the city from the attacks of Sikel peoples occupying that part of the adjacent territory. It is impossible to believe that a position so vital for defence, lying so near as twelve miles from the city, could have been left unoccupied by Himera, whether from the point of view of her own protection or that of its value to her barbarian neighbours. It is probable that after the fall of Himera in 409 Hannibal left Cephaloedium undisturbed, as he returned immediately to Carthage after his tremendous revenge upon the Himereans. Such refugees as escaped the slaughter fled to Cephaloedium, as also some settled, then or later, at Thermae, and the total inhabitants of the place were sufficiently numerous to lead Himilco to make a treaty with them when he marched by on his way to Messana in 397 (Diod. xiv. 56). A year later the victorious Dionysius stood before it, and the strength of the fortress is perhaps indicated when we are told that it was yielded to Dionysius by means of treachery (Diod. xiv. 78). The name of Cephaloedium does not appear again until it was captured by Agathocles in 307, but there can be little doubt that, at the disastrous peace made by Dionysius in 378, when the south coast as far east as the Halykos was formally made over to the Carthaginians, Cephaloedium, along with Thermae (which was in Carthaginian hands during the time of Timoleon, cf. Diod.

xix. 2), was likewise ceded by the Greeks. It must have remained Carthaginian until the time of Agathocles, who besieged and took it in 307 (Diod. xx. 56). Now Head, *H.N.*², p. 136, as already mentioned, gives the *Ras Melkart* tetradrachms to the period 409-396, but, putting aside the testimony of the style of the coins, the place seems to have been Greek at that period, for, in 397, Himilco made a treaty with its inhabitants. A Carthaginian general would not make a treaty of friendship with a small Carthaginian city, still less would an independent Greek city strike coins with a Punic legend. From 396 until 378 Cephaloedium seems to have been under the domination of Dionysius, during which period it probably used the coinage of Syracuse, though of that dominant state, as of all the other Greek cities during that period, it is probably true to say that the issues of tetradrachms were very few. In any case, no Greek city within the dominions of Dionysius would issue coins with Punic inscriptions. There remains, therefore, a period of seventy years, from the peace of 378 to the capture of Cephaloedium by Agathocles, during which the coins bearing the legend *Ras Melkart* might have been struck. There is no reason to suppose that the city would have any need to produce immediately a coinage of its own under its new masters, as there is certainly none to believe that a people inheriting the tradition of the beautiful tetradrachms of Himera, and using until that time the fine tetradrachms of Eukleidas and his imitators, would be capable immediately of so steep an artistic fall as the issue of the *Ras Melkart* coins involves. Cephaloedium was not a great trading city; that, for the Punic peoples of Sicily, was found at

Panormos, only forty-one miles away on the same coast, and the city on the great promontory to the east was of value to the Carthaginians mainly as a defensive outpost against the Hellenic and Sikel peoples. Such a city, from a Carthaginian point of view, would have small use for major coins of its own in time of peace, but in time of war, or the anticipation of war, when its garrison would receive strong additions to resist the attacks which were expected from east and south, the need for full and ample supplies of currency would arise. Such an occasion arose in consequence of Timoleon's efforts directed against the Carthaginians, which began in 343 and culminated in the overwhelming defeat of the Punic forces on the Krimissos in 339. The protection of the north coast, as being the line of approach to Panormos, was all important to the Carthaginians, and it is natural to assume that the provision made at Cephaloedium was proportionate to its importance. In view of the great need for coinage at Cephaloedium at that period, and having regard to the debased style of the coins of *Ras Melkart* that remain to us, it is suggested that their issue began about 345 and continued until about 325, when it was superseded by the Herakles and horse's bust type for the Carthaginian cities of Sicily in general. The considerations leading to this conclusion appear to find convincing support from the inclusion of the six *Ras Melkart* coins in this little hoard. All the other coins of the find belong to the second half of the fourth century, thirty of them to its last decade. There are no coins in the hoard that are admittedly of the late fifth or early fourth century, e.g. no Punic coins of full or half horse/palm tree types, no Syracusan coins of the signed

dies or even of their successors, the imitations of Eukleidas' Arethusa with streaming hair. The *Ras Melkart* coins of the hoard are in a similar state of preservation to many of the coins of which it is composed; they are quite obviously not in that condition which would be inevitable if they had been issued fifty to seventy-five years before they were withdrawn from circulation. On *a priori* and concrete grounds alike, it seems difficult to arrive at any other conclusion than that the *Ras Melkart* coinage, represented here by Class 3, was issued between 345 and 325 approximately.

The coins of Class 6, twenty-one in number, representing nearly one-third of the hoard, are obviously imitations of, and roughly contemporary with, Class 2. The prevailing opinion is that these somewhat rudely-executed coins were struck in Africa, "where the same care could not be bestowed upon them as in Syracuse." Head, *Coinage of Syracuse*, p. 48; cf. also Hill, *Historical Greek Coins*, p. 114, n. 2; and Evans in Freeman's *Sicily*, iv, p. 489. If they were struck in Africa by Agathocles it follows either (1) that he captured a large amount of silver in the course of the campaigns, or (2) that he carried a large quantity of bullion with him from Syracuse. If he had captured silver, it is difficult to see why so interesting a fact is not mentioned by Diodorus; if he carried bullion with him from Sicily it is not easy to understand why he should take silver in that form rather than in the more useful form of coins. If he took silver in the form of bullion he must have taken with him engravers and appliances for converting it into currency. Moreover, it is agreed that the coins of Class 2, Pl. V. d to g, commemorate

his early African victories; if these were struck in Syracuse, why were not all his needs satisfied from that source? If they were struck in Africa, why should other issues with the same types, Class 6, **Pl. VII. aa, bb**, display so sharp and great a fall in design and execution? In Syracuse, we have reason to believe, as indeed it is natural to expect, there were master engravers and pupils, master workmen and apprentices; we have evidences of difference of quality in the work of the same period which it is most reasonable to attribute to such differences of artistic power and technical skill as would flow from such conditions. But the differences of style, both in design and execution, between the coins of Class 2 and those of Class 6 are not explicable upon any such grounds; they are differences not of degree but of nature: differences not as between master and man, but as between Greek and barbarian. The obvious barbarians in this case are the Carthaginians; copyists in coinage they had always been, both in principle and in detail, from the early years in which they reproduced with a progressive diminuendo of success the heads of Syracusan medallions, to the later years of the fourth century when they were copying the heads of other Syracusan coins, as in Classes 3 and 4 of the present hoard. Such differences of style as are seen between the coins of Class 6, **Pl. VII. aa, bb**, and the coins of Class 2, **Pl. V. d to g**, may be readily paralleled between the coins of *Ras Melkart* and those of Euainetos.

It is true that there is in the coins of Class 6 a close reproduction of detail, including the inscriptions, that is not to be found in the parallels mentioned above. That the Carthaginians had some purpose of their own

in such close copying is scarcely to be doubted. Conducting a campaign in a strange land, employing large bodies of mercenary troops drawn from lands outside those over which he held sway, Agathocles must have suffered many losses, by desertion to the enemy, of troops owing him no personal loyalty nor patriotism to his state. We read in Diodorus of mutiny in the army of Agathocles, which, reaching the ears of the enemy, led the Carthaginians to offer the mutineers higher pay and rewards if they would forsake the tyrant and enter their service (Diod. xx. 34). Such offers to men whose pay was in arrear must have been very tempting, and, though we read that Agathocles astutely quelled the mutiny, it cannot be doubted that some would transfer their services on this and many other occasions during the long campaign. Such changes of side were frequent during the centuries of warfare between Greeks and Carthaginians, and it is quite likely that the new masters in Africa would arrange to tender the higher payment in coins resembling those which the troops had been receiving from the old; so would the increased rate of pay be most readily recognized. The Carthaginians might, indeed, have some sinister purpose in this as leading to the suggestion in the minds of the deserted troops of double-dealing on the part of Agathocles, whose coins they were thus enabled to offer in payment. The coins of these imitative issues would be used by the Carthaginians in Sicily also, where, equally, they may have been made to serve the purposes of currency and propaganda. There is one not unimportant piece of evidence in the present hoard that may be offered in support of the proposition that

coins of the Class 6 type are Carthaginian in origin; it is the single coin constituting Class 7, **Pl. VII. cc.**¹ It will be observed that this coin has every detail of the coins of Class 6, the legends in the same position on the two sides and the symbol in the same position, in both which respects it differs entirely from the coins of Class 2. And yet, as compared with the coins of Class 6, its style is immeasurably superior, as is also the technique of the coin; moreover, the features of Kore are definitely Semitic in type. Have we in this example a coin struck from dies produced by a skilled hand for the guidance of the inexpert and untrained Carthaginian moneyers?

To sum up, the conclusions arrived at from the examination of this little hoard are, briefly, as follows:

- (1) The hoard was buried about 300 B.C.
- (2) It consists of coins, Siculo-Punic and Greek, struck between 345 and 304 B.C.
- (3) The coins of Class 2 (Agathocles, 2nd period) were struck by Agathocles, but whether in Syracuse or Africa is immaterial.
- (4) The coins of Class 3 were struck in Cephaloedium (on which site the hoard was found) between 345 and 325 B.C.
- (5) The coins of Class 4 were struck by Carthaginians in Sicily between 345 and 325 B.C.
- (6) The coins of Class 5 were struck by Cartha-

¹ Mr. Stanley Robinson, of the British Museum, has very kindly brought to my notice a poorly-preserved coin from the same dies which was illustrated in Naville Sale Catalogue V, No. 1185. Neither he nor I have been able to find any other example recorded.

ginians in Sicily between 325 and 310 B.C., continuing possibly a few years later.

(7) The coins of Class 6 were struck by the Carthaginians for ends of their own in imitation of the coins of Class 2 struck by Agathocles. They may be attributed to the years 308-304 B.C.

A. H. LLOYD.

VIII.

THE LINCHMERE HOARD.

[SEE PLATE VIII.]

IN the month of December, 1924, an earthenware vase containing Roman and Romano-British coins was discovered in a field which lies to the north of the road leading from Haslemere and Shotter Mill to Liphook, close to the point at which the three counties of Hants, Surrey, and Sussex meet, but actually in the county of Sussex. By great good fortune the entire hoard came into the possession of Miss F. E. Abbott and Mrs. Hoyle, the owners of the field, and they, with a wisdom which cannot be too highly praised, placed it intact in the hands of the British Museum for examination. By so doing they have rendered great service to numismatic knowledge, and set an example to other discoverers which is worthy of all imitation.

It will be seen from the following notes that the find as a whole conveys information and suggests probabilities which could not have been deduced from isolated coins. That is always so. Whenever a find is dispersed before examination the inevitable loss to science is deplorable. We have before us a recent and most grievous example in the case of the Arras find of 1922.

The present discovery is of particular importance in that it largely illustrates that interesting period of our

national history during which, from A.D. 287 to 296, Britain under Carausius and Allectus was practically independent of Rome.

The hoard contained 812 coins, of which 278 were struck in continental mints as follows :

Emperor.	Number of coins.	Cologne.	Lugdunum or the other mint in Gaul.	Ticinum.	Rome.	Siscia.
Postumus	1	1	—	—	—	—
Victorinus	2	—	2	—	—	—
Aurelian ¹	15	—	—	11	3	1
Severina	1	—	—	1	—	—
Tacitus	60	—	43	3	14	—
Florian	3	—	3	—	—	—
Probus	133	—	85	20	14	14
Carus	5	—	4	1	—	—
Carinus	7*	—	—	6	1	—
Magna Urbica	1	—	1	—	—	—
Numerian	4	—	2	2	—	—
Diocletian	20	—	15	4	1	—
Max. Hercules	26	—	26	—	—	—
Totals	278	1	181	48	32	15

With the exception of the two antoniniani of Victorinus, all these coins are in very fine condition, and still bear the white metal wash, almost or quite complete. The absence of all coins from mints east of Siscia is to be noted, as also is the fact that the mints are represented in proportion to their proximity to Britain. No coins of Aurelian are earlier than A.D. 270. The latest coins of Diocletian and his colleague in the hoard are dated by Col. Voetter in A.D. 288; and the total period covered by these con-

¹ A few of these coins were struck at Mediolanum shortly before the removal thence of the mint to Ticinum.

tinental pieces is therefore (excluding the three coins of the Gallic empire) but eighteen years. Short though it is, it is surprising to find that the earliest, and in fact practically all the coins, are in almost mint condition.

The remaining 534 coins are all of Carausius. Most of them bear marks which include the initial of the mint city, and those which are not so marked can be attributed with approximate accuracy on grounds of style. It appears, therefore, that 488 coins are of the Mint of Londinium and 46 of Camulodunum.

The mint-marks on these coins are as follows:

<i>Londinium.</i>		<i>Camulodunum.</i>	
Mark.	Number of coins.	Mark.	Number of coins.
$\frac{|}{|}$	24	$\frac{|}{|}$	9
$\frac{|}{ML}$	13	$\frac{|}{C}$	26
$\frac{|}{III}$	4	$\frac{C|}{|}$	3
$\frac{L|}{ML}$	66	$\frac{|}{C}$	1
$\frac{|}{ML} \frac{|}{J}$	1	$\frac{C|}{\cup}$	1
$\frac{F|O}{ML}$	374	$\frac{|}{CXXI}$	3
$\frac{|}{ML} \frac{|}{O}$	1	$\frac{|}{MCXXI}$	1
$\frac{L|}{XI}$	4		
Brockage	1	Brockages	2
	<u>488</u>		<u>46</u>

The three brockages show obverses only ; one appears to be of Londinium and two of Camulodunum. As we shall see, the hoard was probably deposited in A. D. 290.

The find comprises antoniniani only, and is almost as remarkable for what it does not as for what it does contain. Coins of the independent Gallic empire of Postumus and his successors, usually common in British hoards of the second half of the third century, are conspicuous by their almost entire absence ; there are none of the small coins of almost, or quite, barbarous workmanship which we are accustomed to attribute to the earliest months of the reign of Carausius, and very few of the rough, but not barbarous, coins which probably marked the first improvement of the Mint of London. There are no coins overstruck on those of earlier emperors, none of Rouen or other continental fabric, none marked **RSR**, and none which bear the triple termination **AVGGG**. In one matter the find is unique. Almost all the British coins have retained the white metal wash which is so rarely found that it has been contended that Carausius and Allectus did not use it. It is still possible that the first issues of Carausius were without it, but this find conclusively shows that, when the mints were fully established, their antoniniani were in no way different in character from the similar continental pieces which formed the bulk of the currency from about 259 to 296, except perhaps that in the middle of the reign of the former emperor the flans were somewhat larger.

The coins of Colchester bear a small proportion to those of London, and are all of good workmanship. This supports the view expressed elsewhere that the

mint of the former city was not opened at the commencement of the reign. It was never so prolific as London, but its mechanical skill was somewhat better.

The lettering is often neater and better formed; and the busts are usually well proportioned to the flans. It cannot be said that the portraits are on the whole more handsome, but perhaps they are more conventional. There is a freedom and vigour in the draughtsmanship of some of the London busts which may be thought to render them artistically superior, though their irregular flans and poorer lettering and execution place them in mechanical inferiority. Both mints are agreed on the enormous breadth of bust and thickness of neck of the emperor. His neck can hardly have been as long as it is depicted on many coins, mostly of London, but exaggeration of that portion of the body is not peculiar to this reign or that mint. Numerous portraits of the early emperors show the like exaggeration, and it is occasionally found in later reigns.² A very well designed and pleasing bust was used by one of the Colchester moneyers towards the end of the reign, but there are no specimens of it in this find.

It is to be regretted that the find does not contain any aurei or denarii, but their absence is not evidence of their non-existence at the time of the deposit, for they are not usually found with antoniniani.

The aurei of Carausius are very rare, and are always of good style. They cannot be attributed to his early years, but were probably issued in the middle of his reign. They bear no reverse types which are incon-

² e.g. on coins of Probus, both from Lugdunum and Siscia.

sistent with this view, but some which tend to confirm it. Those inscribed **VOT V** or **MVLT X** may well be attributed to 291. **CONSERVATORI AVGGG** must fall between 289 and 292. The one legionary type might be somewhat earlier, for the antoniniani of the legionary series commence in the days when the mint was at its worst, and the propaganda in aid of which they were struck must have become inadmissible when peace was made with Rome. We do, however, find some specimens which show by their style that occasional legionary coins were issued after the large output of them had ceased,³ and we certainly need not date this aureus earlier than 289.

The silver denarii of the reign range from poor workmanship on base metal up to very well executed pieces of good silver. We are led, therefore, to suppose that their issue began soon after the accession, and continued for some time, but not until late in the reign. The frequency with which they bear the legends **ADVENTVS AVG** and **EXPECTATE VENI** points to an early date, and the extreme poverty of the workmanship and alloy of some specimens supports this view, unless it is the result of irregular imitation of these coins, which must have constituted a startling innovation on the Roman monetary system. On the other hand, the better denarii are of a style which carries them well down to the period of the best anto-

³ There is a coin in the collection of Mr. L. A. Lawrence inscribed **LEG VII CLA**, type, bull to right, which bears the mark **CXXI**, and by its size and style would appear to be of about the date of our hoard.

niniani of London which bear the mark $\frac{L}{ML}$, but as a rule not later. It is probable that this mark gave place to others with letters in the field as well as the exergue sometime before the end of 289.

Some authors have figured pieces which would appear not to be earlier than the last months of 289. In style they resemble the improved antoniniani which are sought to be attributed to that period as the successors of the $\frac{L}{ML}$ coins, and, as I have not been able to ascertain that they are struck in good silver, they may possibly have been issued in washed base metal, and evidence some attempt to introduce into the tariff a substitute for the true silver denarius.⁴ Though these coins are scarce, there seems no reason to doubt their existence, and one may hazard the suggestion that the issue of denarii commenced in or before 288, and ceased not later than the early part of 290. The earliest coinage of Carausius was so bad that it could hardly compete with continental antoniniani, even if it bore a silver wash, and it must be remembered that no one has ever recorded a trace of white metal on these coins. It is possible that they were advisedly issued as of a lower denomination, and the monetary system adjusted by the issue of denarii; and that this arrangement was abandoned in favour of the Roman system.

We find, about 289, a great improvement in the antoniniani; so great, indeed, that the poor earlier pieces could hardly have competed with these later

⁴ Cf. the remarks as to the coins marked $\frac{L}{XI}$ below.

ones in the market. Also we may note that there was evidently some demand for small change under Allectus, that induced him to issue his small **QL** and **QC** pieces, which are certainly of a lower denomination than his antoniniani. He issued no denarii, and his aurei were so numerous, compared to those of Carausius, that they suggest a new departure.

These are interesting problems, but unfortunately this find does not directly assist in their solution.

The writer once held the view that the British antoniniani were tarified as fractions of a denarius, but, now that it is abundantly clear that, at least from the year 289, they were issued with the white metal wash, and therefore as of the silver series, direct descendants of the antoniniani of Caracalla, that view becomes untenable.

On comparing the find with others of which details are available, it would seem that it differs from them materially. In date it approaches the Little Orme hoard, of which Mr. Willoughby Gardner, its fortunate possessor, promises early publication.

That hoard was also deposited about the middle of the reign, perhaps a little later than ours, though it contained many early rough issues. The great majority of the coins were of London, as here, and there were two pieces from the mint of Rotomagus (Rouen). Coins reading **AVGGC** were not present. It included about 550 coins of Carausius, but none of Allectus, Diocletian, or Maximian.

The great Blackmoor Hoard of 1873 (which appears to have been the military chest of Allectus, buried on the occasion of his last fight a very few miles from the present hoard), commenced with coins of Gordianus

Pius (A. D. 238-244), and ended with one of Constantius Chlorus as Caesar, and ninety of Allectus. It contained nearly 4,000 coins of Gallienus and his family, nearly 20,000 of the Gallic Empire, about 4,400 of Claudius and Quintillus, and small numbers of all the rulers represented in our find. There were 545 coins of Carausius, of all dates and mints except **R S R**, including a few from Rouen. Other minor finds have shown similar contents. It may be concluded that these hoards represent the usual contents of the chests of official and private persons at the time.

The present scarcity of both aurei and denarii of the reign suggests that they were not issued in large numbers.

The Rouen find of 1846 contained only coins of that mint in all three metals, the denarii bearing the mark **RSR**, perhaps in imitation of the British pieces so marked. The antoniniani of this mint occur in many British finds, but probably only in those of later date than that now under consideration. It will of course be appreciated that the style of the Rouen coins is so distinct from that of the British mints that it is impossible to mistake them.

Our hoard, as will be seen from the list below, contains a number of minor varieties of bust and legend and a few major varieties from both mints.

Chief among the latter is the coin which appears by its style to be of Camulodunum, and bears the reverse legend **SAEVLARES AVG**, and, for type, a cippus inscribed **COS IIII** [Pl. VIII. 9]. It appears to be copied from a similar coin of Philip I, but is not a mere imitation, for that emperor used the type during his third consulate.

If we may conclude that Carausius, after the manner of Roman emperors, assumed a consulate during each regnal year, this coin should be dated in A.D. 290, and that is the year of the probable deposit of the hoard. Coins inscribed **COS III** and **CO[S I]III** have been published, and the doubts which have been cast upon them now appear to be removed.

The coin inscribed **PACATOR ORBIS**, reverse type a radiate head of Sol [**Pl. VIII. 8**], is a very rare and fine one, copied from a well-known piece of Postumus, and is an instance of the frequency with which Carausius borrowed his types from those of that successful usurper.

There is also a specimen of **GERMANICVS MAX V** [**Pl. VIII. 3**], which may have reference to the early prowess of Carausius, but is possibly a mere copy from coins of Gallienus. This piece bears a London mint-mark. The only previously known specimen was in the collection of the late Commendatore Francesco Gnechi, and is without mint-mark.

There are several other pieces in the hoard which bear mint-marks, and so fix the place of issue of coins which hitherto were only known as unmarked, and were therefore only attributable on style.

Also there are numerous coins which show that the designers of the busts of both mints were men of considerable artistic skill. Several busts of London, wearing armour or the imperial mantle [cp. **Pl. VIII. 3, 6**], are of very good style, and show much ornamental detail, but the finest instance is on a coin of Camulodunum, of the usual **PAX** type, which bears a radiate, cuirassed, half-length bust to right with spear and shield [**Pl. VIII. 5**]. The cuirass is finely ornamented

and shows the aegis on the breast, and the bust is a noble presentment of the emperor, who, though "vilisime natus", was certainly physically well fitted for his exalted position. Many of the portraits in this find show a face which, though not handsome, seems not devoid of kindliness.

There are some brockages among the later coins, apparently from both mints, as are also a number of coins without mint-marks which are all attributable on style.

THE MINT-MARKS OF CARAUSIUS AND THEIR SEQUENCE.

This question is complicated by the number of marks which have to be accounted for (many being blunders) and by the existence of many unmarked coins,⁵ but its solution is assisted by the fact that the coinage of the reign was at first carried out by unskilled moneyers, and that its design and execution afterwards steadily improved, such improvement culminating in the issue under Allectus of a currency which is, with few exceptions, neat and well executed, and on which mint-marks, both in field and exergue, are almost always used.

The marks of Allectus at Camulodunum are most commonly $\frac{S|P}{C}$ and $\frac{S|P}{CL}$. A few coins are marked $\frac{|}{C}$, and a few $\frac{|}{SPC}$. Other marks occur, but they do not connect with those of Carausius, and need not be considered here.

At Londinium his usual marks are $\frac{S|A}{ML}$ and $\frac{S|P}{ML}$.

⁵ Unmarked coins are more often of London than of Colchester.

The exergue sometimes reads **MSL**, but the other variations are unimportant.

It seems fair to assume as a probability that, when similar marks are found under Carausius, they may be placed late in his reign, and it will be seen that this assumption is justified.

It is also reasonable to assume that a great number of unmarked coins, especially those which are small, irregular, and poorly engraved, were issued during the early months of the reign of Carausius, while his mint was in a makeshift condition;⁶ but it is clear from this hoard, and from other evidence, that some unmarked coins were issued contemporaneously with marked series, at least for several years. They become scarcer as time goes on, but, though I find difficulty in attributing any of them, from either mint, to a much later date than that of this hoard, it is possible that they exist. Unmarked coins are common under many emperors of the third century in many well-organized mints, and it may well be that the absence of marks indicated one series among several contemporary, or almost contemporary, issues. In this find we have at least three series which are almost uniform in style, and, no doubt, very near in date, which are marked

$\frac{L}{ML}$, $\frac{F|O}{ML}$, or are without marks.

⁶ The possibility that there was some irregular striking of coins throughout the reign cannot be excluded, and it is not safe to assume that all rough or semi-barbarous coins must be attributed to its commencement. It is unlikely that there was any striking of them after the recovery of the province by Rome, for no coins of Carausius ever appear in later hoards, and it is evident that the Romans must have gone to some considerable trouble to suppress them.

Our knowledge of the actual significance of the marks has not increased since the coinage of Carausius was discussed in the *Numismatic Chronicle* in 1907, nor have the tentative interpretations published on pp. 58 ff. thereof been improved on, but it must not be forgotten that it is possible that, particularly in such mints as those of Carausius, which were never organized quite on Roman lines, a mint-mark may have been considered acceptable, although its letters were merely capricious, if it fulfilled its essential purpose of indicating the series. Mint-marks on continental coins clearly show the division of mints into officinae, and it would seem that there may have been a similar division of the British mints, but it is not explicitly indicated. Even if we could assume that Camulodunum, where the output was small, operated in one officina only, that could hardly have been the case in Londinium, and we may expect to find several marks in contemporaneous issue.

The chronology of the reign should assist in the dating of the coins. Carausius assumed the purple in A.D. 287 (or 286?), and the fleet of Maximian tried conclusions with him in A.D. 289, and was defeated. Some time thereafter, probably not for a few months, peace was made with Rome, which the British emperor commemorated by the use of reverse legends reading **AVGGG**, and by the issue of coins bearing the names and portraits of his "brothers", Diocletian and Maximian.

A result of the victory was that our emperor was, as I think, for a while in possession of the north of Gaul, and then established a short-lived mint at Rouen.

This mint struck aurei, denarii, and antoniniani, its

style being similar to, but an improvement on, that of the irregular mints which had flourished in Gaul during and since the reign of Tetricus. Doubts have been expressed as to the date of its operation, and some would assume that it was established at the commencement of the reign. It is suggested that this view conflicts with historical probability. Carausius was in command at Boulogne, not at Rouen, when he decided on rebellion, and he took his fleet over to Britain immediately on, if not before, his declaration of independence. Indeed, one Roman historian, for what his evidence may be worth, seeing that he wrote in the middle of the fourth century, is definite on this point. Aurelius Victor says "he sailed over to Britain and assumed the Empire". Until he had consolidated his power by the acquisition of Britain, and obtained the adherence of the legions there stationed, it is difficult to see how he could have retained so complete a hold on the north of Gaul, as would have justified the establishment of a mint there. The Romans, it is true, spent two years in building a fleet to replace that which he had taken with him, but, with all their military power, it would not have been a serious matter to destroy what could only have been a very weak position on land. It is fair, however, to draw attention to a passage in the panegyric of 289, which may indicate that Carausius did leave behind him in Gaul some who adhered to his cause. It reads: "Already your soldiers have reached the ocean, victorious, and already the ebb and flow of the tide have sucked the blood of your enemies slain upon that coast. What courage now can that pirate possess, when he sees that your armies have all but entered

those straits by which alone thus far has he delayed death?"

It is submitted that this language hardly seems adequate, especially in the mouth of a panegyrist, to describe a glorious recapture of a great section of northern Gaul, so strongly held as to justify the establishment of a mint.

It is much more probable that, when by his naval victory Carausius had gained absolute command of the Channel, he was able to hold the coast-line and some part of the hinterland. Indeed, strategist as he was, he may well have demanded as a condition of the "Pax Augustorum" that he should do so, and in that way protect himself against further naval attack. Directly the peace was broken the Romans did deprive him of his continental possessions.

Again we find the moneyers of Rouen striking aurei, a denomination which, as we have seen, was probably not issued in Britain till the reign was well established, and imitating denarii marked **RSR**, which can hardly have been very early issues, seeing that they bear a mint-mark, and appear to have followed earlier, unmarked denarii of much poorer workmanship. Also we find that none of the Rouen coins are present in our hoard, though they occur in later deposits. The absence of mint-marks on the field of these coins does not seem to offer any serious obstacle to the above view, for, as we have seen, the mint was evidently modelled on the irregular mints of Gaul, which did not use series marks, and its style shows that it had no close connexion with the British mints. It does not therefore seem remarkable that it failed to follow them in a practice which, after all, had not long been adopted by them.

It seems safer, therefore, to attribute the operations of the mint of Rouen to the period of the Romano-British peace, say 290-292, which was broken by the attack on, and eventual capture of, Boulogne by Constantius Chlorus, probably in 292. No doubt Rouen also fell into his hands, and, sometime later, we find that the fleet of Asclepiodotus sailed from thence for his successful attack on Allectus.

It is certain that the "three emperor" series commenced after the peace, i.e. not earlier than 289, but more probably in 290, and ceased on the breach with Rome.

They also are missing from the hoard; a fact which is consistent with the view put forward above as to the date of the deposit.

It has been considered that the **PAX**, so constantly commemorated on the coinage, is that which arose from the compact of the three emperors, but the use of this legend and type both before and after the period during which that compact held clearly shows that, unless it was purely conventional, it often referred to some other peace. That would be the peace which, tradition tells us, the emperor arranged with the Picts and Scots as the first act of his reign, and possibly also the freedom from piracy which his great sea power assured.

Britain must have enjoyed a period of unwonted tranquillity, a fact which renders it somewhat difficult to suggest why this hoard was deposited. Its date is a few months too late for its attribution to some naval officer called up for service in the great battle. Perhaps the victorious seamen caused some local disturbance on their disbandment and so led to the deposit.

It is likely that the *rapprochement* to Rome is indicated by the use of the Roman mark **XXI**, which is almost always found on the London issues of the "three emperor" types, coupled with the letters **S P** in the field. It appears at London with several other reverses, mostly of common types, and is occasionally found at Colchester, but coins so marked are not common there.

As a few Colchester specimens marked **XXI** appear in this hoard it is reasonable to consider them as immediately preceding the "three emperor" issue of that mint, which is marked $\frac{S|P}{C}$. Neither that mark nor $\frac{S|P}{MLXXI}$ appears in our find.

From these circumstances we get some data which may help us in our arrangement, and may be reinforced by considerations of style.

The marks most commonly employed by Carausius were, at

Londinium, $\frac{|}{ML}$, $\frac{L|}{ML}$, $\frac{F|O}{ML}$, $\frac{S|P}{|}$, $\frac{S|P}{ML}$, $\frac{B|E}{MLXXI}$,
and $\frac{S|P}{MLXXI}$.

Camulodunum, $\frac{|}{C}$, $\frac{|}{MC}$, $\frac{C|}{|}$, or $\frac{|}{C}$, $\frac{|}{CXXI}$, or
 $\frac{|}{MCXXI}$, $\frac{S|C}{|}$, $\frac{S|C}{C}$, and $\frac{S|P}{C}$.

Of them the hoard contains, as we have seen, the following marks of London, viz. $\frac{|}{ML}$ and $\frac{F|O}{ML}$, and a large number (though few varieties) bear a mark which is not so common, viz. $\frac{L|}{ML}$.

Of Colchester we have $\frac{1}{C}$, $\frac{1}{CXXI}$, and $\frac{1}{MCXXI}$, and also a few specimens of the less common mark $\frac{1}{C}$.

There are unmarked coins of both mints, some of them contemporary with what we shall find to be the later marked coins in the hoard, and there are a few uncommon marks which will be mentioned below.

The style of almost all the coins is moderately good, and there are few or none which suggest an earlier date than the later period of the mark **ML**. That mark, which is certainly the earliest of London, is found elsewhere than in this find on coins which otherwise hardly differ from the small, rough, and almost barbarous first issues. The **L** and **FO** coins show improvement over most of those marked **ML** only. The busts and portraits on these two series are alike, and generally executed with much freedom, and sometimes, particularly on the cuirassed pieces, with nice detail. The flans have reached the greatest development of the reign, generally 24 to 25 millimetres, but they are irregular in shape, and the legends are often poorly struck. The lettering of London was never very good, but it is not quite at its best on these coins. To sum up, the art was fair, but the mechanical skill of the mint defective.

The facts that the hoard contains no coins of the "three emperor" types, and that the mark of value, **XXI**, only appears on one or two coins of Colchester, support the view that it must have been deposited in 289 or early in 290, when the policy of peace with Rome had been adopted, but not so far brought to fruition that the treaty had been made, and the time for its commemoration by the "three emperor" coins had

commenced. As we have seen, the existence of the coin inscribed **COS IIII** appears to fix its date as in 290. The fact that the latest coins of Diocletian and Maximian in the hoard are attributed to 288 is consistent with this conclusion, as also is the absence of any trace of the workmanship of the superior artificers evidently brought over from the continent to execute the coins which Carausius struck in the names of Diocletian and Maximian and perhaps some other late coins.

In view of the perfect condition of the hoard it is fair to assume that it is not a fortuitous collection of coins taken out of circulation from time to time, but a sum of money then recently drawn from some official or financial institution analogous to our banks, or the earlier money dealers, and not long from the mint itself. Its composition is fairly representative of what we know from other finds to have been the admixture of coins circulating in Britain at the period, and it is reasonable to conclude that the absence of certain common mint-marks principally arises from the fact that they were not yet in circulation. To this conclusion there is one objection, in that the find contains no coins marked $\frac{1}{MC}$. It must, however, be remembered that the coins of Colchester form a small proportion of its contents, and the absence of this mark may well be accidental. Examination of pieces so marked shows beyond doubt that some at least of them are small, and, for that mint, of inferior workmanship, and therefore early. It cannot be supposed that they were non-existent in 290.

A question also arises as to the exact position of the

scarce pieces marked $\frac{C}{|}$ or $|\frac{C}{}$, but (as it again appears from examination of the coins of Colchester that the earliest mark is $\frac{1}{C}$, and the next probably $\frac{1}{MC}$) it is reasonable to consider these as the first instances of the use of a mark in the field at Colchester, and to place them after **MC**. The mark $\frac{1}{C}$ was not entirely abandoned when other marks were introduced, and is sometimes found on coins which appear to belong to the middle of the reign.⁷

A like question arises as to the order in which the marks $\frac{L}{|}$ and $\frac{F}{|}$ were issued. In style and size the coins are very similar, and it is hardly possible to suggest that one series is better executed than the other, but, if superiority there be, I am inclined to accord it to **FO**. A more cogent argument is that we should expect to find the series in issue at the moment when the money was obtained from the mint in the largest quantity, and the **FO** coins are here much the most numerous.

The hoard gives some indication as to the order of the later series of the coinage of the reign, for we find in it the first appearance of the mark of value at Colchester, and may reasonably conclude that the next mark of Colchester was $\frac{S}{C}$, and of London $\frac{S}{|}$ **MLXXI**, and its scarce variations reading **SC**, **SE** (perhaps a blunder), and **SF**, those being, as we have seen, the marks of the "three emperor" period.

⁷ Some of the coins in this find which are so marked measure as much as 24 mm. in diameter.

The competitor of $\frac{S|P}{MLXXI}$ is $\frac{B|E}{MLXXI}$, with its variations, but it will be found that the lettering of coins so marked is distinctly improved, and the portrait more pleasant. As the triple termination never occurs on these coins, it is probable that they may be dated after the relations between Britain and Rome had lost what cordiality they ever had during the reign of Carausius. They may, however, be a contemporary series with $\frac{S|P}{MLXXI}$ issued from another officina.

On a like reasoning we may suggest that when the loss of Boulogne and the north of France had deprived Carausius of his hope of ever becoming in truth a Roman emperor,⁸ the use of the Roman mark of value was abandoned, and $\frac{S|P}{ML}$ and its variations became his last London mark. Thus we dovetail with the like mark of Allectus.

Coins marked $\frac{S|P}{C}$ only are generally of London, and their style and portrait suggest that they were in issue concurrently with the "three emperor" types. Here again it is very possible that the mark identifies the work of a third officina.

As Camulodunum made little use of the mark of value, and her "three emperor" coins almost without exception bear the mark $\frac{S|P}{C}$, as also do her latest coins of Carausius, it is clear that that mark must have commenced shortly after the deposit of our hoard.

⁸ Every rebel and usurper seems to have considered himself as a candidate for the imperial throne, not as an opponent of the empire attempting to establish an independent state.

and the number of pieces and varieties of type that bear it suggest that it, and its variations, must have remained in more or less constant use throughout the remaining years of the reign. As we know, it continued in use during the reign of Allectus.

There was great improvement in the work of the mint during its latter years. An engraver was appointed whose lettering was good, and whose busts were often in high relief, and he, or another competent man, struck some very neat round coins, rather small in diameter, with a well-proportioned head and bust in good, but not the highest, relief. Some of these coins are marked $\frac{S|P}{C}$, and others use $\frac{|}{SPC}$.

We therefore find the former mark beginning on coins which are a little better than those marked $\frac{|}{MC}$, and continuing throughout the improvement to pieces which are as good as those of Allectus.

Coins marked $S|C$ are generally, perhaps always, of Colchester, and appear to be contemporary with the early $\frac{S|P}{C}$ issues.

There remain the marks $\frac{|}{MSC}$, $\frac{|}{MSCC}$, and $\frac{|}{MSCL}$ which, for some reasons, it would be convenient to attribute to the period of the breach with Rome, but they appear on the **EXPECTATE VENI** types (which are certainly early, though not among the earliest issues), and with the legend **SAECVLARES AVG**, some specimens whereof are marked $\frac{|}{MC}$. It would seem, therefore, that they must be bracketed with the

coins bearing that mark. The Secular Games appear to have been celebrated in 290.

Two other marks included in the hoard require mention. We find $\frac{|}{\text{III}}$, which, seeing how persistently the emperor copied the types of the Gallic mints, might have been a mere imitation of a well-known mark of Lugdunum, but careful examination of one of our four coins so marked shows traces of the inner strokes of the **M**, not struck up, and it is safe to conclude that this mark should always read **ML**.

Lastly, there are four coins, all from the same die, bearing the hitherto undiscovered mark $\frac{\text{L}}{\text{XI}}$ [Pl. VIII. 7], which is very difficult to explain, especially as it is quite clear, and is found upon coins which have every appearance of having been struck in due course. The style is that of the other coins in the find which bear **L** in the field, and the size, 23 mm., is consistent with them.

The mark **XI**, and its Greek equivalent **IA**, appear on certain very rare coins struck by Tacitus at Antioch and Tripolis. Carus and Carinus used **X•I**, **X•I•I** and **X•ET•I**, and coins so marked are also very rare.

It has been suggested that those emperors, pressed by the great gap in value between their fine aurei and greatly debased antoniniani, experimented with these coins, tariffed at double the value of the ordinary antoniniani, in the hope of filling that gap, and this view finds some support in the latter instances from the fact that they are slightly larger, and different in appearance, from the antoniniani whose mark was **XXI**, or its equivalent **KA**.

It may be that Carausius, who was evidently troubled by the same difficulty as the earlier rulers, and who has the honour of introducing the only real remedy, a genuine silver coin, did repeat the earlier experiment when, on the peace with Rome, he was falling in with the continental monetary system, and had apparently ceased to issue denarii. If so, it failed as completely as before. It has been suggested that he may have found himself at the commencement of the reign possessed of a considerable amount of silver bullion, which led to the issue of coins of that metal, and that the supply possibly failed. If it be so, then the **XI** coins may represent an attempt to insert an issue of base metal between the aurei and the ordinary antoniniani.

The style of the denarii, ranging, as we have seen, from almost barbarous pieces up to fine coins similar in style to the best of the antoniniani marked **ML**, and therefore following exactly the course of the early working of the mint of London, is consistent with that view. Indeed, the suggestion does not conflict with any known facts, and it is particularly worthy of note that these **XI** coins of Carausius must, by reason of their style, their mark **L** in the field, and their presence in this hoard, be attributed to a period somewhat earlier than that of the adoption of the Roman mark **XXI** by the mint of London, and immediately after the period at which, it is suggested in these notes, the silver denarius ceased to be issued.⁹ That being so, the moment was very propitious for an

⁹ There are one or two scarce silver coins which suggest that, as in the case of the legionary coins, a few of them may have been struck after the general issue of them had ceased.

attempt to raise the tariff value of the principal coin in the silver series, for a coin marked **XI** and tariffed as a double antoninianus had not to contend, at least in the pockets of the British subjects of the Emperor, against other series of similar appearance marked **XXI**, but only against smaller pieces which bore no mark of value, and, perhaps, were not silver-washed. The difficulties which would have faced Carausius, had he adopted such an expedient, would have been much less serious than those with which Tacitus and Carus had to contend.

The debased antoninianus was, of course, the merest token, with very small intrinsic value, and the State which issues token coinage can tariff the pieces as it thinks fit; but, while a token of a certain nominal value is in circulation, it cannot be expected that the public will accept an exactly similar piece at twice that value. Even the increase in size made by Carus and his son evidently failed to carry the new pieces into the public pockets, for they were only once issued, and are of great rarity. The contrary suggestion that Tacitus, Carus and Carinus, and Carausius, finding that the purchasing values had fallen far below their nominal position in the tariff, experimented by issuing a coin of similar intrinsic value, but tariffed at one-half the nominal value of coins marked **XXI**, does not commend itself to me. If effective at all, it would have operated to depreciate the money in circulation, to the detriment of those who had that money in their pockets, and would, I think, have been unpopular to a dangerous extent.

It may be, of course, that these exceptional coins of Carausius fall merely into the category of errors, for

others are recorded which bear such marks as **X**, **XX**, and **XXX**, but the finer issues of the emperor show that he gave much thought both as to the matter and manner of his coinage, and, as the coins in question are fine, such an explanation is difficult of acceptance.

As a result of the information suggested and supplied by this most interesting find, it seems possible to construct the following chronological table, which, though probably by no means entirely accurate, may form a framework to be amended and completed as further information becomes available. It is given under all reserve, and the dates inserted must, of course, be considered as approximate only.

	LONDINIUM.	
<i>Year A. D.</i>		<i>Marks in issue.</i>
287	|	
288	|	| ML
289 early part	|	| ML, III, L, L|
289 later and 290 early part	L|	L|, F|O, F|O XI, ML, ML
290 later, 291, and 292 early part	S|P	SP, B|E, MLXXI
	B|E	MLXXI
292 later	S|P	S|C, B|E ML, ML, ML

293 $\frac{S | P}{ML}$

Allectus $\frac{S | P}{ML}, \frac{S | A}{ML}$

CAMULODUNUM.

288 and 289 early part $\frac{|}{-}, \frac{|}{C}, \frac{|}{MC}$

289 later and 290 early part $\frac{|}{-}, \frac{|}{C}, \frac{|}{MC}, \frac{|}{MSCC}, \frac{|}{MSCL},$

$\frac{C |}{-}, \frac{|}{C}, \frac{|}{CXXI}, \frac{|}{MCXXI}$

290 later, 291, and 292 $\frac{S | C}{-}, \frac{S | C}{C}, \frac{S | P}{C}, \frac{S | P}{MC}$

293 $\frac{S | P}{C}, \frac{|}{SPC}$

Allectus $\frac{S | P}{C}, \frac{S | A}{C}$

ROTOMAGUS.

290 and 291 $\frac{|}{-}, \frac{|}{R}, \frac{|}{OPR}$

Most of the other recorded mint-marks of Carausius are blunders, but there are, of course, several other marks which were used by Allectus, probably later in his reign.

The hoard bears extraordinary testimony to the enormous number of dies which were necessary for

the equipment of a third-century mint, not only in Britain, but also on the continent. In many cases where only two coins of a type occur it will be found that they are from different dies, and where the numbers of a type present are large they are the product of numerous dies.

I am very glad to say that the owners of the hoard have most generously presented to the National Collection all the coins which show any variation from those which it previously possessed.

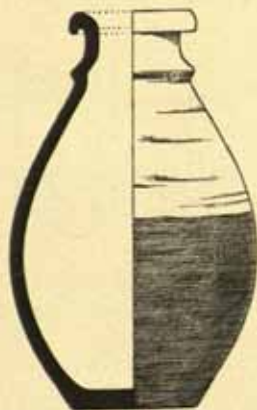
P. H. WEBB.

THE hoard of coins when brought to the Museum was for the most part separate. There were, however, several lumps consisting of two, three, or more coins firmly cemented together. All the coins were covered with a thick rough green patina which in a large number of cases completely obscured their identity. Single coins were treated with different reagents. The two tried with formic acid came out beautifully clean but quite devoid of the silver wash. Acids were therefore put aside and a very weak alkali in the shape of ordinary washing soda was used. This proved to be of little use so long as the solution was cold. Boiling the coins in the solution had, however, the desired effect. It took off the green coating and left all the coins black but legible. A further boiling in plain water removed any excess of soda. The coins were then dried, and it was found that a soft brass-wire brush removed the powdery black surface, revealing the silver wash. All the coins were then

treated in this way. The lumps separated without injury. Some of the coins which were originally very thickly coated required further boiling, first in soda solution and then in plain water. The process was repeated in some coins four or five times. With all this treatment a few coins remained with some isolated patches of rust on them. This was removed with a piece of bone (handle of a tooth-brush), which being softer than the metal did no harm to the coins. A steel tool was rigidly avoided.

The strength of the solution used for the find approached a saturated solution, and the boiling was sometimes kept up for some hours.

L. A. L.



Flask which contained the Linchmere Hoard (1). Now in the British Museum. From the *Antiquaries Journal*, Vol. V, p. 282, by permission of the Council of the Society of Antiquaries.

CATALOGUE OF COINS.¹⁰

CONTINENTAL COINS.

Refer- ence.	Bust.	Reverse legends.	Mint-marks.	Mint.	No. of coins.	Rarity.	Remarks.
213	B	ORIENS AVG	└	Cologne	1	C	<i>circa</i> A. D. 264.
<i>POSTUMUS</i> . 1 coin.							
<i>VICTORINUS</i> . 2 coins.							
93	C	PIETAS AVG	└	Gaul	1	C	
100	A	PROVID AVG	"	"	1	"	
<i>AURELIAN</i> . 15 coins.							
89	C	FIDES MILITVM	└	Mediolanum	1	C	<i>Obv.</i> AVRELIANVS AVG
105	"	IOVI CONSER	└	"	2	"	Dies differ.
"	"	"	└	Siscia	1	"	
142	"	ORIENS AVG	└ └	Mediolanum	2	"	

145	"	"	EXXIR	Rome	1	"
148	"	"	Q	Mediolanum	1	S Radiate, cuirassed bust L., spear pointing L, shield with aegis.
153	"	"	TM'QM	"	2	C
"	"	"	SXXT	Ticinum ¹¹	2	"
"	"	"	T	"	1	" Mint-mark unusual.
"	"	"	PXXT	"	1	"
"	"	"	* SXXI	Rome	1	"
154	"	"	VII	"	1	"

¹⁰ The numerical references are to Cohen, *Médailles Impériales*, vol. vi.

Varieties of bust are indicated by letters as follows:

A. Radiate, draped bust to right.

B. The like, draped and cuirassed.

C. The like, cuirassed only.

D. Radiate, helmeted, cuirassed bust to left, with spear and shield.

E. Radiate, draped bust to left, with sceptre.

Relative rarity is indicated by letters. C = common. S = scarce. R = rare. Extra rarity is shown by the addition of a numeral, as R.

All coins attributed to Gaul are of the mint of Lugdunum, except those of Tacitus which bear the mint letter A, and were perhaps struck at Arelate.

¹¹ The mint was removed from Mediolanum to Ticinum by Aurelian.

Reference.	Bust.	Reverse legends.	Mint-marks.	Mint.	No. of coins.	Rarity.	Remarks.
12	"	PROVIDEN DEOR	<u> </u> VXXT	Ticinum SEVERINA. 1 coin.	1	C	
5	B	AEQVITAS AVG	<u> </u>	Gaul	3	C	
7	"	"	"	"	1	"	
"	A	"	<u> </u> XXI' XXIF	Rome	2	"	
35	B	FELICITAS SAECVLI	<u> </u> C|*	Gaul	1	"	
40	B	FELICIT TEMP	<u> </u> V	Rome	2	"	Dies differ.
45	"	FIDES MILITVM	<u> </u> XXIS	"	2	"	"
47	"	"	<u> </u> BA	Gaul	4	"	"
52	A	LAETITIA FVND	<u> </u> XXIB	Rome	2	"	"

57	B	MARS VICTOR	B | A, B | *	Gaul	6	"	One double-struck, reading MARS V MARS OR
60	"	MARTI PACIF	$\frac{1}{S}$	Ticinum	1	"	
81	"	PAX PVBLICA	$\frac{1}{1}$	Gaul	1	"	
88	B	PROVID DEOR	"	"	1	"	
"	"	"	"	"	1	"	<i>Obv.</i> IMP C L TACI TVS AVG
90	"	PROVIDE AVG	$\frac{1}{Q}$	Ticinum	1	S	<i>c.</i> 90 reads PROVID
100	"	PROVIDENTIA AVG	$\frac{1}{XXIA}$	Rome	3	C	Dies differ.
123	"	SALVS AVG	$\frac{1}{XXIA}$	"	1	"	
125	"	"	$\frac{1}{C | *}$	Gaul	1	"	
130	A	SALVS PVBLICA	"	"	1	"	
131	C	SECVRIT PERP	$\frac{1}{q}$	Ticinum	1	"	

* Diademed bust to right on crescent.

Reference.	Obv.	Reverse legends.	Mint-marks.	Mint.	No. of coins.	Rarity.	Remarks.
137	B	SPES PVBLICA	— CA	Gaul	4	C	Dies differ.
138	"	"	— XXIE	Rome	2	"	"
139	"	"	—* III	Gaul	1	"	"
144	"	TEMPORVM FELICITAS	A | A, A | * Δ | A, Δ | *	"	16	"	Several dies.
145	"	"	A | *	"	1	"	"
and a brockage reading IMP C L TACITVS AVG—B.							
FLORIANVS. 3 coins.							
47	B	PACATOR ORBIS	— III	Gaul	1	C	
88	"	TEMPORVM FELICITAS	— I	"	1	"	
105	"	VIRTVS AVGVSTI	— II	"	1	"	

PROBUS. 133 coins.

1	C	ABVNDANTIA AVG	III' IIII	Gaul	4	C
3	D	"	III	"	1	"
10	"	"	"	"	1	"
36	C	ADVENTVS AVG	RQZ	Rome	1	"
41	"	"	RZ	"	1	"
74	"	AEQVITAS AVG	XXI' XXII'	Siscia	2	"
105	B, C	COMES AVG	A	Gaul	6	"
106	B	COMITI PROBI AVG		"	1	"
116	"	CONCORD MILI	PXXT	Ticinum	1	"
121	D	CONCORD MILIT	E PXXI	"	2	"

The first coin of the second EQVITI series.

Refer- ence.	Bust.	Reverse legends.	Mint-marks.	Mint.	No. of coins.	Rarity.	Remarks.
126	E	CONCORD MILIT	E PXXI	Ticinum	1	S	No spear on <i>obv.</i>
137	B	"	T XXI	Siscia	1	C	
179	"	CONSERVAT AVG	| TXXT	Ticinum	1	"	
211	A	FELICIT TEMP	| II	Gaul	1	S	
214	"	FELICITAS AVG	|^A XXI	Siscia	1	C	
228	"	FELICITAS SEC	| SXXT	Ticinum	1	"	
"	B	"	"	"	1	"	
254	C	FIDES MILITVM	| RQE	Rome	1	"	
255	"	"	| III	Gaul	5	"	1 thick flan.
256	B	"	"	"	6	"	
258	D	"	| VIXXIT	Ticinum	1	"	

292	E	ERCVLI PACIFERO	$\frac{1}{VXXT}$	"	1	S	C. 292 reads HERCVLI The variation is com- mon.
307	C	IOVI CONSERVAT	$\frac{1}{PXXT}$	"	1	C	
328	"	LAETITIA AVGVSTI	$\frac{1}{IIII}$	Gaul	1	"	
329	"	"	"	"	1	"	
334	"	MARS VICTOR	$\frac{1}{II}, \frac{1}{III}$	"	13	"	
337	B	"	$\frac{1}{III}$	"	4	"	
352	E	MARTI PACIF	$\frac{1}{QXXI}$	Ticinum	1	"	Second EQVITI series.
358	D	"	$\frac{1}{QXXI}^*$	"	1	"	Third EQVITI series.
365	C	MARTI PACIFERO	$\frac{1}{II}$	Gaul	1	"	
387	"	ORIENS AVG	$\frac{1}{III}$	"	1	"	
388	"	"	$\frac{1}{I}$	"	1	"	

Refer- ence.	Bust.	Reverse legends.	Mint-marks.	Mint.	No. of coins.	Rarity.	Remarks.
401	C	PAX AVG	D | — , IIII	Gaul	5	C	
404	"	"	D | —	"	1	"	
435	"	PIAETAS AVG	| C	"	1	"	
437	"	PIETAS AVG	| — | C | — III	"	8	"	
496	"	PROVIDENTIA AVG	| — III	"	1	"	
498	"	"	| XXIA	Siscia	5	"	
"	"	"	| — III	Gaul	1	"	
531	"	ROMAE AETER	| — RQB' RQB	Rome	2	"	
532	D	"	| — RQF	"	1	"	
533	E	"	| — RQΔ	"	1	"	
579	"	SALVS AVG	V | — TXXI	Trametes	2	"	Second EQVITI series.

580	"	"	$\frac{\Gamma}{XXI}$	Siscia	1	C	
583	"	"	$\frac{V}{TXXI}$	Ticinum	1	"	Second EQVITI series.
591	C	"	$\frac{A}{XXI}$	Siscia	1	"	
599	"	SALVSPUBLICA	$\frac{T}{XXI}$	Ticinum	1	"	
612	E	SECVRIT PERP	$\frac{I}{VXXXI}$	"	1	"	Second EQVITI series.
624	C	SECVRITAS ORBIS	$\frac{I}{I}$	Gaul	1	S	
650	E	SOLI INVICTO	$\frac{R}{QF}$	Rome	1	C	
662	"	"	$\frac{XXI}{S}$	Siscia	1	"	
701	C	SPES AVG	$\frac{C}{I}$	Gaul	1	"	
713	"	TEMPOR FELICI	$\frac{I}{I}$	"	10	"	Several dies.
727	"	TEMPOR FELICIT	$\frac{B}{I}, \frac{II}{I}$	"	6	"	
744	"	VICTORIA AVG	$\frac{RQ5}{I}, \frac{R5}{I}$	Rome	2	"	

Reference.	Inst.	Reverse legends.	Mint-marks.	Mint.	No. of coins.	Rarity.	Remarks.
766	C	VICTORIA GERM	$\frac{|}{R \equiv \equiv A}$	Rome	4	S	Two dies. One coin double-struck.
807	D	VIRTVS AVG	$\frac{|}{PXXT}$	Ticinum	1	C	
816	C	"	$\frac{|}{IIII}$	Gaul	2	"	Two dies.
817	*	"	$\frac{|}{QXXT}$	Ticinum	1	"	* Radiate, cuirassed bust I.
819	B	"	$\frac{|}{IIII}$	Gaul	1	"	
840	A, C	"	$\frac{|}{XXIE}$	Siscia	2	"	
860	D	VIRTVS AVGVSTI	$\frac{|}{QXXT}$	Ticinum	1	"	
<i>CARUS.</i> 5 coins.							
18	Bare bust r.	CONSECRATIO	$\frac{|}{I, II}$	Gaul	2	C	
79	C	SPES PVBLICA	$\frac{|}{SXXI}$	Ticinum	1	"	
88	"	VICTORIA AVG	$\frac{|}{A}$	Gaul	2	"	Two dies.

CARINUS. 7 coins.

10	C	AETERNIT AVG	$\overline{\text{KJF}}$ (?)	Rome	1	C	
24	"	FELICIT PVBLICA	$\overline{\text{TXXI}}$	Ticinum	2	"	Two dies.
—	"	FELICITAS PVBLICA	$\overline{\text{QXXI}}$	"	1	S	This variety, not in Cohen, has been previously noted.
34	B	FORTVNA REDVX	$\overline{\text{TXXIT}}$	"	2	C	Two dies.
97	"	PRINCIPI IVVENTVT	$\overline{\text{TXXI}}$	"	1	"	

NUMERIAN. 4 coins.

14	C	FELICITAS AVGG	$\overline{\text{B}}$	Gaul	1	C	
18	A	MARS VICTOR	$\overline{\text{C}}$	"	1	"	
76	"	PRINCIPI IVVENTVT	$\overline{\text{VIXXI}}$	Ticinum	1	"	
83	"	PROVIDENT AVGG	$\overline{\text{VXXI}}$	"	1	"	

Refer- ence.	Obv.	Reverse legends.	Mint-marks.	Mint.	No. of coins.	Rarity.	Remarks.
11	A ¹³	VENVS GENETRIX	D |	Gaul	1	R	
<i>DIOCLETIAN. 20 coins.</i>							
61	A	FELICITAS AVG	D |	Gaul	1	C	
189	C	IOVI CONSERVAT	| SXXIT	Ticinum	1	"	
"	"	"	| TXXIT	"	2	"	Dies differ.
190	"	"	| PXXIT	"	1	"	
214	A	IOVI CONSERVAT AVG	| XXIA	Rome	1	"	
215	"	"	B |	Gaul	2	"	Dies differ.
234	"	IOVI CONSERVAT AVCC	|, A |, B |	"	8	"	Several dies.

259	"	IOVI CONSERVAT ORI	C |, C |, D |	"	4	"	Dies differ.
<i>MAXIMIAN HERCULEUS, 26 coins.</i>							
362	A	IOVI CONSERVAT ORI	C |, D |	Gaul	2	C	
513	"	SALVS AVGG	C |	"	6	"	
563	"	VIRTVS AVGG	C |, D |	"	16	"	Several dies.
604	"	"	C |, D |	"	2	"	Type as Coh. 600.

¹² Bust r. on crescent.

BRITISH COINS.¹⁴

CARAUSIUS. 534 coins.

Londinium.

Reference.	Reverse legends.	Mint-marks.	No. of coins.	Rarity.	Minor variations.
14	ADVENTVS AVG	$\frac{1}{ML}$	1	R	
17	"	"	1	"	
[PL. VIII. 1]					
22	COMES AVG	$\frac{F|O}{ML}$	1	"	Obv. 3 C.
27	CONCORD MI	$\frac{1}{ML}$	1	C	Legend entirely in field.
"	"	"	1	"	As above. Bust 5 A.
[PL. VIII. 2]					
39	FORTVNA AVG	$\frac{F|O}{ML}$	1	C	Obv. 5 B. AVG visible.
"	"	$\frac{L|}{ML}$	1	C	Obv. 9 B.
45	HILARITAS AVG	$\frac{F|O}{ML}$	2	"	Dies differ.
51	IOVI VICTORI	"	3	R	Bust B. Two dies.
—	IOVI VICTORI A	"	1	R ¹	
[PL. VIII. 4]					

	LAETITIA AVG		5	C	Bust B.	Dies differ.
55		L | ML	3	"	"	"
"	"	| ML	1	"	"	"
117	MONETA AVG	"	1	"	"	"
"	"	F | O | F | O MI, ML	2	"	"	"
959	"	|	2	"		Dies differ.
128	PAX AVG	| III	3	"		ML imperfect.
"	"	| ML	4	"		
"	"	L | XI	4	R ²		Mint-mark unpublished. ¹²
"	"	L | ML	50	C		

[PL. VIII. 7]

¹¹ The numbers and references to busts and obverse legends are from the lists in *Nam. Chron.*, 1907. Where the variety is important the coin is described at the end of the list. Rarities generally apply to the types, not the mint-marks, many of which are unpublished.

¹² In this case the rarity is in the mint-mark.

Reference.	Reverse legends.	Mint-marks.	No. of coins.	Rarity.	Minor variations.
128	PAX AVG	$\frac{O}{ML}$	1	C	F omitted.
"	"	$\frac{F|O}{ML}$	301	"	
130	"	$\frac{L|}{?}$	1	"	
132	"	$\frac{F|O}{ML}$	1	R	Radiate cuirassed bust l., holding sceptre surmounted by eagle.
133	"	"	6	"	Like bust with spear and shield.
143	"	"	1	S	Legend IMP CARAVSIVS
144	"	"	33	C	P F AV
"	"	$\frac{L|}{ML}$	7	"	
145	"	$\frac{F|O}{ML}$	1	"	
145	"	"	1	R	Radiate cuirassed bust l., with spear and shield.
151	"	"	3	R ¹	
154	"	"	1	R	

155	"	"	1	"	Pax holds wreath and cornucopiae.
977	"	┌	2	C	
980	"	"	3	"	
986	"	"	5	"	
989	"	"	1	S	Legend IMP C CARAVSI VS P F AVG
992	"	"	1	R ¹	Legend IMP CARAVSIVS P F IN AVG Bust B.
994	"	"	2	C	Bust B.
995	"	"	1	S	Legend IMP CARAVSIVS P AVG
176	PROVIDENT AVG	F | O ML	2	C	
1099	SALVS AVG	┌	1	"	Bust B.
1102	"	"	1	"	"
182	"	┌ ML	1	"	
"	"	F | O ML	6	"	1 Bust C.
187	"	"	1	"	
"	"	┌ ML	1	"	

Reference.	Reverse legends.	Mint-marks.	No. of coins.	Rarity.	Minor variations.
1093	SAECVLI FELICIT	—	1	R	Period ML
198	SECVRIT PERP	L — ML	1	S	<i>Obv.</i> 5 B.
"	"	— J ML	1	"	"
"	"	— III	1	"	" ML
200 [Pl. VIII. 11]	SOLI INVICT[O]	— ML	1	R	
1136	TEMP FELIC	—	1	S	No. 1136 reads TEMPO
207	VIRTVS AVG	"	1	"	Mars holds r. spear.
1148 [Pl. VIII. 12]	VICTORIA GERM	"	1	R ¹	<i>Obv.</i> IMP CARAVSIVS AVG. No. 1148 reads VICT

A brockage. *Obv.* 5 B. Probably of series $\frac{L}{ML}$ or $\frac{F}{ML}$

Major Varieties.

Obverse.	Reverse.	Mint-marks.	No. of coins.	Rarity.	Remarks.
5 B.	CONCO MIL Emperor standing l., holding l. sceptre, clasping hand of Concord standing r., holding ensign (?).	— ML	1	R ¹	
5 A.	CONCORDIA MILITVM As above, but l. hands empty.	—	1	"	
CARAVSIVS AVG Radiate, helmeted bust l., spear and shield. [Pl. VIII. 3]	GERMAN[ICVS] MAX[V] Trophy between captives.	L | — ML	1	R ²	Cf. No. 42. [Pl. VIII. 3]
5 B. [Pl. VIII. 8]	PACATOR ORBIS Radiate draped bust of Sol r.	—	1	"	Period F | O ML Cf. 970, 971.
5 C.	PAX CONCOR Pax as usual, vertical sceptre; to r. cuff of clasped hand of Concordia Militum type.	—	1	—	Double-struck. — m.m. ML

Camulodunum.

Reference.	Reverse legends.	Mint-marks.	No. of coins.	Rarity.	Minor variations.
242	COMES AVG	C |	1	R	Victory holds l., ensign.
"	"	"	1	"	Do. <i>Obv.</i> 3 C.
275	FIDES MILIT	| C	1	S	<i>Obv.</i> 5 B.
282	FIDES MILITVM	"	1	"	
907	IOVI CONSERV AV	|	2	R	
298	LAETIT AVG	| C	1	C	Bust B.
299	"	C | C	1	"	<i>Obv.</i> 5 B. The exergual mark may be accidental.
"	"	| C	1	"	<i>Obv.</i> 5 B.
309	LAETITIA AVG	"	1	"	Bust B.
"	"	"	1	"	<i>Obv.</i> IMIMP CARAVSIVS AVG. B.
323	LEG III FLA	| C	1	R ²	<i>Obv.</i> 5 B. No. 323 reads IIII
324	LEG IIII FLAVIA	|	1	"	Bust B. Centaur ¹⁶ holds l., ensign.
336	MONETA AVG	| C	1	C	Bust B.

"	"	$\frac{CXXI}{-}$	1	"	"
355	PAX AVG	$\frac{C}{-}$	1	"	"
358	"	"	5	"	Dies differ.
"	"	C |	1	"	
989	"	$\frac{MCXXI}{-}$	1	"	
"	"	|	1	"	
371	"	$\frac{C}{-}$	1	S	Legend IMP C CARAVSI VS P F AVG
995	"	"	1	C	
"	"	|	1	S	Legend IMP CARAVSI P AVG
996	"	"	1	C	
402	PROVID AVG	$\frac{C}{-}$	1	"	Obe. 1 B.
1130	SPE[S] AVG	"	1	S	Obe. 2 B.

¹⁶ This coin must be attributed to *Camulodunum* on style and lettering, and still more because of the use of an incorrect badge, a centaur instead of a lion, or a youthful head and two lions. *Camulodunum* issued very few legionary coins (probably after the issue of *Londinium* had ceased), and with one exception always used the centaur badge.

Reference.	Reverse legends.	Mint-marks.	No. of coins.	Rarity.	Minor variations.
1140	TEMPORVM FELIC	—	1	S	<i>Obv.</i> 2 B.
467 [Pl. VIII, 10]	TEMPORVM FELICIT	— C	1	C	<i>Obv.</i> 2 B.
"	"	"	1	"	<i>Obv.</i> 5 B.
479	VICTORIA AVG	"	1	"	
"	"	— CXX	1	"	
486	VIRTVS AVG	— C	2	R	Bust B. Shield omitted, but hand as resting on it.
"	"	—	2	"	Bust B. Dies differ.

Two brockages. Bust 5 B.

Major Varieties.

Obverse.	Reverse.	Mint-marks.	No. of coins.	Rarity.	Remarks.
IMP CARAVSIVS A Radiate cuirassed half-length bust r., aegis on breast, holding spear and shield seen from within. [Pl. VIII. 5]	PAX AVG Usual type, vertical sceptre.	— C	1	R ¹	
IMP C M CARAVSI VS PF AVG. B.	PROVIDENTIA AVG Providence standing l., holding baton and cornucopiae; at foot, globe.	"	1	"	
3 C? [Pl. VIII. 9]	SAECLARES AVG Cippus inscribed COS IIII	—	1	R ³	
5 B.	SAECLVI FELICITA Emperor standing r., holding spear and globe.	— CXXI	1	R ¹	Cf. 566.
2 B.	VIRTVS AVG Mars walking l., holding r. olive-branch, l. spear and shield.	— C	1	S	

I take this opportunity of describing the following varieties which have been noted from various sources since "The Reign and Coinage of Carausius" was published in the *Numismatic Chronicle* of 1907. The references to legends and busts by number and letter there adopted are used below, the letters D, E, and F referring to laureate busts to right, draped only, draped and cuirassed, or cuirassed only, and not as in the above lists. The reference numbers in column 1 are to that publication.

LONDINIUM.

Antoniniani.

No.	Obverse.	Reverse.	Mint-marks.	Size.	Authority.
58 A	Inscription uncertain. (A)	LAETITIA AVG Laetitia seated l., r. hand outstretched, l. holding staff.	Illegible.	22	Scot. Nat. Mus.
122 to 157	In several cases additional mint-marks have been noted.				
157 A	IMP CARAVSIVS P E AVG (B)	PAX AVG Pax standing l., holding r. globe, l. vertical sceptre.	F | F ML	22	Fitzwilliam.
157 B	5 (A)	PAX AVG Minerva standing l., hold- ing r. spear, l. Victory with laurel-wreath on globe.	S | P MLXXI	25	Seltman.
172 A	9 (A)	PAX AVCCG Pax standing l., holding r. Victory on globe, l. trans- verse sceptre.	"	24	St. Albans Mus.

185 A	5 (B)	SALVS AVG As 185, but sceptre trans-verse.	<u>ML</u>	22	Poyser.
187 A	5 (B)	SALVS AVG Salus holding l. cornucopiae, standing, with altar and serpent.	<u>MI</u>	18 x 20	"
199 A	5 (B)	SECVRIT PERP Securitas, usual type.	<u>IIIXXI</u>	20	Lawrence.
207 A	9 (B)	VIRTVS AVG Mars walking r., holding spear and shield.	<u>S | P</u> <u>MLXXI</u>	23	Poyser.
208 A	9 (B)	VIRTVS AVGGC As 208.	"	20	Lawrence.
210 A	9 (B)	COMES AVG Victory standing l., holding r. wreath, l. palm.	<u>F | O</u>	21	Poyser.
234 A	IMP CARAVS (A)	AX AVG - - Emperor standing, head l., holding r. globe, l. vertical sceptre.	<u>E | O</u>	21	Spink.

CAMULODUNUM.

Antoniniani.

No.	Obverse.	Reverse.	Mint-marks.	Size.	Authority.
244 A	3 (B)	As 244.	$\frac{1}{C}$	22	Spink.
250	5 (A)	CONCOR M . . . Joined hands.	$\frac{1}{MSC}$	21	Poyser.
250 A	5 (A)	CONCOR MILITV As above.	$\frac{1}{SC}$	22	B. M.
252 A	5 (B)	CONCORD MILIT As above.	$\frac{1}{SC}$ $\frac{1}{7C}$	" ¹⁷	Messenger.
324 A	5 (B)	LEG XX AVG Boar l.	$\frac{1}{SNC}$ (<i>sic</i>)	20	B. M.
352 A	5 (A)	ORIENS AVG As 352, but sun walks l.	$\frac{1}{C}$	22	Poyser.
369 A	IMP C CARAVSI VS P F AV (B)	PAX AVG Usual type, vertical sceptre.	$\frac{1}{MSC}$ (?)	22	"
383 A	IMP CVRASIVS P F AVG	As above, but spear for sceptre.	B $\frac{1}{C}$	21	"

386 A	3 (A)	As above, but holding globe and cornucopiae.	$\frac{S | P}{C}$	23	Sedburgh School.
389 A	6 (C)	PAX AVGG ¹⁸ Usual type, vertical sceptre.	"	22	Royal Danish Mus.
402 A	4 (B)	As 402.	$\frac{|}{C}$	23	Lawrence.
402 B	6 (B)	"	$\frac{S | P}{C}$	23	"
434 A	8 (B)	PROVIDE AVG Providence standing l., holding staff; between staff and foot a globe.	"	24	Poyser.
447 A	6 (B)	SAECVLI FELICIT Indistinct. Figure walking r.	"	20	Lawrence.
448 A	4 (A)	As 448.	$\frac{|}{C}$	22	Poyser.
457 A	5 (B)	As 457.	$\frac{|}{VSC}$	23	Fitzwilliam.
480 A	IMP CARAVSIVS P F A (B)	As 480.	$\frac{|}{C}$	22	Lawrence.

¹⁷ The \neg may be deposit, but the mark is otherwise clear.

¹⁸ It seems to me that some slight indication of a third **G** exists.

No.	Obverse.	Reverse.	Mint-marks.	Size.	Authority.
489 A	IMP C M CARAV SIVS P F AVG (B)	As 489.	— C	21	Poyser.
557 A	IMP C CARAVSI VS P F I AVG	As 557.	S | P	24	Neath Find.
558 A	9 (B)	PROV[DE] AVG Emperor standing r., holding l. spear, crowning trophy between two cap- tives.	SC —	23	Barnett.
565 A	9 (A)	PROVIDE AVG Providence standing l., holding r. globe, l. cornu- copiae.	S | C	20	Poyser.
COINS MARKED RSR.					
<i>Denarii.</i>					
634 A	5 (E)	As 634.	— RSR	19 20	Lawrence. Barnett.
637 A	5 (D)	ROMANOR RENOV Wolf and twins.	— RSS	20	Weber.

649 A	5 (E)	VIRTVS AVG Emperor standing l., r. hand outstretched, l. hold- ing spear.	— RSR	20	Spink.
<i>Antoniniani.</i>					
669 A	5 (A)	FIDES MILITVM Fides standing, looking r., holding l. ensign. ¹⁹	— RSR	17-50	Sharp Ogden.
673 A	Illegible.	RENOVA ROMAN Wolf and twins.	"	19	Lawrence.
677 A	5 (E)	TEMPORVM FELICITA Felicitas standing l., hold- ing caduceus and cornu- opiae.	"	19	B. M.
<i>Rotomagus.</i>					
690 A	IMP C CARAVSI VS IVG (C)	As 690.	—	21	Spink.
744 A	6 (B)	As 744.	"	18	Lawrence.
744 B	9 (A)	As 744.	"	17 x 21	Poyser.

¹⁹ There appears to be a trace of a second ensign.

No.	Obverse.	Reverse.	Mint-marks.	Size.	Authority.
748 A	6 (C)	As 748.	— ¹⁰ CP	20	Royal Danish Mus.
790 A	9 (E)	As 790.	—	20	B. M.
WITHOUT MINT-MARKS.					
<i>Denarii.</i>					
805 A	IMP CARAVSIVS P F A (E)	IXPICTATA MIL Britain standing r., holding l. sceptre, clasping hand of Emperor standing l., hold- ing l. spear.	—	18	Goedman.
812 A	5 (E)	SALVS AVG Salus seated l., feeding ser- pent rising from altar.	—	18	Lawrence.
851 A	5 (A)	CONCORDIA MILITVM Joined hands. <i>Antoniniani.</i>	—	22	Poyser.
883 A	5 (B)	FORTVN A[VG] Fortuna standing l., hold- ing r. rudder, l. cornu- piae; globe below cornu- copiae.	—	20	"

907 A	5 (B)	IOVI CONSERVAT Jupiter standing l., holding r. flower, l. sceptre.	"	23	Webb.
915 A	5 (A)	[LAE]TIT FVND As 915.	"	23	Rawtenstall Lib.
922 A	5 (A)	LA[ETITI]A AVG S As 922.	"	21	Codrington.
960 A	IMP CARAVSIVS AV Radiate cuirassed bust l., holding r. victory on globe, l. sceptre.	MONETA AVG As 952.	"	21	Lawrence.
967 A	5 (B)	ORIENS AVG As 967, but Sol stands be- tween two seated captives.	"	22	Poyser.
977 A	1. Radiate, helmeted bust l., holding large shield, but no spear.	As 977.	"	20	Messenger.

²⁰ A broken O; there is no trace of a third letter.

No.	Obverse.	Reverse.	Mint-marks.	Size.	Authority.
1027 A	5 (A)	PAX AVG Peace standing r., holding r. cornucopiac, l. olive- branch.	—	21	Carlyon Britton.
1087 A	3 (B)	As 1087.	"	18	Shepherd.
1158 A	— SIVS AVG	VICTORIA AVG Victory (?) standing, head l., between two ensigns.	"	19	Lawrence. Struck in grey metal.
UNATTRIBUTED MINT-MARK.					
<i>Antoninianus.</i>					
1210 A	3 (B)	As 1210.	— •XX>	19	Lawrence, Barbarous.
1215 A	IMP CARAVSIVS AV (B)	LETITIA AV Pax standing, holding r. olive branch, l. scap- tve.	* —	21	Lawrence.
—	4 (?) B	<i>Bronze.</i> PAX AVG Usual type; vertical scap- tve.	—	24	Barnett.

DIOCLETIAN. (Struck by Carausius.)

Londinium.

1238 A 9 (C)

PROVIDENTIA
AVGGCProvidence standing l.,
holding r. staff, l. cornu-
copiae; at foot globe.S | P
MLXXI

23 Lawrence.

Camulodunum.— IMP C DIOCLETI
ANVS P AVG
(C)SPES PVBL
Spes walking l., holding
flower and raising robe.S | P
C21 B. M.
This exceptional coin is on a thick, irregular flan, weighing 131.50 gra. The portrait is good and early, and the coin appears to be a true "bronze".

IX.

ON A HOARD OF SILVER COINS FOUND AT WELSH BACK, BRISTOL.

THE object of the present communication is to record details of a hoard of silver coins found in Bristol. For facilities to pursue the research I have to thank Dr. H. Bolton, Director of the Bristol Museum and Art Gallery.

On Tuesday, December 4, 1923, local workmen, whilst digging to locate a leak in the floor of a warehouse used for storing fruit by Messrs. Elders and Fyffes Limited on Welsh Back, found a mass of silver coins and a few pieces of sacking. The decay of the bag had evidently allowed the coins to settle in the form of a horse-shoe, in which they were found. The depth at which the main hoard was found was about ten to fourteen inches. The finding of the hoard was reported to the Chief Constable, who took possession for the city. The Treasury claimed the coins, and issued instructions that they should be sent to London for disposal. The Town Clerk, on behalf of the city, then claimed the hoard of silver as "Treasure Trove", the rights to which had been expressly granted to the city by King Edward IV in 1462.

Numerous instances of the king having surrendered his right to treasure trove¹ are to be found

¹ The law of Treasure Trove is considered, among others, by Baylis, Judge, *Journ. Arch. Inst.*, 1886, vol. xliii, p. 342; Coke, Lord,

in the State Papers. For our present purpose it is sufficient to state that the surrender of this privilege by Edward IV gave the city of Bristol the right to claim treasure trove found within its boundaries. The original charter (1462) is in the City Archives, and it makes the position clear. Latimer records it as No. 30 of the Corporation Charters, and Seyer refers to it as "Carta 12 Feb' I Edw' 4, i' e' 146 $\frac{1}{2}$ ".² It reads:

"Et ulterius concessimus pro nobis et haeredibus nostris, quod iidem major et communitas et successores sui ac praedicti burgenses, haeredes et successores sui in perpetuum habeant et teneant dictam villam Bristoll' cum suburbii ejusdem, necnon terras, tenementa, loca et feoda praedicta (dictis castro et fossato exceptis) a dicto festo S^{ci} Michaelis archangeli ultimo praeterito, cum franchisiis et libertatibus eisdem qualitercunque spectantibus sive pertinentibus, una cum finibus, redemptionibus, exitibus et amerciamentis, catalis utlegatorum et fugitivorum, escaetis, forisfactoris et deodandis infra praecinctus villae, comitatum et suburbia praedicta et singula loca tam per terram quam per aquam infra libertatem et jurisdictionem eorundem emergendis, sive accidendis, cum omnibus aliis proficuis ibidem emergentibus et emergendis sive accidendis; ac etiam omnia proficua et emolumenta tam de punitione de falso judicio in quacunque curia reddito et reddendo, quam in quacunque curia infra praecinctus villae praedictae et subur-

3rd Inst., p. 312; Blackstone, *I. Bl. Com.*, p. 285; *Stephen's Commentaries on the Laws of England*, ii, 1914, pp. 651-652; Halsbury, Earl of, *The Laws of England*, 1909, vii, pp. 212-213; Stroud, F., *The Judicial Dictionary*, 2nd ed., 1903, iii; Carlyon-Britton, P.W.P., *Reliq.*, 1908, vol. xiii, pp. 115-123; Blanchet, A., and Grueber, H. A., *Num. Chron.*, 4 Ser., No. 6, 1902, pp. 148-175; Att.-Gen. v. Moore, 1893, 1 Ch., p. 676; Coroners' Act, 1873, Sect. 36.

² Charter 30. Edw. IV (1462), Grant to the Town in Fee, in Latimer, J., *Bristol Charters*, Bristol, 1909, p. 115; the translation is given by Seyer, S. (Rev.), *The Charters and Letters Patent . . . Bristol*, 1812, pp. 117-118.

bia ejusdem adnullato seu adnullando; necnon omnia alia proficua, thesaurum inventum, emolumenta (quocunque modo evenerint) tam de forestis, parcis, boscis, ? haccis,³ warrenis, stagnis, vacariis, marischis, moris, mineris, quam quibuscunque aliis rebus, quae infra villam praedictam comitatum ejusdem, terras, tenementa, loca et feoda praedicta (ut praedictum est) accidere poterunt quovis modo; aliqua praerogativa, privilegio, seu franchisiis non obstantibus (quibuscunque escaetis terrarum et tenementorum futuris temporibus evenientibus omnino exceptis):”

(TRANSLATION.)

“ And further we have granted for us and our heirs, that the same mayor and commonalty and their successors, and the aforesaid burgesses, their heirs and successors for ever may have and hold the said town of Bristol with the suburbs of the same, and also the lands, tenements, places, and fees aforesaid (the said castle and ditch excepted) from the said feast of St. Michael the archangel last past with the franchises and liberties howsoever belonging and pertaining to the same, together with the fines, redemptions, issues and amercements, the chattels of outlaws and fugitives, escheats, forfeitures and deodands, which shall arise or shall happen within the precincts of the town, the county and suburbs aforesaid and all places as well by land as by water within the liberty and jurisdiction of the same, together with all other profits in the same places arising or which shall arise or happen; and also all profits and emoluments as well from punishment for false judgement given or to be given in any court as for judgement annulled or to be annulled in any court within the precincts of the said town and suburbs of the same; and moreover all other profits, treasure trove, emoluments (howsoever they may happen) as well from forests, parks, woods, warrens, pools, waste places, marshes, moors, mines, as from all other

³ Consultation of the original Charter shows that Seyer's translation is incomplete in various places.

things, which can in any way arise within the town aforesaid, as was before mentioned; any prerogative, privilege, or franchises notwithstanding (all escheats of lands and tenements hereafter happening being wholly excepted):”

Site of Find. Maps of Bristol in the seventeenth century show that the site is that of the Old Custom House, built in 1665⁴ or 1666.⁵ On J. Millerd's map entitled “City of Bristol”, 1671-1673, this building is clearly shown as the “Custome howse”, between King Street and Crow Lane.⁶ The Bristol Museum's collection of old Bristol drawings (Braikenridge Bequest), Folio VI, contains sketches of the Old Custom House, as seen from the Back, made by T. W. Rowbotham in 1825, E. Cashin in 1823, M. H. Holmes in 1820, and H. O'Neill in 1823. A sketch entitled “The Old Custom House from St. Nicholas Burial Grounds”, by H. O'Neill in 1823, Folio VII, is reproduced in *Skelton's Etchings of the Antiquities of Bristol*, Plate 32. An examination of the site appears to furnish conclusive evidence that the hoard was hidden in the back premises of the Old Custom House. The depth of the present buildings, now used as offices by Messrs. Elders and Fyffes Limited, is about twenty-one feet. As there have been considerable modern structural alterations in the front this may not have been the original depth. About seventy-two feet from the footpath in front of

⁴ Seyer, S. (Rev.), *Memoirs . . . Bristol*, Bristol, 1823, ii, p. 512.

⁵ Evans, J., *A Chronological Outline of the History of Bristol*, Bristol, 1824, p. 223.

⁶ In the “Original Plan of Bristol” by Jacobus Millerd, 1673 (Bristol Museum), a crane is shown in front of the place where Old Custom House is shown in his other map. The first crane erected in Bristol was on this spot. According to William Wycestre, “Le crane, with the engine house, is strongly fixed in the ground on the Bac, near the Marsh Gate”.

the building the hoard was found in a large low-ceiled room. At first it was thought that the site was in St. Nicholas burial ground (now disappeared), but from O'Neill's sketch it is shown that the cemetery extended only as far as the side-wall at the back of the Old Custom House.

Chronological Range of Hoard. The earliest coin is a York groat of Henry VIII, Second Issue, 1526-1543; and the latest is a half-crown of James II dated 1688. The chronological range is, therefore, about 146 years.

Geographical Range of Coins in Hoard. The majority of the coins are from the Tower Mint, but other places represented are as follows: Southwark, York, Aberystwyth, Oxford, and Bristol. There are several Scottish coins of James VI and Charles I, and one French Écu, dated 1668.

Condition of Coins. In distinction to the milled coins of the later dates, the majority of the coins are in poor condition. Of the total coins in the hoard, 52 per cent. are clipped, rubbed, coated with horn silver, or otherwise illegible. The coins of Elizabeth, James I, and Charles I are clipped to a marked degree. Taking the shillings of Charles I, no less than 33 per cent. are clipped right down to the inner circle, and of the whole of this reign, 52 per cent. are illegible for various reasons.

Number of Coins in Hoard. The actual number of coins which have been examined is 5,267. According to an account in *The Western Daily Press*, Wednesday, December 12, 1923, 5449 coins were found. After the surrender of the hoard to the civic authorities, the finders were granted a number, presumably 182 coins. The details furnished in the present communication

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are, therefore, concerned with the greater part of the hoard, and not with its entirety.

A summary of the hoard found at Welsh Back is as follows:

Henry VIII	
Groat	1
Edward VI	
Shillings	5
Sixpences	5
Philip and Mary	
Shillings	17
Sixpences	2
Elizabeth	
Shillings	527
Sixpences	1,372
James I	
Half-crowns	11
Shillings	377
Sixpences	190
Charles I	
Half-crowns	718
Shillings	1,393
Sixpences	253
Charles II	
Crowns	16
Half-crowns	202
Shillings	53
Sixpences	5
James II	
Half-crowns	10
Shillings	7
James VI (Scottish)	1
Charles I (Scottish)	9
Foreign (French)	1
Undecipherable	92
Total	<u>5,267</u>

*List of Coins classified according to Mint Marks.⁷**Henry VIII, 1509-1597.*

Groat. 1526-1543. m.m. Cross voided. (York) 1

Edward VI, 1547-1553.

Shilling. 1551. mm. Y. (Southwark) 1

" 1551-1553. m.m. Ton 1

" Illegible 3

Sixpences 5

Philip and Mary, 1554-1558.

Shilling. 1553. m.m. illegible 1

" 1554. " " 2

" 1556. " " 1

" m.m. and date illegible 13

Sixpence. 1554-1558. m.m. Lis 1

" m.m. illegible 1

Elizabeth, 1558-1603.

Shilling. 1558-1561. m.m. Martlet 36

" 1558-1561. m.m. Cross Crosslet 30

" 1558-1561. m.m. Lis 2

" 1582. m.m. Bell 4

" 1582. m.m. A 8

" 1584. m.m. Escallop 14

" 1587. m.m. Crescent 5

" 1590. m.m. Hands 9

" 1592. m.m. Ton 20

" 1594. m.m. Woolpack 17

" 1595. m.m. Key 10

" 1597. m.m. Anchor 2

" 1600. m.m. Annulet 1

⁷ In the preparation of the following descriptions the chief works consulted have been Ruding, R. (Rev.), *Annals of the Coinage of Great Britain and its Dependencies*; Snelling on the *Coins of Great Britain, France and Ireland, &c.*, 1823; Hawkins, E., *The Silver Coins of England*, 1876; Thorburn, W. S., *Guide to the Coins of Great Britain and Ireland, &c.*, 1888; and Grueber, H. A., *Handbook of the Coins of Great Britain and Ireland in the British Museum*, 1889. *Classification according to Mint Marks.*

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Shilling.	1601.	m.m. 1	12
"	1602.	m.m. 2	9
"		Clipped, rubbed, &c.	348
Sixpence.	1561.	m.m. Pheon	32
"	1562.	m.m. "	.	.	.	.	21
"	1563.	m.m. "	.	.	.	.	14
"	1564.	m.m. "	.	.	.	.	21
"	1565.	m.m. "	.	.	.	.	9
"	"	"	Dates illegible	.	.	.	22
"	1565.	m.m. Rose	.	.	.	.	15
"	1566.	m.m. Portcullis	.	.	.	.	0
"	1566.	m.m. Lion	.	.	.	.	26
"	1566.	m.m. illegible	.	.	.	.	17
"	1567.	m.m. Lion	.	.	.	.	8
"	1567.	m.m. illegible	.	.	.	.	18
"	1567.	m.m. Coronet	.	.	.	.	28
"	1568.	m.m. "	.	.	.	.	45
"	1569.	m.m. "	.	.	.	.	23
"	1570.	m.m. "	.	.	.	.	9
"	1569.	m.m. Castle	.	.	.	.	0
"	1569.	m.m. illegible	.	.	.	.	23
"	1570.	m.m. Castle	.	.	.	.	11
"	1570.	m.m. illegible	.	.	.	.	9
"	1571.	m.m. Castle	.	.	.	.	17
"	1571.	m.m. Ermine	.	.	.	.	9
"	1571.	m.m. illegible	.	.	.	.	13
"	1572.	m.m. Ermine	.	.	.	.	49
"	1573.	m.m. "	.	.	.	.	7
"	1573.	m.m. Acorn	.	.	.	.	15
"	1574.	m.m. "	.	.	.	.	12
"	1573.	m.m. Cinquefoil	.	.	.	.	2
"	1573.	m.m. illegible	.	.	.	.	13
"	1574.	m.m. Cinquefoil	.	.	.	.	26
"	1574.	m.m. illegible	.	.	.	.	16
"	1575.	m.m. Cinquefoil	.	.	.	.	44
"	1576.	m.m. "	.	.	.	.	13
"	1577.	m.m. "	.	.	.	.	10
"	1577.	m.m. Cross	.	.	.	.	6

Sixpence.	1577.	m.m. illegible	.	.	.	.	2
"	1578.	m.m. Cross	.	.	.	.	34
"	1579.	m.m. "	.	.	.	.	17
"	1580.	m.m. "	.	.	.	.	34
"	1581.	m.m. "	.	.	.	.	13
"	1582.	m.m. Sword	.	.	.	.	14
"	1582.	m.m. Bell	.	.	.	.	7
"	1583.	m.m. "	.	.	.	.	7
"	1584.	m.m. "	.	.	.	.	0
"	1582.	m.m. A	.	.	.	.	2
"	1582.	m.m. illegible	.	.	.	.	10
"	1583.	m.m. A	.	.	.	.	11
"	1583.	m.m. illegible	.	.	.	.	8
"	1584.	m.m. A	.	.	.	.	11
"	1584.	m.m. Escallop	.	.	.	.	2
"	1584.	m.m. illegible	.	.	.	.	7
"	1585.	m.m. Escallop	.	.	.	.	14
"	1586.	m.m. "	.	.	.	.	4
"	1587.	m.m. Crescent	.	.	.	.	7
"	1588.	m.m. "	.	.	.	.	1
"	1589.	m.m. "	.	.	.	.	10
"	1590.	m.m. Hand	.	.	.	.	7
"	1591.	m.m. "	.	.	.	.	21
"	1592.	m.m. "	.	.	.	.	4
"	1592.	m.m. Ton	.	.	.	.	21
"	1592.	m.m. illegible	.	.	.	.	9
"	1593.	m.m. Ton	.	.	.	.	29
"	1594.	m.m. "	.	.	.	.	3
"	1595.	m.m. "	.	.	.	.	3
"	1594.	m.m. Woolpack	.	.	.	.	12
"	1594.	m.m. illegible	.	.	.	.	9
"	1595.	m.m. Woolpack	.	.	.	.	4
"	1596.	m.m. "	.	.	.	.	1
"	1595.	m.m. Key	.	.	.	.	3
"	1595.	m.m. illegible	.	.	.	.	3
"	1596.	m.m. Key	.	.	.	.	11
"	1596.	m.m. illegible	.	.	.	.	7
"	1597.	m.m. Key	.	.	.	.	1

Sixpence.	1598.	m.m. Key	1
"	1597.	m.m. Anchor	0
"	1598.	m.m. illegible	2
"	1599.	Anchor	1
"	1600.	m.m. 0	2
"	1601.	m.m. 1	22
"	1602.	m.m. 2	26
		Clipped, rubbed, &c.	352

James I, 1603-1625.

Half-crown.	1604.	m.m. Lis	2
"	1624.	m.m. Trefoil	1
"		m.m. illegible	8
Shilling.	1603-1604.	m.m. Thistle	17
"	1604-1605.	m.m. Lis	35
"	1605-1606.	m.m. Rose	29
"	1606-1607.	m.m. Escallop	7
"	1607.	m.m. Bunch of Grapes	9
"	1607-1608.	m.m. Coronet	8
"	1609.	m.m. Key	1
"	1611.	m.m. Mullet	1
"	1612.	m.m. Tower	1
"	1615.	m.m. Ton	3
"	1617.	m.m. Crescent	3
"	1621.	m.m. Thistle, Plume	1
		Clipped, rubbed, &c.	262
Sixpence.	1603.	m.m. Thistle (EXVRGAT, &c.)	34
"	1604.	m.m. Lis (EXVRGAT, &c.)	24
"	1604.	m.m. ,, (QVÆ DEVS, &c.)	13
"	1604.	m.m. ,, clipped	8
"	1605.	m.m. ,, (QVÆ DEVS, &c.)	6
"	1605.	m.m. Rose	16
"	1605.	m.m. illegible	13
"	1606.	m.m. Rose	4
"	1606.	m.m. Escallop	6
"	1606.	m.m. illegible	3
"	1607.	m.m. Bunch of Grapes	3
"	1607.	m.m. Coronet	1

Sixpence.	1607.	m.m. illegible	.	.	.	.	3
"	1608.	m.m. Coronet	.	.	.	.	6
"	1609.	m.m. Key	.	.	.	.	2
"	1611.	m.m. Mullet	.	.	.	.	1
"	1613.	m.m. Trefoil	.	.	.	.	3
"	1615.	m.m. Ton	.	.	.	.	1
"	1621.	m.m. Rose	.	.	.	.	3
"	1622.	m.m. Thistle	.	.	.	.	2
"	1623.	m.m. "	.	.	.	.	2
"	1623.	m.m. Lis	.	.	.	.	1
"	1623.	m.m. illegible	.	.	.	.	2
"	1624.	m.m. Lis	.	.	.	.	3
"	1624.	m.m. Trefoil	.	.	.	.	4
"	1624.	m.m. illegible	.	.	.	.	2
		Clipped, rubbed, &c.	.	.	.	.	24

Charles I, 1625-1649.

Half-crown.	1628.	m.m. Anchor	.	.	.	.	1
"	1630.	m.m. Plume	.	.	.	.	3
"	1631.	m.m. Rose, plumed	.	.	.	.	1
"	1632.	m.m. Harp	.	.	.	.	4
"	1634.	m.m. Bell	.	.	.	.	4
"	1635.	m.m. Crown	.	.	.	.	15
"	1636.	m.m. Ton	.	.	.	.	20
"	1639.	m.m. Triangle	.	.	.	.	18
"	1640.	m.m. Star	.	.	.	.	12
"	1641.	m.m. Triangle in Circle	.	.	.	.	42
"	1643.	m.m. (P)	.	.	.	.	13
"	1644.	m.m. (R)	.	.	.	.	18
"	1645.	m.m. Sun	.	.	.	.	32
"	1645.	m.m. Eye	.	.	.	.	12
"	1646.	m.m. Sceptre	3
"		Clipped, rubbed, &c.	496

Aberystwyth Mint.

"	1637-1642.	m.m. Open Book	1
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York Mint.

"	1629-1642.	m.m. Lion passant gardant	1
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Shilling.	1625.	m.m. Lis	4
"	1625-1626.	m.m. Cross on Steps	6
"	1628.	m.m. Upright Anchor	14
"	1630.	m.m. Plume	. . . . .	4
"	1631.	m.m. Rose	. . . . .	1
"	1632.	m.m. Harp	. . . . .	11
"	1633.	m.m. Portcullis	. . . . .	16
"	1634.	m.m. Bell	. . . . .	16
"	1635.	m.m. Crown	. . . . .	68
"	1635.	m.m. Crown, plumed	. . . . .	4
"	1635-1636.	m.m. Crown over Bell	. . . . .	1
"	1636.	m.m. Ton	. . . . .	64
"	1638.	m.m. Ton (Square Shield)	. . . . .	17
"	1638.	m.m. Anchor	. . . . .	32
"	1639.	m.m. Triangle	. . . . .	63
"	1638-1639.	m.m. Anchor over Triangle	. . . . .	1
"	1640.	m.m. Star	. . . . .	54
"	1641.	m.m. Triangle in Circle	. . . . .	136
"	1643.	m.m. (P)	. . . . .	23
"	1644.	m.m. (R)	. . . . .	58
"	1645.	m.m. Eye	. . . . .	30
"	1645.	m.m. Sun	. . . . .	56
"	1646-1649.	m.m. Sceptre	. . . . .	6
"		Cut down to inner circle, &c.	. . . . .	420
"		Clipped, rubbed, &c.	. . . . .	284
<i>York Mint.</i>				
"	1629-1644.	m.m. Lion passant	. . . . .	1
Sixpence.	1625.	m.m. Lis	. . . . .	3
"	1626.	m.m. illegible	. . . . .	1
"	1626.	m.m. Cross on Steps	. . . . .	3
"	1628.	m.m. Upright Anchor	. . . . .	1
"	1629.	m.m. Heart	. . . . .	1
"	1630.	m.m. Plume	. . . . .	3
"	1630.	m.m. Plume (Shield plumed)	. . . . .	1
"	1632.	m.m. Harp	. . . . .	3
"	1633.	m.m. Portcullis	. . . . .	4
"	1634.	m.m. Bell	. . . . .	5
"	1635.	m.m. Crown	. . . . .	19

Sixpence.	1636.	m.m. Ton	26
"	1638.	m.m. Ton (Square Shield)	8
"	1638.	m.m. Anchor	9
"	1639.	m.m. Triangle	30
"	1640.	m.m. Star	14
"	1641.	m.m. Triangle in Circle	12
"	1643.	m.m. (P)	1
"	1644.	m.m. (R)	6
"	1645.	m.m. Eye	1
"	1645.	m.m. Sun	3
"		Clipped, rubbed, &c.	99

*Declaration Type.**Bristol Mint.*

Half-crown.	1644.	m.m. BR (monogram)	2
"	1645.	m.m. "	3
"	1646.	m.m. "	1

Oxford Mint.

"	1642.	m.m. Plume	2
"	1643.	m.m. "	2
"	1645.	m.m. Five Pellets; OX under date	1
"	1646.	m.m. OX under date	2
Shilling.	1642.	m.m. Plume	1
"	1643.	m.m. "	1
"	1643.	Clipped	1

Shrewsbury Mint.

Half-crown.	1642.	No m.m.	1
		<i>Clipped, &c.</i>	
"	1643.	. . . . .	6
"	1644.	. . . . .	2

Charles II, 1660-1685.

Crown.	1664.	Milled	1
"	1667.	"	1
"	1668.	"	1
"	1669.	"	1
"	1671.	"	1

SILVER COINS FOUND AT WELSH BACK, BRISTOL. 249

Crown.	1672.	Milled	.	.	.	.	.	.	1
"	1673.	"	.	.	.	.	.	.	1
"	1676.	"	.	.	.	.	.	.	2
"	1679.	"	.	.	.	.	.	.	2
"	Dates illegible							.	5
Half-crown.	1660-1662.	mm. Crown	.	.	.	.	.	.	19
"	1660-1662.	mm. illegible, clipped, &c.	.	.	.	.	.	.	51
"	1663.	Milled	.	.	.	.	.	.	7
"	1664.	"	.	.	.	.	.	.	2
"	1666.	"	Elephant under bust	.	.	.	.	.	1
"	1668.	"	.	.	.	.	.	.	3
"	1669.	"	.	.	.	.	.	.	1
"	1670.	"	.	.	.	.	.	.	8
"	1671.	"	.	.	.	.	.	.	12
"	1672.	"	.	.	.	.	.	.	2
"	1673.	"	.	.	.	.	.	.	11
"	1674.	"	.	.	.	.	.	.	1
"	1675.	"	.	.	.	.	.	.	2
"	1676.	"	.	.	.	.	.	.	17
"	1677.	"	.	.	.	.	.	.	9
"	1679.	"	.	.	.	.	.	.	16
"	1680.	"	.	.	.	.	.	.	3
"	1681.	"	.	.	.	.	.	.	4
"	1681.	"	Elephant and Castle under bust	.	.	.	.	.	1
"	1683.	"	.	.	.	.	.	.	17
"	Dates illegible							.	15
Shilling.	1660-1662.	mm. Crown.	.	.	.	.	.	.	19
"	Clipped, rubbed, &c.							.	18
"	1663.	Milled	.	.	.	.	.	.	4
"	1668.	"	.	.	.	.	.	.	7
"	1676.	"	.	.	.	.	.	.	1
"	1677.	"	.	.	.	.	.	.	1
"	Dates illegible.							.	3
Sixpence.	1660-1662.	m.m. Crown	.	.	.	.	.	.	5
<i>James II, 1685-1688.</i>									
Half-crown.	1685.	Milled	.	.	.	.	.	.	4
"	1686.	"	.	.	.	.	.	.	3

Half-crown.	1687.	Milled	2
"	1688.	"	1
Shilling.	1685.	"	7

SCOTTISH COINS.

James VI, 1567-1603.

Thirty Shillings.	1603-1625.	m.m. Thistle. Period II	1
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Charles I, 1625-1649.

Thirty Shillings.	1637.	4th Issue, Clipped	2
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"	"	1637. " " F under horse's off hind-foot	1
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Twelve Shillings.	1637.	m.m. Leaved Thistle and F, 3rd Issue	4
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Six Shillings.	1637.	m.m. Thistle. Badly struck	1
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Half-Merk.	1636.	2nd Issue	1
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Coins not identified.

All reigns.	Clipped, rubbed, or otherwise illegible	92
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French.

Écu.	Louis XIV, 1668	1
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Total	<u>5,267</u>
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GENERAL DESCRIPTION.

Henry VIII, 1509-1547.

The earliest coin in the find is a groat of Henry VIII. Broken: Bust of king in profile. *Rev.* CIVITAS EBOR . . . ; m.m. cross. Royal shield on cross four-chée; at sides T W (Thomas Wolseley); below, Cardinal's hat. Second issue, 1526-1543.

Edward VI, 1547-1553.

The shillings of Edward VI represent the king, front-faced, crowned, in ermine robe, and collar of knighthood; his titles, ACL FRA Z HIB REX, a rose

at one side of his head, and XII at the other. *Rev.* Square shield on cross fourchée; **POSVI DEVM ADIVTORE MEV(M)**. The sixpences of this reign are undecipherable.

Philip and Mary, 1554-1558.

The coins of Philip and Mary, with the busts *vis-à-vis*, are very badly worn, and the mint-marks and inscriptions for the most part are illegible.

Elizabeth, 1558-1603.

The coins of Elizabeth are shillings and sixpences; and are nearly uniform in type. The queen's head is to the left, crowned, the top of the gown just showing, and the hair long. *Rev.* Shield on cross fourchée. The coins of the first three years of the reign (m.m. Martlet; Cross Crosslet; Lis) read **ELIZABETH** (68). *Rev.* **POSVI DEV(M) ADIVTOREM MEV(M)**. The shillings of later dates read **ELIZAB D G ANG FR HIB REGI** (m.m. Bell; A; Escallop; Crescent; Hand; Ton; Woolpack; Key; Anchor; Annulet; 1; 2). The sixpences date from 1561 to 1602; and with the exception of 1566 (m.m. Portcullis), 1569 (m.m. Castle), 1584 (m.m. Bell), 1598 (m.m. Anchor), 1600 (m.m. Anchor), each year is represented in the find. To 1582 they read **ELIZABETH D G AN(G) FR ET HI (REGINA)**. For 1583 they read **ELIZAB D G ANG FR ET HIB REGI**.

James I, 1603-1625.

The coins of James I are half-crowns, shillings, and sixpences. The obverse of the half-crown bears the legend **IACOBVS D : G : MAG : FRA(N) : ET HI : REX**. The king is on horseback to the right, crowned, and

holding a sword in his right hand. *Rev.* QVÆ DEVS CONIVXIT NEMO SEPARET. Square shield, garnished (m.m. Lis; Trefoil). The shillings of the First Issue (1603-1604) have the bust of the king to the right, crowned, in armour: behind XII. The legend reads IACOBVS D G ANG SCO FRA ET HIB REX. *Rev.* Plain square shield; EXVRGAT DEVS DISSIPENTVR INIMICI (m.m. Thistle; Lis). In the Second Issue (1604-1623), MAG BRI(T) was substituted for ANG SCO. The bust on the obverse varies somewhat on several of the coins. *Rev.* Plain square shield: QVÆ DEVS, &c. (m.m. Rose; Escallop; Bunch of Grapes; Coronet; Key; Mullet; Tower; Ton; Crescent; Thistle, plumed shield). The sixpences of the First Issue (EXVRGAT, &c.) have the same types and legends as the shillings, except that they have the dates over the shields (m.m. Thistle; Lis). Those of the Second Issue (QVÆ DEVS, &c.) also resemble the shillings of that type. The series includes specimens from 1604 to 1624, with the exception of 1610, 1612, 1614, and 1616-1620 (m.m. Lis; Rose; Escallop; Bunch of Grapes; Coronet; Key; Mullet; Trefoil; Ton; Rose; Thistle; Lis; and Trefoil).

Charles I, 1625-1649.

The Charles I coins form the main bulk of the find, and include half-crowns, shillings, and sixpences. The earliest half-crown (Tower Mint) is dated 1628 (m.m. Anchor), but the legend is clipped, and the faces of the coin rubbed. The next type (m.m. Plume) bears the legend CAROLVS DG MAG BRIT FRA ET HIB REX. The king is mounted on a small horse, to left, with sword resting on his shoulder. The details of the dress

and horse trappings are illegible. *Rev.* Oval shield, garnished, the garniture encroaching at the top and bottom of the inner ring: **CR** above; **CHRISTO AVSPICE REGNO**. A similar type, but with the shield plumed (m.m. Rose), is in fair condition. The next variety has the oval shield between **CR**. These coins are clipped or otherwise illegible (m.m. Harp). The coins (m.m. Bell) now show the horse without any trappings, and with its head held low; the sword is upright; **MA BR FR ET HI**. *Rev.* Shield oval and garnished. Coins of the same type read **MAG BR FR ET HIB** (m.m. Crown; Ton; Anchor); **MAG BRIT FRA ET HIB** (m.m. Triangle); **MAG BRI FRA ET HIB** (m.m. (P); (R); Sun). The coins with m.m. Eye have Fran. The next type shows the horse somewhat foreshortened; **MAG BRI FRA ET HIB** (m.m. Star; Triangle in Circle; and (P) same with HI). In the last series the horse is large, tall, with head erect; **MAG BRI FRA ET HIB** (m.m. Sceptre). *Obv.* Sceptre; *Rev.* Sun. Most of these coins are in poor condition. There are two half-crowns from provincial mints, viz. Aberystwyth (m.m. Open Book) and York (m.m. Lion passant gardant). The earliest dated shilling (1625) has the king's head to the left, crowned, **XII** behind the head; **MAG BR FR ET HI REX**. *Rev.* Square plain shield over a cross fleury; the harp is furnished with a bird's head. **CHRISTO AVSPICE REGNO** (m.m. Lis). Similar coins (m.m. Cross on Steps) bear the same legend, also **MAG BRI FRA**. The next type (m.m. Upright Anchor) reads **MA BR FR ET HI**. *Rev.* Square shield; harp in shield without bird's head. The coins of the next series (m.m. Plume) read **MAG BR ET HI(B) REX**. *Rev.* Oval shield, garnished; **CR**

above. On other coin (m.m. Rose) belongs to this series. The next type (m.m. Harp) shows the king with long hair, armour, and falling lace collar. **MA(G) BR(I) FR ET HI REX**. *Rev.* Oval shield, garnished, between **CR**. The coins (m.m. Portcullis) dated 1633 are somewhat similar, and read **MA BR FR ET HI(B)**. *Rev.* Oval shield, different garniture; no inner circle. One coin has the m.m. Crown punched over the Bell. Four coins (m.m. Crown) have the shield plumed. The coins dated 1638 (m.m. Ton) have a square shield on the reverse. The next types have a similar bust, but have a square shield over a cross fleury within an inner circle. *Obv.* **MA(G) BR(I) FR(A) ET HI(B)** (m.m. Anchor; Triangle); **MAG BRI FRA ET HI** (m.m. Star). One shilling has the m.m. Triangle over m.m. Horizontal Anchor on the reverse. The coin has not been struck from the same die as the other coins, and is of much finer workmanship. The stops are circular pellets. The head shown on the coins (m.m. Star; Triangle in Circle; **(P)**; **(R)**; Eye; Sun; Sceptre) is somewhat different and the crown is broader. One provincial mint is represented, viz. York (m.m. Lion passant).

The earliest sixpences are of the same type as the earliest shillings. **MAG BR FR ET HI** (m.m. Lis), dated 1625. The other coins represented are as follows:

1626. **MAG BRI FRA ET HI** (m.m. Cross on Steps).
 1628. **MA BR FR . . .** (m.m. Upright Anchor).
 1629. **MA BR . . . ET HIB** (m.m. Heart).
 1630. **MAG BR FR ET HI** (m.m. Plume). *Rev.* Oval shield, garnished. **CR** above.
 1630. *Rev.* Shield plumed.

1632. **MAG BR FR ET HI** (m.m. Harp). Same as shilling.
1633. **MA BR FR ET HI** (m.m. Portcullis).
1634. **MA BR FR ET HI** (m.m. Bell). Same as shilling.
- 1635, 1636, 1638, ditto (m.m. Crown ; Ton ; Anchor).
1639. **MAG BRI FRA ET HI(B)** (m.m. Triangle).
- 1640, 1641, 1643, 1645, ditto (m.m. Star ; Triangle in Circle ; (P) ; Eye ; Sun).

Declaration Coins. The coins represented are half-crowns (22) and shillings (3). The coins from the Bristol Mint are six in number, and are dated 1644, 1645, and 1646. *Obv.* **CAR . . . ET HI REX** ; king on horseback, to the left, sword in right hand, leaning slightly forward ; m.m. Plume. *Rev.* **EXVRGAT**, &c. Across the field between two lines **RELIG PRO LE AN LI PA** ; above, three plumes ; below, **BR** (monogram). Both the coins dated 1644 are clipped ; those dated 1645 are in somewhat better condition. One has the m.m. Plume on the obverse, with **BR** (monogram) between the horse's feet. *Rev.* The inscription reads **REL PRO LE AN LI PA**. The other two coins have **BR** (monogram) between the horse's feet. *Rev.* **REL PROT LE AN LI PA**, date under inscription. A clipped coin dated 1646 has a scroll ornament above the "Declaration", and a plume under the horse.

The Oxford coins of this type are seven in number, and are dated 1642, 1643, 1645, and 1646. *Obv.* Legend illegible, m.m. Plume. Line under horse. *Rev.* **RELIG PROT . . . ANG LIBER PA**. Dated 1642. Another coin of this date reads **MAG BR FR ET . . .** Line under horse. Badly struck and much worn. The two coins dated 1643 are clipped and worn. *Rev.* **RELIG**

PROT LEG ANG LIBER PAR. On one the m.m. is a Plume. The coin dated 1645 reads **MAG BR FR ET HIB.** Rough ground under horse. *Rev.* **RELIG PRO LE ANG LIB PAR,** m.m. Five pellets, **OX** under date. There are two coins dated 1646. *Obv.* **MAG BRIT FRAN ET HIB.** *Rev.* **RELIG PRO LE ANG LIBER PAR;** m.m. Five pellets crosswise; pellets between plumes, figures and **OX** under date.

A Shrewsbury half-crown dated 1642 is coated with horn silver. *Obv.* **MAG BRIT FRAN . . . HIB REX.** Line under horse's feet. *Rev.* **RELIG PROT LEG ANG LIBER PAR.** The three plumes above the "Declaration" have no lower bands under the coronet.

The clipped coins are of the Oxford type.

The shillings are both from the Oxford Mint. *Obv.* King's head to left, **XII** behind, m.m. Plume. *Rev.* **EXVRGAT, &c.; RELIG PRO(T) LEG ANG LIBER PAR** between three lines. Dated 1642 and 1643.

Charles II, 1660-1685.

The coins representing the reign of Charles II^a are crowns, half-crowns, shillings, and sixpences. Of the first the coins are milled, and are in good condition. *Obv.* King's head to right, laureate, draped, long hair. **CAROLVS II DEI GRATIA.** *Rev.* Four shields, crowned, in form of cross; in each angle two inter-linked C's; in centre Star of the Garter. Edge: **DECVS ET TVTAMEN ANNO REGNI XVI, 1664.** On the edges of the coins dated 1667, 1668, 1669, 1671, 1672, 1673, 1676, and 1679 the date on the edge is given in full, viz. **DECIMO NONO, VICESIMO, VICESIMO PRIMO, VICESIMO TERTIO, VICESIMO**

^a There are no Commonwealth (1653-1658) coins in the hoard.

QUARTO, VICESIMO QUINTO, VICESIMO OCTAVO, and TRICESIMO PRIMO.

The hammered half-crowns all bear numerals and an inner circle; they, therefore, belong to the Third Coinage. *Obv.* King's head to left, crowned, hair long, lace collar, and armour, **XXX** behind bust. **CAROLVS II D G MAG BR FR ET HI REX.** *Rev.* Square shield on cross fleury. **CHRISTO AVSPICE REGNO;** m.m. Crown. The first milled coin in the find is dated 1664. *Obv.* Same as crown. The dates on the coins are given in the list of mint-marks. One coin of 1666 has an elephant under the bust, and one dated 1681 (clipped) has an elephant and castle.⁹

The legend on the obverse of the hammered shillings reads **CAROLVS II D G MAG BRI FR(A) ET HI(B) REX;** **XII** behind bust. The first milled shilling is dated 1663, and resembles the crown of that date. The edges are milled in straight lines. The dates on the other shillings are 1668, 1676, and 1677.

The sixpences represented are hammered, and in very poor condition. They are similar in type to the half-crowns, the obverse legend reading **BRI FRA;** **VI** behind bust.

James II, 1685-1688.

The coins of James II are half-crowns and shillings. On the obverse of the half-crowns the king's head is to the left, laureate, hair curling towards the shoulders, which are clothed in antique armour. **IACOBVS II DEI GRATIA.** *Rev.* Similar to the half-crowns of

⁹ The symbol of the African Company, "whose charter gave them the privilege of having coins struck in gold and silver at the mint from metal imported by them". Grueber, H. A., *op. cit.*, p. 131.

Charles II, but without the intertwined C's in the angles of the crossed shields. On the edge: ✠ DECVS, &c. ANNO REGNI PRIMO, SECUNDO, TERTIO, and QUARTO (1685, 1686, 1687, 1688).

The shillings are all dated 1685. The head on the obverse is similar to that on the half-crowns. The milling on the edge is oblique.

The half-crown dated 1688 is the latest coin in the find.

SCOTTISH COINS.

James VI, 1567-1603.

The only coin represented is a thirty-shilling piece. *Obv.* IACOBVS D G MAG BRIT FRAN & HIB REX. The king is on horseback, to right, sword in right hand. *Rev.* QVÆ DEVS CONIVNxit NEMO SE-PARET; square garnished shield; m.m. Thistle. Rubbed. Period II (1603-1625).

Charles I, 1625-1649.

Three thirty-shilling pieces are represented, two of which are clipped. *Obv.* CAROLVS D G MAG BRIT FRAN & HIB REX. King on horseback, to left, sword in hand, ground under horse. *Rev.* QVÆ DEVS CONIVNxit NEMO SE-PARET; square garnished shield, crowned; m.m. Leaved Thistle. Fourth Issue. One of the clipped coins bears the letter F (Falconer) under the horse's off hind-foot. There are four twelve-shilling pieces of the Third Issue. *Obv.* CAROLVS D G MAGN BRITAN FRANC ET HIB REX. Bust of king to left, crowned, falling lace collar and mantle; XII behind bust. *Rev.* QVÆ DEVS CONIVNxit NEMO SE-PARET; plain square shield crowned, between C R, letters crowned. This coin was issued in

1637. Three of the coins are clipped, but one of them, probably the finest coin in the find, has the Leaved Thistle mint-mark, and the letter F (Falconer). The remaining Scottish coin is a half-merk of the Second Issue. *Obv.* CAROLVS D G SCOT ANG FR & HIB R. Bust of king to left, crowned, behind VI over 8. *Rev.* CHRISTO AVSPICE REGNO; square shield, crowned.

*Bristol Mint (1643-1646).*¹⁰ Grueber says that the Bristol Mint was established from 1643-1644; "and from the similarity of the coins to those of Oxford, it is not improbable that workmen were transferred from that place to Bristol". The first coins of Declaration type were struck at Shrewsbury.¹¹ The inscription in full, "Religio Protestantium, Leges Angliae, Libertas Parliamenti", refers to the king's declaration at Wellington, September 19, 1642, where he said "That he would preserve Protestant Religion, the Known Laws of the Land and the Privileges of Parliament". As regards the Bristol coins, the dates of the various types minted locally are as follows:

Unites, 1645 (Sovereign).¹²

Half-Unites, 1645 (Half-sovereign or Double Crown).

Half-crowns, 1643-1646.

Shillings, 1643-1645.

Sixpences, 1643-1644.

Groats, 1644.

Half-Groats, undated.

A large proportion of the contributions extracted from Bristolians on behalf of the royal cause was presented

¹⁰ Grueber, H. A., *op. cit.*, p. 113.

¹¹ "On a unique and unpublished Shrewsbury Crown of Charles I," Spink's *Num. Circ.*, 1895, iii, pp. 1003-1005.

¹² Grueber, H. A., *op. cit.*, p. 113.

in the shape of silver plate, the value of which was taken at about 4s. 4d. per ounce.¹³

On the surrender of the Royalists in 1645, Symonds¹⁴ says that the master of the mint, Bushell, went from Bristol to Lundy Island. This man appears to have had a wandering career as a mint-master.¹⁵ In 1677 he was granted an indenture for the express purpose of striking money from Welsh silver at Aberystwyth.

In 1642 he removed the mint to Shrewsbury; "but on account of scarcity of workmen and engraving implements it was only in operation for a few months, all the coins being dated 1642".¹⁶ The mint was then transferred to Oxford, where it continued in operation until 1646. It appears that Bushell went in 1643 from Oxford to Bristol, while he still retained the wardenship of the Oxford mint.¹⁷ The mint and apparatus were removed from Bristol, and sent to other places where the coins could be safely struck and used for the Royalists. Symonds considers that the coins of Bristol type marked A or B were minted at Appledore and Barnstaple respectively, while Bushell was governing his island. It is doubtful whether he established a mint on Lundy Island.

Observations and Conclusions. On the whole the

¹³ Latimer, J., *The Annals of Bristol in the Seventeenth Century*, Bristol, 1900, p. 188.

¹⁴ Symonds, H., "Civil War Coins of Bristol Type after September, 1645," *Num. Chron.*, 1922, pp. 141-143.

¹⁵ *Brit. Num. Journ.*, vol. xi, pp. 190-192.

¹⁶ Grueber, H. A., *op. cit.*, p. 119.

¹⁷ *Brit. Num. Journ.*, vol. xvi, p. 130. After the Restoration, Bushell reminded Charles II of his work for the late king at Bristol and Oxford in his triple capacity as mint-master, mining speculator, and army contractor.

coins in the hoard give a fair indication of the numismatic history of the period. It illustrates the gradual simplification which took place in the character of the coinage since the reign of Elizabeth, and also the transition from hammered to milled money. The prevalence of the habit of coin-clipping is clearly shown, and it is well known that several ordinances were introduced to cope with the practice.¹⁸ Seyer¹⁹ says that in 1696 the state of the silver coin for many years past had been miserably bad, being so reduced in size by clipping that some of it was only half its value . . . "sixteen shillings of it being weighed against one of King Charles's milled crowns and found wanting". The guinea commonly passed for 30 to 31 shillings. In 1695 coin-clippers were vigorously prosecuted in Bristol, and some were imprisoned in Newgate, and some in Gloucester. On August 15, 1696, the Mayor and Aldermen of the city were promised a premium on the amount of hammered money sent to the newly-established mint at the "sugar-house" behind St. Peter's Church.²⁰

As the hoard was buried in the precincts of the Old Custom House, it would, at first sight, seem difficult to assign a reason for secreting it here. A curious sidelight, however, on the morality of the customs officials towards the end of the seventeenth century is furnished

¹⁸ Ruding, R. (Rev.), *op. cit.*, ii, pp. 36-37, gives a full account of the appointment of a Committee in 1694-1695 to prevent the clipping of coin and the exportation of silver. Numerous ordinances were passed in the reign of Charles I, of which details are furnished by this authority.

¹⁹ Seyer, S. (Rev.), *op. cit.*, p. 544.

²⁰ Latimer, J., *op. cit.*, p. 478.

by Latimer,²¹ who says, "The State Papers for 1691 contain an account of an affair that must have caused much excitement in the city, though no local writer condescended even to allude to it. In a report to the Treasury, dated November 12th, the Customs Commissioners commended the petition of John Dutton Colt, Collector at Bristol, who had succeeded, by the help of an informer on board the ship *Bristol Merchant*, in detecting certain Customs officers and local merchants in a combination for defrauding the revenue. He had recovered £2,772 from the incriminated merchants, and £500, as a fine, from the officers, and the latter had moreover been convicted in the Court of King's Bench, and condemned to stand publicly upon the Back, placarded upon their breasts with a paper declaring their crime . . . The Commissioners recommended that Colt should be generously recompensed, with what result does not appear. Subsequently charges of misconduct against Colt himself were made by Bristolians, but the Government seem to have taken no steps against him". It will be noted that a feature of the hoard is that the denominational values of the coins are nearly uniform throughout the reigns represented. With the exception of the groat of Henry VIII, they are crowns (Charles II only), half-crowns, shillings, and sixpences. From this it would appear that they were used for payment, either in general business or to the Government. The hoard may have, therefore, been hidden by some unscrupulous official in the place where it was found about 235 years later.

²¹ Latimer, J., *op. cit.*, pp. 463-464.

In the newspaper accounts of the find it was stated that the cavity in which the coins were found was probably used by smugglers or thieves, but this does not seem likely. There appears to be another possible explanation. The last coin in the hoard is dated 1688, so that the earliest date of hiding would be that year. The chronological range, *circa* 146 years, does not suggest that the coins were in continual circulation as currency in a large business centre as Bristol undoubtedly was at that time. It is probable that, as at the present time, the country folk held large quantities of coins of many reigns; and this would naturally come into circulation at the biennial fairs held in Bristol. In 1697 the Corporation presented a petition to the House of Commons, and pointed out that a large number of old coins would be brought in at "the approaching fair (at St. James) from Wales and other places . . .",²² so that this theory is not improbable. The importance and antiquity²³ of the principal fair held in St. James Churchyard is well known, and we find that in 1689 the Churchwardens received the not inconsiderable sum of £80 for standings alone.²⁴ The suggestion that the hoard was hidden by a trader may also be considered, although there would remain the difficulty of explaining why it should have been hidden in the Custom House. On the whole, it seems that the first suggestion is the right one.

Mr. G. C. Brooke informs me that the geographical range of the coins of Charles I indicates the mobility

²² *op. cit.*, p. 479.

²³ Seyer, S. (Rev.), *op. cit.*, i, p. 519, mentions the taxing of the fair in 1196.

²⁴ Evans, J., *op. cit.*, p. 245.

of the coins, and not to the same extent of the men, of the time. There were widespread movements of troops in the West of England during the disturbances caused by the Civil War. Again, there are indications of the movements of men who had served in Scotland, for we find that on November 3, 1654, "Captain William Davis claimed and received the benefit of an ordinance, to enable such soldiers as served the Commonwealth in the late wars in Scotland to exercise any trade within this city". [Many other instances of this sort of claim occur during the Protectorate.]²⁵

I have to thank Mr. G. C. Brooke for valuable criticism and advice while the present paper was being prepared.

L. W. G. MALCOLM.

²⁵ Evans, J., *op. cit.*, p. 347.

X.

EDWARD COURTENAY.

[SEE PLATE IX.]

AMONG a series of lead medals acquired by the British Museum¹ at the sale of Mr. Henry Wagner's collection (Christie's, January 22, 1925, lot 60) was the following one-sided piece:

EDOARDO [C]ORTNEIO Bust of Edward Courtenay I., bearded, wearing quilted doublet with high collar, turned down in front; on the truncation, ·P·1556·

Lead, cast solid, 58 mm. [Pl. IX. 1]. The C of the surname has been destroyed by a large hole pierced above the head.

The signature is that of Pastorino de' Pastorini of Siena (1508-1592). At the time when this medal was done, Pastorino was employed at Ferrara, where from 1554 to 1559 he was actually responsible for the dies of the coins of Duke Ercole II.

It is unnecessary to enter here in great detail into the history of the unfortunate subject of the portrait. Born about 1526, he spent half of his life in prison, being confined in the Tower of London from Nov., 1538, to Aug. 3, 1553. A favourite of Queen Mary, he was, a month after his release, created Earl of Devon. Plans were even made for her to marry him, but the

¹ The circumstances of the acquisition are described in the *Proceedings*, 1924-1925, p. 37 (the President's Address). Cp. *Archiv für Medaillen und Plakettenkunde*, vol. v (in the press).

Queen eventually decided in favour of Philip II. His thoughts—or rather those of his backers, for throughout he seems to have been a tool in the hands of others—then turned to the Princess Elizabeth; had Wyatt's conspiracy succeeded, he would have become her consort on the throne. When the rebellion was suppressed he was sent back to prison in February 1554. There he remained for another year; at Easter 1555, he was released on parole, and sent abroad. During his exile, there was frequent talk about treasonable designs in which he was implicated. And, as if plans to marry him to Mary Tudor and Elizabeth were not enough, the French king even entertained for a moment the design of uniting him to Mary, the future Queen of Scots, who was already betrothed to the Dauphin.² He was then living in the North of Italy, and his days were numbered. On Sept. 18, 1556, Peter Vannes wrote from Padua saying that he had died "little more than an hour ago", as the result of a chill.³

One is usually satisfied when one can date a work of art within a year. We are in this instance still more fortunate. Two letters⁴ from Courtenay enable us to fix the date of the medal within a week. On March 20, 1556, he wrote from Venice saying that he was departing the next day towards Ferrara. On the 29th of the same month he wrote from Padua saying that he had returned from Ferrara, where he had been honourably received by the Duke, and entertained in his palace there.⁵ There can be little doubt

² *Cal. St. Pap. Venetian*, vol. vi, Pt. I, p. 532 (July 19, 1556).

³ *Cal. St. Pap. For.*, 1553-1558, pp. 255-256.

⁴ *Cal. St. Pap. Dom.*, 1547-1580, pp. 76, 77.

⁵ Mr. Hilary Jenkinson tells me that Courtenay adds that the

that part of the entertainment was sitting for his likeness to the fashionable modeller of the day.

Hitherto the features of Courtenay have been known to us from a picture in the possession of the Duke of Bedford at Woburn Abbey. It is one of the pictures now attributed to Hans Eworth, and has been two or three times engraved.⁶ It represents him standing facing on the battlements of a tower—doubtless the prison with which he was all too familiar. A replica or copy of this picture is at Powderham Castle in the possession of the Earl of Devon.⁷

Pastorino's medal is one of his most interesting performances. He was usually more successful with feminine than with masculine subjects, and perhaps that is why he has caught so successfully, as it would seem, the likeness of one who was not distinguished by rugged strength of character. The projection of the right shoulder represents in an extreme form a weakness of the artist. Comparison with other medals of his, such as the Leonard of Harrach, of which an example is illustrated beside the Courtenay [Pl. IX. 2], shows that in his desire to represent both shoulders Pastorino, for all his skill as a modeller, was apt to distort the bust in the most extraordinary way. The same distortion is shown in a less offensive degree in his medals of Bonaventura Gruamonte, Francesco Baiardi, and Battista Guarini.

G. F. HILL.

Duke invited him to return for eight or ten days later; but I have found no evidence that he went.

⁶ Walpole Society, vol. ii (1912-1913), Pl. IX b; F. O'Donoghue, *Catal. of Engraved British Portraits*, ii (1910), p. 47.

⁷ I have to thank the Hon. and Rev. H. H. Courtenay for calling my attention to this picture.

XI.

A PERSIAN GOLD MEDAL.

It is with great pleasure that I bring to the notice of readers of the *Numismatic Chronicle* the existence of a very large Persian gold piece struck during the reign of Fath 'Alī Shāh Kājār, A.D. 1797-1834 (A.H. 1212-1250). I have failed to discover any Persian gold coin of this size recorded in any Catalogue. It is an admirable specimen, not only in the matter of size but in its magnificent artistic workmanship and rarity. It is an exemplary piece of the engravers' art, is of extreme delicacy, and seems to have been done by a most skilful hand. It rivals the finest specimens of the period of Jahāngīr, the Mughal emperor of India. Gold coins of this size were not used in the ordinary currency of Persia.

The weight of the piece is 3,545 grains, which does not appear to be a regular denomination. The average weight of Fath 'Alī Shāh's current gold coins was first 95 grains. It was reduced to 70 grains at the close of the thirteenth year of his reign, and was further reduced later still to 53 grains, which is identical with the old *ashrafī*. It is to be noted that this coin, if such it is, was minted, however, at a time when Fath 'Alī Shāh was really reducing the weight of his current gold coinage, due either to the scarcity of gold or in conformity with his policy of hoarding gold.

The Mughal emperors of India coined a variety of large pieces up to a hundred mohurs, or 100 tolas in weight; and it is probable that the Persian king followed the same practice. Such large pieces were probably used only for ceremonial gifts, for example, to foreign ambassadors and high personages of the state in recognition of their services. In any case, they do not seem to have been used either in Persia or India as ordinary currency. The question may be asked whether this is not a medal? The legend, however, on the reverse suggests that it is. It says *بر قلب شکستگان درستی بخش است*, "confers soundness on the broken-hearted". If we take this line in the literal sense we might infer that it was used specially in alms-giving. It is said of Fath 'Ali Shāh that, like the last of the Caliphs, he preferred to hoard his gold, but there is no historical evidence that he used such hoarded gold in minting such extraordinary coins.

The question then arises, if the coin was meant to relieve the distress of the suffering poor, why should Fath 'Ali Shāh use in alms-giving such special magnificent and costly coins, different from the ordinary everyday currency, instead of giving them the usual current money, which could be cashed by the poor on the spot without any trouble? I think, then, the real meaning of the legend *بر قلب شکستگان درستی بخش است* (it "confers soundness on the heart-broken") should be that the coin is "a salve to the wounds of the broken-hearted". Taken in conjunction with the Persian history of the time, it would seem that the legend refers to the Persian victory over the Turks, who, I take it, are referred to as "broken-hearted" conse-

quent on their defeat by the Persians. This is corroborated by the legend *یا مهر فکنده عکس بر ماه این است*, which literally translated reads, "Is it the shadow of the Sun reflected on the Moon", the "Sun" being the "Sun" of the national flag of the Persians, and the "Moon" in the same way being the Crescent Moon of the Turkish flag, thus alluding to the victory of the "Sun" (i.e. Persians) over the "Moon" (i.e. the Turks).



which was always a cause of great rejoicing among the Persians.

The piece therefore, I take it, was neither a current coin nor was minted for the purpose of charity. It was evidently specially struck for a commemorative purpose in honour of the victory of the Persians over the Turks. There is nothing in its construction to show that it was intended to be worn. The only

conclusion that I can come to is that it is a medallion, not awarded to decorate the rank and file, but presented to a few select officers of the highest rank who had served in the battle. Similar medallions were struck during the reign of Nāṣir al-Dīn Shāh, and this particularly fine specimen shows they were not unknown to the earlier Persian Shāhs.

Further, there is the absence of the usual Shī'a



formula, as is usual in the Persian coins, there is no regnal year.

In short, this medallion has an historical interest, inasmuch as it gives the name of the king, the year in which he reigned, and the place at which the coin was minted, and refers to certain hostilities between Persia and Turkey.

In order that the reader may appreciate the full

charm of the coin, I give the metrical legend in the original Persian with its English translation :

		<i>Obverse.</i>
Margin	}	صراب قضا خالق اکبر آمد
		صراف قدر شاه مظفر آمد
		از تیغش قلب جیش دشمن بشکت
		وز نا مش فتح سکه بر زر آمد
Central		سکه فتح علی شاه خسرو صاحبقران

The literal translation of the first four lines is as follows :

Obverse.

The minter of fate is the great Creator,
 The Sarāf of destiny is the victorious King ;
 By his sword the heart (Centre) of the army of (His)
 enemy is broken ;
 And in his name the stamp of conquest (Fath) was
 impressed on gold.

The whole inscription is full of puns, and the translation to be effective is not easy. I give below the following in more intelligible English :

It was the Almighty Creator that impressed the face
 of destiny ;
 It was the victorious King that gave currency to God's
 decree ;
 He pierced with his sword the hearts of the hostile
 army ;
 He put the stamp of his name on golden victory.

The Sarāf in the literal translation is the man who brings coins into circulation, and the sense conveyed

by these lines is that it was the king who was the instrument for executing God's decree or giving it currency. The central portion on the obverse says that this is the coin of His Imperial Majesty Fath 'Ali Shāh.

Reverse.

Margin { بر بیکر زر نام شهنشاه این است
 یا مهر فکنده عکس بر ماه این است
 بر قلب شکستگان درستی بخش است
 مَا أَحْسَنُ مِنْهُ صِبْغَةَ اللَّهِ إِنْ هُوَ إِلَّا اللَّهُ

Central

ضرب دار السلطنة تبریز

۱۲۴۲

—

Translation of the legend on the *reverse* :—

There in the mould of gold is the name of the King of Kings ;

Or is it yellow gold of the " Sun " reflected on the Silver " Moon " ?

It confers soundness on the heart-broken ;

Whatever is the most beautiful is from Him who is the — colour (tincture) of God.

The central portion of the reverse says the coin was minted in the capital city of Tabrīz, A. H. 1242 (A. D. 1826).

The inscriptions are metrical compositions, *rubā'īs* (quatrains), written in the *Nastalik* style of handwriting, to the cultivation of which great attention was paid in the *Qājār* Dynasty. They are overloaded with a meaningless superfluity of flattering

terms. The court poet has followed the time-honoured practice of praising the king, and has expressed the flattery in unusually honeyed words. It is difficult to express the real significance in ordinary English of these figurative modes of expression. The court poets hardly believed what they wrote, and when they offered such poems to the king, with eyes lowered and the palms crossed over the breast, knew very well that it was no part of their business to strive after accuracy. They rivalled each other in deluging the king with fulsome flattery.

VICAJI D. B. TARAPOREVALA.

MISCELLANEA.

MUSEO SALNITRIANO.

WHEN Ugdulena wrote in 1857, the Museo Salnitriano (see p. 136) was a well-known collection, but I sought in vain for information concerning it until application to my friend Senatore Orsi, the distinguished Director of the Museo Nazionale at Syracuse, to whom I owe many kindnesses, brought me into touch with the melancholy facts. He writes to me that the Museo Salnitriano was the former Museum of the Jesuits at Palermo; after the suppression of that order the collections passed to the University of the city, and, upon the formation of the Museo Nazionale at Palermo, they were transferred to that institution. Unfortunately, he had to add, many of their contents had disappeared. Upon writing to Dr. Gabrici, the learned Director at Palermo, I was told that only a small part of the contents of the Museo Salnitriano had reached the Museo Nazionale. The collections of the Jesuits of Salnitriano were burgled by unknown thieves in 1860, or shortly after, and the coins in particular suffered from the spoliation; the didrachm illustrated by Ugdulena (see p. 142 of the present part) was amongst those that were lost.

A. H. LLOYD.

NOTICE.

DIES FOR FALSE COINS.

In the possession of the Museo Nazionale Romano are more than 1,000 dies for making false coins, for the most part produced by the electrotyping process; about a hundred are, however, hand-engraved in steel. The various classes of coins and medals are represented in approximately the following numbers: Greek coins, 232; Roman, 520; Medieval and Modern, 294.

The Istituto Italiano di Numismatica, in agreement with the Direction of the Museum, has undertaken the publication of impressions from these dies, with descriptions, in a quarto volume with about 40 plates. An invitation issued some years ago for subscriptions to defray the cost of this work having met with inadequate response, the publication has not proceeded. As, however, it is highly desirable, in the interest of museums and private collectors, that the forgeries from these dies should be exposed, the invitation is now renewed. Promises to subscribe at the rate of £1 10s. sterling, or \$6, will be received by Mr. G. F. Hill, British Museum, London, W.C. 1, or Messrs. Spink & Son, 17 Piccadilly, London, W. 1. Payment should not be actually made until notice is received that the work is ready for distribution.

ERRATA

Numismatic Chronicle, Series V, vol. V.

PAGE 51, line 5 from bottom of text for "uncertain" read "certain"

PAGE 52, line 4 from bottom of text for "0,5 grm." read "0,05 grm."

REVIEW.

Manuel des Poids Monétaires. Par A. DIEUDONNÉ, Conservateur du Département des Médailles de la Bibliothèque Nationale. Pp. vii, 184. Florange & Ciani, Paris, 1925.

THIS is a book which deserves a wide and an attentive public. The thick dumps of brass, either square or circular, which usually represent medieval and modern coin-weights, are familiar enough to the student of coins. How much of economic history, however, is involved in the study of them, and how much of interest they contain will be learnt as a delightful surprise by readers of M. Dieudonné's book. M. Dieudonné has given a full survey of his subject, carefully arranged, well documented, but yet easy to follow and not overloaded with detail. He traces the use of coin-weights from Byzantine to medieval times, explains how they were used in particular to test the weights of foreign coins, and traces the changes of attitude on the part of governments towards such use of foreign currencies. Further chapters deal with the weights, whether normal weights of the coin or weights tolerated in the market, with the money-changers, whether in private or public employment, who used them, with the shapes, types, and legends usually found. A second part of the book gives a list of weights, classed under countries, in chronological order under denominations, followed by a list of weights issued under an ordinance of Philip the Fair, 1499, and by a very valuable section classing coin-weights by their fabric to different places—identifying, for example, the long series of Antwerp weights, with open hand as general mark and initials of individual issuers. The book closes with a note on boxes of weights, a bibliography, an index, and sixteen plates. M. Dieudonné does not pretend to offer us a full 'Corpus' of coin-weights, so it is not surprising to find that the British Museum collection contains weights not registered here—the rose-ryal and spur-ryal of James I, the Scots XXX shilling piece of Charles I, a number of denominations of the Irish series, to take a few examples. M. Dieudonné's book is likely to stimulate interest in a subject which has been unduly neglected in this country, and may lead to further publications which will complete his. For the skill with which he has brought out the salient points of interest all who are interested in coins are deeply in his debt.

H. M.

XII.

A RECENT FIND OF SICILIAN COINS.

[SEE PLATES X-XIV.]

THE find here described was first reported to me by an American collector and Fellow of this Society, Mr. Hoyt Miller,¹ who had the great good fortune of handling 196 coins in all. He was told that the whole find consisted of between 400 and 500 coins and was offered the opportunity of inspecting the remaining portion but, unfortunately, his engagements did not permit of his remaining in Sicily for the necessary period. The coins were seen in their entirety, minus the coins acquired by Mr. Hoyt Miller, by a numismatist of experience, who bought 117 and rejected all the others because they were too badly preserved; "nearly all corroded" are the words in which he described them. For scientific purposes, this numismatist made a record of the coins he rejected, and the following summary is based upon his information collated with that supplied by Mr. Hoyt Miller.

¹ It is my pleasant duty to express my gratitude to Mr. Hoyt Miller for supplying me with casts, photographs, and weights of all the coins he obtained. The illustrations of Nos. 7, 10, 14, 15, 28, 29, 30, 31 are from casts supplied by him; all the others are of coins in the Lloyd collection.

AKRAGAS			
Archaic didrachms	88		
Transitional tetradrachms	3		
	—		91
CATANA			
Early transitional tetradrachms	2		
	—		2
GELA			
Tetradrachms	25		
Didrachms	70		
	—		95
HIMERA			
Archaic drachms:			
Cock and incuse square	2		
Transitional tetradrachm	1		
Transitional didrachm	1		
	—		4
LEONTINI			
Transitional tetradrachms	19		
Transitional didrachms	8		
	—		27
MESSANA			
Tetradrachms	20		20
SELINUS			
Transitional tetradrachms	25		
Transitional didrachms	75		
	—		100
SYRACUSE			
Archaic tetradrachms	85		
Archaic didrachms	4		
Transitional tetradrachms	44		
	—		133
		Total number of coins in the find	472

The percentages of the whole number of the coins borne by the various cities included are:

AKRAGAS	19.3	LEONTINI	5.7
CATANA	0.4	MESSANA	4.2
GELA	20.1	SELINUS	21.2
HIMERA	0.9	SYRACUSE	28.2

I wish to make it clear that I had not the opportunity of examining the whole find myself, but, with that reservation, I believe that the foregoing summary is a close approximation to the total and detailed contents of the find. Thirty-six coins were bought by Mr. Miller and the 117 already mentioned passed into the Lloyd collection; as I am assured that the numismatic value of the remainder is negligible, and as, in any case, they are not available, my analysis of the find is necessarily based upon the 153 coins whose description is as follows:

(The weights of all the coins are given, and those of the coins illustrated are in heavier type.)

AKRAGAS.

Tetradrachms.

- Obv.*—AKRAC | ΣΟΤΜΑ Eagle with closed wings, l., standing upright.
Rev.—Crab; beneath, a letter.
 Somewhat worn. Wt. 16.66. [Pl. X. 1.] 1
- Obv.*—Same inscription. Eagle with closed wings, l., perching on dotted line.
Rev.—Crab.
 Somewhat worn. Wt. 16.91. [Pl. X. 2.] 1
- Obv.*—Same inscription. Eagle with closed wings, l., perching on capital of Ionic column.
Rev.—Crab, carapace showing lineaments of monster's face; beneath, spray with two volutes curved upwards and downwards respectively.
 Mint state. Wt. 17.02. [Pl. X. 3.] 1

3

CATANA.

Tetradrachms.

- Obv.*—Quadriga driven r.: dotted border.
Rev.—KATAVAION Head of Apollo r., laureate, three rows of leaves.
 Fine state but double struck; the other somewhat worn. (Two varieties.) Wt. 17.02, 2
 17.06. [Pl. X. 4.] — 2

U 2

GELA.

Tetradrachms.

- Obv.*—Quadriga driven r.; horses crowned by Nike; in exergue, a grain of corn: dotted border.
- Rev.*— Σ | $\Lambda\Lambda\Xi$ Forepart of man-headed bull swimming r.; dotted truncation.
Of rude design and execution.
Slightly worn. Wt. 17.56, 17.01, 17.26. [Pl. X. 5.] 3
- Obv.*—Quadriga driven r.; horses crowned by Nike: dotted border.
- Rev.*— $\text{CE} | \Lambda | \Sigma \text{A}$ Forepart of man-headed bull swimming r.; plain truncation.
Somewhat worn. Wt. 17.34. [Pl. X. 6.] 1
- Obv.*—As last.
- Rev.*— $\Sigma \text{A} | \Lambda | \Xi | \text{D}$ As last, but dotted truncation.
Somewhat worn. Wt. 17.28, 17.37. [Pl. X. 7.] 2
- Obv.*—Quadriga driven r.; horses crowned by Nike.
- Rev.*— $\text{CE}\Lambda\Lambda\Xi$ Forepart of man-headed bull swimming r.; dotted truncation.
Somewhat worn. Wt. 16.92. [Pl. X. 8.] 1
- Obv.*—Quadriga driven r.; horses crowned by Nike; no exergual line: dotted border.
- Rev.*— $\text{CE}\Lambda\Lambda\Xi$ (*sic*) Forepart of man-headed bull swimming r.
Mint state. Wt. 17.37. [Pl. X. 9.] 1
- Obv.*—Quadriga driven r. past meta in form of Ionic column: dotted border.
- Rev.*— $\text{CE}\Lambda\Lambda\Xi$ Forepart of man-headed bull swimming r.; truncation dotted.
Somewhat worn. Wt. 17.94. [Pl. X. 10.] 1
- Obv.*—Quadriga driven r. past meta in form of Ionic column; in field, a wreath; in exergue, ear of barley: dotted border.
- Rev.*— $\text{CE}\Lambda\Lambda\Xi$ Forepart of man-headed bull swimming r.; crowned by Nike.
Brilliant state. Wt. 17.11. [Pl. XI. 11.] 1
- Obv.*—Quadriga driven r.; Nike crowns horses with r. hand and holds a second wreath in lowered l.; in exergue, honeysuckle ornament between two volutes: dotted border.
- Rev.*— $\Gamma\text{E}\Lambda\Lambda\Xi$ Forepart of man-headed bull swimming r.; truncation marked by dotted line between two plain ones.
Mint state. Wt. 17.04. [Pl. XI. 12.] 1

HIMERA.

Tetradrachm.

Obv.—**MOIA 4EMI** in exergue, quadriga driven r.; charioteer crowned by Nike: dotted border.

Rev.—Nymph standing l., wearing sandals, long-sleeved chiton and peplos, whose ends fall over r. arm.; hair bound with fillet under which back hair is turned; sacrificing at narrow, pedimented, wreathed altar raised on two steps; in outstretched r. hand a phiale, l. hand extended, open, r.; in field r., seilenos r. with head averted, nude but wearing boots, stands in trough and receives on shoulder a jet of water from lion-headed fountain, a handle on which he grips with l. hand; the back of r. wrist rests on r. thigh; altar steps and trough connected by a pavement on which the nymph stands.

Mint state. Wt. 17-13. Cf. Gabrici, Pl. XIV, no. 9. [Pl. XI. 13.] 1

Obv.—**VOI | A 4EMI** Nude youthful rider dismounting from horse cantering l.; in exergue, a wading bird flying l.: dotted border.

Rev.—Traces of inscription in exergue. Nymph sacrificing as in last; in field r., an upright caduceus about which is knotted a fillet; in field l., above, a grain of barley.

Slightly worn. Wt. 8-57. [Pl. XI. 14.] 1

2

LEONTINI.

Obv.—Nude horseman cantering r., reins in l. hand, whip in r.; dotted exergual line and border.

Rev.—**AEON | TIVON** Lion's head, erased, with open jaws r.; around, four barleycorns.

Slightly worn. Wt. 8-18. [Pl. XI. 15.] 1

Obv.—Head of Apollo laureate (three rows) r.; the hair, in ringlets over the forehead and in front of the ear and bound with cord thrice horizontally round the crown, is turned up in coils over the wreath-band behind, the extreme ends projecting l.: dotted border.

Rev.—**VE | ON | TI | NON** Lion's head, erased, with open jaws r.; around, four barleycorns.

Two in mint state, one slightly worn. Wt. 17-17, 17-25, 16-54. [Pl. XI. 16.] 3

- Obv.*—Head of Apollo as in last, but the hair is indicated by lines radiating from the crown: dotted border.
- Rev.*—As in last.
Mint state (two varieties). Wt. 16.81, 17.45, 16.30. [Pl. XI. 17.] 3
- Obv.*—Head of Apollo as in last, but much finer lines used to indicate the hair on the crown: dotted border.
- Rev.*—As in last.
Dies untraced elsewhere. Slightly worn. Wt. 17.40. [Pl. XI. 18.] 1
- Obv.*—Head of Apollo laureate (two rows) r.; the hair, bound and crossed at back with cord where it is formed into a chignon, hangs in short ringlets on the forehead with longer ones on the cheek and a very long one behind the ear: dotted border.
- Rev.*—VE O | NTI | NO | N Lion's head couped, truncation dotted, with open jaws r.; surrounded by four barleycorns; above the eye ••
Traced only in B. M. Cat., 27, and two other examples. Very slightly worn. Wt. 17.37, 17.38. [Pl. XI. 19.] 2
- Obv.*—Head of Apollo laureate (three rows) r., as before but unusually small: dotted border.
- Rev.*—Lion's head r. as before, erased.
Traced only in B. M. and two other examples. Very slightly worn. Wt. 16.83. [Pl. XI. 20.] 1
- Obv.*—Head of Apollo laureate (three rows) r.; the tying of the wreath cord is shown behind and, beneath it, four coils are seen; long ringlets behind and before the ear; the truncation is waved: dotted border.
- Rev.*—Lion's head r. as before, erased.
As B. M. Cat., 34 = *Coins of Ancients*, 16. 27, and Hill, *Sicily*, v. 6, p. 79. Very slightly worn, but not fully struck, which is characteristic of the die: cf. the coin cited, also Ward, 189, and Weber, 1382, both with different reverses. Wt. 17.09. [Pl. XII. 21.] 1

SELINUS.

The dies of the tetradrachms and the didrachms of this mint in the find are numerous, including some unknown to me and to the British Museum. As it is my hope to deal more fully with Selinuntine dies upon another occasion, I illustrate here three coins only of each denomination.

Obv.—IT | ∇ | Ω VIΛΞ above, r. to l. and in exergue
OΞ

Slow quadriga driven l. by Artemis in long sleeveless chiton, her hair bound and formed into chignon; at her side, Apollo, with hair bound with fillet and with chlamys falling over his l. arm and the reins, discharges an arrow: dotted border.

Rev.—ΞEΛI | ∇ | OΞ above l. to r. River-god Selinos nude, with short horn in front, standing l., hair bound with fillet, sacrificing with phiale in outstretched r. hand at pedimented wreathed altar raised on two steps, on lower of which a cock stands l., head erect, beak closed; in l. hand a branch held erect in front of the arm; in field r., on a platform supported by a rectangular pedestal on a base, a bull l., head level; above the bull a selinon leaf, stalk upwards; the lower step of the altar and the base of the pedestal connected by a pavement on which river-god stands.
Mint state. Wt. 17.35. [Pl. XII. 22.]

Of this obverse there are ten other examples with six different reverse dies; the weights are 17.50, 17.50, 17.36, 17.34, 17.32, 17.30, 17.04, 17.01, 16.94, 15.92.

11

Obv.—ΞEΛ | ∇ | Ω VT above, l. to r., and in exergue
 ∇ OI

Slow quadriga driven l. by Artemis wearing long-sleeved chiton, her hair rolled and bound by fillet; reins divided between both hands; at her side, Apollo, chlamys over l. shoulder, his hair bound by fillet, discharges an arrow: dotted border.

Rev.—Ξ ΕΛ Ι | Ν | Ο Ξ around l. to r. River-god Selinos nude, with short horn in front, hair bound with fillet, standing l. sacrificing with phiale in outstretched r. hand at broad, pedimented, wreathed altar raised upon two steps, on lower of which a cock, crowing, l.; l. hand, resting on hip, holds forked branch in front of the arm; in field r., on a platform supported by a pedestal with concave sides, a bull l., head level; above bull, selinon leaf, stalk upwards.

Mint state. Wt. 17.31. [Pl. XII. 23.]

Of this obverse there are eight other examples with four different reverse dies; the weights are 17.56, 17.39, 17.35, 17.32, 17.29, 17.11, 17.08, 16.78.

Obv.—ΝΟΙ Τ | ΟΜΙΑΞ Ξ above r. to l. and in exergue. Slow quadriga as before.

Rev.—Ξ ΕΛ Ι Ν Ο Ξ above l. to r. River-god Selinos nude, with short horn in front, hair bound with fillet, standing l. sacrificing with phiale in outstretched r. hand at broad, pedimented altar, the horizontal number of the pediment enriched with band of round disks; before the altar, cock l., erect, beak closed; in river-god's l. hand, a branch held before the arm; in field r., on a platform supported by a fluted pedestal and base, a bull l., head level; above bull a selinon leaf, stalk upwards. Altar, cock, god, and base stand upon a pavement common to them all.

Mint state, but carelessly struck. Wt. 17.28. [Pl. XII. 24.]

Of this obverse there are four other examples with two different reverse dies; the weights are 17.28, 17.06, 16.97, 16.93.

Obv.—Ξ Ε | Λ Ι | Ν Ο Λ | Ι Ο Ν r. downwards and to l. Youthful Herakles nude, hair in crisp curls, r., on hither side of wreathed bull r., his r. foot on the ground, his l. leg pressing against the bull's off shoulder; in his uplifted r. hand, a club with which he is about to strike, his l. grasping the horn of the bull which he pulls backward, lifting his forelegs off the ground: dotted border.

Rev.—**HVV** | **AΞ** above l. to r. River-god with short horn, hair bound with fillet, standing l. and sacrificing with phiale in outstretched r. hand at pedimented wreathed altar on base of two steps; altar entwined by serpent; in l. hand a lustral branch held downwards; in field r., a heron, without crest, striding r., above which selinon leaf, stalk upwards.

Mint state. Wt. 8.73. [Pl. XII. 25.]

Of this obverse there are twenty-one other examples with four different reverse dies; the weights are 8.79, 8.79, 8.73, 8.72, 8.71, 8.70, 8.68, 8.68, 8.64, 8.62, 8.61, 8.61, 8.60, 8.56, 8.54, 8.53, 8.43, 8.40, 8.29, 8.29, 8.27.

Obv.—**Ξ** | **E** | **Λ** | **Λ** | **Λ** | **OV** | **NT** | **IOΞ** r. downwards and to l. As last, but bull not wreathed: dotted border.

Rev.—**HVV** | **AΞ** above, l. to r. As last, but the heron is crested.

Mint state. Wt. 8.73. [Pl. XII. 26.]

Of this obverse there are eighteen other examples with five different reverse dies; the weights are 8.94, 8.79, 8.77, 8.69, 8.66, 8.65, 8.65, 8.64, 8.64, 8.63, 8.59, 8.59, 8.55, 8.53, 8.50, 8.48, 8.35, 8.11.

Obv.—**ΞE** | **VI** | **MOV** | **Λ** | **OV** r. downwards and to l. As last: dotted border.

Rev.—**VV** | **AΞ** above l. to r. As last, but the altar is not wreathed and the crested heron has long plumes at the bottom of the neck.

Mint state. Wt. 8.70. [Pl. XII. 27.]

Of this obverse there are eight other examples with three different reverse dies; the weights are 8.75, 8.74, 8.71, 8.70, 8.61, 8.61, 8.57, 8.56.

SYRACUSE.

Obv.—**ΣYRAQO** above l. to r. in two lines. Quad-
ΣION

riga driven r. by nude male charioteer holding reins in both hands; in exergue (?) fish: dotted border.

Rev.—Small female head l.; the hair, indicated by lines, is confined by a diadem and falls upon the neck in three stiff coils indicated by dots; the whole within small circular incuse in the middle of an incised swastika.

Somewhat worn. Wt. 16.73. [Pl. XII. 28.] 1

- Obv.*—Quadriga driven r. by nude male charioteer, holding reins in l. hand, goad in r.; above, Nike, with outspread wings, alights upon the yoke and rests her l. hand upon the head of the fourth horse and in her r. holds a wreath: dotted border.
- Rev.*—ΣV | RAQ OΞI ON r. downwards, around. Head of Arethusa r., wearing necklace; her hair, bound by a diadem, is indicated by dots and falls behind upon the neck: around four dolphins. Somewhat worn. Wt. 17-15. [Pl. XII. 29.] 1
- Obv.*—As last, but Nike flies r. to crown the horses: border of large dots.
- Rev.*—ΣVRA K OΞ | IO N around, r. to l. As last. Much rubbed. Wt. 17-30. [Pl. XII. 30.] 1
- Obv.*—Nude bearded horseman r. leading a second horse and holding reins in both hands; fringed exergual line: dotted border.
- Rev.*—As last, but around, three dolphins. Much rubbed. Wt. 8-43. [Pl. XIII. 31.] 1
- Obv.*—Quadriga driven r. by charioteer in long chiton, holding reins in both hands, goad in r.; above, Nike flying r. to crown the horses in exergue, pistrix r.: dotted border.
- Rev.*—VO | BO KAKVΣ around r. downwards to l. Head of Arethusa r. wearing ear-ring of single pendant and necklace of pearls of which seven are seen; the hair, falling upon the neck, is confined by a band of large pearls through which the ends are drawn behind; around, four dolphins. Slightly worn. Wt. 17-22. [Pl. XIII. 32.] 1
- Obv.*—Quadriga driven r. by youthful charioteer wearing long sleeveless chiton and holding reins in both hands, goad in r.; above, Nike, wearing long chiton with diplois, flying r. and crowning horses; in exergue, pistrix r.: dotted border.
- Rev.*—ΣYRAKOΞIO | N r. downwards and to l. Head of Arethusa r.; her hair, waved over the forehead, falls upon her neck and is confined by band of pearls through which the ends are drawn behind; ear-ring of single pendant and necklace of pearls; around, four dolphins.

Very slightly worn. In all, seven examples with four obverse and four reverse dies. Wt. 17.06, 17.39, 17.28, 17.28, 17.27, 17.25, 17.10. [Pl. XIII. 33.]

7

Obv.—As last, but Nike flies l. to crown the charioteer, who has no goad.

Rev.—ΞΥΡΑΚΟΞΙΟΝ r. downwards. As last, but the hair is bound by a narrow cord passing round the crown and wound thrice round the queue, where the extreme ends are drawn through it in a loop; double necklace.

Slightly worn. Wt. 17.48. [Pl. XIII. 34.]

1

Obv.—As last.

Rev.—ΞΥΡΑΚΟΞΙΟΝ r. downwards to l. Head of Arethusa r. as last, but the cord now passes twice round the queue, which no longer rests upon the neck and the ends are no longer visible.

Two varieties of both obverse and reverse dies. Very slightly worn. Wt. 17.33, 17.28.

[Pl. XIII. 35, 36.]

2

Plate XIII. 35 shows that the reverse die has been weak; the final O between the two dolphins l. has broken and a second has been cut slightly higher to replace it; in the present example, the Ν has begun to break and the bottom dolphin has merged in the neck. The die then appears to have been abandoned and the one from which Pl. XIII. 36 was struck, with the hair indicated by finer lines, replaced it.

Obv.—As last, but charioteer holds goad in r. hand, and Nike crowns the horses.

Rev.—ΞΥΡΑΚΟΞΙΟΝ r. downwards and to l. Head of Arethusa r.; the hair, waved over the forehead, is bound by a cord under which it is turned up behind in four coils, the ends falling over; ear-ring of single pendant and necklace of pendants fastened near the front with a jewel; around, four dolphins.

Three examples with two obverse and three reverse dies. Slightly worn. Wt. 17.32, 17.13, 16.93. [Pl. XIII. 37.]

3

Obv.—As last.

Rev.—ΣΒΡΑΚΟΞΙ | Ο Ν r. downwards to l. Head of Arethusa r.; hair, waved over forehead and ear, lies behind in queue on neck and is bound with cord, plain behind but ornamented with pearls in front, which passes round the crown and four times round the queue; round ear-ring with small pendant, necklace of pearls; around, four dolphins.

Four examples of three different obverse dies with the same reverse. Mint state, but two have been heavily oxidized. Wt. 17.17, 17.00, 16.52, 16.49. [Pl. XIII. 38.]

4

Obv.—As last. Four horses and sixteen legs clearly visible.

Rev.—ΣΒΡΑΚΟΞΙ | Ο Ν r. downwards to l. Head of Arethusa r.; hair, waved over forehead, is bound by a string of pearls over and into which the back hair is drawn in fine coils; ear-ring with single pendant; necklace of pearls fastened in front with clasp; around, four dolphins.

Slightly worn. Wt. 17.00. [Pl. XIII. 39.]

1

Obv.—As last, but the horses shown in normal manner.

Rev.—As last, but, on one, necklace of pearls between two plain bands. [Pl. XIII. 40.]

Three examples, different dies on both sides. Slightly worn, but one heavily oxidized and another corroded. Wt. 16.77, 17.39, 17.06.

3

Obv.—Quadriga driven r. by female charioteer in long chiton, holding reins in each hand separately; above, Nike, in long-sleeved chiton with diplois, flying r. to crown horses; in exergue, pistrix r.: dotted border.

Rev.—ΣΒΡΑΚΟΞΙΟΝ r. downwards. Head of Arethusa r.; hair, worn in bunch behind, is confined by band of pearls which passes round the head and over the bunch; ear-ring of single pendant formed of two pearls; necklace of pearls; around, four dolphins. [Pl. XIII. 41.]

Six examples with four obverse and three reverse dies; the one illustrated in mint state, the others slightly worn and one having the obverse heavily corroded. Wt. 17.15, 17.28, 17.18, 17.10, 16.93, 16.93.

6

Obv.—Same die as Pl. XIII. 39.

Rev.—ΣΥΡΑΚΟΞΙ|ΟΛ r. downwards to l. Head of Arethusa r.; hair, waved on the forehead, is confined by a cord passing twice round and then across the crown and tightly wound about the ends which fall in a knot on the neck; ear-ring with pendant of two pearls, and necklace of pearls fastened by a clasp in front; around, four dolphins.

Three examples, same dies both sides, one mint state, the others slightly worn. Wt. 16.78, 17.30, 16.65. [Pl. XIV. 42.]

3

Obv.—Quadriga driven r. by charioteer in long chiton, reins in both hands, goad in r.; above, Nike flying r. and crowning horses; in exergue, pistrix r.: dotted border.

Rev.—ΣΥΡΑΚΟ ΞΙ|ΟΛ r. downwards to l. Head of Arethusa r.; the hair, waved over the forehead, is confined by a broad band fastened in front by strings or buckle and drawn up behind under the band, over which it falls in a large curl; ear-ring of single pendant and broad neckband upon which lies a string of pearls; the truncation is waved; around, four dolphins.

Five examples with four obverse and four reverse dies in graduated development, culminating in a very small head of great rarity. All the dies are illustrated, and it may be noted that the form of the *rho* is P and R in different examples. Mint state, but one has been heavily oxidized. Wt. 17.31, 17.04, 17.34, 17.42, 17.42. [Pl. XIV. 43-6.]

5

Obv.—Quadriga driven r. by charioteer in long chiton, holding reins in both hands, goad in r.; above, Nike, wearing chiton with diplois, flying r. to crown the horses; beneath the horses, grain of corn; in exergue, pistrix r.: dotted border.

Rev.—ΣΥΡΑΚΟΞΙΟΛ r. downwards. Head of Arethusa r.; the hair, arranged in numerous coils, is confined by a band which broadens at the back and is covered in front by four of the coils; ear-ring of single pendant and necklace of pearls, the knots between each

pearl on the string clearly seen, mounted on a band; truncation of neck waved; around, four dolphins.

Mint state.

A rare type of head, and the obverse with grain of corn beneath the horses has been traced only in Du Chastel 42, Jameson 771, and Egger 1912, no. 419.

Wt. 17.05.

[Pl. XIV. 47.]

1

Obv.—Similar to the last, but with dotted exergual line and no symbol.

Rev.—As last, same die.

Mint state, but the reverse has suffered slightly from oxidization. Wt. 17.03. [Pl. XIV. 48.]

1

Obv.—Quadriga driven l. by charioteer in long chiton, holding reins in both hands, goad in r.; above, Nike, in long chiton with diplois, flying l. to crown horses; in exergue, pistrix l.

Rev.—ΣΥΡΑΚΟΞΙΟΝ r. downwards. Head of Arethusa r. with ampyx, the hair gathered in coils and turned in upon the crown; ear-ring of single pendant and necklace of pearls on a band; truncation of neck waved; around, four dolphins.

Mint state, but has suffered somewhat from oxidization. Wt. 17.10. [Pl. XIV. 49.]

1

These are rare types, and I have failed to trace any other die of the transitional period which has the walking horses to left.

Obv.—Quadriga with cantering horses driven l.; by charioteer in long chiton, reins in both hands, goad in r.; Nike, just visible on the upper edge of the flan [clearly seen on the other examples], in long chiton flying r. to crown charioteer; in exergue, pistrix swimming swiftly l.; dotted border.

Rev.—ΣΥΡΑΚΟΞΙΟΝ r. downwards to l. Head of Arethusa r., hair gathered up in eight coils to the top of the head where it is tied, the ends waving loose in curling strands; coiled ear-ring; plain neckband, fastened at the side; around, four dolphins.

Three examples, very slightly worn. One has been oxidized. Wt. 17.45, 17.54, 17.17, 16.83.

[Pl. XIV. 50.]

4

It is interesting to note how the artist has adapted the motion of the pistrix to that of the horses.

Obv.—As last, but different die.

Rev.—ΣΥΡΑΚΟΣΙΟΝ r. downwards. Head of Arethusa r., hair drawn to top of head in twelve coils and tied with cord, the ends waving loose in curling strands; hook earring and plain neckband fastened with jewel at the side; around, four dolphins; behind neck, A.

Very slightly worn. Wt. 17-31. [Pl. XIV. 51.] 1

48

There is an example of this coin in the McClean collection, No. 2676, and, these two apart, I know of no other pistrix tetradrachms with a letter that is not part of the legend. In the class with saccos, immediately following the pistrix class, they are known with A on the neck (Jameson 784), and on the saccos (McClean 2690; an example also in the Lloyd collection). If the matter ended there it would be attractive to find in this letter associated with the head the initial of Arethusa seen in full on Kimon's famous facing head. But the letter is found also on the obverse (B. M. Cat., 108) and this indifference to side on which the letter is placed seems to point to the greater probability of its being an artist's signature. If that were accepted, it would appear that we have here an artist's signature upon a Syracusan coin issued not later than 455 B. C.

153

The coins were found in the territory of Selinus; not in the city itself but, according to my information, a few miles to the west in the direction of its former chief port at the mouth of the river Mazaros. That the find is a Selinuntine one is confirmed by its composition, for no ancient accumulation of coins found within the border of any other State would be likely

to consist as to 21.2 per cent. of coins of Selinus, all of one period and practically all in mint state.

Before attempting to draw any conclusions as to the circumstances and date of the deposit, it will be well to make some general observations upon the coins of the various mints of which it is composed.

SELINUS is not represented by any leaf didrachms. Its quota consists exclusively of those tetradrachms and didrachms universally associated with the story of Empedocles, and so little is known of the date of the origin of these types, which continued in use till the destruction of the city in 409 B.C., that if the coins of Selinus alone had been found the question of the period of their burial would remain unanswered.

It is from the coins of other cities that we must hope to answer our main question and, incidentally, to establish a more or less definite point in the chronology of the Selinuntine mint. In arriving at such a result, it will be necessary to adduce evidence from the absence and rarity in the deposit of the coins of certain Sicilian cities.

SYRACUSE offers the most comprehensive range, both chronologically and artistically. It begins with the earliest tetradrachms with incuse female heads and (including the archaic tetradrachms with K which were too badly corroded to be of value) continues without a break to the close of the pistrix series; there is no coin with hair in saccos. I am not aware of any attempt having been made to fix a lower limit of date for the pistrix issues. Head, "Coinage of Syracuse", *Num. Chron.*, 1874, pp. 10-11, Pl. II, does not continue them beyond 466, a limit quite impossible to accept in face of the very great artistic development

of the reverse dies revealed in our Plates III, IV, and V. In *H.N.*², p. 173, he makes the modification, "the symbol was retained for some time after the fall of the tyranny in 466 B.C." Hill, *Coins of Ancient Sicily*, p. 58, attributes the earliest signed coins to *circa* 440; Tudeer, *Die Tetradrachmenprägung von Syrakus*, p. 4, suggests for the same coins 425. With due regard to the not very extensive series of heads with saccos, corded head-dress, and others lying between the earliest signed dies and the latest pistrix issues, it is not unreasonable to suggest that the pistrix series continued to be issued later than 460 and probably as late as 455. The Syracusan coins of the find are almost all in a fine state of preservation, and that fact would seem to suggest that the earlier dies continued to be used simultaneously with the later. The evidence of the Syracusan element of the find points to a date of deposit about the middle of the decade 460-450.

CATANA is represented by two coins which are probably of the earliest issues following the restoration of original inhabitants of the city in 461. They are in good condition but slightly double-struck.

GELA has coins in the find of a wide range of development, from the rude specimen (Pl. X. 5) to the beautiful example (Pl. XI. 12) with the elaborate exergual ornament and with Γ appearing for the first time as the form of the initial letter of the legend. In the absence hitherto of detailed chronological arrangement, the coins of Gela must rather borrow evidence from the find than offer it.

AKRAGAS gave a large number of didrachms which are all amongst those said to be too badly corroded to be of value; they are described as archaic, but whether

of flat or thick fabric does not appear. The tetradrachms (Pl. X. 1-3) are such as are attributed to the years preceding the middle of the century but, as in all her coins preceding the date of the Athenian expedition against Syracuse, the lettering is so early in character, with R and M forms, as to make it impossible to distinguish with certainty between early and late transitional issues. Like Gela, Akragas is likely to get from this find more information than she gives.

HIMERA showed two examples, badly corroded, of the cock and incuse drachms. The dies of the transitional tetradrachm and didrachm (Pl. XI. 13/14) are illustrated by Gabrici, *Imera* (Pl. IV, 9 and 12), who attributes them, *loc. cit.*, pp. 76-77, to the period beginning 450, largely upon epigraphical grounds. But while the rho is not of the tailed form, the M is more archaic than the N of his preceding period and, upon their epigraphy alone, these two coins might well be five years or more earlier than 450. Dr. Gabrici would probably not contend for 450 as anything more exact than an approximate date. The very small proportion of coins of Himera in the find is remarkable, having regard to the nearness of that city to Selinus as compared with Messana and Leontini—I do not cite Syracuse, whose predominating position puts it in a class apart—and must have its due weight when the evidence is summed up.

LEONTINI had, in the find, three or four quadriga tetradrachms badly corroded, but all the Apollo tetradrachms (Pls. XI, XII. 16/21) were in fine state. They include the coin (Pl. XII. 21) which has the same obverse and reverse dies as *H.N.*², fig. 78, and Hill, *Coins of Ancient*

Sicily, Pl. V, 6. Mr. Hill, *loc. cit.*, p. 79, says the coin "belongs to about the middle of the century". The find appears to include all the varieties of tetradrachms struck from 466 down to the coin just mentioned, and, judged by the mint state of some examples of the earlier varieties, it is inferred that these dies, like contemporary and earlier dies in Syracuse, continued to be used simultaneously with the later.

MESSANA. The tetradrachms of Messina were all, in the opinion of Mr. Miller and the other numismatist who had access to them, too poor to be of value for numismatic purposes; but Mr. Miller informed me that the thirteen examples seen by him were of the biga—hare type, without symbol beneath the hare.

From the foregoing survey and from the summary at p. 278, it will be seen that the only considerable Sicilian mints not represented in the find are, in Eastern Sicily, Camarina and Naxos; in Western Sicily, Eryx, Segesta, and Panormos. Neither of the eastern cities was of the first rank, and we have no information leading us to suppose that either city had much intercourse with the extreme west. It is even possible that Camarina was not minting at this period. At the re-foundation in 461, the city was a colony of Gela, and the very rare didrachm of heraldic types (Hill, *loc. cit.*, p. 80, fig. 6) is the only issue attributed to the city from 461 until the tetradrachm with bearded Herakles—fast quadriga and exergual swan was issued, which cannot have been earlier than 430. It is not unlikely, therefore, that during that period Camarina used the coins of her mother city, Gela.

Of the western cities, neither Eryx nor Panormos

was of great importance as a minting city, but Segesta, with her long series of didrachms, filled a large place in the coinage of the western part of the island. The absence of her coins, bordering as she did a large part of the territory of Selinus, must have deep significance for us in forming our judgement as to the date and circumstances of the deposit, as must also, though to a smaller degree, the like absence of the coins of Panormos and Eryx.

It may have been observed that, throughout, the deposit has been called by the general term "find"; the use of the term "hoard" has been purposely avoided. Sir Arthur Evans has reminded us, *Num. Chron.*, 1891, p. 230, that hoards are divisible into two main classes, "those, namely, which represent the character of the local currency at the moment of their burial and those the accumulation of which has been more gradual, and which, therefore, represent selections from the current coinage of a more or less extended period of years". If the deposit we are considering were a hoard, by which is understood something laid aside as savings, it would be necessary, and difficult, to explain how it came to partake of the character of both the categories described by Sir Arthur Evans. For, while the deposit contained only the current coins of Selinus, it included coins issued during fifty years at Syracuse and Himera, during twenty years or more at Gela, and during ten years at Leontini. If the person who buried these coins had been hoarding for many years the coins of near and distant cities, it is unthinkable that he would have abstained from adding the more easily accessible coins of his own city, contemporary with the early as well as with the later

issues of the outside cities represented in his hoard. But there is not a single specimen of the leaf didrachm of Selinus, either of the earlier form, selinon leaf—irregularly divided incuse, or the somewhat later form, selinon leaf—selinon leaf within incuse square. Head, *H.N.*², p. 167, dates these types between 480–466, though it is easier to hold with Holm that the upper date should be extended to well within the sixth century. In either case, these leaf didrachms, upon the analogy of the coins of other mints represented in the find, would continue to circulate with later issues, and their non-inclusion in a hoard would be extraordinary.

Moreover, if the deposit represented savings, it would be difficult to explain the small number of coins of Himera included in it and the entire absence of those of Segesta, and even those of Eryx and Panormos. It is easy to suggest circumstances explanatory of temporary shortages of the coins of these near-at-hand cities; it is impossible to offer adequate reason for their exclusion from a hoard representing coins selected from the issues of other cities, far and near, over a long term of years.

For these reasons I feel constrained to reject the idea that the deposit was a hoard of savings, and I offer instead the suggestion that it represents the stock-in-trade of a banker or dealer in exchange, whether such a person engaged exclusively in these occupations or, as is perhaps more likely, combined them with the transaction of other affairs of commerce. Given such an interpretation of the assembling of the coins forming the deposit, the character of its contents becomes intelligible. The greater part of the commercial intercourse of Selinus with the outer world,

excluding Segesta and, probably, Himera, would be by sea. Her port was at the mouth of the river Mazaros, about fifteen miles to the west of the city, and hither would come the vessels of Akragas, Gela, and Syracuse, to exchange their cargoes for the products of Selinus. From the port, the traders would make their way by road to the city, and, somewhere along that road, when they came to the wide-flung outskirts of Selinus, they would be glad to find some banker with whom to exchange their own coins for those of the city with which they came to trade. A man ready to serve that purpose was found in the owner of the deposit which has become our find. He would care little of what period the coins offered to him were; they were silver and had their intrinsic value, and his remuneration for his services would take account of any loss of weight due to long years of circulation. Such a banker would have frequent communication with his city's mint; in exchange for his foreign coins—those of full weight perhaps to be re-struck with Selinuntine types, those of light weight to be melted down—he would obtain coins of his own city fresh from the mint, thus replenishing his stock-in-trade and getting ready to repeat his profitable operations.

Such a banker, like our modern bankers, would not carry in his stock antique currency of his own city; in exchange for the bullion value of his foreign currency, he would obtain from the Selinuntine mint coins of the current issues. Thus is to be explained the absence of the archaic coins of Selinus and the inclusion of those of other cities.

The approximate date of the deposit, lacking numis-

matic chronology relative to Selinus itself, is to be found in the mean chronological tendency shown by the latest coins of other Sicilian cities included in the find. As has been shown above, Catana, Syracuse, Himera, and Leontini all point to the decade 460-450 (and Gela and Akragas present no obstacle to the acceptance of that period) as applicable to the latest coins of those cities included in the deposit. It is therefore suggested that the deposit was made about the year 455 B.C., and, following upon that, it is also suggested that it is to that date that we ought to attribute (1) all the coins of Selinus, and (2) the latest of the tetradrachms of Gela (Pl. XI. 12). Of the three tetradrachms of Akragas, all that can with safety be said is that they cannot be later than 455, while the tetradrachm of Himera and its relative didrachm must be carried back five years from the date given to them by Gabrici.

Can we find in the circumstances of the time a reason for the burial of the coins? It is quite certain that there were wars proceeding in western Sicily about 455-454 B.C.; it is equally certain that Selinus was concerned in them and that she won a victory whose importance is to be measured by her offerings to her gods of statues made out of sixty talents of gold. The evidence is incontrovertible, for it takes the form of an inscription found in her own great temple of Apollo (Kaibel, *I. G. S. I.*, No. 268). The enemy is not named in this inscription, but there is an Athenian inscription printed by, amongst others, Köhler, *Ath. Mitth.*, 1879, p. 30, to which the date is given, upon evidence partly textual, partly epigraphical, of 454. The inscription is mutilated, but it appears

to record a request to Athens by Segesta for help against some unnamed enemy; the name of Halikyai—a barbarian city to the south-west of Segesta, whether Sikan or Elymian is unknown—is introduced, but the name of Selinus does not appear. The inscriptions and their implications are discussed by Hicks and Hill, *Greek Historical Inscriptions*, 1911, No. 34, and Freeman, *Sicily*, ii, pp. 338-342, 549-559. What emerges quite definitely from the inscriptions is that there was serious warfare in western Sicily about 454 B.C. in which Segesta and Selinus were concerned, and, though it is not stated in the inscriptions in so many words, it is generally assumed that these two cities were at war with each other, as was so frequently their position before and after this time. A state of war between Segesta and Selinus would involve other cities, Eryx and Panormos in particular, who would range themselves with Segesta; it would also interfere with the passage of trade between Himera and Selinus. The absence from the find of coins of Segesta, Eryx, and Panormos, and the small representation of those of Himera, might thus be accounted for, and it appears to me that the numismatic evidence does much to confirm that of the inscriptions and the deductions made from them.

Judged by the magnitude of her offerings, Selinus must have been delivered from a very terrible menace; that danger may well have been the occasion which led to the burial of those coins whose fortunate recent discovery this paper records.

A. H. LLOYD.

XIII.

A HOARD OF IMPERIAL COINS FROM TARSUS.

[SEE PLATES XV, XVI]

THE interesting hoard here described was brought to Athens by a refugee from the Tarsus district, and came into my hands early in the year 1925. I have not been able to obtain more precise particulars of the circumstances of its discovery than the fact that it was found 'on the site of ancient Tarsus'. Whilst I cannot absolutely guarantee that these 169 pieces constitute the whole hoard, there is good reason to believe that, if it is incomplete, very few pieces are lacking from it. On the other hand, it is quite certain that it is a single hoard, no pieces having been added since discovery. Such specimens as I saw still uncleaned all had a similar green patina, and traces are still visible on a few examples of their having been found adhering together.

Opportunities of studying similar hoards of copper coins of the Imperial age are so rare that this fact by itself justifies a detailed description of the present find. As, however, its interest is enhanced both by the composition of the whole, and by the nature of certain individual pieces, no further apology will be needed, I trust, for the length of this article.¹

¹ This account could not have been adequately completed without the kind help and encouragement of Mr. G. F. Hill, Keeper of

The following table shows the distribution of specimens among the emperors concerned :

		Brought forward	74
Septimius Severus	35	Balbinus	5
Julia Domna	3	Pupienus	8
Caracalla	10	Gordian III	68
Plautilla	1	Philip Senr.	3
Geta	8	„ Junr.	3
Severus Alexander	5	Trajanus Decius	7
Maximinus	12	Trebonianus Gallus	1
	<u>74</u>	Total	<u>169</u>

It will be seen, in the first place, that these coins were all minted at Tarsus, and secondly that the period which they cover extends from Septimius Severus to Trebonianus Gallus, of whom there is but one specimen. As this and the majority of the pieces of Trajanus Decius show very little sign of use it is safe to conclude that the hoard dates from the reign of Gallus (A.D. 251-252); otherwise it is hard to account for the total absence of the issues of Gallienus. Within this period there are interesting omissions, for no examples appear of the coinage of Macrinus, Elagabalus, or Maximus, nor of Julia Paula, Tranquillina, or Otacilia, which might reasonably have been expected. The distribution in other respects calls for little comment, except that the thirty-five examples of Septimius Severus offer a striking contrast to the ten pieces of Caracalla, whose issues at Tarsus were far more extensive than

the Department of Coins and Medals in the British Museum, who afforded me every possible facility for the study of the Tarsus series in his charge, of the series of Mionnet's casts, and of his invaluable bibliographical material. Dr. G. P. Oekonomos, Director of the Numismatic Museum at Athens, and his Assistants, have also abundantly earned my cordial thanks, here tendered. For any shortcomings I am alone responsible.

those of his father. Of these thirty-five, however, nine are of one type (Zeus, seated l., Nos. 1-9), seven of another (Agonistic crown, Nos. 26-32), and six of another (Emperor lion-hunting, Nos. 19-24). At the same time we obtain convincing evidence (cf. details of inventory) that there was a large variety of dies used for many of the types hitherto regarded as rare, which are present in this hoard. We may note, for instance, that there are six, if not seven, different dies represented by the reverses of Nos. 26-32; that of the six specimens of the type of Geta with Dionysos and faun (Nos. 52-57) all are different from each other, as well as from that of the British Museum example (*B. M. C.* 203); and that the two examples of the type of Severus with City-Tyche and Provinces are from different dies from either of the British Museum specimens (*B. M. C.* 175, 176).

The obverse dies likewise afford points of interest. I cannot trace elsewhere other examples of II or V-VIII, inclusive, of Severus, nor of Nos. I-IV of Caracalla (many of whose known *obv.* dies are not represented here). Papienus, No. IV, seems also unpublished, and of the twenty different *obv.* dies of Gordian Nos. VI, VII, VIII, IX, and XX are not recognizable elsewhere; each of these is represented by only one example. It is noteworthy that of the remaining fifteen only No. XV is not already represented in the British Museum. Among reverse types which seem to be hitherto unknown, we may notice, under Severus, Nike in a quadriga (*a*) walking, and (*b*) galloping to left (Nos. 14 and 15) instead of to right (as *B. M. C.* 174 and Nos. 10-13); and (*c*) City-Tyche seen between two temples shown in perspective (No. 18). Under

Caracalla, (*d*) the Koinoboulion seated l., holding a temple on each hand (No. 41), (*e*) ditto (or City-Tyche?) seated, offering a wreath to the emperor (No. 42), and (*f*) an elephant walking to r. (No. 48), in contrast to that to l. (as *B. M. C.* 196, &c.). Under Geta (*g*), Dionysos standing with kantharos (Nos. 50, 51); under Severus Alexander (*h*), Nike engaged in a ritual dance in front of a temple, in the entrance of which is a cult-image of Apollo Lykeios (No. 59). For Balbinus, Selene in a biga drawn by bulls (No. 76, a type known under Gordian III) seems new, as does Tyche standing with usual attributes (No. 81), as a reverse of Pupienus. Under Gordian, No. 88, Apollo standing, with laurel-branch in r., and bow and arrow in l., seems a new variety, though many standing Apollo-types are known in this series, and No. 124, female figure standing, with branch and cornucopiae, seems also undescribed. No. 159, a very similar Apollo, occurs under Philip Junr., for whom Elpis (No. 160) seems also unrecorded. We may also note that the rare Herakles and infant-Telephos type,² of which we have actually five specimens under Maximinus (Nos. 65-69), appears again under Trajanus Decius (No. 165).

Among interesting types already known, the Perseus-myth is illustrated by several of the types already collected by Imhoof-Blumer in his invaluable article in the *Journal of Hellenic Studies* (xviii, 1898, pp. 171 ff.).³ Herakles and Antaios appear under Caracalla (No. 46) and Pupienus (No. 80); and a coin of Gordian (No. 104) shows the episode of the Stymphalian birds, in a naïve representation from a different die from that

² Cf. Roscher's *Lexikon*, s. v. Telephos, p. 301, and Fig. 9.

³ Cited below as "I.-Bl., *J.H.S.* 1898".

in Paris (*Inv. Coll. Waddington*, No. 4670). Among agonistic types, that of Severus with the prize-crown⁴ and legend **ΕΝ ΚΟΔΡΙΓΕC**, &c., is represented by six examples, all poorly preserved, and a little-known variety showing a small prize-crown, on an altar ornamented with sculptured figures (No. 25), is also, unluckily, very much rubbed. The agonistic types of Gordian include two specimens (Nos. 153, 154) of a type known hitherto only from Vaillant (*M. Suppl.* 548), and No. 152 (an archieratic crown with two rows of heads) is a type which Mionnet, on the strength of a poorly preserved *obv.*, attributed to Elagabalus (*M.* iii. 492). Among *rev.* types which do not appear at all in the hoard we may note the Sandan-type (*B. M. C.* 229, 257, 305), and the group of figures sacrificing a humped bull (*B. M. C.* 304); but on the whole, the range which this hoard gives us is a remarkably representative one, and constitutes a valuable addition to our knowledge of the series.

I cannot claim to have made an exhaustive search of all possible sources for the identification of dies or even of types, and have refrained from multiplying references to well-known types. Examples in the British Museum are described as briefly as possible, and where not needed for comparison their reverse legends are omitted. This is not the place to follow up the question of the grouping of obverse dies with

⁴ For the identification as agonistic crowns of the objects previously regarded as urns, cf. H. Dressel, *Z. für N.*, xxiv (1903), pp. 34-37; *id. ap. C.I.L.*, xv. 7045; P. Wolters, *Zu Griech. Agonen* (Würzburg, 1901), pp. 12-15; and bibliography in Γ. Π. Οικονόμος, *Χριστιανοί Στεφανίφοροι* (extr. 'Ημερολόγιον τῆς Μεγάλης Ἑλλάδος, Athens, 1925).

certain reverses, which might lead to definite conclusions as to the die-engravers employed, and perhaps to a chronological series for the coins of the emperors who reigned for more than a few months.

The uniformly worn condition of the earliest pieces indicates that they must have been in circulation for a long time, perhaps actually down to the time when the hoard was deposited—a conclusion, if legitimate, of no little importance.

LIST OF OBTVERSE DIES.

Septimius Severus.

- | | <i>(Reverses.)</i> |
|---|---|
| I. [AVT KAIC]ACETΠ - - - - CEB
in field [Π Π(?)].
Bust r., rad., cuir.
(= <i>B. M. C.</i> 172.) | (1 example, No. 1.) |
| II. AVTKAICACETΠ - - - - EPT(?)
in field [Π Π(?)].
Bust as above. | (1 example,
No. 14.) |
| III. AVTKAICACETΠ CEBH[POCTEP(?)]
in field [Π Π(?)].
Bust r., laur., palud., cuir., with Gorgoneion.
(= <i>B. M. C.</i> 175.) | (3 examples,
Nos. 16-18.) |
| IV. Legend as last, smaller letters:
in field Π Π.
Bust r., laur., palud., cuir.
(= <i>B. M. C.</i> 173-174 = <i>M.</i> iii. 449.) | (8 examples, Nos.
2, 10, 11, 19-
22, 26.) |
| V. Legend as last.
in field Π Π.
Bust as last, but head is smaller, beard
less sharp. | (15 examples, Nos.
3-6, 12, 13, 15,
23-25, 27, 28,
33-35.) |
| VI. AVTKAICACETΠ I CEBHPOCTE
PCE
in field Π Π.
Bust as last. | (3 examples,
Nos. 7-9.) |

- VII. Legend as last (?), but **СΕΠΤΙ·СΕΥΗ** (1 example,
ΡΟС No. 29.)
 in field **Π Π**.
 Bust as last.
- VIII. Legend obliterated. (3 examples,
 Bust as last. Nos. 30-32.)
 (Possibly more than one die?)

Julia Domna.

- I. **СΕΒΑΣΤΗΝ ΙΟΥΛΙΑΝΔΟΜΝΑΝ** (2 examples,
 Bust r., draped. Nos. 36, 37.)
 (= *M. iii.* 454?)
- II. **ΙΟΥ[ΛΙΑ] ΔΟ[ΜΝΑ] СΕΒ[ΑΣΤΗ]?** (1 example,
 Bust as last (slightly smaller). No. 38.)
 (= *M. iii.* 453.)

Caracalla.

- I. **ΑΥΤ·Κ·Μ·ΑΥΡ·СΕΥΗΡ ΟСΑΝ** (2 examples,
ΤΩΝΕΙΝΟССΕВ Nos. 39, 40.)
 in field **Π Π**
 Head r., laur.
- II. **ΑΥΡСΕΥΗΡΟСΑΝΤΩΝΕΙΝΟС** (1 example,
[СΕВ?] No. 48.)
 in field **Π Π**.
 Bust l., wearing crown and robes of
 Demiourgos.
- III. **ΑΥΤΚΑΙΜΑΥΡСΕΥΗΡΟСΑΝΤΩ** (2 examples,
ΝΕΙΝΟС Nos. 43, 47.)
 in field **Π Π**.
 Bust r., similarly clad.
 (= *B. M. C.* 183 = *M. iii.* 460, 461, 465,
 471.)
- IV. **ΑΥΡСΕΥΗΡΟСΑΝΤΩΝΕΙ** (1 example,
ΝΟССΕ No. 42.)
 in field **Π Π**.
 Bust as last.
- V. **ΑΥΡСΕΟΥΗΡΟСΑΝΤ - -** (2 examples,
 in field, **Π Π**. Nos. 41, 46.)
 Bust r., laur., palud., cuir.
 (Legend practically obliterated on second
 piece.)
 (= *B. M. C.* 185.)

- VI. (Apparently Caracalla) **OCCEB** (2 examples,
in field [Π Π(?)]. Nos. 44, 45.)
Bust r., laur., palud.

Plautilla.

- I. **ΦΟΥΛΟΥΙΑ ΠΛΑΥΤΙΛΛΑ CEB** (1 example,
CTH No. 49.)
Bust r., draped.

Geta.

- I. [ΠCΕΠΤΙ]ΜΙΟΣ ΓΕΤ[ΑCΚΑΙCΑΡ] (1 example,
Bust r., bare, palud., cuir. No. 51.)
- II. ΠCΕΠΤΙΜΙΟ CΓΕΤ[ΑCΚΑΙCΑΡ] (2 examples,
Bust as above. Nos. 50, 53.)
(= *B. M. C.* 203.)
- III. Legend and bust as last. (5 examples in
all, Nos. 52,
IV? (perhaps 3 different dies, all much worn
V? pieces.) 54-57.)

Severus Alexander.

- I. [ΑΥΚC]ΕΟΝΗΡΟCΑΛΕΙΑΝΔΡ (2 examples,
in field Π Π Nos. 58, 60.)
Bust r., laur., palud.
(= *M.* iii. 500.)
- II. Α·Κ·Μ·Α·CΕΟΥ·ΑΛΕΙΑΝΔΡΟC (2 examples,
CEB Nos. 61, 62.)
in field Π Π.
Bust r., wearing crown of Demiourgos,
and draped.
(= *B. M. C.* 211-214 = *M.* iii. 496, 498.)
- III. [ΑΥ·Κ·CΕΟΥ]ΗΡΟCΑΛΕΙΑΝΔΡΟC (1 example,
in field Π Π. No. 59.)
Bust l., laur., draped, cuir.; shield with
Gorgoneion on l. shoulder, spear in r.
held over r. shoulder. **Pl. XV.**
(= *M.* iii. 494, 495.)

Maximinus.

- I. AVT·K·Γ·IOV·OVHMAΣIMEINOC (3 examples,
in field Π Π Nos. 63, 73, 74.)
Bust r., rad., palud., cuir.
(= *B. M. C.* 215-218, 220, 223, 226,
228, 233, 234 = *M. iii.* 511.)
- II. AVT·K·Γ·IOV·OVH·MAΣIMEI
NOC·CE (3 examples,
in field Π Π Nos. 64, 70, 71.)
Bust as last.
(= *B. M. C.* 219, 221, 222, 224, 225, 227,
230, 231, 235 = *M. iii.* 512, 514, 515,
517.)
- III. Legend as last, but ends ·CE B (last (6 examples,
letter under middle of bust.) Nos. 65-69, 72.)
in field Π Π.
Bust r., rad., palud., cuir.
(= *M. iii.* 518.)

Balbinus.

- I. AVT·KEC·KAIΛ·BALBEINOCCEB (1 example,
in field Π Π No. 76.)
Bust r., laur., palud., cuir.
(= *B. M. C.* 239, 242 = *M. iii.* 520, 521.)
- II. AVTKECKEΛ BALBEINOCCEB (3 examples,
in field Π Π Nos. 75, 77, 79.)
Bust as last.
(= *B. M. C.* 240, 241.)
- III. AVTKAICΔKA[IA]B[AL]BEINON (1 example,
CEB No. 78.)
in field, Π Π.
Bust as last.
(= *B. M.* accession, 1922-12-3, 1 = *M. iii.*
519 = Hunter, 38.)

Pupienus.

- I. AVTKECMΛOΔΠOΠΛHNIOCCE B (3 examples,
in field Π Π Nos. 81-83.)
Bust r., rad., palud., cuir.
(= *B. M. C.* 244, 248 = *M. iii.* 526, 527.)

- II. AVT • KAIC • M • KΛΩΔ • ΠOYΠIΗ (2 examples,
NON • C E B Nos. 80, 85.)
in field Π Π.
Bust r., laur., palud., cuir.
(= *B. M. C.* 245, 246 = *M.* iii. 523.)
- III. AVT • KECM • ΛOΔ • ΠOYΠIΗNIOC (2 examples,
CEB Nos. 86, 87.)
in field Π Π
Bust r. as last.
(= *B. M. C.* 250 = *M.* iii. 524.)
- IV. AVT • KAIC • M • KΛ • ΠOYΠIΗNO (1 example,
NCE No. 84.)
in field Π Π
Bust as I.

Gordian III. [a, b, c. Bust rad., &c.]

(a) with *Antonius* in full.

- I. AVTKAIMANTΩNIOCΓOPΔIA (2 examples,
NOCCEB Nos. 89, 100.)
in field Π Π.
Bust r., rad., palud., cuir.
(= *B. M. C.* 252 = *M.* iii. 550.)
- II. Legend as last. (3 examples,
Bust as last. Nos. 93-95.)
(= *B. M. C.* 262.)
- III. AVTKMANTΩNIOCΓOPΔIANOC (6 examples, Nos.
CEB 88, 90, 91, 106,
in field Π Π 107, 130.)
Bust at last.
(= *B. M. C.* 251, 253, &c. = *M.* iii. 551,
552.)

(b) with *Antonius* abbreviated.

- IV. AVTKMANTΓ OPΔIANOC OEB (3 examples, Nos.
[sic] 122, 149, 154.)
in field Π Π
Bust as last.
(= *B. M. C.* 271, 277, 291 = *M.* iii. 530,
570.)

- V. **ΑΥΤΚΜΑΝΓΟΡΔΙΑΝΟCCEB** [*sic*] (1 example,
 in field Π Π No. 152.)
 Bust as last. PL XVI.
 (= *B. M. C.* 290 = *M.* iii. 548.)
- VI. **ΑΥΤ·ΚΑΙΜΑΝΤ·ΓΟΡΔΙΑΝΟCCEB** (1 example,
 in field Π Π No. 108.)
 Bust as last.
- VII. **ΑΥΤΚΜΑΝΤΓ ΟΡΔΙΑΝΟCCEB** (1 example,
 in field Π Π. No. 129.)
 Bust as last.
- VIII. **ΑΥΤΚΜΑΝΤΓΟΡΔΙΑΝΟCCEB** (1 example,
 in field Π Π. No. 92.)
 Bust as last.
- IX. **ΑΥΤΚΑΙΜΑΝΤ ΓΟΡΔΙΑΝΟCCEB** (1 example,
 in field Π Π. No. 105.)
 Bust as last.
- (c) without *M*, and *Antonius* abbreviated.
- X. **ΑΥΤΚΑΝΤΓΟΡ ΔΙΑΝΟCCEB** (11 examples, Nos.
 in field Π Π. 96-99, 111-114,
 Bust as last. 124, 145, 146.)
 (= *B. M. C.* 255, 266, &c. = *M.* iii. 561 (?),
 565.)
- XI. **ΑΥΤΚΑΝΤΓΟ Ρ ΔΙΑΝΟCCEB** (4 examples, Nos.
 in field Π Π 125, 126, 153,
 Bust as last. 155.)
 (= *B. M. C.* 270, 278, 279 = *M.* iii. 531,
 560.)
- XII. **ΑΥΤΚΑΝΤΓΟΡ ΔΙΑΝΟCCEB** (3 examples,
 in field Π Π. Nos. 142-144.)
 Bust as last.
 (= *B. M. C.* 281.)
- XIII. **ΑΥΤΚΑΝΤΓΟΡΔΙΑΝΟCCEB** (3 examples, Nos.
 in field Π Π. 103, 104, 127.)
 Bust as last.
 (= *B. M. C.* 256, 260, 265 = *M.* iii. 547,
 557, 569.)

- XIV. Legend as last. (1 example,
in field Π Π. No. 128.)
Bust as last.
(= *B. M. C.* 261, 280 = *M.* iii. 553, 558,
559, 562.)
- XV. AVTKANT ΓΟΡΔΙΑΝΟΣΣΕΒΑΣ (3 examples, Nos.
in field Π Π. 101, 102, 123.)
Bust as last.
(= *M.* iii. 556.)
- (d) Bust r., rad., palud., cuir., with shield
and spear.
- XVI. AVTKMANTΓΟΡΔΙΑΝΟΣΣΕΒ (6 examples, Nos.
in field Π Π. 115-116, 136-
(= *B. M. C.* 257, 286 = *M.* iii. 535, 137, 139, 150.)
536, 544.)
- XVII. Legend as last. (11 examples,
in field Π Π. Nos. 109, 110.
(= *B. M. C.* 264, 274-276, 282-283 131-135, 138.
= *M.* iii. 528, 529, 534.) 140, 141, 151.)
- XVIII. Legend as last. (2 examples, Nos.
in field [Π] Π. 117, 148.)
(= *B. M. C.* 285 = *M.* iii. 532, 533,
538.)
- XIX. AVTKAICMANTΓΟΡΔΙΑΝΟΣ (4 examples, Nos.
ΣΕΒ 118-120, 147.)
in field Π Π.
(= *B. M. C.* 284, 288, 289.)
- XX. AVTKAIC - - ΓΟΡΔΙΑΝ - - (not (1 example,
same as XIX.) No. 121.)
in field Π Π.

Philip Senior.

- I. AVT·KAI·MIOY·ΦΙΛΙΠΠONEY (1 example,
TEYC No. 156.)
in field Π Π.
Bust r., rad., palud., cuir.
(= *B. M. C.* 296.)

- II. **ΑΥΤΚΑΙΙΟΝΦΙΛΙΠΠΟΝΕΥΤΕΥ** (2 examples,
CEC Nos. 157, 158.)
 in field Π Π.
 Bust as last.
 (= *B. M. C.* 297 = *M.* iii. 576, 578, 579.)

Philip Junior.

- I. **ΑΥΤΚΑΙΙΟΝΛΦΙΛΙΠΠΟΝΕΥΤΕΥC** (2 examples,
CEB Nos. 159, 161.)
 in field Π Π.
 Bust r., rad., palud., cuir.
 (= *B. M. C.* 300 = *M.* iii. 577.)
- II. [**ΑΥΤΚΑΙΙΟΝΦΙΛΙΠΠΟΝΕΥΤΕΥC**] (1 example,
CEB No. 160.)
 in field Π Π.
 Bust as last.
 (= *M.* iii. 575.)⁵

Trajan Decius.

- I. **ΑΥΚΕΓΜΕCΚΟΝΔΕΚΙΟCΤΡΑΙΑ** (4 examples, Nos.
ΝΟCΕΥΕΥCΕB 162, 165, 166,
 in field Π Π. 168.)
 Bust r., rad., palud., cuir.
 (= *B. M. C.* 301, 304, 306 = *M.* iii. 590.)
- II. **ΑΥΚΑΙΓΜΕCΚVΙΝΔΕΚΙΟCΤΡΑΙΑ** (3 examples, Nos.
ΝΟC 163 Pl. XVI,
 in field Π Π. 164, 167.)
 Bust as last.
 (= *B. M. C.* 302, 303 = *M.* iii. 586, 587, 589.)⁶

Trebonianus Gallus.

- I. **ΑΥΚΑΙΓΟVΙ ΒΙΟΝΤΡΙΒΩΓΑΛ** (1 example,
[ΛΟΝ] No. 169.)
 in field Π Π.
 Bust r., rad., palud., cuir.
 (= *B. M. C.* 311.)

⁵ Mionnet does not successfully distinguish between the *obr.* dies of the two Philips.

⁶ *M.* iii. 564, a poor specimen, ascribed to Gordian, is certainly Trajan Decius from die II.

INVENTORY OF HOARD.

An asterisk following a number in column 1 indicates that this piece is now in the British Museum collection.

Septimius Severus.

Serial No.	Obverse.	Reverse Type.	Number.
1.	Die I.	Zeus seated l. (<i>B. M. C.</i> 172) ---- ΠΟΛΕΩC (in ex.).	1
2.	„ IV.	„ „ (legend obliterated)	1
3-6.	„ V.	„ „ on Nos. 3, 4, 5, legend ends -- ΜΗΤΡΟΠΟΛΕΩC in ex. (all from same die?); on No. 6, legend obliterated.	4
7-9.	„ VI.	„ (legends obscure or obliterated).	3
			9
10, 11.	„ IV.	Nike in quadriga to r. (legends obliterated, but No. 10 may be as <i>B. M. C.</i> 174.)	2
12, 13.	„ V.	„ (legends obliterated, but from dif- ferent dies; No. 13= <i>B. M. C.</i> 174?)	2
			4
14. [Pl. XV.]	„ II.	„ in quadriga walking to l. [Μ]ΗΤΡΟΠΟΛΕ ΩC. in ex.	1
15.	„ V.	„ in quadriga galloping to l. Π[ΟΛΕΩC] in ex.	1
			2
16*, 17.	„ III.	City-Tyche, crowned by three Pro- vinces (cf. <i>B. M. C.</i> 175, 176); No. 16 reads ΑΔ? [-----]ΝΗΤΑΡ CON•M(?)H; and names of pro- vinces as in <i>B. M. C.</i> 176. No. 17 has legend obliterated. (Neither die is that of <i>B. M. C.</i> 175 or 176.)	2
			2

Serial No.	Obverse.	Reverse Type.	Number.
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Julia Domna.

- | | | | |
|-----|---------------|--|---|
| 36* | [Pl. XV], 37. | Die I. City-Tyche seated l., river-god at feet. | 2 |
| | | ΑΔΡΣΕΝΗΡΙΑΝΗΤΑΡΣ[ΟΝ]
ΜΗ ΤΡΟΠΟΛΙΣ
In field Γ Β
(Legend on No. 37 almost obliterated.)
(Cf. <i>M.</i> iii. 454.) | |
| 38. | „ II. | Similar; legend lost except ΟΠΟ
ΛΕΩΣ on inner line. (Not identical with <i>M.</i> iii. 453.) | 1 |

 3
Caracalla.

- | | | | |
|-----|-----------------|---|---|
| 39* | „ I. | Athena seated l., holding Nike on r.,
spear in l., shield behind seat.
--- ΕΙΝΟΥΠΟ ---
In field l. ΚΟΙ; to r. Β
ΝΟΒ
ΟΥΛ
ΙΟΝ
In exergue ΤΑΡΣΟΥΜΗ
ΤΡΟΠ
(Cf. <i>M. Suppl.</i> 436.) | 1 |
| 40. | „ I. | Koinoboulion, seated l., placing vote in
pedestalled urn.
--- ΩΝΕΙΝ ---
(Cf. <i>M.</i> iii. 468.) | 1 |
| 41* | [Pl. XV.] „ V. | Ditto, seated l., holding a temple on
each, outstretched, hand.
ΑΝΤΩΝΙΝΙΑΝΗ ---
In field Α ΜΚ
Γ Β
(? Unpublished.) | 1 |
| 42. | [Pl. XV.] „ IV. | City-Tyche(?) reclining r., holding
wreath in r., which she offers to the
Emperor, who advances l., draped,
with r. outstretched.
ΑΝΤΩΝΕΙ ---
In field above, central, Β
(? Unpublished.) | 1 |

Serial No.	Obverse.	Reverse Type.	Number.
43*. [Pl. XV.]	Die III.	The Emperor, draped, sacrificing to cult-image of Apollo Lykeios, which stands facing, with two wolves; altar between them. - - ΝΕΙΝΙΑΝΗCΣ ΕΥΗΡΑΔΡ In field above, central, A M K In exergue ΤΑΡCΟΥ (Dies = <i>M.</i> iii. 465.)	1
44, 45.	„ VI.	The Emperor and Plautilla grasping hands; he wears toga, and faces l. - - - ΤΑΡCΟΥΜΗΤΡΟΠΟΛ - In field r., B. And another, from same die, legend perished. (Cf. as <i>rev.</i> of Plautilla, <i>B. M. C.</i> 202; not known with <i>obv.</i> of Caracalla?)	2
46*.	„ V.	Herakles l., wrestling with Antaios whom he lifts high off the ground. The former is much taller than his opponent. His club leans (against nothing) in field r. - - - ΗΑΔ ΤΡ In field Γ B In exergue - - ΡCΟΥ (Die = Athens, 5797 β, and cf. <i>M.</i> iii. 472; <i>M. Suppl.</i> 448; <i>B. M. C.</i> 184.)	1
47*.	„ III.	Galley sailing to r.; below, fishes(?), ΑΝΤΩΝΕΙΝΕΙΑΝΗCCEVAΔ No letters in field. In exergue ΤΑΡCΟΥ CEIT (Cf. <i>B. M. C.</i> 199-201; <i>M.</i> iii. 462, 463; Philipson, 2783. ⁷ None exactly as this, which shows traces of re-cutting of <i>rev.</i> die.) ⁸	1

⁷ Hirsch Sale, xxv (1909).

⁸ The legend actually shows ΑΝΤΩΝΙΕΝ|ΕΙΑΝΗC! It is not a question of modern tooling.

Serial No.	<i>Obverse.</i>	<i>Reverse Type.</i>	Number.
48*. [Pl. XV.]	Die II.	Elephant walking r.; on (or above) its back uncertain objects (a large pear?, two ears of corn and a wreath?). Legend perished, except, in field Γ B ; in exergue TAPCOY AM[K?] (For an elephant to l., cf. <i>B. M. C.</i> 196, and unpublished accession, 1922-8-3, 2.* I can find no example of one to r.)	1

 10

Plautilla.

49.	,, I.	Caracalla and Plautilla grasping hands, as on Nos. 44, 45. ΑΔΡΣΕΥΗΡ - - - COYMHTPO ΠΟΛ In field Γ B (Cf. <i>B. M. C.</i> 202.)	1
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Geta.

50.	,, II.	Dionysos standing to l., draped, with thyrsos in l., nebris over l. shoulder, and kantharos in r., from which he is pouring on to head of panther which is beside him, looking up. ΑΔ[PCEV]HPIANHÇ - - - In field Γ B	1
51.	,, I.	Similar; legend obliterated after ΑΔΡ. (Different die.)	1
52.	,, III.	Dionysos and faun, as <i>B. M. C.</i> 203. Legend obliterated, except— $\xi\Omega$ in exergue.	1

* Cf. *Num. Chron.*, 1923, Pl. X. 41.

Serial No.	Obverse.	Reverse Type.	Number.
53.	Die II.	Ditto, different die. --- ΝΗC ΤΑΡCΟΥΜΗΤΡΟΠ. In field Γ Β	1
54-57.	„ III, (IV, V?)	Ditto, four more all in poor condition, apparently from different <i>rev.</i> dies. (Legends mostly obliterated, but traces visible agree with those of 52 and 53.) (None of the six is from die of <i>B. M. C.</i> 203.)	4

(*Macrinus, Julia Paula, Elagabalus*—None.)

Severus Alexander.

58.	Die I.	Apollo, standing to front, facing r., with laurel-branch in r. and bow in l., cloak over l. arm. ΑΔΡCΕ--ΑΛΕΞΑΝΔ--[ΤΑ]ΡC In field A M K Γ B (Dies = <i>M.</i> iii. 500.)	1
59*. [Pl. XV.]	„ III.	Cult-image of Apollo Lykeios, with wolves, in entrance of shrine shown in perspective, with pediment, and five (?six) columns on side; in front, Nike standing with arms raised (in ritual dance?). -- ΕΟΥΗΑΛΕΞΑΜΗΤ[ΡΟ]ΤΑΡ CΟΥ (? Unpublished.)	1
60*.	„ I.	Veiled and turreted bust of City-Tyche to r. ΑΔΡCΕΟΥΗΑΛΕΞΑΝΔΡ[ΜΗ] ΤΡΤΑ[ΡC] In field A M K Γ B (<i>Cf. M. Suppl.</i> 471.)	1

Serial No.	Obverse.	Reverse Type.	Number.
69.	Die III.	Similar, but from different die. ΤΑΡΣΟΥΤΗ Σ ΜΗΤΡΟΠ - - Letters in field as last.	1
70*, 71.	„ II.	Herakles standing in tetrastyle temple, which has eagle in pediment; he holds an uncertain object in l., above a small tree (?). ΤΑΡ ΣΟΥ above temple. ΤΗΣΜΗΤΡ in exergue. In field l. A M K (Cf. <i>M. Suppl.</i> 485. Two examples from same dies.)	2
72*.	„ III.	Perseus standing, holding Gorgoneion, harpe, and chlamys, as <i>B. M. C.</i> 228. ΤΑΡΣΟΥ·ΤΗΣΜΗΤΡΟΠΟ ΛΕΩΣ In field A K M Γ B (= <i>M.</i> iii. 510.)	1
73.	„ I.	City-Tyche seated l. on rock in tetrastyle temple, with river-god Kydnos emerging at her feet. ΤΑΡ ΣΟΥ above temple. ΜΗΤΡΟΠ Ο in exergue. In field Γ A K B M (Cf. <i>M.</i> iii. 515; Hunter, No. 36; <i>B. M.</i> accession, 1902-6-10, 54.)	1
74.	„ I.	Three Graces standing, as <i>B. M. C.</i> 234. (Same dies.)	1

Serial No.	Obverse.	Reverse Type.	Number.
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Balbinus.

75.	Die II.	Athena, seated l. with Nike and spear. (Dies= <i>B. M. C.</i> 240.)	1
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76 ^a .	„ I.	Selene, crescent on head, driving r. in biga drawn by bulls (cf. <i>B. M. C.</i> 253, of Gordian III).	1
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ΤΑ ΡΣΟΝ ΜΗΤΡΟΠΟ

In field A
 M
 KBΓ

(? Unpublished.)

77 ^a .	„ II.	The Emperor, veiled, and wearing toga, standing to front, head l.; r. held out over flaming altar.	1
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ΤΑΡΣΟΥΜΗ ΤΡΟΠΩΛΕΥΣΑ

(sic)

In field M K
 B
 Γ

(Cf. *M. Suppl.* 489 for this type; that of Pupienus (*B. M. C.* 250) is from a different die.)

78 ^a .	„ III.	The Emperor on horseback r., lion-hunting.	1
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ΤΑΡΣΟΝ Μ Η Τ Ρ Ο Π Α

In field M
 Γ
 B
 K

(Dies=*M.* iii. 519; Hunter, No. 38.)

79 ^a .	„ II.	Heads of Balbinus (l), Pupienus (r.), and Gordian III in centre, as <i>B. M. C.</i> 243, which is incomplete.	1
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[Pl. XV.]

(This complete example shows correctly the legend on *rev.*)

ΤΑΡΣΟΥΜΗΤ

K B Γ in field above heads.

ΝΥΝΟΠΟΔ

(Cf. *Inv. Wadd.* 4664, with *obv.* of Pupienus.)

Serial No.	<i>Obverse.</i>	<i>Reverse Type.</i>	Number.
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Pupienus.

- 80*. Die II. Herakles and Antaios wrestling. Club 1
lies in exergue.
ΤΑΡCΟΥΜ Η ΤΡΟ[ΠΟΛΕΩC]
In field **A**
Μ Γ
Κ Β
(Same die as Hirsch Sale, xviii, Pl.
XXXIX, 2497, except that there
the **M** in field is cut as **Ϟ**: our
example shows that the die was
corrected later = *M.* iii. 525, and
apparently B. M. accession (1922-
12-3, 1) with *obv.* of Balbinus.)
- 81*. „ I. Tyche standing l. with usual attributes. 1
ΤΑΡCΟΥ Μ ΗΤΡΟΠΟ - -
In field **Μ Κ**
Β Γ
(Unpublished as type of Pupienus?)
- 82, 83*. „ I. Skylla, facing, head to r.; r. raised 2
and narrow oar on l. shoulder. (Cf.
B. M. C. 268, with *obv.* of Gordian
III, for type, but with r. horizontal,
and broad-bladed oar.)
ΤΑΡCΟΥ Μ ΗΤΡΟΠΟΛΕΩ
CΑΜ
In field **Κ**
Β Γ
(Cf. *M.* iii. 527.)
84. „ IV. Similar (same die.) 1
- 85*. „ II. The Emperor lion-hunting (as on No. 1
78, but here the lion is attacking).
ΤΑ ΡCΟΥ Μ ΗΤΡΟΠΟΛ
ΕΩCΑ
In field **Μ**
Κ
Β Γ
(Cf. *M.* iii. 524; Hunter, No. 40.)

A HOARD OF IMPERIAL COINS FROM TARSUS. 325

Serial No.	Obverse.	Reverse Type.	Number.
86*, 87.	Die III.	The Emperor sacrificing at an altar (as No. 77). (Two examples = <i>B. M. C.</i> 250.)	2

8

Gordian III.

88.	„ III.	Apollo, standing, facing, head r.; laurel-branch in r., bow and arrow in l.; cloak on l. shoulder. ΤΑΡ ΣΟΝ ΜΗ ΤΡΟΠΟΛΕΩΣ In field A [Γ] M K B (? Unpublished.)	1
89*. [Pl. XVI.]	„ I.	Ditto, but attribute in l. doubtful; cloak hangs from l. arm; quiver at back. ΤΑΡ ΣΟΝ ΜΗ ΤΡΟΠ ΟΛΕΩΣΑ ΜΚΓΒ (<i>Cf. M. Suppl.</i> 499.)	1
90, 91.	„ III.	Selene in biga of bulls r. (Both from same dies as <i>B. M. C.</i> 253, 254 = <i>M.</i> iii. 552.)	2
92.	„ VIII.	Ditto (same <i>rev.</i> die).	1
93-95.	„ II.	Artemis, as on <i>B. M. C.</i> 255, but only bow in l., taking arrow from quiver. (3 from same dies; <i>cf. M.</i> iii. 538; <i>Hunter</i> , No. 42; <i>Leake, Suppl.</i> No. 3.) ΤΑΡ ΣΟΝ ΜΗ ΤΡΟΠΟΛΕΩΣ In field M A K Γ B	3
96, 97.	„ X.	Ditto, but bow and arrow in l. ΤΑΡ ΣΟΝ ΜΗ ΤΡΟΠΟΛΕΩΣ In field A M K Γ B	2

Serial No.	Obverse.	Reverse Type.	Number.
98, 99.	Die X.	Ditto. ΤΑΡΣΟΥΜ ΗΤΡΟΠΟΛΕΩ (<i>sic</i>). In field A M Γ K B (Poorer style than Nos. 96, 97.)	2
100.	„ I.	Similar (?) ΤΑΡΣΟΥΜΗΤΡΟΠΟ - - (In poor condition; letters not visible in field.)	1
101.	„ XV.	Similar type to I. ΤΑΡΣΟΥΜΗΤΡΟ ΠΟΛΕΛΣΑ ΜΚΓΒ (? Unpublished.)	1
102*.	„ XV.	Athena, in crested helmet, standing facing; head r., spear vertical in r., l. on shield. ΤΑΡΣΟΥΜΗΤΡ Ο ΠΟΛ[Ε]ΩΣ ΑΜΚΓΒ (Cf. <i>M.</i> iii. 560; <i>Consul Weber</i> , ¹⁰ 3930 ¹ .)	1
103.	„ XIII.	Herakles subduing the Cretan bull. (Dies = <i>B. M. C.</i> 260.)	1
104*. [Pl. XVI.]	„ XIII.	Ditto, shooting the Stymphalian birds, two of which are falling, dead, beneath his bow on r. ΤΑΡΣΟΥΜΗΤΡ ΟΠΟΛΕΩΣ In field A M K Γ B (Cf. <i>Inv. Wadd.</i> 4670, not same die.)	1
105.	„ IX.	Herakles standing with club, lion-skin, and apples; tree and serpent on l. (= <i>B. M. C.</i> 262.)	1

¹⁰ Hirsch Sale, xxi (1908).

Serial No.	Obverse.	Reverse Type.	Number.
106.	Die III.	Similar type. <div style="text-align: center;"> <p>ΤΑΡΣ Ο ΥΜΗΤΡΟΠΟΛΕΩ (sic).</p> <p>In field A K</p> <p style="margin-left: 100px;">M Γ</p> <p style="margin-left: 150px;">B</p> </div>	1
107.	„ III.	Similar type; but l. hand, against chest, holds lion-skin. <div style="text-align: center;"> <p>ΤΑΡΣΟΥΜ ΗΤΡ[ΟΠΟΛΕΩ]</p> <p>ΣΑΜ Κ (in exergue).</p> <p>In field Γ Β</p> </div> <p>(Dies = B. M. accession, 1901-7-6, 22.)</p>	1
108*.	„ VI.	Similar type to Nos. 104-105. <div style="text-align: center;"> <p>ΤΑΡΣΟΥΜΗΤΡΟΠΟΛΕΩΣ</p> <p>In field A</p> <p style="margin-left: 150px;">Γ</p> <p style="margin-left: 100px;">M Β</p> <p style="margin-left: 100px;">K</p> </div> <p>(Several varieties of this type are known: in addition to <i>B. M. C.</i> 262, 263, cf. <i>M. Suppl.</i> 504, 505, 506; Hunter, No. 45.)</p>	1
109, 110*.	„ XVII.	Perseus standing with Gorgoneion and harpe. (= <i>B. M. C.</i> 264 = <i>M.</i> iii. 534; two examples.)	2
111, 112*. 113.	„ X.	Perseus on l. holding harpe in r., cult-image of Apollo Lykeios aloft in l.; opposite him, a fisherman with rod, from which hang fish and basket. (= I.-Bl., <i>J. H. S.</i> 1898, No. 49.)	3
114.	„ X.	Similar type, but ^B Γ l. in field, and Perseus' l. hand is nearer the fisherman's head. (Dies = <i>B. M. C.</i> 267.) ¹¹	1

¹¹ Legend ends ΠΟΛΕΩ (without final C).

Serial No.	Obverse.	Reverse Type.	Number.
115, 116.	Die XVI.	Elpis, walking l. (Dies = <i>B. M. C.</i> 272; 2 examples.)	2
117.	„ XVIII.	Similar type, but ΤΑΡΣΟΝΜΗΤΡΟ ΠΟΛΕΛ ΣΑΜΚ In field [Γ Β]? (Dies = <i>M.</i> iii. 541.)	1
118, 119.	„ XIX.	Similar type, but ΤΑΡΣΟΝ ΜΗΤΡΟΠΟΛΕΛΣ In field A B M Γ K (= <i>M.</i> iii. 539; 2 examples.)	2
120.	„ XIX.	Similar type, but ΤΑΡΣΟΝ Η [ΤΡΟΠΟΛΕΛΣ] In field A B M Γ K	1
121.	„ XX.	Similar type, but ΤΑΡΣΟΝ Η ΤΡΟΠΟΛΕΛΣ In field A B M Γ K (For other examples, cf. <i>M.</i> iii. 540 ¹² ; Leake, <i>Suppl.</i> 4; Hunter, Nos. 46-48.)	1
122.	„ IV.	Aequitas standing l., holding scales and cornucopiae. ΤΑΡΣΟΝ Η Τ ΡΟΠΟΛΕΩΣ In field A B M Γ K B (Cf. <i>M. Suppl.</i> 509.)	1
123.	„ XV.	Female figure holding wreath in r., as <i>B. M. C.</i> 273, but not same die. ΤΑΡΣΟΝΜΗΤΡ ΟΠΟΛΕΛΣ AM K (in exergue). In field Γ Β	1

¹² Perhaps from die of our example, reworked later.

Serial No.	Obverse.	Reverse Type.	Number.
124*. Die [Pl. XVI.]	X.	Female figure standing to l., holding branch and cornucopiae. ΤΑΡ ΣΟΥΜΗΤΡ ΟΠΟΛΕΩΣΑ ΜΚΓΒ (? Unpublished; apparently not as <i>M. Suppl.</i> 507, where a similar figure holds ears of corn, with <i>modius</i> at foot.)	1
125, 126. ,,	XI.	Winged Tyche-Nemesis standing to l., with rudder in r., resting on globe, and cornucopiae in l. ΤΑΡ ΣΟΥΜΗΤ Ρ ΟΠΟΛΕΩΣ In field A Μ Γ Κ Β (Cf. <i>M.</i> iii. 557; <i>Nomisma</i> , vi, p. 20, No. 24; 2 examples from same die.)	2
127*. ,,	XIII.	Similar type, but ΤΑ Ρ ΣΟΥΜΗ ΤΡΟΠΟΛΕΩΣ In field A Μ Γ Κ Β	1
128. ,,	XIV.	Tyche standing l. with attributes, as <i>B. M. C.</i> 278-280. ΤΑΡ ΣΟΥΜ Η ΤΡΟΠΟΛΕΩΣ In field A Μ Β Κ Γ	1
129. ,,	VII.	Similar type, but ΤΑΡ ΣΟΥΜ Η ΤΡΟΠ . . . Letters in field as last.	1
130. ,,	III.	Similar type, but no globe under rudder. ΤΑΡ ΣΟΥΜΗΤ Ρ Ο [ΠΟΛΕΩΣ] Α Μ Κ Β Γ	1
131-133. ,,	XVII.	Bust of City-Tyche, veiled and turreted, r. (Dies = <i>B. M. C.</i> 276; 3 examples.)	3

Serial No.	Obverse.	Reverse Type.	Number.
134, 135.	Die XVII.	Similar Type. (Dies = <i>B. M. C.</i> 275 ; 2 examples.)	2
136, 137*.	„ XVI.	Similar type, but ΤΑΡCΟVΜΗΤΡΟΠΛΛΕΟCΛ (sic) In field A M K B (2 examples.) Γ	2
138.	„ XVII.	Similar type, but ΤΑΡCΟVΜΗΤΡΟΠΟΛΕΩ (sic) In field A K M B Γ	1
139.	„ XVI.	Similar type, in poor condition. ΤΑΡ - - - - ΕΩ Γ B under bust.	1
140, 141*.	„ XVI.	Three Graces standing in usual pose. ΤΑΡCΟ VΜΗΤΡ ΟΠΟΛ In field A M K B Γ (Dies = <i>M. iii.</i> 537 ; 2 examples.)	2
142.	„ XII.	Emperor and Tranquillina grasping hands. ΤΑΡCΟVΜ ΗΤ ΡΟΠΟΛΕΛC In field A M K Γ B (Dies = <i>B. M. C.</i> 281.)	1
143.	„ XII.	Similar type, but ΤΑΡCΟV ΜΗΤΡΟΠΟΛΕΛC In field AM K Γ B	1

Serial No.	Obverse.	Reverse Type.	Number.
144.	Die XII.	Similar type, but ΤΑΡΣΟΝΜΗ ΤΡΟ ΠΟΛΕΥΣ In field A M K In exergue ΓΒ	1
145.	„ X.	Similar type, but legend as No. 143 ; letters in field as No. 142.	1
146.	„ X.	Similar type and legend, but letters in field. ΑΜ (<i>sic</i>) K Γ B	1
147.	„ XIX.	Emperor on horseback, lion-hunting, as <i>B. M. C.</i> 282-285. (Dies = <i>B. M. C.</i> 284 ; legend begins ΤΑΡ ΣΟΥΜ , &c.) In field A M K (under tail of horse) B Γ below.	1
148.	„ XVIII.	(Similar type, dies = <i>B. M. C.</i> 285.)	1
149.	„ IV.	Similar type, but ΤΑΡ ΣΟΝΜΗΤΡΟΠΟ Λ Ε Ω Σ In field A M K Γ (under tail of horse) B („ hind legs)	1
150.	„ XVI.	Similar type, but ΤΑ ΡΣΟΥ ΜΗΤΡ ΟΠΟΛΕΥΣ (<i>sic</i> ?) In field A M K B Γ	1

Serial No.	<i>Obverse.</i>	<i>Reverse Type.</i>	Number.
151.	Die XVII(?)	Lion overcoming bull, to r., as <i>B. M. C.</i> 286-288. Poor condition, and legend obscure. ¹³	1
		ΤΑΡC --- ΡΟ ΠΟΛ -- In field above ΑΜΚ Β Γ (Not from die of <i>B. M. C.</i> examples.)	
152*.	[Pl. XVI.]	V. Archieratic crown with two rows of heads, on table with three legs. The outer row has seven heads of which the central one is crowned by two Nikai; the inner row has six, and is not joined to the outer.	1
		ΤΑΡCΟV₁ Μ₂ Η₃ Τ₄ Ρ₅ Ο₆ ΠΟΛΕΩC (The figures indicate the position of the outer heads counting from the left.) Beneath the table ΑΜ ΚΓΒ (Cf. <i>M.</i> iii. 548 ¹⁴ ; = <i>M.</i> iii. 492, ascribed to Elagabalus.)	
153*.	[Pl. XVI.]	XI. Agonistic crown from which spring two palm-branches, and inscribed CEVHPEIA on narrow sunken panel, standing on tripod-table.	1
		ΤΑΡCΟVΜΗ ΤΡΟΠΟΛΕΩC In exergue ΑΜΚΒΓ	
154.		IV. Similar, apparently from same die, but less clearly struck. (Cf. <i>M. Suppl.</i> 548; <i>B. M. C.</i> 291 is similar, but inscribed ΟΙΚΟVΜΕ ΝΙΚΟC.)	1
155*.	[Pl. XVI.]	XI. Two smaller crowns, with two palms between, on four-legged table, beneath which is an amphora.	1
		ΤΑΡCΟVΜΗΤΡΟΠΟΛΕΩC Beneath table. In exergue CEVHPEIA ΑΔΡΙΑΝ! [A] (Cf. Hunter, No. 53.)	

¹³ Apparently an ancient cast.¹⁴ *B. M. C.* 290 offers many interesting points of difference.

Serial No.	<i>Obverse.</i>	<i>Reverse Type.</i>	Number.
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Philip Senior.

- 156*. Die I. Artemis huntress r., as *B. M. C.* 296. 1
ΤΑΡΣΟΝΜΗΤΡ ΟΠΟΛΕΛΣΑΜ
 In field **Κ Γ**
Β
 (Dies = *B. M. C.* 296.)
- 157*. " II. Herakles standing r.; r. on club, l. 1
 holds apple; lion-skin over l. arm.
ΤΑΡΣΟΝΜΗΤΡ ΟΠΟΛΕΛΣ
ΑΜΚ
 In field l. **Γ**
Β
 (= *M. Suppl.* 520.)
- 158*. " II. The Emperor lion-hunting, as Nos. 1
 147-150; lion r. with head turned l.
ΤΑΡΣΟΝΤΗ ΣΜΗΤΡΟΠ Ο
ΛΕ ΩΣ
 In field **Α**
Μ
Κ
Γ Β
 (Cf. *Inv. Wadd.* 4677; Athens, 1907/8, *IZ'*. 4; *Consul Weber*, 3933¹.)

3

Philip Junior.

- 159*. " I. Apollo standing facing, head l., with 1
 [Pl. XVI.] branch in r., bow in l., cloak over
 l. arm (as No. 88 above).
ΤΑΡ ΣΟΝΜΗ ΤΡΟΠΟΛΕΩΣ
 In field **Α Γ**
Μ
Κ Β
 (? Unpublished.)
- 160*. " II. Elpis standing l., as Nos. 115 ff. 1
ΤΑΡΣΟΝΜΗΤΡ ΟΠΟΛΕΛΣΑΜΚ
 In field **Γ Β**
 (? Unpublished.)

Serial No.	Obverse.	Reverse Type.	Number.
161*	Dje I.	Tyche standing l. with usual attributes (double-struck). Τ ΑΡΣΟΥΜΗΤ ΡΟΠΟΛΕΩΣΑΜ In field K Γ Β (Cf. <i>M.</i> iii. 577.)	1
<hr/> <hr/> 3			
<i>Trajan Decius.</i>			
162.	.. I.	Apollo standing, with branch and bow. (Dies = <i>B. M. C.</i> 301.)	1
163*. [Pl. XVI.]	.. II.	Herakles standing facing, head r.; r. on club, lion-skin on l. arm. ΤΑΡΣΟΥΜΗΤΡΟΠΟΛΕΩΣ In field A M K Γ Β (= <i>M.</i> iii. 588; Athens, 1904/5, 157. 736; <i>Consul Weber</i> , 3933 ² .)	1
164.	.. II.	Similar, but head l. ΤΑΡΣΟΥΜΗΤΡΟΠΟΛΕΩΣ (C in exergue.) In field A K (? only.) M	1
165*.	.. II.	Herakles with Telephos and deer, as Nos. 65-68. ΤΑΡΣΟΥ ΜΗΤΡΟΠΟΛΕΩΣΓΒ In exergue ΑΜΚ (Unpublished.)	1
166*. [Pl. XVI.]	.. I.	Perseus and fisherman, the former on r., starting back. (= <i>I.-Bl. J. H. S.</i> 1898, 50; = <i>M.</i> iii. 587; <i>Leake, Suppl.</i> 100; Athens, 5799 <i>θ.</i>)	1
167.	.. II.	Similar (from the same die).	1

A HOARD OF IMPERIAL COINS FROM TARSUS. 335

Serial No.	Obverse.	Reverse Type.	Number.
168*	Die I.	Lion r., overcoming bull. ΤΑΡΣΟΥΜΗΤΡΟΠΟΛΕΩΣΓΒ In field above ΑΜΚ (= <i>M. iii.</i> 590, 591; Leake, <i>Suppl.</i> 1.)	1
			<u>7</u>
		<i>Trebonianus Gallus.</i>	
169.	„ I.	Helios, radiate, to l. (Dies = <i>B. M. C.</i> 314.)	1
		Grand Total	<u>169</u>

ARTHUR M. WOODWARD.

XIV.

A MINT AT WROXETER ?

THE two coins here published were first brought to the notice of numismatists a few months ago. The first, which is the property of Lord Barnard, was found during the excavations at Wroxeter conducted by the Birmingham Archaeological Society; it was communicated to Mr. P. H. Webb by Mr. T. G. Barnett, and, on Mr. Webb's showing it at the British Museum the suggestion was put forward which, at any rate to the writer of this paper and to his colleagues, appears to be the most probable explanation of the mark in the exergue of the reverse. I am indebted to the Council of the Birmingham Archaeological Society for permission to illustrate the coin here.

The second piece was found by Mr. L. A. Lawrence in the stock of a London dealer within a few days of Mr. Webb's bringing the first coin to the Museum. To Mr. Lawrence also I am indebted for permission to publish his coin.

The exergual mark in question was the subject of a discussion at the Royal Numismatic Society's meeting on January 21 last. I hope that I have done adequate justice to the views there expressed, however divergent they may be from my own.

The coins are Carausian antoniniani, offering no peculiar features apart from the exergual mark.



Obv.—[IMPC]ARAVSIVSPF AVG Bust r., radiate, draped and cuirassed. Plain border.

Rev.—P[AX] A V G Pax standing l., holding olive-branch in extended r., sceptre transversely in l. In exergue, **BRI** Border of dots.

Wt. ? Diam. 24 mm. Found at Wroxeter.



Obv.—Similar type and inscription to preceding.

Rev.—SALV SAVG Salus standing l. sacrificing with patera in r. over a small altar, round which twines a serpent, rearing its head to drink from the patera; she rests with l. on a sceptre. In exergue, **BRI** Border of dots.

Wt. 63.3 grains (4.10 grammes). Diam. 22.5 mm. Mr. L. A. Lawrence.

The beginning of the obverse legend of the first coin is quite obliterated, but, judging from the amount of space, **IMPC** seems a safer restoration than **IMPCC**.

The question to be decided is: what is the significance of the exergual mark **BRI**? The obvious explanation, that it is the abbreviation of Britannia, is

accepted by Mr. Webb. There is, he claims, some evidence in the mint of Siscia for the use of an initial to represent a province,¹ and "it was by no means impossible that a man who diverged so much from common practice as did Carausius might use the name of Britain or part of it as a mint-mark". The coins, he considers, are exactly in the early style of London when the use of a mint-mark was beginning.

Admitting, for the sake of argument, that Britannia is indicated, and that the abbreviation is of the nature of a mint-mark,² we must, I think, infer that it precedes in date any more precise mint-mark. For, once the coins had been marked as issued from London or Colchester, to mark one as issued in Britain would have been absurd. Mr. Webb's assumption, implied in the phrase, "when the use of a mint-mark was beginning", is bold. Seeing that some at least of the coins which their types and legends show to belong to the very beginning of the reign (such as *Expectate veni* and *Adventus Aug.*) are mint-marked, it is difficult to accept the view that coins without any mint-mark necessarily precede the mint-marked ones. The sequence: no mint-mark > **BRI** > local mint-mark, would be logical; but it remains to be proved that it was the actual sequence.

¹ P for Pannonia under Gallienus, according to his suggestion (*Num. Chron.*, 1921, p. 276); where he adds "a similar use of the initial of a province is to be found some years later in the mark HT, for Heraclea in Thrace".

² i. e. that it is not, for instance, an adjective descriptive of the Augustus or of the personification. This is, I think, ruled out by the fact that it does not read continuously after **AVG.** Nor, obviously, does it describe the type, since not Britannia but Pax and Salus are represented.

We may now pass to the interpretation which suggested itself to me and was at once endorsed by my colleague, Mr. Mattingly, if indeed it did not independently occur to him, when the coin found at Wroxeter was first shown at the Museum. It is that **BRI** is the abbreviation of Briconium, which we take to be an alternative form of Vriconium. As a preliminary, I cannot do better than quote the discussion of the name-form by the late Professor Haverfield in the *Victoria County History of Shropshire*.³

"The name of the Romano-British town which occupied the site of Wroxeter is well attested. The evidence supplied by the Itinerary and Ptolemy, by the Anglo-Saxon Wreocen or Wrocen, and by the modern place-names Wroxeter, Wrekin⁴ and Wrockwardine, show that the site was known by some such name as Viroconium, and the identification has been accepted by the vast majority of archaeologists. Unfortunately the exact form of the name is uncertain. English antiquaries have preferred Uriconium, foreign scholars Viroconium or Viriconium, and Vriconium has also been suggested. The evidence of our ancient sources is somewhat confused. The MSS. of the Itinerary contain all these forms, there being no manuscript distinction between Vriconium and Uriconium, but the better MSS. do not give preference to any one of them. The Ravennas gives Vtriconium, which may be a blunder for Viriconium.

³ Vol. i, p. 220 f.

⁴ "It is not clear whether Wrekin is adapted from the Anglo-Saxon Wreocen-setan or is a genuinely old Celtic name. In any case Wreocen-setan is derived from Viroconium (or Viriconium) as Magasaetan in Herefordshire from Magna (Kenchester)."

The MSS. of Ptolemy agree on Viroconium. All this evidence plainly indicates that the word began with a consonant V, but it leaves the next three letters doubtful. In favour of 'Viroconium' we might cite other Celtic place-names such as Viro-sidum, Virodunum, Viromagus, which show a stem *viro-*, and we must note that some of these also contain *i* in the second syllable, and Viridunum, for example, appears beside Virodunum. It is, on the whole, quite conceivable that the original stem was *viro-*, and that this was sometimes altered to *vir-* by a slurring of the 'thematic vowel' which is philologically intelligible and not uncommon. Later still, it may have been shortened to *vro-* (or *vri-*) by the influence of the accent—for which, again, analogies can be adduced⁵—and by this shortening we may explain the modern forms beginning with Wro- or Wre- which suggest a stem *Vro-*. But in default of this decisive evidence, the question must be left open. We have preferred in this paper the word 'Viroconium', as perhaps the most widely used in modern times, and as in all probability more correct than the Uriconium favoured by English writers."

It is abundantly clear from this that the form adopted by most older English antiquaries, beginning the name with a vowel U, must be abandoned. It is also clear

⁵ "Rhys, *Celtic Britain* (ed. 3, 1904), 324, suggested that the original stem was *vro-*. But I understand that he now thinks the explanation given in the text to be the more probable. He considers the Celtic name of the district to have been 'Gwricon', and compares the Cair Guricon of Nennius. For *Vro-* one can compare a Celtic place-name in Germany, *Vrocomagus* (Holder, *Sprachschatz*, i, 619). Curiously enough, *Viromagus* seems also to occur in the forms *Vromagus* and *Bromagus*."

that although there is no literary or lapidary evidence for the form *Briconium*, it is not an impossible form. It is true that most of the cases of alternation of B for V are before vowels.⁶ But the instance quoted by Haverfield—*Bromagus*, *Vromagus*, *Viromagus*—is very much to the point. It may be added that the Celtic place-name *Vrocomagus* (*Brumath* in Alsace), which he mentions, has the alternative form *Brocomagus*.⁷ *Virgitio* is an alternative for *Brigetio* in *Idatius* (ad a. 375). It would seem, therefore, that the representation of VR by BR is not impossible.⁸

In objection to the identification with Wroxeter, Mr. Webb has urged that these two coins would be the sole evidence for the existence of a mint there, or indeed anywhere in Britain outside the two generally accepted mints of London and Colchester; further, that the largest known hoard of coins of Carausius, that belonging to Mr. Willoughby Gardner, and found in *Wales*, does not contain any coins marked **BRI** or any other coins that seem to be attributable to Wroxeter. To which it may be replied that neither does the great hoard from *Lynchmere* contain any

⁶ *Iubentus*, Gallienus, Cohen², 415 (cp. 598) is an instance from a third-century coin; but this appears to have been struck in the East. In the East of course the interchange of B and V was so common as to call for no remark. From Roman inscriptions of Britain I may quote *Iubenis* (*C. I. L.*, vii, 1336, 546), and probably *Betto* (*ibid.*, 1092). See in general the index to Dessau, *Inscr. Lat. Sel.*, III (ii), p. 809. But he gives no instance of the change except before a vowel.

⁷ *Ihm* in Pauly-Wissowa, s. v. *Brocomagus*.

⁸ Mr. Brooke reminds me of a parallel from Anglo-Saxon times in the spelling *Ælbred* for *Ælfred* on certain coins of Alfred the Great. In the alternative forms *Dorobernia*—*Dorovernia* we have the same thing before a vowel (or is it a sonant r?).

of these coins marked **BRI**, as it might reasonably be expected to do if they are (1) early in the reign, as Mr. Webb thinks, and (2) of the London mint. The coins are obviously very rare, and comparatively few must have been issued.

Mr. Lawrence, who does not accept the abbreviation as representing Britannia, but is yet unwilling to recognize it as *Bri(conium)*, urges that we should look for other places in the country with names beginning with Bri. In reply to this I may be permitted to cite the opinion of Dr. George Macdonald:

"I can think of no British town at all so likely as Wroxeter. It was larger than Colchester and nearly as large as St. Albans—much bigger than Isurium Brigantum, and obviously much more important than places like Brige (Anton. Itin.) and Brinavis (Rav. Geogr.), wherever these may have been."

Though I do not for a moment pretend that certainty has been obtained, I think that the reasons set forth above make it at least probable that the equation $Bri = Briconium = Vriconium$ may be correct.⁹ If and when a coin of Carausius with **BRIT** in the exergue is found, I shall be ready to admit that I am wrong.

GEORGE F. HILL.

⁹ Vricon, it will be remembered, was supposed by Haigh and Beale Poste to stand for Wroxeter on certain coins of Tasciovanus, but Evans showed (*Coins of the Ancient Britons*, p. 268) that the legend is *Tascio. Ricon.* not *Tascio. Vricon.* British coins are, I believe, still unknown on the site of Wroxeter, as they were in Evans's time.

XV.

ANGLO-SAXON ACQUISITIONS OF THE
BRITISH MUSEUM.

V. ALFRED TO EADWIG.

ALFRED (871-900/1).

Canterbury Mint. Type xvii. *Obv.* Cross pattée. *Rev.*
Moneyer's name in two lines.

Diarwald.

442. *Obv.*—+ELFREDREXDOR◊

Rev.—DIXRVKLDM◊

R 22.9 grs. Evans coll.

Lincoln Mint. Type xi. *Obv.* Cross pattée. *Rev.*
Moneyer's monogram within mint-name (cf. B.M.C.,
Pl. V. 1).

443. *Obv.*—EL FR ED RE

Rev.—LIII LOIIX above and below monogram.

R 20.5 grs. Stamford find, 1902 (*Num.*
Chron., 1903, pp. 347 ff.).

London Mint. Type vi. *Obv.* Bust r. *Rev.* LVNDONIA
monogram.

444. *Obv.*—+ÆLFR EDREX From the same die as B.M.C.,
Nos. 90 and 92.

Rev.—Three pellets in O of monogram, cross pattée
above, three pellets to l. and below.

R 23.8 grs. Evans coll.

445. *Obv.*—+VEFR EDRE

Rev.—Three pellets above and one below l of monogram,
no ornaments in field.

R 18.9 grs. Stamford find, 1902.

446. *Obv.*—As preceding coin, but from different die.
Rev.—Pellets in O, five pellets above and four below monogram.
 At 21.6 grs. Stamford find, 1902.
447. *Obv.*—ELFR EDREX
Rev.—Pellets in O, cross above and four pellets below monogram.
 At 21.1 grs. Montagu sale, 1895, lot 526.
448. *Obv.*—IELFR REDRE retrograde. Bust very barbarous to l.
Rev.—Three pellets above and one below l of monogram, cross in field above.
 At 19.4 grs. Montagu sale, 1895, lot 528.

Halfpenny of Type vi.

449. *Obv.*—ELFR (pellets above head) EDR
Rev.—Three pellets above and below monogram, pellet to l.
 At 11.0 grs. broken. Evans coll., from Wigan coll.; found in the Thames (engraved in Hawkins, *Silver Coins*, Pl. XIII. 177).

London Mint. Type vii. *Obv.* Very barbarous bust.
Rev. LVNDONIA monogram.

Tedwin.

450. *Obv.*—TED VVIN
Rev.—Four pellets above, six, in pyramid, below monogram.
 At 12.2 grs. Stamford find, 1902.

London Mint. Type ix. *Obv.* Bust r. *Rev.* LVN DONIA monogram, with moneyer's name above and below.

Tilewine.

451, 452. *Obv.*—ÆLFR EDREX

Rev.—TILEVINE above monogram, MONETĀ below. Four crosses (on 452, two crosses and two groups of three pellets) in field.

Æ 21.6 grs. (with pellets in and round O of MONETĀ). Evans coll.

Æ 22.9 grs. Montagu sale, 1895, lot 530 (illustrated).

London Mint. Type x. *Obv.* Cross pattée (no inner circle). *Rev.* as preceding (type ix).

Tilewine.

453. *Obv.*—EL FR ED REX

Rev.—M \diamond NETĀ above monogram, TILEVINE below. Cross each side of monogram.

Æ 20.9 grs. Montagu sale, 1895, lot 535 (illustrated).

Coins without name of mint.

Type i. *Obv.* Bust r. *Rev.* Moneyer's name in lunettes.

Biarnred.

454. *Obv.*—+ÆLBRED• RE+

Rev.—BIA $\overline{\text{R}}$ NR $\overline{\text{E}}$ DMON ETĀ (var. b; each lunette replaced by a curve and a double crook).

Æ 19.0 grs. Beeston Tor find, 1924.

Bosa.

455. *Obv.*—+ÆLBRED REX

Rev.—BOSĀ •MON• •ETĀ•

Æ 18.4 grs. Beeston Tor find, 1924.

Diarwulf.

456. *Obv.*—+ÆLBRED REX*Rev.*—DIXRVLF MON ETΛ (var. c; double crooks only dividing lines of inscription).

R 13.6 grs. Beeston Tor find, 1924.

Dunn.

457. *Obv.*—+ÆLBRED REX*Rev.*—DVNN •MON• •ETΛ•

R 19.4 grs. Beeston Tor find, 1924.

Eadwulf.

458. *Obv.*—+ÆLBRED; REX*Rev.* EADVLF •MON• •ETΛ•

R 17.7 grs. Beeston Tor find, 1924.

Edelere.

459. *Obv.*—+ÆLBRED RE+*Rev.*—EDELERE •MON• •ETΛ••

R 23.8. Beeston Tor find, 1924.

460. *Obv.*—+ELBRED; REX*Rev.*—EDELERE MON ETΛ (var. b; each lunette replaced by a curve and a double crook).

R 16.9 grs. Beeston Tor find, 1924.

Elbere.

461. *Obv.*—+ÆLBRED REX*Rev.*—ELBERE •MON• •ETΛ•

R 19.3 grs. Evans coll., from Croydon find, 1862.

Elelaf.

462. *Obv.*—+ELFRED REX beginning at shoulder and not divided by bust.*Rev.*—ELELAF •MON• •ETΛ•

R 17.7 grs. Beeston Tor find, 1924.

Etheleah.

463. *Obv.*—+ÆELBRED: RE+

Rev.—EÐELEÆ •HMON• •ETÆ•

At 18.8 grs. Beeston Tor find, 1924.

Ethelmund.

464. *Obv.*—+ÆELBRED RE+

Rev.—EÐELMV •NDMO• •NETÆ•

At 15.1 grs. Beeston Tor find, 1924.

Ethered.

465. *Obv.*—+ÆELBRED REX

Rev.—EÐERED •MON• •ETÆ•

At 20.2 grs. Beeston Tor find, 1924.

Ethelwulf.

466. *Obv.*—+ÆELBRED REX

Rev.—EÐELVLF •MON• •ETÆ•

At 16.3 grs. Beeston Tor find, 1924.

Heaberht.

467. *Obv.*—+ÆELBRED RE+

Rev.—HEÆBEÆ; RHMOMETÆ

At 20.3 grs. Beeston Tor find, 1924.

Herebald.

468. *Obv.*—+ÆELBRED REX

Rev.—HEREBÆL •DMO• •NETÆ•

At 16.3 grs. Evans coll., from Croydon
find, 1862.

469. *Obv.*—+ÆELBRED: RE+

Rev.—HEREBEÆ •LDMO •NETÆ•

At 15.0 grs. Purchased 1906.

Tidbearht.

470. *Obv.*—+ÆLBRED REX*Rev.*—+TIDBEARHT MO NETΛ (var. a; lunettes broken in centre of curve).

At 14.5 grs. Beeston Tor find, 1924.

Torhtmund.

471. *Obv.*—+ÆLBRED REX*Rev.*—TORHTMV NMO NETΛ Three pellets in upper lunette.

At 17.7 grs. Evans coll., from Croydon find, 1862.

472. Similar, but with pellet added at beginning and end of top and bottom lines of reverse inscription.

At 15.6. Beeston Tor find, 1924.

Wine.

473. *Obv.*—+ÆLBRED: REX*Rev.*—VVINE •MON. •ETΛ:

At 20 grs. Beeston Tor find, 1924.

Wulfearð.

474. *Obv.*—+ÆLBRED REX*Rev.*—VVLFEAR •DMO: •NETΛ.

At 17.3 grs. Beeston Tor find, 1924.

475. *Obv.*—+ÆLBRED REX*Rev.*—VVLFEAR DMON ETΛ (var. b; each lunette replaced by a curve and a double crook).

At 19.5 grs. Beeston Tor find, 1924.

Type iv. *Obv.* Bust r. *Rev.* Type of two seated emperors with Victory above.

Cenred.

476. *Obv.*—XÆLFRED REXHTGL□:•:*Rev.*—CENREDMON•ETΛ

At 20.1 grs. (chipped). Montagu sale, 1895, lot 545 (illustrated); said to have been dug up in this country.

Type v. *Obv.* Bust r. *Rev.* Cross crosslet with quadrilateral voiding enclosing cross pattée.

Guthere.

477. *Obv.*—+ELFRE DREXΛ

Rev.—+C VΘ HE RE Segments of circles added, joining the ends of each pair of limbs of the cross (the cross-bars at the ends of the limbs being omitted), so that each pair of letters is set in a frame. Cross-bar at each angle of the central voiding within which four pellets are added.

Æ 19.3 grs. From a small find at Washington (Sussex), 1904.

Hereferth.

478. *Obv.*—+[E]LFRE DREZ

Rev.—HER EF ER ΘM No cross-bars at ends of limbs of the cross, cross pattée below letters in each angle.

Æ 17.6 grs. (chipped). From same source as preceding.

Liafwald.

479. *Obv.*—/ELFRE•• DRE+S

Rev.—LIÅ FVÅ LDM ONE No cross-bars at ends of limbs of the cross, pellet below letters in each angle and four pellets within central voiding.

Æ 20.1 grs. Montagu sale, 1895, lot 556 (illustrated) from the Cuerdale find.

Luceman.

480. *Obv.*—/ELFR EDREXΣX

Rev.—LVCE MΛ NMO NET No cross-bars at ends of limbs of the cross, pellet below letters in each angle.

Æ 21.2 grs. From the find at Washington (Sussex), 1904.

Type xiv. *Obv.* Cross pattée. *Rev.* Moneyer's name
in two lines.

Burgnoth.

481. *Obv.*—+EL FR ED RE

Rev.—BVRGN ODM◊ Pellet above, below, and
between lines of legend.

Æ 22.3 grs. Found at Leigh, Essex,
1893.

Burnwald.

482. *Obv.*—+EL FR ED RE

Rev.—BVRNV ALDM◊ Pellet above, below and
between lines of legend.

Æ 22.0 grs. Found at Leigh, Essex,
1893.

Cudberht.

483. *Obv.*—+ÆL FR ED RE

Rev.—LVDB ERHT One pellet between two groups
of three pellets between lines of legend.

Æ 23.8 grs. Evans coll., from Cuerdale
find.

Dudig.

484. *Obv.*—+ÆL FR ED RE

Rev.—DVDIC HHON Pellet between two crosses
between lines of legend.

Æ 24.6 grs. Evans coll., from Cuerdale
find.

Eadwald.

485. *Obv.*—+ÆL FR ED RE From the same die as B.M.C.,
No. 278.

Rev.—EAGV VALD One pellet between two groups
of three pellets between lines of legend.

Æ 25.0 grs. Evans coll.

Ludig.

486. *Obv.*—EL FR ED REX

Rev.—LVDIG MON Group of three pellets to r.
between lines of legend.

Æ 19.6 grs. Stamford find, 1902.

487. *Obv.*—EL FR ED REX

Rev.—LVDI NOW Cross between lines of legend.

There are traces on this coin both of re-striking and of brockage; the cross on the reverse is probably from the obverse die.

R 16.8 grs. Stamford find, 1902.

Wulfred.

488. *Obv.*—Æ•LF•RED•REX•

Rev.—VVLV RED•• Pellet above and between lines of legend.

R 22.6 grs. Evans coll., from Westwell Downs, Kent.

Round Halfpennies of Type xiv.

Tilewine.

489. *Obv.*—EL FR ED RE

Rev.—TILE VVNE Pellet between and below lines of legend.

R 8.5 grs. Stamford find, 1902.

Uncertain moneyer.

490. *Obv.*—+EL EC DR LE

Rev.—HOH IN'CE Pellet between two groups of three pellets between lines of legend. The letter O has nine wedge-shaped radiations round it.

R 8.9 grs. Stamford find, 1902.

Round Halfpennies of the type illustrated in *Num. Chron.*, 1903, p. 347. *Obv.* Cross pattée. *Rev.* A and W monogram.

Tilewine.

491, 492. *Obv.*—EL FR ED RE

Rev.—TIL VVN

R 7.7 and 6.6 grs. From different dies; both coins from Stamford find, 1902.

EDWARD THE ELDER.

(900/1-924/5.)

Type ii. *Obv.* Small cross pattée. *Rev.* Moneyer's name in two lines across field.

Beahstan.

493. *Obv.*—+EADVVEARD REX

Rev.—BEAHS TΛNMŌ Pellet above, pellet below, three crosses between lines of inscription.

Æ 24.1 grs. Evans coll., from Co. Dublin, 1883.

Bonus Homo.

494. *Obv.*—+EADVVEARD REX

Rev.—BONVS HOHOHŌ Three pellets above, three pellets below, three crosses between lines of inscription.

Æ 23.7 grs. Evans coll., from Sotheby sale, 21. xii. 1895, lot 118.

For the name compare "Bonsom" (B.M.C., *Eadmund*, No. 35).

Fritheberht.

495. *Obv.*—+EADVVEARD REX

Rev.—FRIDEB RHTMŌ Three pellets above, three pellets below, three crosses between lines of inscription.

Æ 24.6 grs. Evans coll., from Co. Dublin, 1883.

Uncertain moneyer (cf. B.M.C., No. 49).

496. *Obv.*—+EVDVVEARD RE+

Rev.—OIEOI OIOMI Three pellets above, three pellets below, three crosses between lines of inscription.

Æ 23.5 grs. Evans coll., from Co. Dublin, 1883.

Walter (York?).

497. *Obv.*—+EADVVEARDRE+

Rev.—ƿKLT EREO Three pellets above, three pellets below, three crosses between lines of inscription.

Æ 25.2 grs. Evans coll.

Wealdhelm.

498. *Obv.*—+EADVVEARDREX

Rev.—VVEAL DELMMO Three pellets above, three pellets below, three crosses between lines of legend.

Æ 21.6 grs. Evans coll., from Co. Dublin, 1883.

Type iii. *Obv.* Bust l. diademed. *Rev.* Moneyer's name in two lines across field.

Buga.

499. *Obv.*—+EADVVEARDREX

Rev.—BVGA MON Three pellets above, three pellets below, pellet and two crosses between lines of inscription.

Æ 25.5 grs. Evans coll.

Deorwald.

500. *Obv.*—+EADVVEARDREX

Rev.—DEORV VALDMO Cross between two groups of three pellets above, three pellets below, three crosses between lines of inscription.

Æ 24.8 grs.

Uncertain moneyer.

501. *Obv.*—+EADVVEARDREX

Rev.—IENC B OΛEICN Three pellets—cross—pellet above and below, three crosses between lines of inscription.

Æ 21.3 grs. Evans coll.

Type ix. Various floral designs.

Heremod.

502. *Obv.*—+EADVVEARDREX Small cross pattée.

Rev.—HEREMOD across lower part of field, which is bisected by a line from which springs a flower between two leaf-branches; the pot from which the plant grows shows below the line. Below the name is a flower.

R 24.3 grs. Evans coll., from Co. Dublin, 1883.

Type xi. *Obv.* Small cross pattée. *Rev.* Hand of Providence issuing from clouds. Moneyer's name variously dispersed in field.

Athulf.

503. *Obv.*—+EADVVEARD REX

Rev.—ÆDVLFM

From the same dies as B.M.C., No. 107. It is overstruck (*rev.* on *rev.*) on a coin of Type ii.

R 25.1 grs. P. W. P. Carlyon-Britton sale, 1914, lot 373 (illustrated); Murdoch sale, 1903, lot 106; Montagu sale, 1895, lot 603; Borghesi sale, 1880 (Rome), lot 1380.

AETHELSTAN (924/5-940).

In the descriptions which follow the form ÆÐELSTAN REX will be taken as the normal form of obverse inscription. Only variations from the normal will be described.

Type i. *Obv.* Small cross pattée. *Rev.* Moneyer's name in two lines across field, three crosses between and three pellets above and below.

Alfeau.

504. ÆLFEÆ VMOÑ Cross above, annulet below.

R 16.6 grs. Evans coll., from Co. Dublin, 1883.

Alhstan.

505. $\overline{\text{ALHS TANM}}$

R 20.0 grs. Evans coll., from Co. Dublin, 1883.

Eadmund.

506. $\overline{\text{EADMV NDMO}}$

R 23.8 grs. Evans coll.

Eric.

507. $\overline{\text{ERIC} \cdot \text{+ MONET}}$ (*Obv.* $\text{+AIT\theta EL\zeta TANREX}$ (the first three letters may be due to double-striking.)

R 22.1 grs. Evans coll., from Co. Dublin, 1883.

Heremod.

508. $\overline{\text{HERE} \cdot \text{MOD M}}$

R 21.6 grs. Evans coll.

Stephanus.

509. $\overline{\text{STEF}}$ in lower, $\overline{\text{ANVS}}$ in upper line (*Obv.* $\text{+E\theta EL-STANRE}$)

R 20.1 grs. Evans coll., from Irish find, 1862 (see *Num. Chron.*, 1863, p. 49, No. 9).

Type iv.

510. *Obv.*— $\overline{\text{ÆDELSTANREX\lambda}}$ Small cross pattée.

Rev.—A building standing on a line bisecting the field, beside it two small crosses, below which are the letters DO (or D and an annulet?) and IS. Below the line $\overline{\text{ETR\mathring{A}M M-O}}$ in two lines; below again, an annulet.

R 22.9. Montagu sale, 1895, lot 647, ex Wigan and Brice collections. Cf. Ruding, Plate 17, No. 17.

Type v. Small cross pattée on both sides.

Chester.

511. +OSVLFEM⁻OLEGE⁻CF (*obv.* inscription ends REX TO BRT) overstruck on a coin of Type i, obverse on reverse.

R 25.0 grs. Evans coll., from Killyon Manor, Meath, find, 1876.

512. +P⁻AVLES⁻MONLEGE⁻CF (*obv.* inscription Λ EDELSTAN RETOBRLE)

R 24.8 grs. Evans coll.

513. + Θ VRS⁻TAN MO+TOLIE⁻CVI (*obv.* inscription ends REXTOBRIT)

R 20.6 grs. Evans coll., from Killyon Manor, Meath, find, 1876 (in *Num. Chron.*, 1885, p. 130, mint is misread as LINCVI; cf. *ibid.*, No. 16 + Θ VRSITAN MOX TO LIEI).

Dartford? (see *B.N.J.*, vi, pp. 24-25).

514. +BEORHTVLFM⁻OD Λ RE \cdot NT \cdot VRB (*obv.* inscription + Λ EDELSTAN \cdot REX \cdot TOT \cdot BRI⁻T)

R 24.3 grs. Montagu sale, 1895, lot 610; Brice coll.; York Moore sale, 1879, lot 89; Cuff sale, 1854, lot 510; illustrated in Ruding, Pl. C. 19.

Derby.

515. +II \cdot AE⁻ENRE Θ E [] ONDEOR Λ BV (*obv.* EDEISTAN
R Λ S Λ X [] H)

R 21.4 grs. (edge broken). Evans coll., found in Co. Cork, 1799.

Exeter.

516. +R \cdot AE⁻ENOLDMOE Λ X Λ NCE⁻CVI Pellet in field.
Obv. inscription ends REX TO BRIT

R 24.8 grs. Rashleigh sale, 1909, lot 244.

Hereford.

517. +ECCBERHTM[—]OHREF[—] (*obv.* inscription ends REX BRIT^Λ) overstruck on a coin of Type i, reverse on reverse.

R 21.7 grs. (cracked). Rashleigh sale, 1909, lot 244.

London.

518. XLI OF HELM M[—]OLVND EIVITT (*obv.* REX TOT BRIT)

R 23.4 grs. Evans coll., from Killyon Manor, Meath, find, 1876.

Nottingham.

519. A coin struck from two reverse dies, reading:

+EDELNOÐONS N:O:TENCEHΛM
+EDELNOÐONS N:O:TENCEHI

R 21.7 grs. Montagu sale, 1895, lot 621.

Stafford.

520. +VVIMVNDMOSTFOR (*obv.* +EDELSTΛN REX TO BRT)

R 22.4 grs. Montagu sale, 1895, lot 625.

Tamworth.

521. +MΛNNΛMOTONTOMIEΛRÐE (*obv.* +EDELSTΛZ RE+ΣΛ+SORVI)

R 23.2 grs. Evans coll., from Killyon Manor, Meath, find, 1876.

522. A coin struck from two reverse dies, reading:

+MΛNNΛMOTONTOMIEΛRÐEE
+IN[Λ?]RΛMONENEEÐN

R 19.8 grs. Purchased in 1846, but not included in Catalogue.

York.

523. *Obv.*—+EDELSTANREXTÖBRIT Crescent and six pellets in field.

Rev.—+REGNΛLDMÖEFORFIC

Æ 23.1 grs. Evans coll., from Irish find, 1862 (see *Num. Chron.*, 1863, p. 50, No. 20).

524. *Obv.*—+EDELSTANREXTÖBRIT Small bar in field beside the cross.

Rev.—+REGNΛLDMÖEFORFIC

Æ 21.1 grs. Evans coll., from Irish find, 1862 (see *Num. Chron.*, 1863, p. 50, No. 21).

525. *Obv.*—+EDELSTANRE+TÖBR Pellet at each angle of the cross.

Rev.—+REGNΛ••LDMÖEFORFIC∴

Æ 22.3 grs. Evans coll., from Killyon Manor, Meath, find, 1876.

526. *Obv.*—+EDELSTANRE+TOBRIF• Pellet at each angle of cross and one in field.

Rev.—+REGNΛ••LDMÖEFORFIC∴

Æ 25.4 grs. Montagu sale, 1895, lot 633 (illustrated); Brice coll.; Howard sale, 1874, lot 12.

No mint name (Megenfreth).

527. *Obv.*—+EDELSTANRE+Λ+ORV Small pellet in field.

Rev.—+MEBENFREDMOT•• M in field.

Æ 18.5 grs. (chipped). Evans coll., found in Co. Cork, 1799.

Blundered penny of coarse work.

528. *Obv.*—+CEBT(M?)DEΛNSCOTI

Rev.—+DVDIIIZTΛIIIIO+IT(Λ?)IILZ

Æ 15.9 grs. Acquired 1922.

Type vi. Rosette of pellets on both sides.

Shrewsbury.

529. *Obv.*—+ÆDELSTAN·R·EXTOB

Rev.—+EADMVNDMOSCR0B

Æ 23.7 grs. Montagu sale, 1895, lot 625.

Type viii. *Obv.* Crowned bust to r. *Rev.* Small cross pattée.

Langport (see *B.N.J.*, vi, p. 28).

530. *Obv.*—+FVNSIGENOLANEP0RT

Overstruck on a coin of Type i, obverse on obverse.

Æ 24.6 grs. Douglas find, 1894 (*Num. Chron.*, 1913, pp. 322 ff.).

London.

531. +BIORNEARDM^o LONDEI (*obv.* Rosette on shoulder).

Æ 23.0 grs. Evans coll., from Irish find, 1862 (*Num. Chron.*, 1863, p. 49, No. 4).

532. +CRIMFALD MO LONDEI (*obv.* Rosette on shoulder).

Æ 19.6 grs. Sotheby, 19-21 Dec. 1911, lot 193.

Norwich.

533. +EADGARII^oONOR0F

Æ 23.4 grs. Evans coll., from Irish find, 1862 (*Num. Chron.*, 1863, p. 49, No. 8).

534. +MANTICEN·MONOR0IC (*obv.* REI Annulet on shoulder).

Æ 25.2 grs. Evans coll., from Killyon Manor, Meath, find, 1876.

Winchester.

535. +ÆDELMM^oOVVINEI Small cross in field, near the inner circle.

R 23.6. Evans coll.

York.

536. *Obv.*—+ÆDEL^oSTAN REX TO BRΓ (var., B.M.C., Type ix, bust within the inner circle).

Rev.—+ÆBELERDMOEFECX

R 20.2 grs. Evans coll., from Killyon Manor, Meath, find, 1876.

HOWEL DDA.

King of the Welsh, c. 915-948.

537. As Type i of Aethelstan.

Obv.—++(or Ð?)HOPÆLREX.∞

Rev.—GIL+.∞.ZYL+ Rosette above and below, three crosses between lines of inscription; ∞ below the left cross.

R 23.5 grs. P. W. P. Carlyon-Britton sale, 1917, lot 993 (illustrated); Nobleman sale, 1903, lot 1. See *B.N.J.*, vol. ii, pp. 31 ff.

EDMUND (940-946).

Type i.

Obv.—Small cross pattée; inscription (unless otherwise stated) +EADMVNDRE or EADMVNDREX

Rev.—Three crosses between the two lines of inscription, trefoil of pellets above and below.

538. ELFV XLDM Rosette above and below.

R 25.4 grs. F. W. Hasluck bequest, 1920.

539. BEIE (retrograde) DIOTVS

R 18.3 grs. Evans coll.; Marsham sale, 1888, lot 176.

540. BESELM. ONETΛ (*obv.* +EADMVNDREX)

At 20.8 grs. Evans coll., from Killyon Manor, Meath, find, 1876.

541. DORV LFMO Rosette above and below (*obv.* EAD MVNDREX)

At 24.9 grs. Evans coll., from Killyon Manor, Meath, find, 1876.

542. CZMO IETΛ (*obv.* +EADMVNDRE+)

At 21.2 grs. Acquired 1922.

543. SICPOL DESMOT Rosette above and below (*obv.* +EADMVNDREI+)

At 19.2 grs. (broken). Acquired 1922.

544. VVLF STAN Rosette above and below.

At 20.5 grs. (cracked). Evans coll., from Irish find, 1862 (*Num. Chron.*, 1863, p. 51, No. 25).

Halfpenny of the same type.

545. BΛLDV INNOI Two additional pellets above (*obv.* +EADMVNDREO+)

At 9.1 grs. Presented by Mr. H. A. Grueber, 1907.

Type vi.

Obv.—Bust to r. crowned.

Rev.—Small cross pattée.

546. *Obv.*—+EADMVNDREPTX

Rev.—+CLACMONEWONEIITX From same reverse die as B.M.C., No. 2, which was, through a misreading, attributed to the London mint.

At 22.1 grs. Montagu sale, 1895, lot 650; Wyllie sale, 1882.

EADRED (946-955).

Type i.

Obv.—Small cross pattée. Inscription, unless otherwise stated, +EADREDREX

Rev.—Three crosses between two lines of inscription, trefoil of pellets above and below.

Oxford.

547. *Obv.*—EADREDREXO+VRBIZ. Four pellets added in field near the circle.

Rev.—PYNNE LMMO

R 23.5 grs. Montagu sale, 1895, lot 677 (illustrated); Marsham sale, 1888, lot 182; Bergne sale, 1873, lot 210.

No mint name.

548. ÆLFZ ICEMO Cross between two annulets across field, rosette above and below (*obv.* EADRED RE+)

Overstruck on coin of similar type, obverse on obverse.

R 22.1 grs. Evans coll., from Killyon Manor, Meath, find, 1876.

549. ÆDELVL FESMOT Rosette above and below. (*Obv.* M in field near circle.)

R 21.1 grs. (cracked). Acquired 1922.

550. ÆDEL PTLD Rosette above and below (*obv.* no initial cross).

R 19.2 grs. Evans coll., from Killyon Manor, Meath, find, 1876.

551. ERIM EMOT (both lines retrograde). Cross between two annulets across field, rosette above and below. *Obv.* (retrograde) FADREDREX

R 17.2 grs. Acquired 1922.

552. HVN RED Two crescents at end of legend. *Obv.* +EADREDREX;

R 25.5 grs. Evans coll., from Killyon Manor, Meath, find, 1876.

553. HVNR EDMO Group of four pellets below. (*Obv.*
+EADREDREXD)
R 18.5 grs. Acquired 1922.
554. INCEL GARMO (*obv.* +EADREDRE+)
R 22.3 grs. Evans coll., from Killyon
Manor, Meath, find, 1876.
555. OSFE RDMO Rosette above and below.
R a fragment. Presented 1917.
556. OSFAL LDMO Rosette above and below.
R 20.7 grs. Evans coll., from Killyon
Manor, Meath, find, 1876.
557. OTIC+ MONE
R 23.5 grs. F. W. Hazluck bequest,
1920.
558. ðYRM ODMON Cross between annulets across
field, rosette above and below (*obv.* EADRED
REX)
R 25.1 grs. Evans coll., from Killyon
Manor, Meath, find, 1876.
559. VVILAL FMON Cross between annulets across field,
rosette above and below (*obv.* EADRED REX)
R 21.4 grs. Evans coll., from Killyon
Manor, Meath, find, 1876.
560. FINEB REHTM
R 17.6 grs. Purchased 1912.

Type ii with floral reverse seems to be a wrong attribution; the coin described (B.M.C., 103) and figured on p. 154 is a coin of Edward the Elder from which part of the king's name has been cut away.

Type v.

Obv.—Crowned bust to right +EADRED REX

Rev.—Small cross pattée.

Exeter.

561. +ΛΖΡΕΜΟΝΕΙΙΧ (*obv.* Α for Λ)

At 22.6 grs. Montagu sale, 1895, lot 673 ;
Brice coll.

No mint name.

562. +ΜΚΙΙΕΜΟΝΙ (*obv.* inscription ends RE).

At 19.5 grs. Evans coll., from Irish find,
1862 (*Num. Chron.*, 1863, p. 51,
No. 27).

EADWIG (955-959).

Types i, ii.

Obv.—Small cross pattée ΕΑΔΥΥΙΟ REX*Rev.*—Three crosses between two lines of inscription, three pellets above and below. Mint, when added, is inserted among, or in place of, the three crosses.

Hertford ?

563. ΑΒΕ. ΝΕΓ. In centre: +Η+ΙΡ+ (*obv.* extra cross pattée in field).

At 20.7 grs. Montagu sale, 1895, lot 696 ;
Brice coll. ; Bergne sale, 1873, lot 213 ;
Durrant sale, 1847, lot 43.

York.

564. ΕΑΔΜ ΥΝΔΜ In centre: ΟΝ+ΕΟ Rosette above and below (*obv.* +ΕΑΔΥΥΙΟΕΡΕ)

At 21.0 grs. Evans coll., from Irish find,
1862 (*Num. Chron.*, 1863, p. 51,
No. 33).

The coin of Froðric (B.M.C., No. 10) should, I think, be attributed to the Chester mint. The reading of the mint is ΕΤΟ or, perhaps, ΕΓΟ (for ΛΕΟ). Cf. the Chester coins of Eadgar.

No mint name.

565. $\mathfrak{R}EZLV LFMO$ (*obv.* + $\mathfrak{EADPIRE}+\mathfrak{M}$)

At 21.3 grs. Evans coll., from Irish find,
1862 (*Num. Chron.*, 1863, p. 51,
No. 35).

566. $\mathfrak{R}ERE MODM\bar{O}$ (*obv.* inscription ends $\mathfrak{RE}\cdot$).

At 14.0 grs. (slightly chipped). Acquired
1922.

Type v. *Obv.* Small cross pattée. *Rev.* Rosette of
pellets.

Exeter.

567. *Obv.*—+ $\mathfrak{EADVVIE RE}$

Rev.—+ $\mathfrak{R}LFSICEMONEX$

At 20.4 grs. Montagu sale, 1895, lot 695.

G. C. BROOKE.

XVI.

THE TWO MINTS AT YORK.

THE importance of the Mint of York can hardly be overestimated, as it was the great northern centre for the distribution of money. The origin of the mint is unknown, but the coins tell us that it goes back to the seventh century. It is certain that it is the first mint of which we can definitely date the coins. In this connexion the sceat of Archbishop Egbert and his brother King Eadbert will be in everybody's memory, and the later stycas of Archbishops Eanbald and Wigmund. The mint was active during the whole Saxon and Norman periods and also during the reign of Henry II.

In the short-cross issue York, with other mints, closed down in 1223 and reopened with the large coinage of 1248, closing again with other provincial mints in, or about, 1253. York coins are in evidence occasionally during the reign of Edward I. We know nothing of a coinage at York during the reign of Edward II.

During the earlier years of Edward III the mint was occasionally active. It was not until shortly after 1351 that York began to play the important part in the coinage that became its lot during the remainder of the Plantagenet period.

It is important therefore to try and get some idea of the constitution of this York mint. The subject is a difficult one, as there is but little documentary

evidence. One can only make a guess from the coins themselves.

It is a well-known fact that for some part of its existence there were two separate establishments in the mint, one belonging to the king, the other to the archbishop. Whether this was so from the earliest times we cannot be sure. While the archbishops were striking stycas the kings were doing the same thing at York.¹ Later, when stycas are superseded by pennies, the names of archbishops are unknown on the coins. Danish kings' names, however, are in abundant evidence. There seems to have been no distinctive mark to separate an episcopal from a royal coin of York until the reign of Edward I, when the well-known York quatrefoil first appears. This does not mean that the archbishop's mint was in abeyance during this long period, but simply that there were other means of recognizing his coins if necessary. It need scarcely be said that the moneyers' names were the means. These were of course known to the mint authorities, but we can only rarely recognize them now.

The Anglo-Saxon coins of York cannot be divided into two mints. Even in the reign of Edward the Confessor the York annulet does not help us to distinguish an archbishop's coin from a king's coin, as all the coins are marked with the annulet in the types using this mark.

It is due to the mere accident of the preservation of the document to be found in John of Oxenede's chronicle and again in the Red Book of the Exchequer that we are able to identify a York archiepiscopal

¹ Mr. Symonds tells me that the Royal Mint was in the Castle and the Archbishops' mint in their palace outside the city walls.

coin of long-cross type. Tomas is the name of the moneyer.

After the reform of the coinage in the reign of Henry II (short-cross issue) and before 1351, York, in common with other mints, was only called on to produce when there was some special reason for coinage. Thus we find no York coins of the late period of the short-cross issue. When this issue was demonetized in 1248 York, in common with many other mints, was called upon to help in bringing out the new long-cross coinage. The work of transforming the coinage took perhaps three or four years, and then York and the other mints recently called on were all shut down. Precisely the same thing occurred in the reign of the first Edward, as a larger coinage occasionally required more mints. This is particularly noticeable in Type IX (date about 1300) when a number of mints were reopened to replenish the nation's coin. York was one of these along with Exeter, Chester, Hull, &c. The work was evidently finished quickly and the mints closed almost at once; some of them for ever.

It is during this reign (Edward I) that we get our first glance at the dual formation of the mint at York. Coins both with and without the quatrefoil occur in Classes II, III, and IX. Except for the quatrefoil (and occasionally a cross on the king's breast) the coins do not differ. The quatrefoil without doubt is the mark of the archbishop's mint at York and practically the only mark; it has no reference to a particular archbishop.

After the coins of Class IX there is no evidence of any York coins till 1331. This seems at first sight somewhat surprising, but it must be remembered that

the only mints at work were London, Canterbury, Durham, and Bury St. Edmunds, the four mints which had had the task of regular provision of pennies for the country for close on 100 years.

Now in 1331 Archbishop Melton (1317-1340) claimed his dies. The claim was resisted by the Exchequer authorities, as stated by Messrs. Fox in *B.N.J.*, vol. x, on the plea that the king had not now, as formerly, a mint at York. The objection, however, was overruled by the king and the archbishop got his dies. The coins struck from these dies are the rare York pennies with quatrefoil in the centre and three tiny extra pellets in one quarter of the reverse. Messrs. Fox tell the story of them. With these rare coins were also issued equally scarce pieces from the four mints already mentioned, and then all coinage of pence ceased. The mint accounts until 1344 are entirely concerned with halfpence and farthings (I am not referring to gold).

From 1344 till 1348 the florin-type pennies were in issue. London alone issued large quantities, but Canterbury, York, Durham, and Reading contributed in small numbers. The York coins only vary from the coins of the other mints in having the quatrefoil on the reverse. There are no York coins known without the ornament, and those with it give us no variants. These pieces were issued under Archbishop Zouche (1342-1352), *circa* 1345. Following the florin type came the coinage of 1351 with all its new features, groats, half-groats, &c. London and Durham divided the supply of pennies when first issued, and it seems to be a rather surprising matter that York was not called in. The life, however, of Archbishop Zouche supplies the explanation. He was excommunicated by

the Pope for supporting a candidate for the deanery of York against the Pope's wishes. This excommunication, pronounced in 1349, lasted till just before his death in July, 1352. Good reason therefore for his mint having had no share in the new coinage of 1351.

My own idea of the result of the excommunication of Zouche was (a) that a new archbishop could not be appointed, and (b) that in the interim it would have been impossible to use the archbishop's mint. A royal mint had not been re-established and consequently there was no coinage. When Zouche died in 1352 his successor was found in John Thoresby, bishop of Worcester. He was appointed to York on Feb. 13, 1353 (Close Roll), but apparently he did not get his full rights until the following May. A royal mint was established at York, and was open from July 1353 till May 1355.

We have the accounts of the Royal Mint (Crump and Johnson in *Num. Chron.*, 1913, pp. 234-235), from July 14, 1353, until May 26, 1355. We also have the coins: groats, half-groats, and pennies. These agree entirely with certain London coins of the same denominations and they agree with each other in every particular, initial cross, epigraphy, &c. The pennies have no quatrefoil and no marks of any sort. The initial crosses are of two forms, one evidently made from a broken punch used, before it was broken, for the 1351 coinage on all the London and Durham coins; the other a neat compact cross, quite unmistakable. The "broken" cross is used with a set of letters which do not resemble those on the 1351 coinage. The "second", or compact, cross again is associated with another new set of letters. Groats, half-groats, and pennies, without quatrefoils,

occur at York with both initial crosses, and muled coins also of the larger pieces. Here again London is in agreement with York, but we can go a step backwards in London as there are mules showing the unbroken cross with its normal lettering combined with the broken cross and the letters belonging to it. We can now say definitely that the broken cross preceded the new form of compact cross immediately. Our present object in establishing the relationship of these two crosses is to be able to place a penny of York with a quatrefoil in its proper position. This penny bears the broken initial cross and the corresponding letters belonging to it. It is therefore an archbishop's coin and the mark places it early. There are no quatrefoil pennies with the compact cross and very few of the Royal Mint pennies with the broken cross. This shows that the establishment of the York Royal Mint must have taken place just before the change of the initial cross. As no archiepiscopal coins are known for some years later, I think we are justified in believing that the opening of the Royal Mint was simultaneous with the closure of that of the archbishop. Therefore I attribute this early coin to between May 1353, the earliest date when Thoresby could have minted, and July 1353, when the Royal Mint opened.

After May 1355 Royal Mint coins of all descriptions disappear, and then after a period the archbishop's pennies with his quatrefoil are found in abundance. Be it noted that the pennies without quatrefoil only occur in periods when larger silver coins were issued at York.

Thoresby and his successors in the see of York continued to supply the greater part of the penny currency right down to the reign of Henry VII.

Pennies without the quatrefoil appear rarely. The first of them that I am aware of is the penny of Henry VI of the annulet coinage, with a fleur-de-lis each side of the neck. This, like the pennies of Edward III, was issued along with York groats and half-groats; halfpence too were now issued. It is obviously a royal penny and it differs from the archbishop's coins in having annulets in two quarters of the reverse where only one annulet is to be observed on the archbishop's coins; also there is no quatrefoil. Whether the reopening of the Royal Mint at this time caused the closing of the ecclesiastical one I cannot say, as the coins at this period are not sufficiently classified to form a judgement. There are no larger coins of York during the remainder of the reign of Henry VI, so we must suppose that the Royal Mint remained closed until it was reopened by Edward IV for coining light money.

There are certain York coins of Henry VI of the pine-cone mascle issues without quatrefoils or other marks referring to ecclesiastical origin. These have been referred to a royal mint. I do not think myself that this is correct, and I should prefer to call them *sede vacante* coins, or else coins struck by a king's receiver put in for some other reason than the archbishop's death. In either case the coins belonged to the archiepiscopal mint, but as the archbishop had not the use of his temporalities and as coins had to be supplied, his special mark, the quatrefoil, was not used.

These coins may belong to the period when the see was vacant for three years between 1423 and 1426.² It

² Archbishop Henry Bowett died in 1423; his successor, Richard Fleming, was never confirmed in his appointment by the king.

may be urged that in placing them so early I am not sufficiently accounting for the time during which the annulet and rosette coins were in use. An answer to this objection is that, although we have large numbers of these two early coinages, we have practically no distinct varieties. There are mules, but otherwise the annulet-trefoil coins of Calais are almost the only variety.

After these coins without the quatrefoil, the regular series of archbishop's coins continued right to the end of Henry VI's first reign. John Kemp held the see from 1426 till 1452, and there was nothing during these years to cause the removal of the quatrefoil.

The reign of Edward IV (1461-1483) provides many examples of unusual York pennies. The occupants of the see were:

1. Archbishop William Booth, 1452, died Sept. 12, 1464.
2. Archbishop George Nevil, March 15, 1465, died June 8, 1476.
3. Archbishop Laurence Booth, Oct. 1, 1476, died May 19, 1480.
4. Archbishop Thomas Rotherham, Oct. 3, 1480, died May 29, 1500.

The dates given by Ruding for the indentures of Edward IV are:

1464. Aug. 13. Pat. 4 E. IV, pt. 11, m. 16. The 108 gr. nobles were valued at 8*s.* 4*d.* The silver was to be struck at 12 gr. to the penny.
1465. Mentioned in Pat. 9 E. IV, pt. 1, m. 20. The noble, 120 gr., valued at 10*s.* The angel at 6*s.* 8*d.*

We know nothing of this indenture of 1465, except that it is referred to in that of 1469. The indenture itself cannot be found, and it does not appear to have been enrolled.

In July 1465, however, commissions were given to the mint masters of Bristol, Norwich, and Coventry to take coiners, workmen, and labourers for the work of the three mints for the coinage of gold and silver. Pat. Roll., 5 Edw. IV, pt. 1, m. 5. This arrangement must clearly have followed the preparation of London for striking the new coinage, so that we may perhaps conclude that the missing indenture was before July 5, 1465, the date of the commission. York is not included or referred to. Although we do not know the precise date of the 1465 indenture, we do know the coins which were ordered to be struck. They are Rose nobles or Rials, wt. 120 gr., and the halves and quarters. The silver coins were groats and smaller coins. The gold and silver resemble each other closely in detail. No gold coins of the weight of 108 gr. to the noble can be referred to the indenture of Aug. 1464. The only two known 108 gr. nobles of Edward IV must be referred to quite the beginning of the reign as they, except in name, are practically identical with the cross and pellet coins of the latest issue of Henry VI.

The absence of any gold of 1464 may be due to two reasons: (a) disappearance in course of time; (b) the inadvisability of striking any under the terms of the indenture. Gold was appreciating rapidly in value and within a year it had risen so considerably that the 120 gr. noble was valued at 10s. The probabilities are in favour of the second alternative. If no gold was struck and the later gold and silver are in agreement, it follows that little or no silver was struck under the terms of the 1464 indenture. If this be the case we have here an indenture, 1464, which was not acted on, in the same way that a later indenture, 1542,

was a dead letter, as was lately clearly shown by Mr. Brooke when he attributed all the third coinage of Henry VIII to an indenture of the year 1544, and showed that the old coinage of 1526 was still continued in spite of the 1542 document.

These references to the indentures are given to show the possibilities of George Nevil having had time to strike pennies of heavy weight. He succeeded William Booth, who died Sept. 12, 1464, and was granted full temporalities on March 15, 1465.³

Reference must be made to some of the York pennies. The early period is exemplified by a coin of the general type, viz. large head of the king facing, portions of Edward's name and titles are visible. The coin has a quatrefoil each side of the neck. Initial mark, a rose. Reverse: DIVITIS EBORACI, quatrefoil in the centre. Much worn and somewhat clipped; wt. 13.1 gr.; struck from London made dies. This is obviously a heavy coin of William Booth.

Mr. Walters has described another coin which only differs in the absence of the quatrefoil on the reverse, again i. m.⁴ a rose; wt. 13.5 gr. My view of this coin is that it should be a *sede vacante* coin between William Booth and George Nevil. Mr. Walters places it to the Royal Mint. I might, however, point out that there is no evidence of the Royal Mint being at work at the time. There are no gold coins and no silver coins known from the York Royal Mint before the issue of light coins. The object of these notes is

³ There are undoubtedly heavy pennies with Nevil's mark, G and key; they are all of rough (i. e. local) work and may have been struck between Sept. 1464 and March 1465.

⁴ i. m. here and throughout = initial mark.

not so much to describe the varieties of coins from the York Mint as to account for unusual coins for which some explanation may be offered to account for the unusual characteristic observed. The unusual coins that I have noted are (a) without quatrefoil, (b) with quatrefoil and without archbishop's initial : (c) without any marks.

Obv. EDWARD DI GRÆ REX *Rev.* CIVITAS EBORACI

- | | |
|--|--------------------------|
| (a) 1. i.m. rose, quatrefoil at sides of neck | No quatrefoil in centre. |
| 2. G and key at sides of neck, i.m. cross pierced | " " |
| 3. No symbols at sides of neck, i.m. rose | " " |
| 4. No symbols, i.m. annulet | " " |
| (b) 1. A trefoil each side of neck, i.m. lis | Quatrefoil in centre |
| 2. A quatrefoil each side of neck, i.m. cross over lis | " " |
| 3. No symbols, i.m. ? | " " |
| 4. No symbols, i.m. lis | " " |
| 5. H and leaf, i.m. rose | " " |
| 6. No symbols, rose on breast, i.m. rose | " " |
| 7. ? and key, i.m. heraldic cinquefoil | " " |

Some of these coins can be accounted for: thus *a 4* is clearly a Royal Mint coin, *a 1* has already been referred to as *sede vacante* between Booth and Nevil. To account for most of the others some consideration of George Nevil's activities must be referred to. He and his better known brother, the king-maker, were in high favour with the king until the intended marriage with Elizabeth Woodville. The Nevils opposed the idea, and from the time of the marriage, 1468, troubles arose between the Woodville faction and the Nevil family which resulted in the restoration of Henry VI. In 1470, after the return of Edward IV

to the throne, George Nevil was imprisoned for two months. In 1471 he was arrested and sent abroad for imprisonment, which lasted until 1475. He then made peace with the king and was restored to York. He died in 1476. During his absence from York the revenues were in the hands of the king. To continue the issues of the mint the king's receiver had to show that although they were archiepiscopal coins the archbishop himself was not at the head of affairs. One way was to remove the archbishop's initials from the obverse, another way was to remove the quatrefoil from the reverse. In either case there was sufficient remaining on the coin to identify it as being from the archbishop's mint. To remove both initials and quatrefoil would have destroyed the identity of the mint. No. *a2* may well be placed to the early imprisonment of 1471; it still bears the initial *G* and a key but is without the quatrefoil; the initial mark would be correct for this period. Then came the two years of imprisonment. For the purpose of the trials of the pyx a possible number of varieties would be eight. The majority of the (*b*) class would be thus accounted for. The coin with *G* and leaf, already referred to this imprisonment by Mr. Walters, is a marked example of the device of the king's receiver to get a privy mark for the pyx trial. All the changes had been rung, and as a further mark was necessary something was added in place of the removed *G* and key.

George Nevil died on June 8, 1476. His successor, Laurence Booth, was appointed on Oct. 1 of the same year. His York coins bear *B* and key at the sides of the neck and a quatrefoil in the centre of the reverse. There are, however, a few pennies known without the quatrefoil. There is no story of trouble during his

tenure of the see, so that we cannot assume the intervention of the king's receiver. Booth died May 19, 1480, and was succeeded by Thomas Rotherham on Oct. 3, 1480. The coin therefore would well fit the *sede vacante* between May and October 1480. It cannot well represent the *sede vacante* between Nevil and Booth because, although it may have been suggested that Booth should be appointed, his name could not have been used with certainty until sanction was given to it.

Rotherham occupied the see from 1480 till 1500. Between 1480 and the death of the king in 1483 no trouble seems to have occurred, as a consequence all Rotherham's coins during this period bear his initial **T** and a key on the obverse and a quatrefoil on the reverse. After the death of Edward IV Rotherham for a time took sides with the widowed queen and was imprisoned. Our coins of Richard III promptly record the event of the intervention of the king's receiver on a coin which, though still showing the York quatrefoil on the reverse, is destitute of symbols on the obverse.

The reign of Henry VII provides several York pennies which instead of the usual York quatrefoil bear an **h** in the centre of the reverse. They were issued during Archbishop Rotherham's tenure of the see and do not vary otherwise from the quatrefoil-marked coins. As Henry struck no royal coins at this time at the York Mint, these ought to indicate some possible interference by the king's receiver. Unfortunately such information is not forthcoming as the story of Rotherham's life apart from College foundations is fragmentary.

Mention should perhaps be made here of the controversy, still unsettled, over the Rose and Martlet York half-groats of Henry VII. The reign of Henry VIII

provides a few examples of unusual York coins. One of them is Wolsey's groat without initials on the reverse. There is enough known of Wolsey's life to account for this variant.

Another coin without initials is Lee's half-groat.

With these coins the archiepiscopal mint of York finishes. There are no coins with marks attributable to an archbishop of York in succeeding reigns.

Before concluding, it is worth while to notice the almost entire absence of pennies from the York Royal Mint during the reign of Edward IV. Larger coins, groats and half-groats, were struck there in some abundance between 1465 and 1470, and a few were struck during Henry VI's restoration and shortly after, but with the exception of the coin with the annulet initial mark previously referred to, I know of no pennies. It is difficult to assign a reason for their absence seeing that the larger coins were issued. It may be that between the times of opening the Royal Mint, the archbishop's mint had struck such quantities of pennies that no more were needed. It is of course just possible that our collectors to-day miss these pennies owing to the accident of non-survival. One would also expect to find a York royal penny of Henry VI seeing that the groat exists. The absence of York royal pennies from Henry VII's time until the reopening of the mint after the end of the second coinage is amply accounted for by the absence of any large York coins. To sum up: the quatrefoil on York coins was always the archbishop's mark, not the mark of the city of York. Its absence did not imply a Royal Mint coin unless there were no other marks on the coin and larger coins were being struck at the same time at York.

XVII.

MEDALS OF NICCOLÒ ORSINI, COUNT OF PITIGLIANO AND NOLA.¹

[SEE PLATE XVII.]

THE medals of Niccolò Orsini, the famous military commander of the last quarter of the fifteenth century, afford an interesting example of the way in which revised (and seldom improved) editions of an original medal were issued to suit the altered circumstances of the person represented.

What is perhaps, in origin, the earliest of the medals² of this man is now represented only by a late cast in lead:

- (1) *Obv.*—•NIC•VRS•PIT•SVANE ET NOLE•COMES•
E•C•G• Bust l., bald, in cuirass, wearing chain across breast. Plain border.

Without reverse.

British Museum (George III). [Pl. XVII. 1.] Lead, 31 mm. After-cast, set into a moulded frame, making 45 mm. This cast is probably not earlier than the seventeenth century.

Niccolò is here described as Count of Pitigliano, Sovana, and Nola, and Captain General of the Church. He became Count of Nola in 1485. He had already commanded the Papal troops as early as 1482. In 1486 he received the bâton from Florence. It is unlikely

¹ My thanks are due to directors of the museums and of the owners of private collections for casts or photographs of many of the medals which are here recorded.

² In the following descriptions the nature of the stops in the inscriptions is not exactly indicated; they are often triangular.

that he would have ignored this dignity, and it seems therefore that this medal may have been made at the latest in 1485-1486. On his later medals he drops the title of Count of Sovana—a comparatively unimportant place near Pitigliano—but keeps the others. But my argument as to the date may be vitiated if there was ever a reverse to this piece, with room for other titles. Nevertheless, its modest size, compared with the other medals, favours an early origin.

The remaining medals of the Count all derive, in different degrees, from one original version, which is the following:

(2) *Obv.*—**NIC·VRS·PET·ET·NOL·COMES·SANTE·ROM·ECCLE·ARMOR·CAP.** Bust l., very bald, wearing plate armour over gorget of mail. Pearled border.

Rev.—**NIC·VRS·PETILIANI·ET NOLAE·COMES·REIP·FLOR·CAP.** Niccolò, bareheaded, in armour, riding r., pointing forward with bâton in r., accompanied by two halberdiers, one bareheaded, the other helmeted. The bâton extends between the **O** and **L** of **NOLAE**. Pearled border.

See Armand, ii, p. 64, No. 16; *Tresor de Numismatique, Méd. ital.* i, Pl. XXXVI, No. 5; Litta, *Orsini*, No. 52; J. de Foville, *Rev. Num.*, 1911, p. 450; Habich, *Med. d. ital. Ren.*, Pl. LXVI, No. 7.

Specimens: (a) Brescia, 43 mm.; Rizzini, No. 488. (b) Florence, 42 mm.; Supino, No. 196. (c) London, Brit. Mus. (George III), † 44 mm.; Keary, No. 64; *Sel. Ital. Med.*, Pl. 37, No. 3; here **Pl. XVII. 2.** (d) London, Victoria and Albert Mus., 4565-1857, † 42 mm. (e) Naples, 41 mm.; Rinaldis, No. 664. (f) Paris, 43 mm., *Rev. Num.*, 1911, p. 450, Pl. XI, No. 1; another, silver, 41 mm. (g) Vienna, 43 mm.

A specimen in the Museo Comunale of Pitigliano has been described as reading "Comes Rom. Eccle. arm. cap.", on the obverse, but this is doubtless inaccurately read, as indeed "Petilani" and "Flos." are obvious errors in the same description. G. Bruscalupi, *Monogr. stor. della Contea di Pitigliano*, ed. Fabriziani, 1906, p. 635.



FIG. 1. Medal of Niccolò Orsini, Mus. Civico, Brescia.

This medal must date from between 1486 and 1495. Next comes the following:

(3) *Obv.*—Similar to the preceding, the bust being from the same model; but the inscription has been entirely recut to read **NIC·VRS·PET·ET·NOL·COMES·SERMI·DVCA·DO·VENE·ARM·QV·CNE**. Pearled border.

Rev.—Similar to preceding; inscription entirely recut to read **NIC·VRS·PET·ET·NOLE·COMES·IN·EXERCITV·REGIS·PARTINOPEI·VIC·GEN** (the general's bâton cuts across the R of **EXERCITV** but does not interrupt the inscription). Pearled border.

Brescia †, 42 m. (Fig. 1); Rizzini, No. 489 (description inexact). Chased all over, but the bust less altered than in the other derivative versions. The tail of the R in **SERMI** extends under the M.

This version must date from shortly after Fornovo. Orsini was appointed by Alfonso II (Rex Parthenopeus) to the command of his army in 1494, and taken prisoner by Charles VIII, but escaped at Fornovo, and prevented the complete defeat of the Italians; after which, on Oct. 30, 1495, he entered the Venetian service. **QV** in the obverse inscription is an error for **GV**(bernator), as is made clear below.

- (4) *Obv.*—Similar to No. 2, from same model, but the inscription after **COMES** recut to read **SIRI·DV·DO·ARMOR·CAP·GNRA·LS·** Plain border.

Rev.—Similar to No. 2, from same model, but inscription recut so that it ends **COMES·SIRI·DV·DO·ARMOR·CG** Plain border.

Specimens: (a) Brescia †, 42 mm. Rizzini, No. 490 (description inexact); (b) Munich, 42 mm. [Pl. XVII. 3.]

Although the inscriptions on both sides of this version seem to have been chased throughout, the relative positions of the letters as far as **COMES** on the obverse and **NO** on the reverse have not been altered; the general's bâton on the reverse still interrupts the inscription after **NO**. The abbreviation **VE** was accidentally omitted after **DO**, an error which was corrected in the version next to be described; and, as No. 3 shows, **SIRI** is also doubtless an error for **SER**(enissim)l. The title is thus, "Serenissimi Ducatus Domini Venetiarum Armorum Capitaneus Generalis", and Foville's speculations (*Rev. Num.*, 1911, p. 450) about territorial names such as Sirico and Domicella are wide of the mark. The agreement of Orsini with the "*Serenissimus Princeps et Excellentissimus Dominus Augustinus Barbadigo Dei gratia Dux et inclitum Dominium Vene-*

tiarum", dated Oct. 30, 1495, and giving him the title of "*Gubernator Generalis*" of the Venetian army, confirms the above explanation (Bruscalupi, *op. cit.*, p. 637).

(5) *Obv.*—Similar to No. 2; bust from same model; inscription recut to **NIC·VRS·PET·ET
NOL·COMES SIRI·DV·DO·VE·ARMOR·
CAP·GNRALS·** Pearled border.

Rev.—Similar to No. 2, from same model; the general's bâton shortened; inscription entirely recut to **NIC·VRS·PETILIANI·ET
NOLAE·COMES·SIRI·DV·DO·VE·ARMOR·
·C·GE·** Pearled border.

Armand, ii, p. 64, No. 17, with misreading **SIR** on obverse. Van Mieris, i, p. 415.

Specimens: (a) Berlin, 42 mm. (b) Brescia, 43 mm.; Rizzini, No. 491. (c) Florence, 42 mm.; Supino, No. 197. (d) Paris, 44·5 and 41·5 (the larger has an extra rim); *Rev. Num.*, 1911, p. 450, Pl. XI, No. 4. (e) Mr. Henry Oppenheimer †, 42 mm. [Pl. XVII. 4]. (f) Formerly Spitzer, Sale Catal., iv, p. 171, No. 71 (41 mm.); description probably inexact.

On this version the error of the omission of **VE** has been corrected.

Of the above medals, Nos. 2 and 5 have been discussed by J. de Foville in the article in the *Rev. Numismatique* already cited. He would attribute their origin to Caradosso who, he thinks, may have seen Orsini between July 6 and Aug. 6, 1495, between the battles of Fornovo and Novara. The medal No. 2, on which Orsini is not yet in the Venetian employ, is the only one for which the claim of Caradosso can be considered; the others are merely new editions by a not too skilful hand that cannot be identified.

G. F. HILL.

MISCELLANEA.

J. T. WOOD'S COINS FROM EPHESOS.

THE Ashmolean Museum lately came into possession of a parcel of coins found in the course of J. T. Wood's excavation of the Artemision at Ephesos: and as these do not appear to have been recorded previously, and are of interest from the fact that they furnish some evidence as to the currency of the district at various periods, a summary list of them is given. The Greek and Byzantine pieces are described so far as possible in terms of the British Museum Catalogue, the Roman by the numbers of Cohen (and Sabatier for Arcadius).

I. GREEK.

Ephesos. (1) Æ. 15 mm. Type of B.M. 58/62: magistrate's name illegible. (2) Æ. 15 mm. Type of B.M. 58/62: magistrate's name illegible. (3) Æ. 14 mm. Type of B.M. 58/62: magistrate's name illegible. (4) Æ. 16 mm. Type of B.M. 83/5: magistrate's name illegible. (5) Æ. 17 mm. Type of B.M. 83/5: in ex. . . . ΙΙΝΟΣ (6) Æ. 15 mm. Type of B.M. 83/5: in ex. . . . ΛΟΣ (7) Æ. 13 mm. *Obv.* Bee in laurel-wreath. *Rev.* Stag standing r., looking back: in background, long torch: in field, Ν Π, in ex. [Μ]ΕΝΑΝΔ[ΡΟΣ] (8) Æ. 13 mm. *Obv.* as last. *Rev.* as last: in field [?] Σ, in ex.]. ΝΟ . . . [

Augustus.

(9) Æ. 18 mm. As B.M. 195, but *rev.* leg. ΑΡ ΧΙΕΡ ΕΥΣ|ΑΣ Κ Λ ΑΣ|ΕΦ Ε Τ ΡΥ|ΦΩ . . . (10) Æ. 21 mm. Type of B.M. 200, but *rev.* leg. ΑΡΤΕΜΙΔΩ ΡΟΣ|Ε ΦΕ| . . . ΝΕΙΤ ΗΣ

Claudius.

(11) Æ. 21 mm. B.M. 207.

Trajanus.

(12) Æ. 20 mm. B.M. 222. (13) Æ. 19.5 mm. As B.M. 222, but *obv.* leg. ΑΥΤΟΝΕΡΒΑ ΣΤΡΑΙΑΝΟΚΑΙCΑΡ

Hadrianus.

(14) Æ. 23 mm. B.M. 229.

Antoninus Pius.

(15) Æ. 37 mm. As B.M. 235, but *obv.* bust l. laur. in back view. (16) Æ. 19 mm. *Obv.* $\zeta\tau\alpha\iota\kappa\alpha\iota\ \gamma\alpha\upsilon\tau\omega\upsilon\eta\eta\epsilon\iota\upsilon\eta\iota\upsilon$ Head r. laur. *Rev.* $\zeta\delta\iota\omicron\varsigma\ \gamma\eta\epsilon\omega\kappa\omicron\rho\omega\eta\eta$ (ex.) $\epsilon\phi\epsilon\varsigma\iota\omega\eta$ Cult-statue of Artemis.

Faustina.

(17) Æ. 31 mm. B.M. 244.

Caracalla.

(18) Æ. 22 mm. *Obv.* $\zeta\alpha\upsilon\tau\kappa\alpha\iota\mu\alpha\upsilon\ \gamma\ .\ .\ .\ .\ .$ Bust r. laur. in back view. $\zeta\ .\ .\ .\ .\ .\ \gamma\ \cdot\ \eta\ \epsilon\omicron$ (ex.) $\kappa\omicron\rho\omega\eta\eta$ Artemis r. seizing fallen stag by horns.

Geta.

(19) Æ. 17 mm. As B.M. 288, but *obv.* leg. $\lambda\varsigma\epsilon\pi$ $\Gamma\epsilon\tau\alpha\kappa\kappa$, *rev.* leg. $\epsilon\phi\epsilon\varsigma\iota\ \omega\eta$

Elagabalus.

(20) Æ. 21 mm. *Obv.* $\zeta\ .\ .\ .\ .\ \gamma\ \tau\omega\eta\eta\epsilon\iota\omega\varsigma$ Bust r. laur. in back view. *Rev.* $\zeta\ .\ .\ .\ .\ (ex.)\ \epsilon\omega\kappa\omicron\rho\omega$ [River-god reclining l.

Maximinus.

(21) Æ. 17 mm. *Obv.* $\zeta\mu\alpha\epsilon\ \gamma\ \mu\epsilon\iota\omega\varsigma\alpha\upsilon\gamma$ Bust r. laur. in back view. *Rev.* $\epsilon\phi\epsilon\varsigma\iota$ (ex.) $\omega\eta$ Boar r. transfixed with spear.*Kolophon.* Trajanus. (22) Æ. 35 mm. As B.M. 45, but *rev.* leg. $\alpha\rho\tau\epsilon\mu\iota\kappa\kappa\lambda\alpha\rho\ \iota\alpha\kappa\omicron\ .\ \phi\omega\eta\eta\omega\eta\eta$ [circular emk., bee].*Magnesia.* (23) Æ. 14.5 mm. Type of B.M. 19/32; *rev.* above, $\mu\alpha\gamma$, in ex. $\tau\omicron$ (24) Æ. 19.5 mm. Type of B.M. 39; *rev.* above, $\mu\alpha\gamma\ \eta\eta$, below, $\delta\iota\omicron\ \nu\upsilon\varsigma\iota\omicron\varsigma$ | [. . . .]

Alexander.

(25) Æ. 21.5 mm. *Obv.* $\zeta\alpha\upsilon\tau\kappa\mu\alpha\upsilon\rho\varsigma\epsilon\upsilon\alpha\lambda\epsilon\epsilon\alpha\eta\delta\rho\omicron$ Bust r. laur. in back view. *Rev.* $\zeta\mu\alpha\gamma\eta\ \gamma\ \eta\tau\omega$ [Dionysos standing l. holding kantharos over panther in r., thyrsos in l.*Smyrna.* Tranquillina. (26) Æ. 21 mm. B.M. 448.*Samos.* Caracalla. (27) Æ. 29 mm. B.M. 259.

Gordianus III.

(28) Æ. 22 mm. B.M. 307/8.

Pergamon. (29) Æ. 23.5 mm. B.M. 149.*Aphrodisias.* (30) Æ. 19 mm. B.M. 49.*Iasos.* (31) Æ. 14 mm. *Obv.* Head of Apollo r. laur.
Rev. Hermias and dolphin r. : below, ? : whole in wreath.*Sebastopolis.* (32) Æ. 18 mm. B.M. 2.*Apamea.* (33) Æ. 21 mm. Type i of B.M., p. 74: magistrate's name off flan.*Hierapolis* (34) Æ. 13.5 mm. As B.M. 52, but *rev.* leg.
CIEPA ZΠO (ex.) ΛITΩN

Augustus.

(35) Æ. 16 mm. Type of B.M. 95/6: *rev.* leg. IEPAΠO |
ΛEITΩN | ΘEOKPI | TOΣ (cf. Imhoof, *Kl. M.* 238).*Sardis.* (36) Æ. 18.5 mm. B.M. 44 (?).*Tmolos.* M. Aurelius. (37) Æ. 24 mm. *Obv.* ZΟΥΗΡOC
CKAICAP Bust r. bareheaded. *Rev.* CCTPAHPAKΛ
ZEIDΟΥTMΩΛITΩN Veiled effigy to front between corn
and poppy (cf. Imhoof, *Lyd. Stadtm.*, p. 164, no. 3).*Naxos.* Julia Domna. (38) Æ. 26 mm. B.M. 22.*Illegible.* (39) Æ. 22 mm. Probably autonomous. worn
smooth [circular emk., ram walking r.]. (40) Æ. 36 mm.
Obv. Legend effaced: bust of M. Aurelius r. bareheaded. *Rev.*
Worn smooth. (41) Æ. 23 mm. *Obv.* Legend effaced: bust
probably of Elagabalus r. laur. *Rev.* Legend effaced: Tyche
standing r.

II. ROMAN.

Roscius Fabatus. (42) A den. Type of B.M. 3394 ff.
(symbols effaced).

Faustina jr. (43) A den. C. 155.

Sept. Severus. (44) A den. C. 461.

Caracalla. (45) A den. C. 315.

Gordianus III. (46) Bill. Anton. C. 404.

Decius. (47) Æ sest. C. 87.

Treb. Gallus. (48) Bill. Anton. C. 13.

Gallienus. (49) Æ den. C. 5: i. f. l. **B** (50) Æ den. C. 5: i. f. l. **B** (51) Æ den. C. 586: ex. **B** (52) Æ den. C. 667: ex. **N**

Salonina. (53) Æ den. C. 127: ex. **MS**

Claudius II. (54) Æ den. C. 7. (55) Æ den. C. 10: i. f. r. **P** (56) Æ den. C. 46. (57) Æ den. C. 50. (58) Æ den. C. 50. (59) Æ den. C. 54. (60) Æ den. C. 289. (61) Æ den. C. 301: i. f. l. **A**

Aurelianus. (62) Æ den. C. 100.

Dioeletianus. (63) Æ. C. 34: i. f. **HB**, ex. **XXI**.

Licinius. (64) Æ. C. 70: i. f. r. **A**, ex. **SMK** (65) Æ.

X

C. 74: i. f. r. **IIΓ**, ex. **SMHB** (66) Æ. C. 74: i. f. r. **IIΓ**, ex. **SMNΔ**

Constantinus I. (67) Æ. C. 250: ex. **SMKΓ** (68) Æ. C. 254: ex. **SMNΓ** (69) Æ. C. 254: ex. **SMNS** (70)

X

Æ. C. 292: i. f. r. **IIΓ**, ex. **SMANTS** (?). (71) Æ. C. 454: ex. **SMKΓ**. *Constantinopolis*. (72) Æ. C. 21: ex. **SMKΔ** (73) Æ. C. 21: ex. ?

Constantinus II. (74) Æ. C. 164: i. f. l. **Γ**, ex. **CONS**

Constans I. (75) Æ. C. 59: ex. **SMKΔ** (?) (76) Æ. C. 197: ex. **SMNS**. (inverted).

Constantius II. (77) Æ. C. 45: ex. ? (78) Æ. C. 45: i. f. l. **M**, ex. [·] **KE**. (79) Æ. C. 45: ex. ? (80) Æ. C. 46: i. f. l. **Γ**, ex. **SMKE** (81) Æ. C. 46: ex. **TSB** (*obr.* i. f. l. **Δ**). (82) Æ. C. 46: i. f. l. **Γ**, ex. **SMNB** (83) Æ. C. 92: ex. **CONSE** (84) Æ. C. 102: ex. **SMNB** (?) (85) Æ. C. 187: ex. **ALEΓ** (?) (86) Æ. C. 335: ex. **SMKA** (87) Æ. C. 335: ex. **CONSD** (?).

Constantius Gallus. (88) Æ. C. 9: ex. ?

Julianus. (89) Æ. C. 14: ex. ? (90) Æ. (C. 43) (**DNIVLIANVS NOBCAESAR**): ex. ?

Valentinianus I. (91) Æ. C. 56: i. f. l. palm, ex. **SMNA**

Valens. (92) Æ. C. 47: ex. **SMKΔ**. (93) Æ. C. 47: ex. **CONSS** (?) (94) Æ. C. 47: ex. ? (95) Æ. C. 47: ex. **ALEΓ**

Valentinianus II. (96) Æ. C. 9: ex. **MNB** (?) (97) Æ. (C. 30) (**DNVALENTINIANVSPFAVC**): ex. **CON** -- (98) Æ. (C. 30) (**DNVALENTINIANVSPFAVC**): ex. **SMNB** (?) (99) Æ. (C. 30) (**DNVALENTINIANVS PFAVC**): ex. [·] **MKA** (100) Æ. C. 73: ex. **ANΓ**

Theodosius I. (101) *Æ*. C. 21: ex. **CONSA**. (102) *Æ*. C. 21: ex. ? (103) *Æ*. C. 30: ex. **SMKA** (104) *Æ*. C. 30: ex. **CONS**- (105) *Æ*. C. 30: ex. **TESB** (106) *Æ*. C. 70: ex. **SMKΓ** (107) *Æ*. *Obv.* **DNTHEODO SIVSPFAVG** Bust r. diad. *Rev.* **VOT | XX | MVLT | XXX** in wreath: ex. **SMKA** (?)

Magnus Maximus. (108) *Æ*. C. 7: ex. ?

Arcadius. (109) *Æ*. S. 35: ex. **CO---** (110) *Æ*. S. 39: ex. **SMKB** (111) *Æ*. S. 41: ex. **CONSA** (112) *Æ*. S. 41: ex. **CONSG** (113) *Æ*. S. 41: ex. **SMK-** (114) *Æ*. S. 41: ex. ? (115) *Æ*. S. 41: ex. ? (116) *Æ*. *Obv.* **DNARCADI VSPFAVG** Bust r. diad. *Rev.* **VIRTVS EXERCITI** Emperor crowned by Victory: ex. **SMKA** (117) *Æ*. As last: ex. **SMKB** (118) *Æ*. S. 47: ex. **SMKΓ** (119) *Æ*. S. 47: ex. **SMNA**

Honorius. (120) *Æ*. C. 20: ex. **SMKA** (121) *Æ*. C. 22: ex. **SMKA** (122) *Æ*. C. 26: ex. **SMKΔ** (123) *Æ*. C. 26: ex. **TES-** (124) *Æ*. C. 27: ex. **CONSB** (125) *Æ*. C. 27: ex. **SMNB** (126) *Æ*. C. 27: ex. ? (127) *Æ*. C. 27: ex. ? (128) *Æ*. C. 28: ex. ? (129) *Æ*. C. 56: ex. **CONSG** (130) *Æ*. C. 56: ex. **SMKA** (131) *Æ*. C. 56: ex. ?

Barbarous. (132) *Æ*. 11 mm. *Obv.* Traces of bust. *Rev.* Cross in wreath. (133) *Æ*. 8.5 mm. *Obv.* Bust r. *Rev.* **A** in border of dots. (134) *Æ*. 7 mm. *Obv.* Traces of bust. *Rev.* As last. (135) *Æ*. 8 mm. *Obv.* Bust r. *Rev.* ? Monogram. (136) *Æ*. 8 mm. *Obv.* ? Bust. *Rev.* ? Monogram.

Illegible. (137) *Æ*. **FELTEMPREPARATIO** type: soldier stabbing foe. (138) *Æ*. **SECVRITAS REIPVBLICAE** type: Victory l. (139-141) *Æ*. **SPESREI PVB LICE** type: emperor l. (142-144) *Æ*. **SALVSREI PVBLICAE** type: Victory l. with captive. (145) *Æ*. **GLORIAROMANORVM** type: two emperors standing.

III. BYZANTINE.

Anastasius. (146) *Æ*. **K** of Constantinople. As B.M. 30/3, but *rev.* on r. **A**.

Justinus I. (147) *Æ*. **M** of Constantinople. B.M. 27/8.

Justinianus I. (148) *Æ*. **M** of Constantinople. As B.M. 79/80, but *rev.*, below, **Γ** (149) *Æ*. **I** of Cyzicus.

Obv. [ζ] ζ ANVSP Bust r. diad. *Rev.* I: above,
 A
 cross: on l. N: on r. Xx : in ex. KVZ (150) \mathcal{A} . \mathcal{E} of ?
 N
 O

B.M. 423/4.

Justinus II. (151) \mathcal{A} . K of Constantinople. B.M. 83.
 (152) \mathcal{A} . K of Thessalonica. B.M. 111. (153) \mathcal{A} . M of
 Nicomedia. B.M. 147.

Tiberius II. (154) \mathcal{A} . X of Constantinople. As B.M. 47/53:
 but *obv.* leg. δ MTI β C TANTPP (155) \mathcal{A} . K of Thessa-
 lonica. Type of B.M. 60/4 (date broken off). (156) \mathcal{A} .
 M of Nicomedia. B.M. 70.

Mauricius. (157) \mathcal{A} . M of Constantinople. As B.M. 37/41
 (*obv.* -RC -AVG), but *rev.*, beneath, Δ (158) \mathcal{A} . K of
 Constantinople. As B.M. 71, but *obv.* leg. DNMAV
 RICPP ---; *rev.*, beneath, A. (159) \mathcal{A} . K of Constantinople.
 As B.M. 75/7, but *obv.* leg. DNMAVRIC -----; *rev.*,
 beneath, Γ (160) \mathcal{A} . \mathcal{E} of Constantinople. *Obv.* ζ DNM-
 ζ ----- Bust r. diad. *Rev.* \mathcal{E} : to r., cross. (161) \mathcal{A} . \mathcal{E} of
 Constantinople. *Obv.* ζ DNMA ζ VRICTI Bust r. diad.
Rev. \mathcal{E} , to r., B

Phocas. (162) \mathcal{A} . M of Antioch. B.M. 103/4.

Heraclius. (163) \mathcal{A} . M of Constantinople. B.M. 138 (*obv.*
 δ DNNE β ER - -RACO): restruck on M of Mauricius of
 Constantinople. (164) \mathcal{A} . M of Constantinople. B.M. 139(?)
 (*obv.* leg. obscure): restruck on M of Tiberius of Nicomedia.
 (165) \mathcal{A} . M of Constantinople. B.M. 141(?) (*obv.* ---CONST,
rev. date obscure): restruck on XXXX of Phocas, year 8.
 (166) \mathcal{A} . M of Constantinople. B.M. 170. (167) \mathcal{A} . A of
 Constantinople. Type of B.M. 202/3: date off flan. (168)
 \mathcal{A} . M of Cyzicus. B.M. 263/4.

Constantinus V. (169) \mathcal{A} . B.M. 13/4.

Leo VI. (170) \mathcal{A} . B.M. 8/9.

Constantinus VII. (171) \mathcal{A} . B.M. 45. (172) \mathcal{A} .
 B.M. 52/3: restruck on Romanus I. (173) \mathcal{A} . B.M. 70/6.

Nicephorus II. (174) \mathcal{A} . B.M. 9/12: restruck.

Johannes I. (175) \mathcal{A} . B.M. 16/7. (176) \mathcal{A} . Type
 of B.M. 8/37: details obscure.

Basiliius II. (177) \mathcal{A} . B.M. 22. (178) \mathcal{A} . Type of B.M. 21/3: details obscure.

Constantinus X. (179) \mathcal{A} . B.M. 18.

Nicephorus III. (180) \mathcal{A} . B.M. 12/21.

Michael VIII. (181) \mathcal{A} nomisma. As B.M. 6.

Illegible. (182) \mathcal{A} nomisma. Emperor and St. George type.

IV. ORIENTAL.

Crusaders. (Baldwin II of Edessa.) (183) \mathcal{A} . 24 mm. *Obv.* Bust of Christ to front: single pellets on nimbus, five pellets on book: b. d. *Rev.* Cross of equal limbs, starred in centre, pellets at ends, floral decoration below: b. d. (cf. Schlumberger, pl. i. 13). (184) \mathcal{A} . 25 mm. *Obv.* Bust of Christ to front, St. Andrew's cross on nimbus, five pellets on book: b. d. *Rev.* Patriarchal cross, with pellets at ends in groups of one large and two small, floral decoration below: b. d. (cf. Schlumberger, pl. i. 14).

Cyprus. (185) \mathcal{A} . Fourteenth cent.

Arab. (186) \mathcal{A} . Eighth cent.: anon. of Syria.

Ottoman. (187) \mathcal{A} . Of Murad b. Urkhan. (188) \mathcal{A} . Of Murad b. Urkhan. (189-192) \mathcal{A} . Of Bayazid b. Murad. (193) \mathcal{A} . Of Mohammed II b. Murad. (194) \mathcal{A} . Of Mahmud II. (195-204) \mathcal{A} . Uncertain, fifteenth-sixteenth cent.

Unidentified. (205) \mathcal{A} .

ADDENDUM.

The following should be inserted after no. 167.

\mathcal{A} . K of Constantinople. As B.M. 204, but *rev.*, beneath, Γ .

It will be observed that more than half of the Greek bronze are of Ephesus; and that none of the coins of other cities come from any great distance: also that Roman "imperial" bronze coins are practically only introduced under Gallienus. A summary of the mints represented in the fourth and fifth centuries suggests that, naturally enough, Ionia was chiefly supplied with coinage from Cyzicus: there are 22 coins of Cyzicus, 12 of Nicomedia, 12 of Constantinople, 2 of Heraclea, 3 of Thessalonica, 2 of Antioch, and 2 of Alexandria. Under the early Byzantine emperors the mint of Constantinople was much the most important: from Anastasius to Heraclius there are 14 coins of Constantinople against 2 each of Cyzicus, Nicomedia, and Thessalonica, and 1 of Antioch.

J. G. M.

THREE ITALIAN MEDALS.

In connexion with Dr. G. F. Hill's "Notes on Italian Medals" in the *Burlington Magazine*, and his lists of medals "Not in Armand" in the *Archiv für Medaillen- und Plakettenkunde*, ii, 10-28 and 45-54, attention may be drawn to three medals in the Oxford University Collections (now in the Ashmolean Museum).

(1) Dr. Hill suggests (*Burlington Magazine*, 1912, p. 203, and pl. I, B & D) that the letters **P** and **F** on the portraits by Gian Marco Cavalli of the two emperors Frederick III (reverse of D) and Maximilian I (obverse of B) could only be explained on the assumption that they stood for Pater and Filius on a medal of which these two portraits formed the two faces. A brilliant example (\mathcal{A} , diam. 32.5 mm.)



in the University's collections confirms this. Another fine medal combines the obverse of D and the reverse of B.

(2) Maximilian I. \mathcal{A} ; struck: diam. 37 mm.; Wt. 26.27 gr. *Obv.* **MAXIMILIANVS CAESAR** Bust to r., crowned and cuirassed. Pearled border, and outer circle to legend.

Rev. **SAZENO PROTECTOR VERONAE**; in exergue, 1516. The saint, mitred and nimbed, seated facing, blesses with r., and in l. holds the pastoral staff and a fishing-rod with a fish caught on the hook. Pearled border; inner and outer circles to legend.

The types closely resemble those on a gold ducat of Verona shown in outline in *Corpus Nummorum Italicorum*, vi, 280, and pl. XXV. 6, except that the bust on the obverse is reversed.

(3) Philip II of Spain. Oval; Æ, cast; diam. 49 × 42 mm. *Obv.* PHILIP·II·HISP·V·S·NOVIQ·ORB·REX·AET·S·AN·XXX (i.e. 1557). Bust of Philip II to L, as on Poggini's medal (Habich, *Die Medaillen der Italienischen Renaissance*, pl. LXXX. 3); pearled border.

Rev. VENATIO; in exergue AFRICA; traces? of signature CPF; pearled border. The type closely resembles Poggini's medal with HINC VIGILO reverse, but the horseman has cuirass with flaps instead of wings, and a lion (or panther) replaces the Chimaera.

E. T. LEEDS.

NOTES ON ZIZ AND ZUZ.

ZIZ.

ON pages 129 et seq. of the *Numismatic Chronicle*, Part II, 1925, Mr. A. H. Lloyd has dealt with the significance of the inscription 𐤆𐤆 = Ziz found on certain Siculo-Phoenician coins; the conclusion to which he comes being that it means "Shiner", probably a colloquial term used among the early Semitic settlers in Sicily to denote a silver coin. Such a theory is, I think, very much open to doubt.

Let us consider whether Ziz could by any possibility be the name of a coin. Ziz is from a Semitic root which has a variety of meanings, e.g. a flower, a wing, to bloom, a gold plate, a shining or projecting plate. Professor Nowack in his *Lehrbuch der Hebräischen Archäologie*, 1894, renders Ziz thus: "A golden diadem encircling the mitre of the Jewish High Priest, and bearing the inscription 'Holy to the Lord'." Although "shining", as emphasized by Mr. Lloyd, is one variant of the meaning of Ziz, it will be seen that this is not the whole idea contained therein. Its significance of "brilliance" is also specifically that of gold.

It should be remembered that the general term throughout the whole Semitic world for money was 𐤆𐤃 = Kesēph = Silver, and this word occurs in inscriptions from all parts of that world from the celebrated Lion Weight of Abydos in the fifth century B.C. right down to modern times. It is found also in the Jewish sacred and other writings.

The word "Kesēph" being in such universal use, there was no need for the Siculo-Phoenicians to have coined a new term for money. It was also not a usual practice of the Semites to place inscriptions on their coins expressive of denomination or value. It is difficult, indeed, to see

why the Siculo-Phoenicians should have inscribed their coins with the word "money" irrespective of the size or value of the coins. It could have served no useful or rational purpose, and would never have commended itself to such a practical people. The modern instances quoted appear to be irrelevant to the question. The "Shiner" in English was, at any rate, only a slang term for certain coins which were otherwise properly named and recognized; while the rupee was quite correctly named also "Silver Coin", as the rupee is so called from the Hindustani word for silver.

Taking everything into consideration, there are very slight grounds for assuming ZIZ to be a monetary term. In no Semitic inscription yet discovered does this root occur in such a sense. What then does ZIZ signify, and why does it appear on coins of Panormus, to which city it can with certainty be attributed? It should be understood that a Semitic root-word is capable of wide interpretation, and takes in all possible expansions both of actual and figurative meaning. The meanings already given—flower, shining, golden diadem—imply something of outstanding importance, and in adopting "shining" as a comprehensive rendering we should not restrict ourselves to a prosaic idea limiting it to the shining of a new coin, but take it in its wider sense, as illustrious or pre-eminent. This would then apply admirably, not indeed to the coins, but to the great port from which the coins emanated. The Greek name "Panormus", baldly translated "All Harbour", would then assume some more specific significance, such as the "Paramount Port", and this would well describe the principal city or settlement of the Phoenicians.

Zuz.

Professor G. Salikowitz, writing in the *Jewish Gazette*, Oct. 19, 1923, in a long and interesting article in Yiddish on אײַשע געלט, "Jewish Money", details the money referred to throughout the Jewish writings, and under the heading זוז = Zuz describes this coin as follows: A small silver coin bearing the figure of a Greek god, Zeus (the Jupiter of the Romans). This would appear to be at least a rational suggestion of the origin of the name of a coin which was known to be a drachm. Its prototype might have been the Alexander drachm which circulated in large quantities in Palestine.

H. D. McEWEN.

SOME ROMAN HOARDS.

CORDOVA.

THIS find,¹ consisting of Roman and Celtiberian silver coins, was unearthed at Cordova in 1916, together with a number of silver ornaments.² It consisted originally of well over three hundred coins; the bulk of them, consisting of 235 denarii, 1 victoriate, 1 quinarius, and 82½ Celtiberian silver, were examined in the British Museum.

The following coins were included in it:

Denarii, 223.

Rome.²—Wreath (2), Club (1), no symbol (8), Crescent (2), Star (1), Au. (1), L. Coil. (1), Cn. Do. (2), S. Afra. (1), M. Atili. Saran. (3), Q. Marc. Libo (1), L. Semp. Pitio (3), C. Ser. (2), Sar. (1), Nat. (3), C. Ter. Luc. (3), P. Sulla (4), L. Sauf. (4), Nata (2), Flaus (9), L. Cup. (1), C. Antesti. (4), M. Iuni (5), C. Reni (10), C. Cur. Trige. (1), Crescent (1), L. Iuli. (2), Cn. Gel. (1), Sex. Pom. Fostlus (2), Cn. Lucr. Trio (3), M. Baebi. Q. F. Tampil. (7), C. Aug. (1), L. Trebani. (1), L. Minuci. (1), P. Calp. (2), L. Antes. Grag. (11), P. Mae. Ant. M. F. (4), M. Aburi. Gem. (4), C. Aburi. Gem. (2), M. Marc. (2), M. Acili. Balbus (1), M. Porc. Laeca (4), Cn. Dom. (1), C. Cassi (1), T. Q. (3), Elephant's head (1), M. Varg. (1), T. Clouli (2), M. Acili (1), L. Post. Alb. (1), L. Opeim. (1), M. Opeim. (2), C. Serveil. (Roma) (2), C. Metellus (1), C. Pulcher (2), Ap. Cl. T. Mal. Q. Ur. (1) = 144.

Italy.—Anchor (1), Wheel (1), Pur. (1), Mat. (1), Victory in biga (2), C. Maiani. (1), Au. Ruf. (1), Carb. (2), C. Pluti. (3), C. Cato (11), Q. Minu. Ruf. (5), M. Fan. C. F. (10), M. Carbo (3), M. Calid. Q. Met. Cn. Fl. (3), Q. Curt. M. Sila. (1), Q. Fabi. Labeo (3), M. Tulli. (1), M. Sergi. Silus (5), M. Cipi. M. F. (6), L. Flamini. Cilo (6), C. Serveil. M. F. (2), Ti. Vē. (3), Roma, she-wolf and twins (1), Cn. Blasio Cn. F. (3), Q. Lutati. Cerco (1), L. Memmi. (1), M. Aquil. (1) = 79.

Victoriate. *Rome*.—No symbol (after 217 B. C.), 1.

Celtiberian silver: Iliberis (45), Osca (23½), Aregrat (2), Carabaca (1), Balsio (3), Arsa (1), Cose (1), Turiaso (1), Ilerda (1), Arse (1), Uncertain (3) = 82½.

¹ For these, compare an article by W. L. Hildburgh in *Archaeologia*, vol. lxxii, pp. 161 ff.

² The coins are described in the order of Grueber, *Catalogue of the Coins of the Roman Republic in the British Museum*: see especially vol. iii, pp. 2 ff., where they are set out under mints and dates.

The following thirteen coins—one quinarius and twelve denarii—apparently did not belong to the main body of the hoard: M. Cato (quinarius), L. Rubri. Dossen., M. Barbatus,² Augustus (C. and L. Caesares, 2), Tiberius (Livia seated, 2), Nero (Fortune), Trajan (Mars, Aequitas, Pax, 3), Hadrian (Minerva Pacifera), Septimius Severus (Marti Pacifero).

Three coins—one of L. Semp. Pitio, one of C. Metellus, one of Tiberius—were of tin.

The Cordova find is unmistakably similar to a number of Spanish hoards, assigned by Grueber to a date about 90-89 B.C. (cp. *B.M.C. Rep.*, iii, p. 2; *List of Finds*, Nos. 7, 8, 9—Cazlona, Oliva, Ricina); to these may be added Sierra Morena (*Num. Chron.*, 1921, pp. 179 ff.). This date is without doubt some dozen years too late.⁴ The common denarius of Piso and Caepio, certainly struck in 100 B.C., occurs in none of these hoards. The careers of the moneymen are in many cases probably, in one or two certainly (cp. C. Pulcher), inconsistent with Grueber's dating. The occasion of the burial of these hoards was the invasion of Spain by the Teutoni in 105-104 B.C., which was only beaten back after a desperate resistance.

The presence of so many Celtiberian coins, mostly in fine condition, is strong evidence for the view that they were still being struck at the time of burial. This native money was struck on the standard of the denarius, probably with the full approval of the Roman authorities. Livy mentions it under the name of "argentum Oscense" in accounts of booty from Spain from about 195 B.C. onwards (cp. Livy xxxiv. 10, 46).

HONITON.

The sixteen siliquae, described below, were found in a round receptacle of iron-stone in the garden of Mr. F. Pope, "Phileona", Honiton, Devon, and were shown in the British Museum in August, 1923.

Julian II.

Rev. *Votis V Multis X*, in wreath, $\frac{1}{\text{CON}}$, 34.2 gr.
(2.22 grm.). Cohen, 154.

² See Grueber, *B.M.C. Rep.*, vol. iii, p. 42, 16, 52.

⁴ It depends entirely on the assignment of the great issue of "L. Lic. Cn. Dom." to the year 92 B.C., in which the two men were censors. It may now be regarded as highly probable that the real year of that issue is 118 B.C. (*Num. Chron.*, 1924, pp. 45 ff.).

Valens.

Rev. *Vot. V. Mult. X*, in wreath, $\frac{|}{\text{C.AQ.}}$, 24.1 gr. (1.56 grm.). Cohen, 91.

Rev. *Urbs Roma*, $\frac{|}{\text{TRPS}}$, 31.2 gr. (2.02 grm.). Cohen, 110.

Rev. *Urbs Roma* (var.), $\frac{|}{\text{PLVG}}$, 26.5 gr. (1.72 grm.). Cohen, 109.

Gratian.

Rev. *Urbs Roma*, $\frac{|}{\text{TRPS}}$, 25.1 gr. (1.63 grm.). Cohen, 86.

Valentinian II.

Rev. *Virtus Romanorum*, $\frac{|}{\text{TRPS}}$ (2 coins), 29.7 gr. (1.92 grm.), 25.8 gr. (1.67 grm.). Cohen, 61.

Theodosius I.

Rev. *Virtus Romanorum*, $\frac{|}{\text{TRPS}}$, 23 gr. (1.49 grm.). Cohen, 57.

Arcadius.

Obv. *D. N. Arcadius P. F. Aug.* Bust, diademed, draped r.

Rev. *Virtus Romanorum*. Roma seated l. $\frac{|}{\text{TRPS}}$ (4 coins), 25.2 gr. (1.63 grm.), 23.3 gr. (1.51 grm.), 20.7 gr. (1.34 grm.), 20 gr. (1.30 grm.).

Magnus Maximus.

Rev. *Virtus Romanorum* (4 coins), 29 gr. (1.88 grm.), 26 gr. (1.68 grm.), 25.6 gr. (1.66 grm.), 23 gr. (1.49 grm.). Cohen, 20.

This little find seems to consist of two parts:

(1) Five coins of various mints of various dates from c. A. D. 360-375.

(2) Eleven coins, all of the mint of Treveri, of the years just after 388 B. C.

There are two varieties of reverse with the legend *Virtus Romanorum*; one, with Rome to front, which is common to Gratian, Theodosius I, and Magnus Maximus; the other, with Roma l., unknown to Magnus Maximus, but shared by Valentinian II, Theodosius I, Eugenius, Arcadius, and Honorius. This second variety, then, should fall after the death of Maximus, summer, 388. Valentinian II died on May 5, 392, and Honorius was made Augustus on November 20, 393; this gives us a probable later limit for our find. We can date it to the period A. D. 388-392/3.

TAVISTOCK SQUARE.

Workmen, excavating the site of a new hotel in Tavistock Square, Bloomsbury, in November, 1924, brought to light a hoard of some 700 Roman copper coins. No trace remains of the box (of tin?) in which they were said to have been found. The coins themselves, with the exception of quite a few which were given away in small lots, have, by the courtesy of Mr. Knott, Manager of the Imperial Hotel, Russell Square, been submitted to the British Museum for examination. Over one hundred coins were subsequently presented by him.

The distribution of the coins over rulers and mints is shown in the table on the opposite page.

Finds of the reign of Constantine I are not uncommon even in provinces like Britain, where peaceful conditions prevailed. One can instance the Bishop's Wood hoard, described in *Num. Chron.*, 1896, pp. 209 ff., the Little Orme's Head hoard, described in the *British Numismatic Journal*, 1907, pp. 17 ff., or the Langwith find, described in the *Numismatic Circular*, 1924 (Sept.-Oct.), pp. 432 ff.

The main interest of our hoard, however, consists less in its contents than in its place of finding—outside the Roman city, but well within the range of suburban occupation. Finds of Roman coins in and around London are not common. A list of the chief ones recorded in the *Numismatic Chronicle* may be of interest:

Coins found in the Thames (miscellaneous), *Num. Chron.*, 1841, pp. 147 ff.

Coins of Allectus, found at Old Ford, Bow, *Num. Chron.*, 1866, pp. 304 ff.

Denarii of Commodus to Trajan Decius (c. 500), found in Lime Street, *Num. Chron.*, 1882, pp. 57 ff.; 1883, pp. 278 ff.

Coins of the reign of Constantius II, found at Croydon (c. 2,800), *Num. Chron.*, 1905, pp. 36 ff.

Sestertii and "middle brass", Claudius I to Antoninus Pius (281), found at Croydon, *Num. Chron.*, 1907, pp. 353 ff.

Rumours of a fourth-century copper hoard at Highgate a few years ago reached the Museum, but the coins themselves never came to hand.

	Aquila.	Arelate.	Constanti- nopolis.	Cyzicus.	Heraclia.	Londinum.	Lugdunum.	Nicomedia.	Rome.	Siscia.	Thessalo- nica.	Ticinum.	Treveri.	Uncertain.	Total.
Licinius I	1	3	—	—	—	—	—	1	—	1	—	1	4	1	12
Constantine I	2	19	1	2	2	9	36	2	14	13	8	12	187	1	308
Crispus	—	3	—	1	—	17	19	—	7	8	3	5	49	1	113
Constantine II	4	10	—	—	1	21	14	—	2	9	5	3	75	4	148
Constantius II	—	5	—	1	2	—	1	2	3	—	5	—	25	2	46
Helena	—	—	—	—	—	—	—	—	—	—	—	1	24	1	26
Fausta	—	1	—	—	—	—	—	—	—	—	—	—	10	1	12
Constantino- polis	—	—	—	—	—	—	1	—	—	—	—	—	1	—	2
	7	41	1	4	5	47	71	5	26	31	21	22	375	11	667

ALLERTON BYWATER.

This hoard of nearly 300 Roman silver coins was discovered by a grave-digger in Allerton Bywater churchyard in the West Riding of Yorkshire late in 1923. A conspectus of the find is given below, followed by a list of coins under their numbers in Cohen's second edition.

Mark Antony	11	Brought forward	169
Nero	6	Hadrian	51
Galba	1	Sabina	7
Otho	3	L. Aelius Caesar	1
Vitellius	4	Antoninus Pius	30
Vespasian	54	Faustina I	19
Titus	10	Marcus Aurelius	8
Domitian	14	Faustina II	9
Nerva	4	L. Verus	1
Trajan	62	Lucilla	1
Carried forward	169	Total	296

Mark Antony. Legionary coinage of 33-31 B. C., struck in the East. Cohen, 27 ff. There are coins of *Leg. II*, *Leg. VII*, *Leg. XII* (2: one doubtful), *Leg. XV* (2), and 5 quite doubtful.

Nero. Cohen, 119, 314 (4), 316.

Galba. Cohen, 238.

Otho. Cohen, 7, 15 (2).

Vitellius. Cohen, 20, 111, 112 (2, *German. Imp.* on Obv.).

Vespasian. Cohen, 43 (4), 45 (3), 74, 115 (but Obv. *Vespasianus*), 121, 125 (2), 133 (but Obv. *Imp. Caesar Vespasianus Aug.*), 222 (5), 226 (3), 362 (2), 363, 364 (4), 366 (5, the figure on reverse is Pax), 368, 387 (3), 431, 561, 563, 574, 618 (but on Rev. Victory holds palm and crowns trophy).

Not in Cohen:

Obv. *Imp. Caesar Vespasianus Aug.* Head, laureate r.

Rev. *Cos. Iter. Tr. Pot.* Aequitas standing l., holding scales and rod (1), and

Obv. As above.

Rev. *Cos. Iter. Tr. Pot.* Pax seated l., holding branch and cornucopiae (10).

Both types are common.

One with Rev. completely obliterated. Obv. *Imp. Caes. Vesp. Aug. Cens.* Head, laureate r.

Titus. Struck under Vespasian. Cohen, 61 var. (Obv. *T. Caesar Imp. Vespasianus*), 65, 162 (the figure on Rev. is Pax), 332, 336.

Not in Cohen :

Obv. *T. Caesar Vespasianus*. Head, laureate r.

Rev. *Imp. XIII*. Bull butting l.

Struck in his own reign :

Cohen, 303, 304, 313, 334 var. (Obv. *Imp. T. Caesar Vespasianus Aug.*).

Domitian. Struck under Vespasian. Cohen, 47 (4), 49.

Struck under Titus. Cohen, 386, 397 var. (2, Obv. *Divi F.*).

Struck in his own reign. Cohen, 66 var. (Obv. *Domitianus Aug. Germanicus*), 189, 250, 280, 293, 575.

Nerva. Cohen, 3, 25, 48, 113.

Trajan. Cohen, 63, 68, 69 (4), 80 (2), 81, 84 (2), 85 var. (2), 86 (3), 87 (2), 89, 150 (2), 154 var. (2, Obv. *Traian. optim.*, one with aegis), 196, 228, 229, 240 (2), 241, 242, 270 (2), 272 (2), 274 (3), 277 var. (3, Obv. *Optimo*), 278 (2), 280 (2), 292, 301 (2), 302, 308 var. (2, Obv. *Traian. optim.*), 372, 402 (2), 404 (2), 417, 457, 529, 577 (2), 644, 645.

Hadrian. Cohen, 172, 212, 328, 332 (2), 358, 361, 374, 379 (2), 380, 381, 390, 395, 454, 462, 600, 614, 716, 717, 783, 788 var. (head bare r.), 816, 904 (3), 965, 989, 991, 1010, 1015, 1023, 1030, 1072, 1099 (2), 1118, 1119 (3), 1140, 1143, 1198, 1247, 1316, 1334 (2), 1335, 1353, 1437, 1460.

Sabina. Cohen, 3, 24, 25, 43 var. (no queue), 73 (2), 81.

L. Aelius Caesar. Cohen, 50.

Antoninus Pius. Cohen, 91, 123, 164 (2), 196, 197, 198, 263, 270 (2), 281, 288 (2, date of one doubtful), 344, 345 (2), 353, 357, 437, 491 (2), 802, 827, 856, 861, 874, 1016, 1039, 1127, and (with Marcus Aurelius) Cohen 22.

Faustina I. Cohen, 26 (2), 32, 34, 61 var. (not veiled), 78 (?), 101 var. (2), 116, 119, 120 (2?), 124, 128, 175, 215, 234 (3).

Marcus Aurelius. Struck under Antoninus Pius: Cohen, 25 var. (not draped), 110 (2), 451, 452, 721 (?), 764.

Struck in his own reign: Cohen, 508.

Faustina II. Struck under Antoninus Pius: Cohen, 24 (2), 44, 53, 184 var. (head l.), 266.

Struck under Marcus Aurelius: Cohen, 85, 111, 196.

L. Verus. Cohen, 155.

Lucilla. Cohen, 6 var. (*Concordia* seated l. holding *patera*).

The latest dated coin in the find was of the year A. D. 162. The only coin of special interest was the very rare *Patientia Augusti* of Hadrian (Cohen, 1010).
H. M.

WELSH BACK, BRISTOL, HOARD.

In my description of this hoard in Part II of the present volume I noted (pp. 245 and 252) three specimens of the shilling of James I with Crescent mint-mark. As gold only was coined during the period of the Crescent or "Half-moon" mark (see *Brit. Num. Journ.*, ix, p. 214), this was doubtless an error. One of the three specimens has been re-examined, and is found to bear the Rose mint-mark, this coin is in the Bristol Museum; a second is in Bristol Council House, and the third has gone back to the mass of the hoard for disposal.

L. W. G. MALCOLM.

REVIEWS.

Die Tetradrachmenprägung von Selinunt. Von WILLY SCHWABACHER, Mit 3 Lichtdrucktafeln. Frankfurt a. M. Mitteil. der Bayer. Num. Gesellschaft. 1925 (xliii).

THIS work upon the tetradrachms of Selinus is the author's thesis for his doctorate, which fact disarms the reviewer of certain grievances which he might properly cherish in regard to an inquiry of the kind independent of such directing and restrictive conditions.

In accordance with the practice made familiar by Regling, Tudeer, and others, and, in this country, by C. T. Seltman, in his works upon the coins of Olympia and of Athens, Dr. Schwabacher has handled his material by dies, and has sought, with much success, to establish their sequence. There is no other method so helpful of approaching the study of a mint, so long as the method is subordinated to common sense and due regard is had for ancient as contrasted with modern conditions of coin production. To postulate that only one pair of dies at a time was used to produce the principal coins of a mint, a second die only coming into use as and when its predecessor was worn out, is to assume the impossible, and conclusions flowing from that assumption and based upon die-couplings may be altogether misleading. Die-couplings overlapping groups may have chronological and other significance of considerable value, but the importance of couplings within the same group should not be greatly stressed.

The author has been fortunate, as he recognizes, in having for his foundation the fine series of twenty-three tetradrachms of the Berlin museum—the largest number in any public collection—and in having access to that museum's casts of coins in other cabinets and from past sales. In addition, he has been at much pains in collecting material from far and near which will be of permanent value to other numismatists, but, of course, he has not been able to achieve completeness. Absolute completeness would be a counsel of perfection, but it should be the ideal governing an enterprise which endeavours to present the dies of one denomination of one of the smaller mints and to catalogue

the examples of each die. The author seems to have had small encouragement in his inquiries addressed to certain Italian museums, but, confining the observation to Italy, there are missing from his list the three tetradrachms in the Bologna museum and the four examples in the Brera collections, in both of which instances experience has shown that Dr. Schwabacher could have counted upon the discharge of the proper functions of a museum. While these two cabinets would have added to the examples of dies already represented in this study, they would not have yielded additional dies or fresh couplings, but there are sources in England which Dr. Schwabacher has not examined, whose tetradrachms include dies and couplings not known to him, and some coins whose preservation is such as would have yielded him additional information and saved him from some errors.

Much space is devoted to examination of the artistic features of the types and their affinities in sculpture and painting, but there is no attempt to discuss the Empedoclean story in its relation to the types, the religious or other significance of the symbols, or, in any adequate measure, the question of signed dies. From an archaeological point of view, it might have been desirable that the study had included the treatment of these and similar matters even at the expense of omitting the chapters upon *Plastik und Malerei*. But this is probably one of those respects in which the author had to have special regard to the requirements of the examiners.

There are certain errors of detail, varying in importance. It is difficult to understand why, in the description of Q 1 on p. 5 and again on p. 32, the legend is made to terminate in N, seeing that the illustration, Pl. I. Q 1 a, shows it so clearly to end in Σ . The coin No. 1 a, from the McClean collection (Grose 2574), has not S 1 reverse but, obviously, S 2, and there is no coin in the Fitzwilliam museum answering to No. 2 a, other than the one wrongly placed as No. 1 a. The reverse S 19 β , Plate II, is not the same die as S 19 α on the same plate. S 19 β is the reverse of the Brussels coin No. 25 a, but it is certainly not that of 25 d or 25 g, both of which have the reverse S 19 α . There is another example of S 19 β in the Brandis Sale (Naples, 1922), No. 249. Q 13 has not a fish but a crustacean in the exergue; this is not a pedantic detail, for there is special significance attaching to it on this die. The obverse die of coin No. 42 (Bement 439 = Hirsch 32. 106) is not Q 13,

but is a die not illustrated on these plates; there are other differences, but it will suffice to say that, while the wheel-spokes of Q 13 chariot are at an angle of 45° with the ground-line, those of the die of coin No. 42 are parallel with and perpendicular to it. The author has examined 100 examples of Group I, and has found no instance of overlapping within the group, but such overlapping does exist in a coin which he has not seen: it is an example of Q 2 with S 10 in the Lloyd collection.

While it has been necessary to call attention to these slips and omissions there is no desire to magnify their importance, for there is as yet no publication dealing with the tetradrachms of Selinus which approaches this study by Dr. Schwabacher in fullness of description and illustration. The arrangement of the letterpress is good, and that of the plates could not be better, short of reproducing both sides of every die-coupling, which would add greatly to the cost of production. The little work should find a place upon the shelves of all students of Greek coinage, and the author would be adding to the debt under which he has placed numismatists if he could arrange for reprints to be available through ordinary commercial channels.

This type of numismatic research, so distinctive of continental training, has been too long neglected in Great Britain. Students of classical archaeology are encouraged to study particular sites and particular buildings, and are enabled in some cases to go abroad for those purposes, but in the study of ancient coins it is found sufficient that they should endeavour to grasp in a few short lectures the outlines only of the subject which deals with the most complete and best preserved original monuments that have come down to us from classical antiquity. For most students that is all that can be attempted, but there must be some of the more advanced in both old and new universities who, if their attention were so directed, would welcome the alternative of working a mint to preparing a site. Moreover, no Greek city's coinage can be adequately treated without consideration of its site and buildings, while dark places in the topography and architecture of many sites might be flooded with light from research addressed primarily to their mints. From the older universities, partly by tradition, but principally from the material they possess, more may be expected than from the new, and Cambridge in particular lies under special obligations laid upon her by her much-envied possession

of the splendid McClean collection which, for purposes of study, is unequalled by any save the great national cabinets. This great treasure, conveniently and beautifully housed, and being made completely accessible by Mr. Grose's admirable catalogue, is for practical purposes better known amongst foreign students than it is in our own country, while it could be made the foundation of a school of Greek numismatics which should rival the fame of and in some sort be complementary to the Cambridge School of Economics.

A. H. LL.

Sicilia Numismatica. Von WALTHER GIESECKE. 12 × 10, pp. 188. 27 colotype plates. Karl W. Hiersemann, Leipzig, 1923. Goldmark 36 (\$ 8.70).

THE author is already known to readers of the Chronicle as a worker in the Western field of ancient numismatics, and he brings the same ingenious industry which marks his special study of the Tarentine gold coinage and the Roman pound to bear on the problems of Sicilian numismatics. In this book his main interest is in currency as an economic instrument, in the standards to which it conforms and the relative exchange values of the metals employed. In point of method the author shows a welcome tendency to break with deductive metrology and to take his weights from the coins themselves. In spite of Viedebant's researches, however, he still accepts absolute weights (e. g. 17.46 for the Euboic Attic stater—somewhat overweighted!), instead of limiting points, and in determining weights he works by mere averages instead of by the frequency method. It is a more serious shortcoming that in many cases these averages are based on an inadequate number of particular pieces. With copper coins the greater variations in individual weights make the collection of a large mass of material especially necessary, and deductions based on only fifteen or twenty pieces cannot be regarded as satisfactory. Further, and this is fundamental, the author assumes the conception of a token coinage to have been quite outside the circle of ancient economic ideas; consequently the copper coins, equally with the gold and silver, must always have an intrinsic value equal to their face value, and if their weights vary in relation to the others it is due to a variation in the exchange values of the metals. As a general proposition

this seems untenable, and leads him into great difficulties. For example, the aboriginal unit of value in Sicily was of copper, which must have been selected, just as silver in Greece or electrum in Asia Minor, because it was ready to hand and relatively more abundant. The Greeks introduced currency in a new metal, silver, which *ex hypothesi* must have been relatively scarce in the early period. Its purchasing power in terms of copper should therefore have been high to begin with, and should fall more and more as the mass of silver in circulation increased. This is exactly what happens in Central Italy (where a silver currency supersedes a copper currency of full intrinsic value), but not, according to Giesecke, in Sicily. His results show an exchange value of 50-60:1 between copper and silver to begin with, rising to 60-70:1 in the fourth century, and 96:1 in the third—also incidentally a different ratio at the same time at different cities. A further consequence of this assumption is that a different explanation has to be given to the pellet marks of value on small silver and early copper coins, e. g. of Himera, and on the later fifth-century coppers of the same and other cities. On the first, they are explained in the usual manner as denominating so many ounces; but to make any sense of the weights of the later and much lighter coins, the author apparently treats the largest denomination, whatever its weight, in each case as a Chalcus (ounce = $\frac{1}{2}$ litra), and is consequently driven to explain the pellets as indicating that the coins are multiples of a still smaller unit. Allowance made for these fundamentals, the book suggests many interesting lines of thought. The whole subject bristles with difficulties, and the author often gives our preconceived notions a rude shake, but many of the solutions propounded will not, we think, meet with general acceptance.

Giesecke rightly emphasizes the connexions between the Sicilian and Etruscan silver weights, and points to the relation of the unit of the Chalcidian cities (a third of the Euboic stater) to the Etruscan coins of similar standard. Both, according to him, are based on a heavy litra, reckoning five litras to the unit. This is an interesting hypothesis: the Etruscan side of the question cannot be discussed here, except to say that if Giesecke had not overweighted his Euboic stater, and consequently its fifteenth part, he would have obtained an exact equivalent of the scruple unit of 1.137 grammes, and thus a much stronger case. What is the positive evidence for a heavy litra in North Sicily?

So far as I understand Giesecke's position it is twofold: first, a passage of Pollux, quoting Aristotle, to the effect that the *litra* was equivalent to an Aeginetic obol; second, certain enigmatic letters (marks of value?) on early coins of Himera of the unit weight in question. The passage of Pollux is so confused, and contains some other statements so demonstrably untrue, that it should be allowed no independent value—even so, an Aeginetic obol is nearer a sixth than a fifth of the Chalcidian unit. The argument, however, from the signs **V V** &c. on the coins of Himera which have puzzled numismatists so long, requires more serious consideration. Giesecke interprets them as 5 *litras*, and if the signs always appeared in this form his interpretation would be convincing. Unfortunately, there are several variants, e. g. **LV**, which ought to mean 50 *litras*, and **∩∩**, which might mean 10. It is a desperate remedy to dismiss these awkward forms in a foot-note as mistakes of illiterate die-engravers who did not understand the signs. Why should die-engravers be more illiterate than the mass of their fellows for whom the currency was intended, and if they did not understand the signs, why should the others? The final test is the coins themselves: the weights of the fractional currency of the Chalcidian cities indicate that like other Greeks they originally divided their unit into six small coins, not five, and that when they did adopt a *litra* it was the already known *litra* of 0.87 gramme. Giesecke indeed claims the first of these little coins as his heavy *litra*, reckoning five not six of them to the unit, though he has to confess that the actual weights of the coins never reach their proper level. But why should Sicilian "heavy *litras*" be consistently under weight when light *litras* and obols of the same period show no such tendency? Head's explanation of them as obols of the Chalcidian unit is surely the true one.

A very thorough treatment is given to the fourth-century issues of electrum, and here at least the fullness of the material collected (specific gravities as well as weights of 79 coins) deserves every praise. As a result, the proportion of gold to silver is surprisingly constant round about 50:50, and at a ratio of 11:1 the silver of the highest denomination is exactly equal to a decadrachm or a hundred *litrae*. This is surely the correct solution. The author also gives some reasons for assigning the whole coinage to Dionysius II rather than to Dion: he strikes us as less fortunate in his comparison of the Artemis head with that of Arethusa

on the earliest Kimonian decadrachm, which he appears to regard, in spite of its double signature, as a later work by a pupil of the master.

The second half of the book is devoted to an interesting survey of the coinages of the third century. The author finds the clue to its complications in the successive encroachments (punctuated by reactions) of Italian standards, culminating in the final victory of Rome. There are several happy suggestions (for instance, the explanation of the little silver coins with the signs XII and XIII as 2 and 3 Chalci), and his thesis that Hieron's coinage is based on the nummus, and not, as in the general view, on the litra, deserves a fuller discussion than can be given here.

The plates are good, and there are some useful appendices giving detailed weights of a few of the issues discussed: if the book had contained more of these its value as a quarry for future workers would have been greatly enhanced.

E. S. G. R.

Quellenbuch zur Münz- und Geldgeschichte des Mittelalters.
 Von WILHELM JESSE. Halle a. S., Riechmann, 1924.
 pp. 19 + 320, 16 collotype plates.

THIS volume makes no attempt to supply the want for a comprehensive edition of original documents relating to medieval coinage. It contains under 400 extracts which cover the whole period down to the end of the fifteenth century. The currencies of Germany are the central theme of the work, the coinage of other countries being admittedly only illustrated in broad outline. The collection of rather less than 250 extracts to illustrate the German currency from the ninth to the fifteenth century would seem, on the face of it, inadequate, but the value of the work depends on the wisdom of the selection and the adequacy of the references in the notes; these are matters which we may leave to the decision of German authorities.

Our function lies in the English sections which we propose to examine, bearing in mind the accessory part played by this portion of the work.

It is unfortunate that the references by which the extracts are cited are frequently not the most recent or standard publications. Thus, chronicles are quoted from Rymer's *Foedera* or Stubbs's *Select Charters*, though they may now be found in

the valuable "Rolls" series (*Rev. Brit. Med. Acv. Script.*); the most remarkable instance of this is the *Dialogus de Scaccario* which is quoted from Stubbs to the complete exclusion (even from the notes) of any reference to the edition of Hughes, Crump, and Johnson (1902) in which the introduction and notes are scarcely less valuable than the text itself. Similarly, the references contained in the notes, pp. 282-312, are many years out of date. Hawkins (he appears as Hawskins on p. 292) is quoted from the 1841 edition; a reference to the British Museum Catalogue, *Norman Kings* (1916), might have saved references to periodical publications; the author has apparently never heard of the *British Numismatic Journal* (first published in 1905) and consequently omits any reference to the standard works on short-cross, long-cross, and Edwardian pennies.

The selection of extracts is not altogether a happy one. In the fourteenth and fifteenth centuries proclamations and indentures, though few are still extant, are of first-rate importance. The only proclamation quoted is that of 1364, and the only indenture the Calais indenture of 1371, and in this case the author has had the misfortune to refer readers (p. 300, note to no. 267) to *Num. Chron.*, 1908, pp. 102 ff.; this is the Black Prince section of Hewlett's Anglo-Gallic coins, in which work the only reference to the Calais mint is the statement that the author has purposely omitted any reference to it as it belongs essentially to the English, not the Anglo-Gallic, series. Under no. 180 the date 1278, though correctly quoted from Trivet, should be corrected to 1279 by reference to other chroniclers. For the introduction of gold the abortive gold penny issue of Henry III is illustrated (leaving the more important coinages of 1344-1350 to a reference in the notes) by the extract relating to the petition of the Londoners and the consequent reduction of the gold coin from a compulsory to a permissive coinage. Both the writ ordering the proclamation of the gold penny and the evidence of its appraisalment to 24 instead of 20 pence are of more importance.

Though the author has set apart a section for the business and establishments of mints, there is no quotation of, or reference to, the important document of 1248 contained in the appendix to the chronicle of John of Oxenedes, which gives a full account of the establishment of the mints with names of officers, and sets out in detail the process for the trial of the money which, later perhaps, is familiar under the title of Trial of the Pyx. However, attention has already

been drawn to the unimportant part which is assigned to the currencies of the non-German countries, and one must not be too critical of omissions in a work which, under the comprehensive title *Die Münze in der Dichtung und wissenschaftlichen Litteratur*, collects only nine quotations.

On Plate IX the short-cross and long-cross pennies are interchanged, and the reference (on p. 318) should be corrected from 115 to 175.

G. C. B.

Civico Museo Correr. Catalogo della Raccolta Numismatica Papadopoli-Aldobrandini. Compilato da GIUSEPPE CASTELLANI. Vol. I, pp. xxiii+379. Vol. II, pp. 413. Portrait and 14 plates, $12\frac{3}{4} \times 8\frac{3}{4}$ in. Venezia, a Cura del Comune, 1925.

WHEN Count Nicolo Papadopoli-Aldobrandini bequeathed his collection to the Commune of his beloved city, he foresaw that, in order to serve a scientific purpose, it should be incorporated with the general collection already existing in the Museo Correr. He therefore made the condition that a detailed Catalogue should be compiled and published within three years of his death, and that the incorporation should not take place before this publication. He thereby set an example which all testators of really important collections would do well to follow; for nothing can be more exasperating to those who make scientific use of a public collection to find that it is split up into sections in order to perpetuate the glory of its benefactors. That result is much more effectively obtained by the publication of a catalogue such as the one before us. In this instance the numismatic world is the more fortunate in that the Venetian authorities were able to secure for the compilation the services of the veteran numismatist, who had worked so long with Count Papadopoli that there is no doubt but that he expresses the Count's views on every question of classification or attribution.

The Catalogue is done on a severely economical plan. Descriptions are dispensed with wherever possible, and references to standard works substituted. Metal, denomination, weight, diameter, and state of preservation are indicated. We miss, however, headlines to the pages, which would have made the book so much more convenient for reference, and the absence of which in the great Corpus of Italian

Coins we never cease to deplore. To each section are appended notes on remarkable points. Section VI (Venice and the Veneto) occupies 125 pages and numbers 4,365 pieces. Those who thought of Count Papadopoli as a Venetian specialist will be surprised to find that this is just about one quarter of the whole collection. Most of the Italian series are represented. Even where the Corpus and the Vatican Catalogue have already covered the ground, this book must be used as a supplement by all who desire a complete view of the coins; naturally, for the mints which have hitherto received less attention, such as Pesaro or Camerino or Naples and Messina—to choose a few at random—the number of coins requiring full description is much larger and the value of the book proportionately greater. The twelve plates illustrate a selection of the more important pieces. It is altogether a publication on which the Venetian authorities and Signor Castellani are to be congratulated.

G. F. HILL.

Handbuch zur Münzkunde der römischen Kaiserzeit. Von Dr. MAX BERNHART. 2 vols.: Textband 420 pp.; Tafelband pp. 38 with 102 plates. 8 × 11 in. Riechmann, Halle (Saale). 1926.

WE have little but praise for this finely produced book. It will be indispensable to student, to collector, and to curator. The author sets before himself the task of treating of the coinage of the Roman Empire from various points of view, communicating the results of specialist investigation, stating but not necessarily inquiring into hypotheses, and providing bibliographies for each section. Thus we have summaries of what is known of (A) the history of numismatics, (B) the right of coinage and the nature of money, (C) history of coinage, (D) pieces (such as medallions, tesserae) resembling coins, (E) types and inscriptions, (F) countermarks and restitutions, (G) dating, (H) mints, (I) technique and forgeries, (K) abbreviations and enigmatic inscriptions. E is the most substantial section (230 pages), and includes, under inscriptions, a complete list of reverse legends, based on Cohen's list with additions and corrections, references to publications being provided in the more important cases. A valuable feature is the inclusion of that No-man's Land, the East Roman Emperors from 395 to 476. Extremely useful also are the tables in G, giving

the years of the reign of each emperor, with tribunicia potestas, consulship, and imperatorship. There are full indexes of Emperors and their relations, Mints, Legends, and general matters. We miss, however, any section on coin-hoards and the evidence which they supply for dating. The constant use to which the book will certainly be put will doubtless reveal small defects, but we have no doubt that the first favourable impression which it makes will be maintained. We note a few small points. The importance of De Salis in the history of Roman numismatics is not recognized; but that is hardly surprising, since Mattingly's recent notice of him in the Vienna *Zeitschrift* is the first serious attempt to appreciate it. In connexion with the portraits of the Emperors, a few words on the various methods of posing and the gradual triumph of frontality would have been in place. In the list of honorary titles borne by the Emperors, Perpetuus Augustus should have been included; and the refusal of certain Emperors to take the title Pater Patriae might have been noted. In the section on personifications of provinces, &c., reference should have been made to Jatta, *Rappresentanze figurate delle provincie Romane* (1908). In the details of the Emperors and their houses, we note that Drusus Junior had twin sons, Ti. Iulius Germanicus and Ti. Iulius Nero (*Z. f. N.*, 1922, p. 182); that Sulpicia Dryantilla was perhaps the mother, not the wife, of Regalianus (Groag in *Oesterr. Jahresh.*, ii. 206 ff.); that it is doubtful whether there are any coins of Macrianus Sen. (Laffranchi in *Riv. Ital.*, 1907, pp. 381-386); that the reigns of Macrianus and Quietus begin perhaps in autumn 260, rather than in 261 (Milne in *Anc. Egypt.*, iv, 1917); that Allotte de la Fuÿe has published a coin of the tyrant Domitianus, which can hardly be, as seemed at first sight possible, a misread Aurelianus (*Rev. Num.*, 1901, p. 319); that the coins of Martinianus were perhaps issued about 318 or 319 rather than in 323 (Laffranchi, *Riv. Ital.*, 1907, p. 56). In the section on Mints since the middle of the third century reference should have been given to Webb's most useful summary in *Num. Chron.*, 1925, pp. 226-293. It is nothing less than astonishing that the view that T stands for Ticinum and not Tarraco—a view for which to us the evidence seems entirely conclusive—should not even be mentioned. The statement that Lugdunum was a Roman 'colonial mint' from Marcus Antonius to Claudius I is rather an understatement, even if some of the claims advanced for the place are exaggerated. The details

under Londinium should have been modified, if not expanded, by reference to the article of De Salis in *Num. Chron.*, 1867, which is substantially confirmed by finds in this country. But it seems ungracious to pick holes in so fine a piece of work, which is a marvel of compression and practical arrangement, and for which every one should be grateful. The Plates are admirable.

G. F. H.

Becker the Counterfeiter. By GEORGE F. HILL. Part I, 72 pp. with Portrait and 8 Plates. 1924. Part II, 39 pp. with 11 Plates. 1925. 12s. net each part. London: Spink & Son.

DR. HILL has provided us not only with a valuable guide for detecting what are probably the most attractive forgeries ever produced for the discomfiture of coin-collectors, but also with an interesting study in psychology. The ways of counterfeiters are devious, and it is often hard to understand what prompts their methods of work or their choice of subjects: if Becker had been content in the medieval series, where he was artistically most at home, to confine himself to known types, it would have been almost impossible to identify his forgeries except by the aid of his dies; fortunately for us, he allowed his fancy a somewhat free rein, and so provided a clue to the products of his workshop: where he kept closer to his models, in the Greek coins, there is nearly always a failure to catch the true Hellenic touch, especially in the heads: the most dangerous of his productions are, as generally recognized, in the Roman series, as he adhered to original types, though sometimes in new combinations, and was able to rise to the artistic level of the Roman die-engravers. This invention of new varieties seems the most damaging argument against the plea advanced by Becker's advocates that his object was to enable collectors to get cheap reproductions of rare coins: and Dr. Hill is rather lenient, perhaps, in his summing up of the evidence of fraudulent intent when he suggests that Becker may have invented because he found it amusing. But the story as told by Dr. Hill is a pleasant problem.

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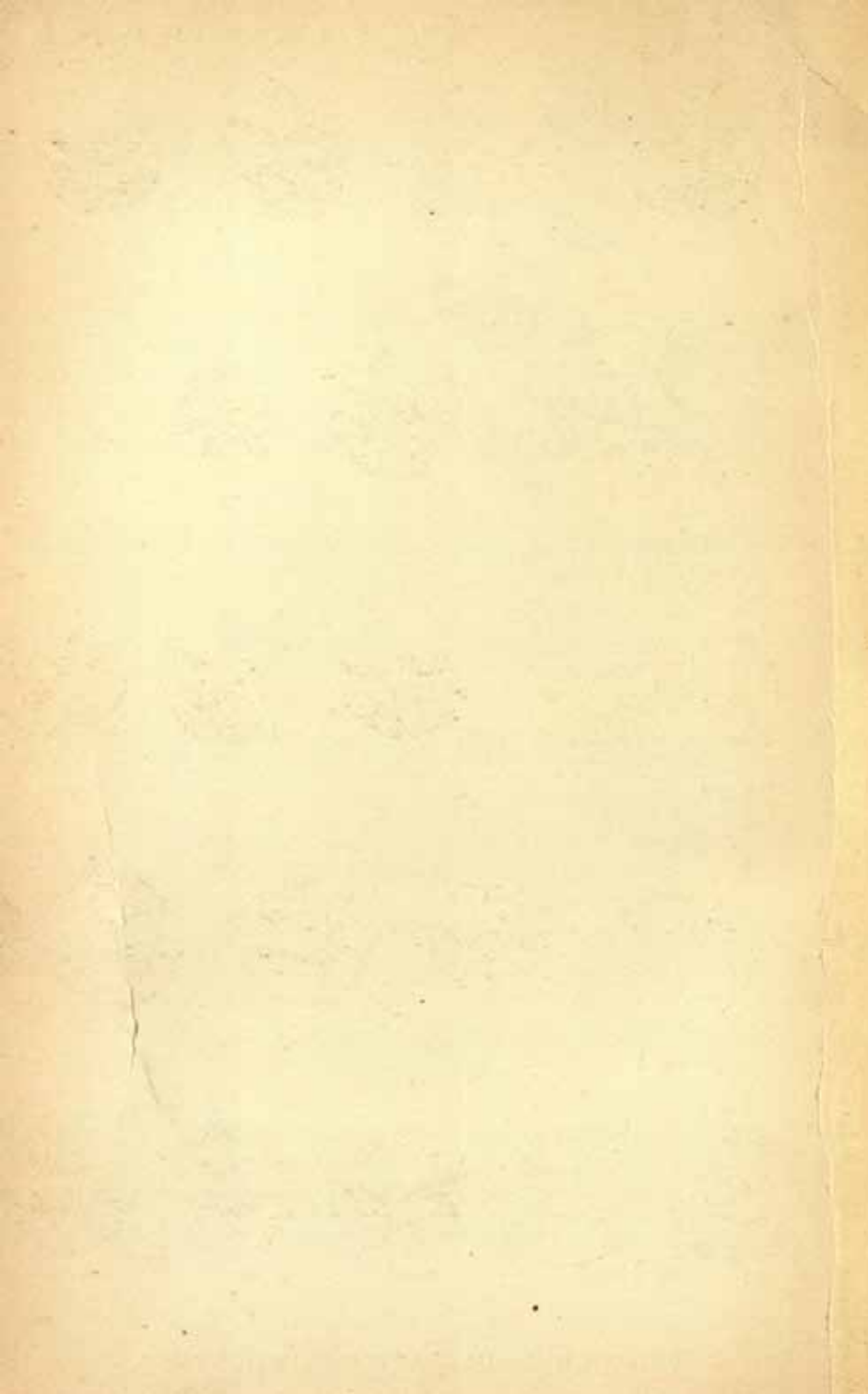
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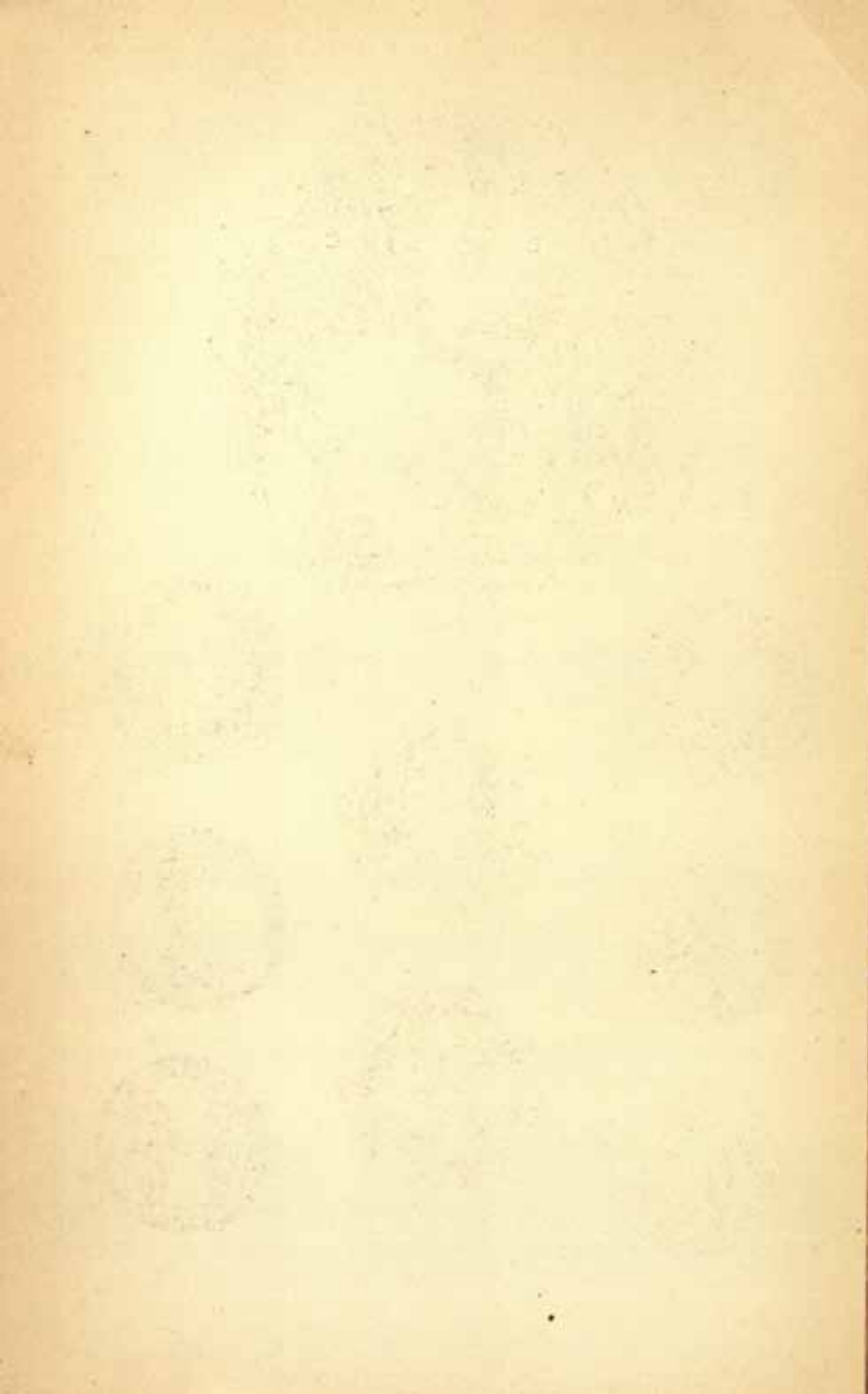
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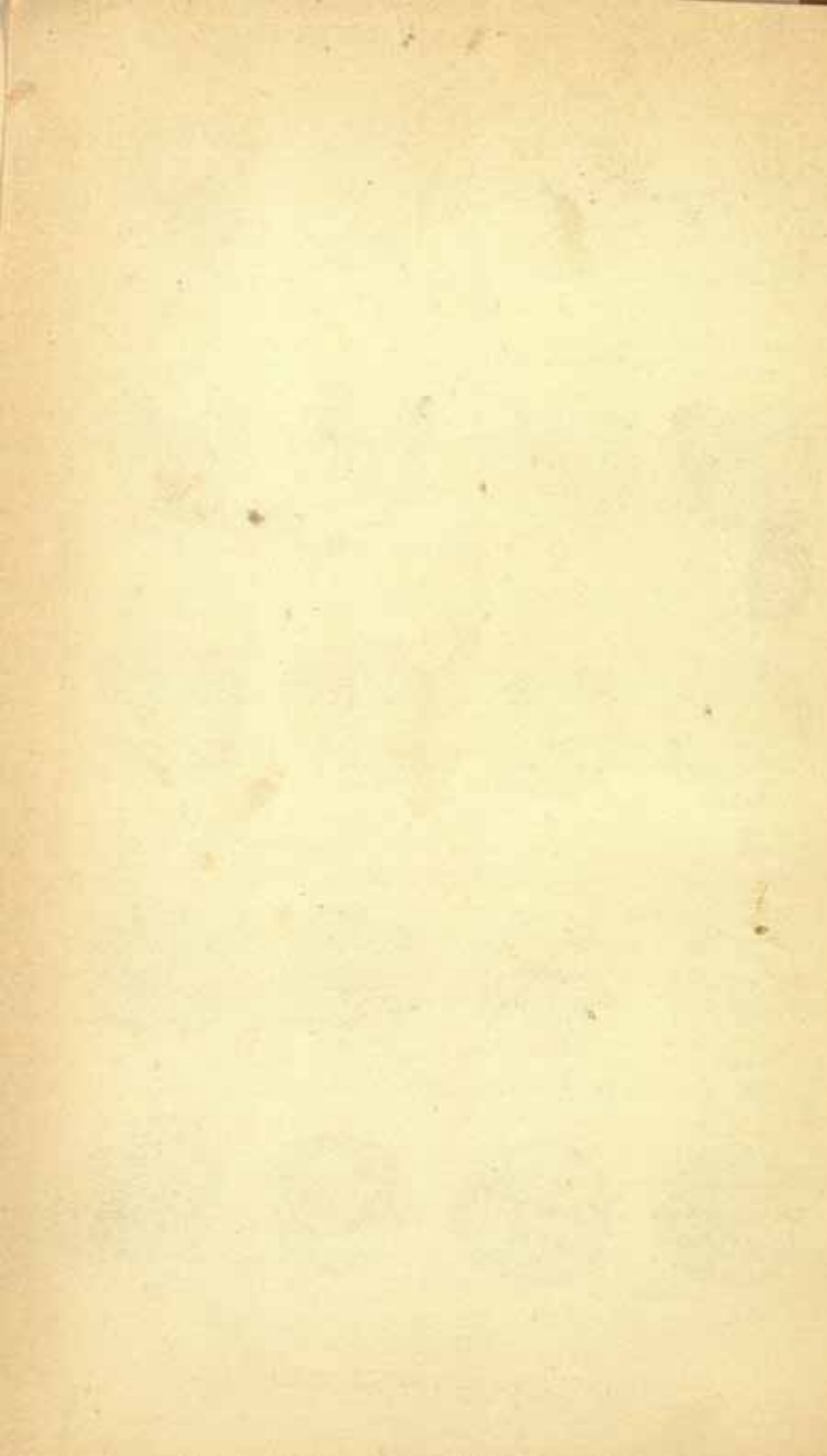
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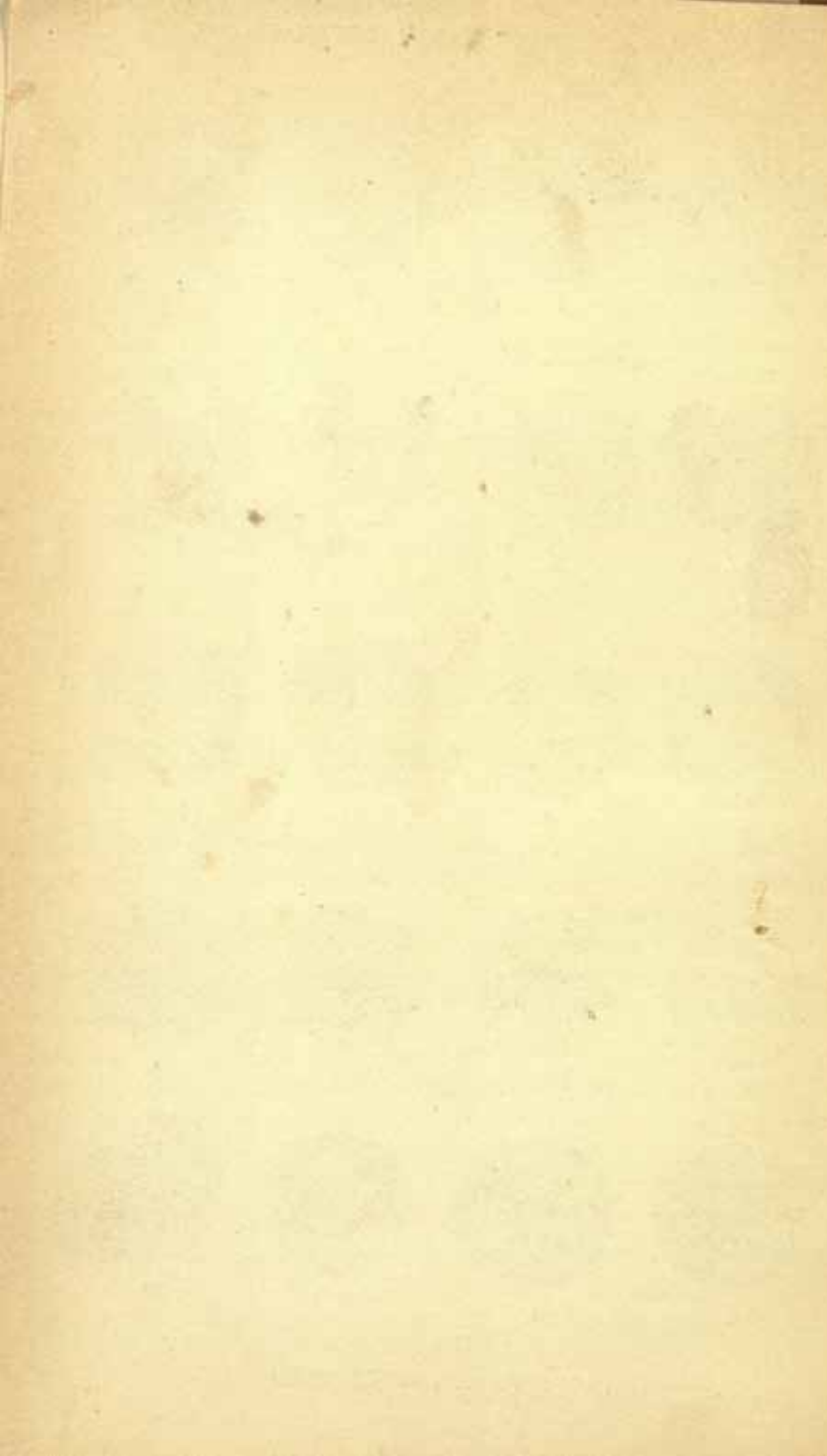


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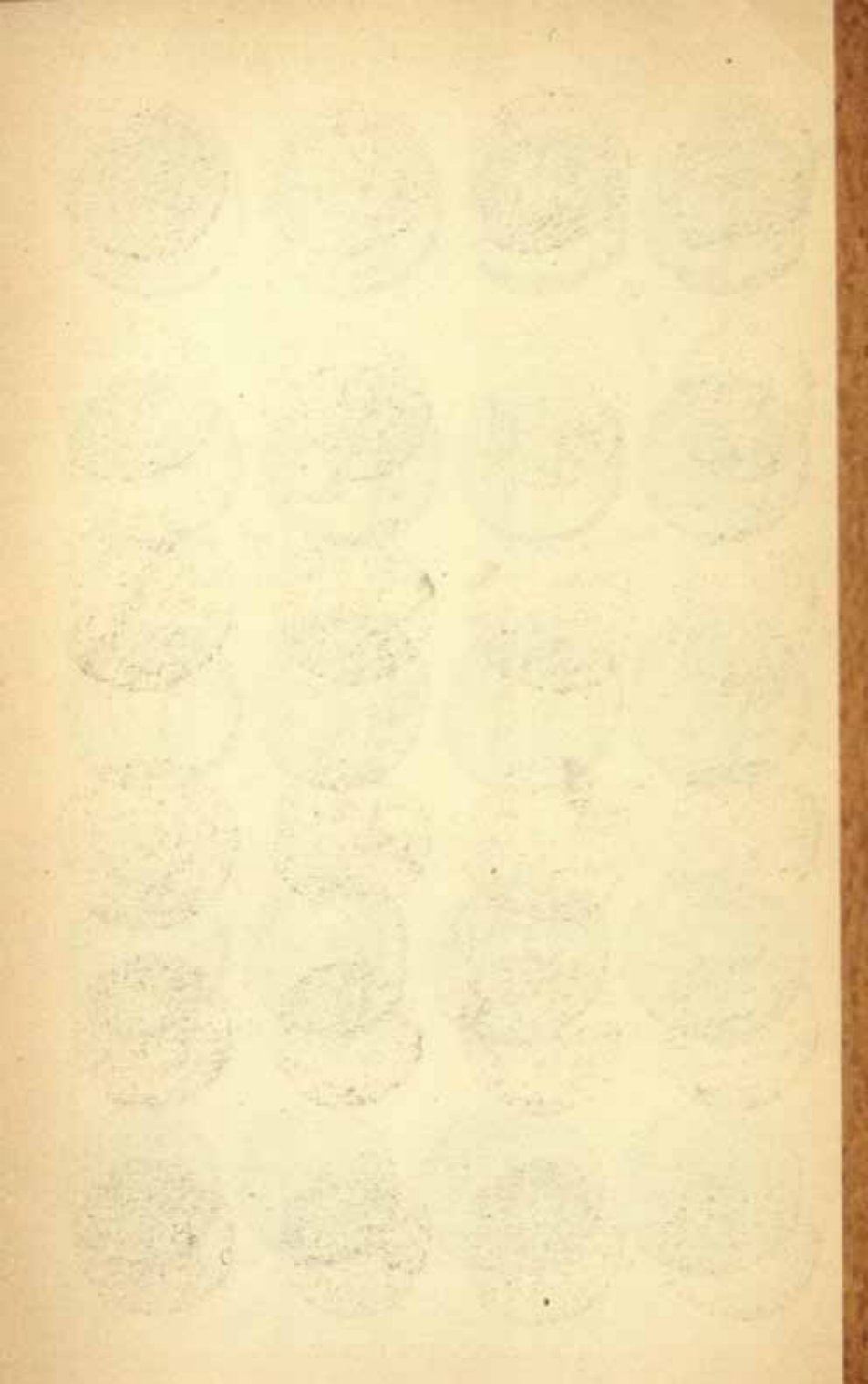


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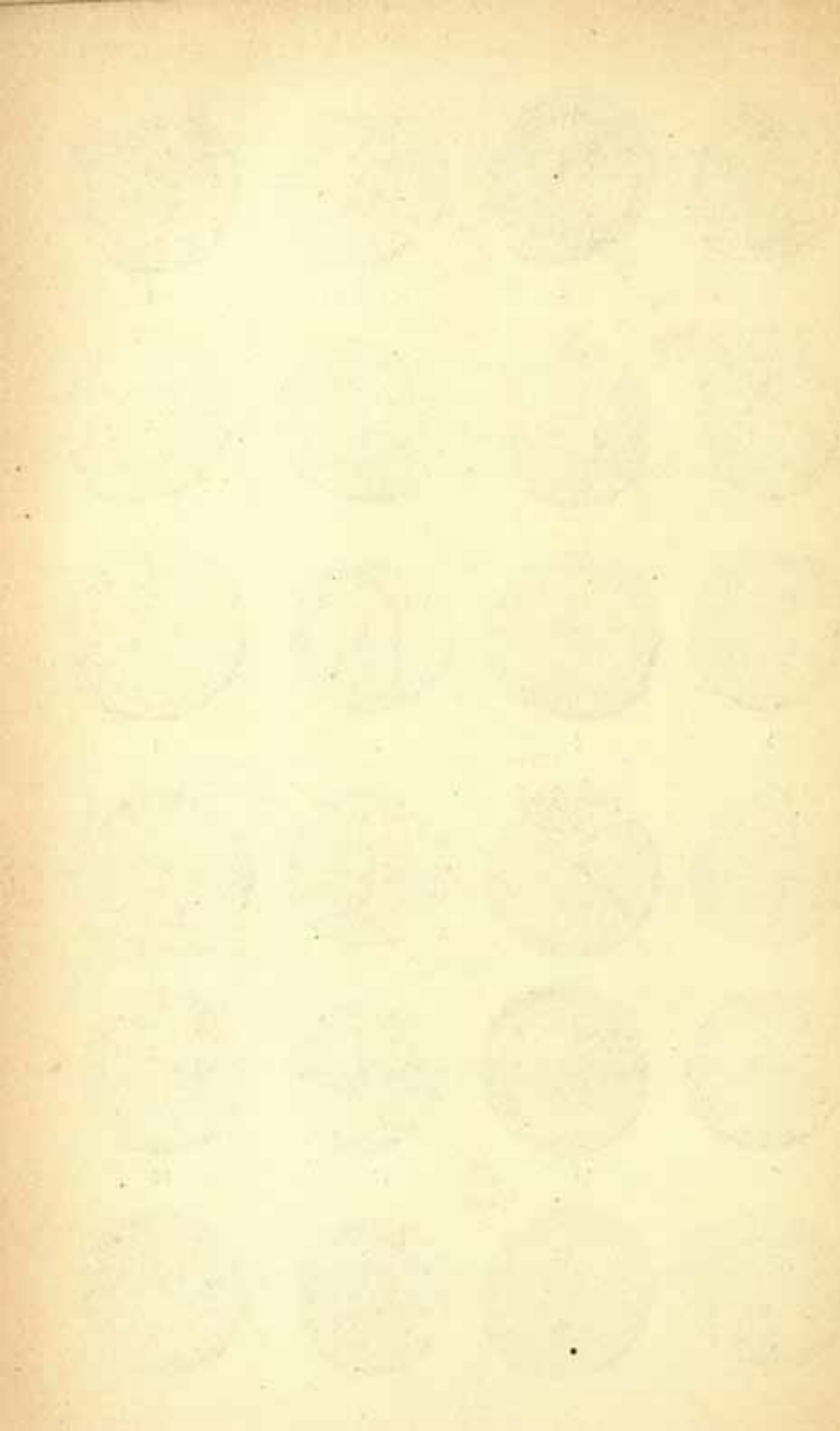


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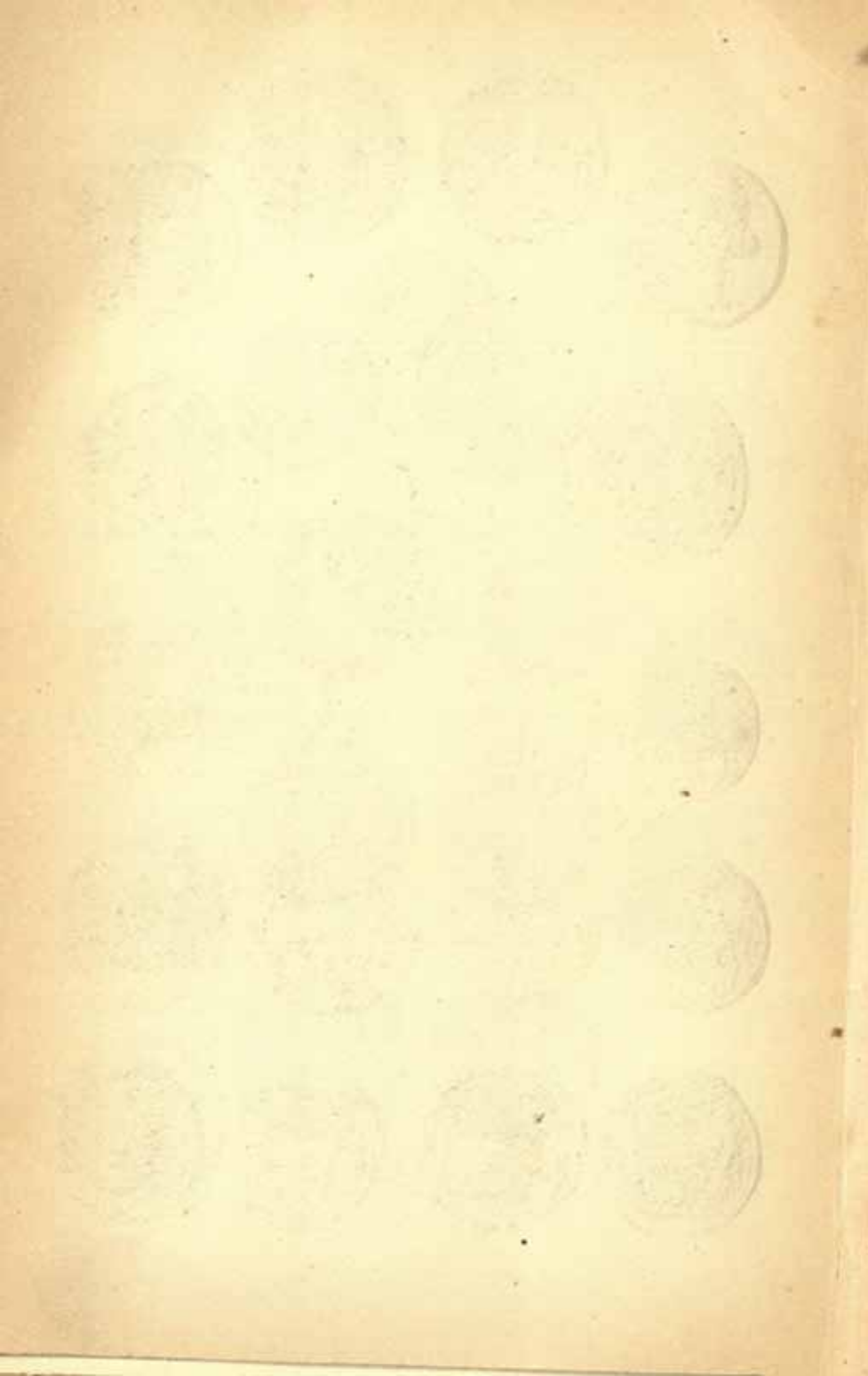


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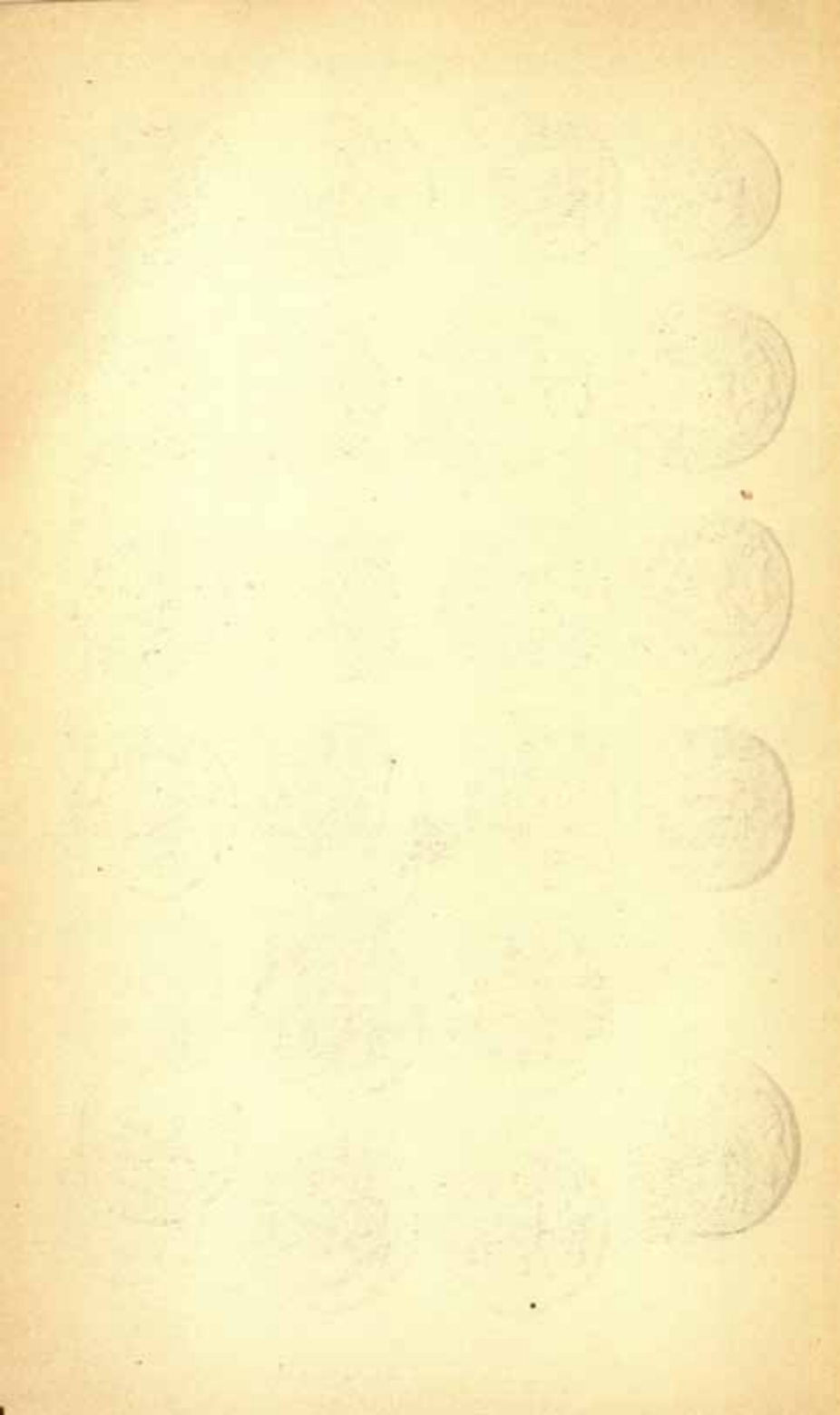
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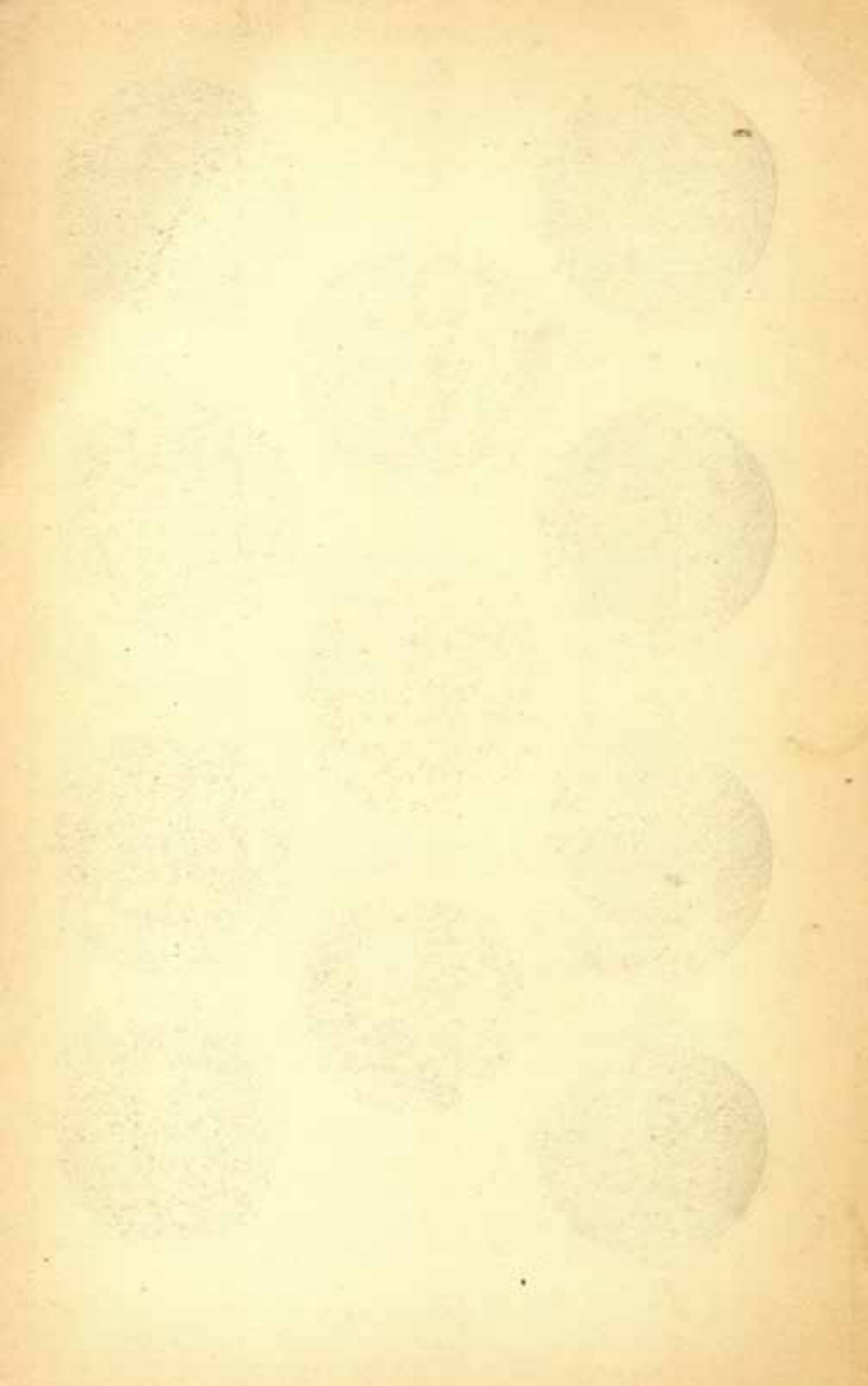
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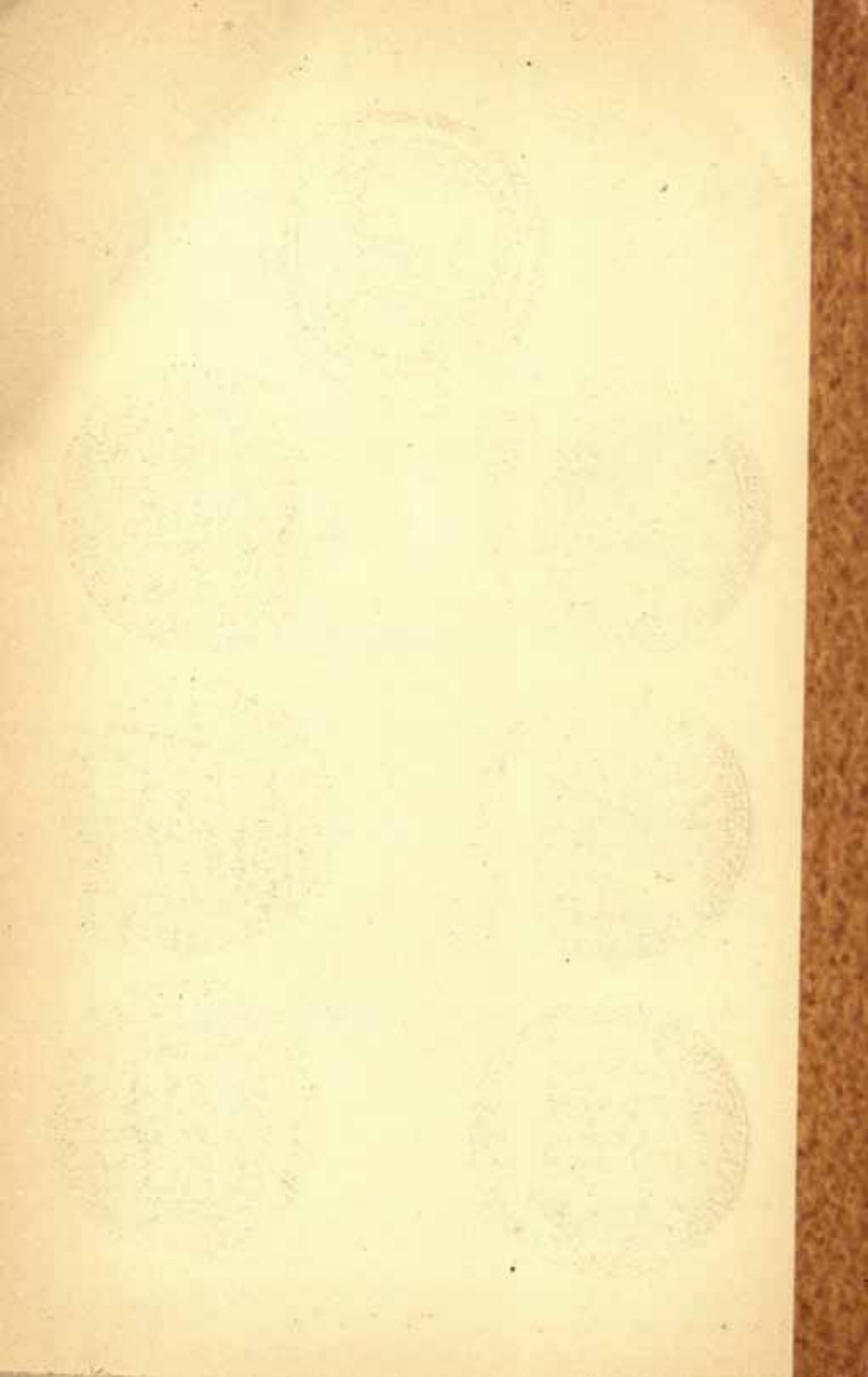
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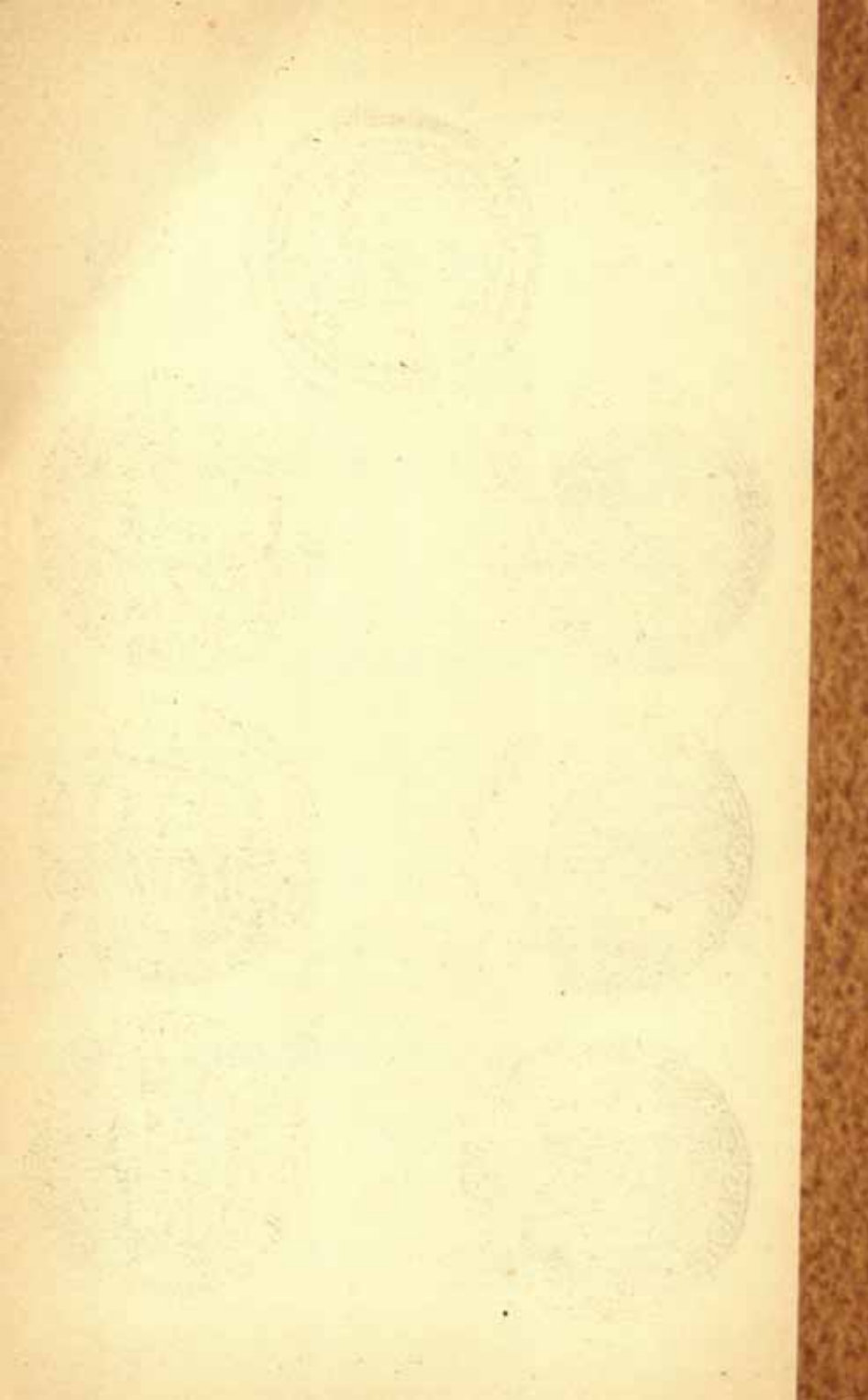


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- 1914 GROSE, S. W., Esq., M.A., 18 Hobson Street, Cambridge.

ELECTED

- 1871 GRUEBER, HERBERT A., Esq., F.S.A., Bembridge, Isle of Wight.
- 1910 GUNN, WILLIAM, Esq., 19 Swan Road, Harrogate.
- 1920 GUNTHER, CHARLES GODFREY, Esq., Nicosia, Cyprus.
- 1916 HAINES, G. C., Esq., 14 Gwendwr Road, W. 14.
- 1899 HALL, HENRY PLATT, Esq., Pentreheylin Hall, Llanymynech, Montgomeryshire.
- 1912 *HAMILTON-SMITH, G., Esq., Northside, Leigh Woods, Bristol.
- 1898 HANDS, REV. ALFRED W., 8 Grove Road, Wanstead, E. II.
- 1924 HARCUM, MISS CORNELIA E., Ph.D., *Keeper of Classical Antiquities*, Royal Ontario Museum, Toronto, Canada.
- 1912 HARDING, NEWTON H., Esq., 110 Pine Avenue, Chicago, U.S.A.
- 1917 HARRIS, B. WILFRED, Esq., Lynwood, Boldmere, Erdington, Birmingham.
- 1904 HARRIS, EDWARD BOSWORTH, Esq., 5 Sussex Place, N.W. 1.
- 1904 HARRISON, FREDERICK A., Esq., F.Z.S., Sunnyside, Fourth Avenue, Frinton-on-Sea.
- 1916 *HART, R. EDWARD, Esq., M.A., Brooklands, Blackburn.
- 1914 HAYES, HERBERT E. E., Esq., C.M.S. House, Menouf, Egypt.
- 1886 *HENDERSON, JAMES STEWART, Esq., F.R.G.S., M.R.S.L., M.C.P., 1 Pond Street, Hampstead, N.W. 3.
- 1900 HEWLETT, LIONEL M., Esq., Greenbank, Harrow-on-the-Hill, Middlesex.
- 1903 HIGGINS, FRANK C., Esq., 579 East 17th Street, Flatbush, Brooklyn, N.Y.
- 1898 HILL, CHARLES WILSON, Esq. (address not known).
- 1893 HILL, GEORGE FRANCIS, Esq., M.A., LL.D., Litt.D., F.B.A., *Keeper of Coins*, British Museum, W.C. 1, *Vice-President*.
- 1898 HOCKING, WILLIAM JOHN, Esq., C.B.E., Royal Mint, E. 1.
- 1895 HODGE, THOMAS, Esq., Fyning House, Rogate, Petersfield, Hants.
- 1920 *HOLROYD, MICHAEL, Esq., M.A., Brasenose College, Oxford.
- 1921 HUBBARD, WING-COMMANDER T. O'BRIEN, Royal Aero Club, 3 Clifford Street, W. 1.
- 1908 *HUNTINGTON, ARCHER M., Esq., Governor of the American Numismatic Society, Audubon Park, 156th Street, West of Broadway, New York, U.S.A.

ELECTED

- 1922 IYENGAR, M. H. KRISHNA, Esq., M.A., M.R.A.S., Government Museum, Bangalore, India.
- 1922 JAMESON, M. R., 8 Avenue Velasquez, Paris.
- 1922 JOHNSON, LIEUT.-COL. ROBERT A., C.B.E., Deputy-Master, The Royal Mint, E. 1.
- 1911 JOHNSTON, LEONARD P., Esq., The Cottage, Warningcamp, Arundel, Sussex.
- 1911 JONES, FREDERICK WILLIAM, Esq., 22 Ramshill Road, Scarborough.
- 1874 *KENYON, R. LLOYD, Esq., M.A., J.P., D.L., Pradoc, West Felton, Salop.
- 1914 *KEBB, ROBERT, Esq., M.A., Royal Scottish Museum, Edinburgh.
- 1920 KING, COLONEL E. J., C.M.G., The Old House, East End Road, N. 2.
- 1901 KOZMINSKY, DR. ISIDORE, 20 Queen Street, Kew, near Melbourne, Victoria.
- 1917 LAMB, MISS WINIFRED, Holly Lodge, Campden Hill, W. 8.
- 1920 LAST, H. M., Esq., M.A., St. John's College, Oxford.
- 1910 LAUGHLIN, DR. W. A., M.A. (address not known).
- 1877 LAWRENCE, F. G., Esq., Birchfield, Mulgrave Road, Sutton, Surrey.
- 1885 *LAWRENCE, L. A., Esq., F.S.A., 44 Belsize Square, N.W. 3., *Librarian.*
- 1883 *LAWRENCE, RICHARD HOE, Esq., Fifth Avenue Bank, New York, U.S.A.
- 1920 LEWIS, JOHN CAMPBELL, Esq., Bridge House, Troedyrhiw, Merthyr Tydfil.
- 1900 LINCOLN, FREDERICK W., Esq., 69 New Oxford Street, W.C. 1.
- 1922 LLOYD, ALBERT H., Esq., St. John's House, Grange Road, Cambridge.
- 1922 *LLOYD, MISS MURIEL ELEANOR HAYDON, St. John's House, Grange Road, Cambridge.
- 1907 LOCKETT, RICHARD CYRIL, Esq., F.S.A., J.P., 58 Cadogan Place, S.W. 1.
- 1911 LONGMAN, W., Esq., 27 Norfolk Square, W. 2.
- 1924 DE LOREY, M. EUSTACHE, Institut Français, Damascus, Syria.
- 1921 LUCKNOW MUSEUM, The Curator of the, Lucknow, India.
- 1893 LUND, H. M., Esq., Waitara, Taranaki, New Zealand.

ELECTED

- 1903 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., D.Litt., F.B.A., 17 Learmonth Gardens, Edinburgh.
- 1901 MACFADYEN, FRANK E., Esq., 135 Osborne Road, Newcastle-on-Tyne.
- 1923 MALLINSON, REV. ARNOLD, 2 Severn Road, South Shore, Blackpool.
- 1897 †MASSY, COL. W. J., 82 Bushwood Road, Kew.
- 1912 MATTINGLY, HAROLD, Esq., M.A., British Museum, W.C. 1.
- 1905 MAVROGORDATO, J., Esq., Gilridge, Cowden Pound, Eden bridge, Kent.
- 1921 MAVROJANI, CAPTAIN S., M.A., B.C.L., Clyro Court, Clyro, Hereford.
- 1901 McDOWALL, REV. STEWART A., 5 Kingsgate Street, Winchester.
- 1905 McEWEN, HUGH DRUMMOND, Esq., 13 Lovelace Road, West Dulwich, S.E. 21.
- 1868 McLACHLAN, R. W., Esq., Apt. 9, The Kensington, 4412 St. Catherine Street, Westmount, Montreal, Canada.
- 1916 MEIGH, ALFRED, Esq., Dole Spring House, Forsbrook, Stoke-on-Trent.
- 1924 *MERRITT, FERRIS P., Esq., 25 West 43rd Street, New York, U.S.A.
- 1905 MESSENGER, LEOPOLD G. P., Esq., 151 Brecknock Road, Tutnell Park, N. 19.
- 1924 MILLER, HOYT, Esq., East Shore Road, Great Neck, Long Island, New York, U.S.A.
- 1897 MILNE, J. GRAFTON, Esq., M.A., Bankside, Lower Bourne, Farnham, Surrey.
- 1921 MILNE, MRS. J. GRAFTON, Bankside, Lower Bourne, Farnham, Surrey.
- 1910 MITCHELL LIBRARY, THE, Glasgow, The Librarian.
- 1898 *MONCKTON, HORACE W., Esq., F.L.S., F.G.S., 3 Harcourt Buildings, Temple, E.C. 4, and Whitecain, Wellington College Station, Berks.
- 1920 MONTAGU, ALFRED C., Esq., 8 Essex Villas, W. 8.
- 1888 MONTAGUE, LIEUT.-COL. L. A. D., Penton, near Crediton, Devon.
- 1905 MOORE, WILLIAM HENRY, Esq. (address not known).
- 1879 MORRIESON, LIEUT.-COL. H. W., R.A., F.S.A., F.R.S.A., 42 Beaufort Gardens, S.W. 3.

ELECTED

- 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.
- 1909 NAGG, STEPHEN K., Esq., 1621 Master Street, Philadelphia, U.S.A.
- 1906 NEWBERRY LIBRARY, The Librarian, Chicago, U.S.A.
- 1905 *NEWELL, E. T., Esq., President of the American Numismatic Society, 156th Street, West of Broadway, New York, U.S.A.
- 1924 NORDHEIM, E., Esq., 86 Heimhuderstrasse, Hamburg.
- 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*.
- 1925 OMAN, CHARLES CHICHELE, Esq., B.A., Victoria and Albert Museum, S.W. 7.
- 1911 OPPENHEIMER, HENRY, Esq., F.S.A., 9 Kensington Palace Gardens, W. 8.
- 1904 d'ORBELLIANI, COL. ROBERT, F.R.G.S., Allerton House, 143 East 39th Street, New York, U.S.A.
- 1922 PAKENHAM, IVO, Esq., 8 Queen St., Curzon Street, W. 1.
- 1903 PARSONS, H. ALEXANDER, Esq., Dalmuir, Cedar Avenue, Rickmansworth.
- 1915 PEARS, LT.-COL. G. B., R.E., c/o Cox & Co., Charing Cross, S.W. 1.
- 1894 PERRY, HENRY, Esq., Middleton, Plaistow Lane, Bromley, Kent.
- 1920 PHILIPSEN, HR. GUSTAV, Castelsvej 23^{1/2}, 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.
- 1925 PONTIFEX, BRYAN, Esq., The Croft, Knowle, Warwickshire.
- 1915 POYSER, A. W., Esq., M.A., 64 Highfield Street, Leicester.
- 1923 PRAGUE, Bibliothèque de l'Université, Czecko-Slovakia.
- 1903 PRICE, HARRY, Esq., Arun Bank, Pulborough, Sussex.
- 1911 PRICHARD, A. H. COOPER, Esq. (address not known).

ELECTED

- 1913 RAO, K. ANANTASAMI, Esq., Curator of the Government Museum, Bangalore, India.
- 1890 RAPSON, PROF. E. J., M.A., M.R.A.S., 8 Mortimer Road, Cambridge.
- 1923 RAVEL, MONSIEUR O., 7 Bd. de Lorraine, Pointe Rouge, Marseilles.
- 1909 RAYMOND, WAYTE, Esq., 489 Park Avenue, New York City, U.S.A.
- 1903 REGAN, W. H., Esq., 17 Queen's Road, Bayswater, W. 2.
- 1876 *ROBERTSON, J. DRUMMOND, Esq., M.A., 65 Ladbroke Grove, Notting Hill, W. 11.
- 1911 *ROBINSON, E. S. G., Esq., B.A., 23 Upper Phillimore Gardens, W. 8.
- 1910 ROGERS, REV. EDGAR, M.A., O.B.E., 5 Essex Villas, W. 8.
- 1919 ROSE, EDWARD E. PILKINGTON, Esq., I.C.S., Loughton, Essex.
- 1924 ROWE, CAPTAIN F. G. C., 16 The Crescent, Leatherhead.
- 1903 RUBEN, PAUL, Esq., Ph.D., Alte Rabenstrasse, 8, Hamburg, Germany.
- 1919 RYAN, V. J. E., Esq., c/o Messrs. Spink & Son, Ltd., 16-18 Piccadilly, W. 1.
- 1916 SAINT LOUIS NUMISMATIC SOCIETY, Washington University, St. Louis, Mo., U.S.A.
- 1872 *SALAS, MIGUEL T., Esq., 247 Florida Street, Buenos Ayres.
- 1916 *SALISBURY, F. S., Esq., M.A., Limbrick Hall, Harpenden, Herts.
- 1919 SAVAGE, W. LISLE, Esq., 11 Faith Street, Maidstone, Kent.
- 1917 SEABY, B. A., Esq., c/o Messrs. Spink & Son, Ltd., 16-18 Piccadilly, W. 1.
- 1907 *SELTMAN, CHARLES T., Esq., M.A., 39 Barton Road, Cambridge.
- 1890 SELTMAN, E. J., Esq., Villa Maria, S. Giorgio a Cremano, Naples.
- 1900 SHACKLES, GEORGE L., Esq., Elim Lodge, Hornsea, E. Yorks.
- 1913 SHIRLEY-FOX, J. S., Esq., R.B.A., Rossetti Studios, Flood Street, S.W. 3.
- 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.

ELECTED

- 1918 *SLIGO, THE MARQUESS OF, F.S.A., F.R.G.S., 7 Upper Belgrave Street, S.W. 1.
- 1905 SNELLING, EDWARD, Esq., 26 Silver Street, E.C. 2.
- 1909 SOUTZO, M. MICHEL, 8 Strada Romana, Bucharest.
- 1922 SPENCER-CHURCHILL, CAPT. E. G., Northwick Park, Blockley.
- 1894 SPINK, SAMUEL M., Esq., 16-18 Piccadilly, W. 1.
- 1925 SPINK, MARTIN S., Esq., B.A., 16-18 Piccadilly, W. 1.
- 1902 STAINER, CHARLES LEWIS, Esq., Woodhouse, Iffley, Oxford.
- 1922 STARKEY, W. BEAMONT, Esq., Lyonsdown, Ilfracombe.
- 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., 19 Ellenborough Park N., Weston-super-Mare.
- 1896 *TAFPS, H. W., Esq., 35 Greenholm Road, Eltham, S.E. 9.
- 1879 TALBOT, COL. THE HON. MILO G., C.B., Bifrons, Canterbury.
- 1919 TARAPOREVALA, VICAJI D. B., Esq., Junction of Babulnath and Chowpatti Roads, Chowpatti, Bombay.
- 1917 TAYLOR, GLEN A., Esq., 63 Lewis Road, Neath, 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.
- 1925 THOMAS, CECIL, Esq., 7 Gloucester Terrace, S.W. 7.
- 1920 THOMAS, J. ROCHELLE, Esq., Elm House, Ellison Road, S.W. 13.
- 1918 THORBURN, PHILIP, Esq., 71 South Side, Clapham Common, S.W. 4.
- 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., Wesleyan Mission, Shimoga, Mysore, India.
- 1899 VLASTO, MICHEL P., Esq., 12 Allée des Capucines, Marseilles, France.

ELECTED

- 1905 WACE, A. J. B., Esq., M.A., Leslie Lodge, Hall Place, St. Albans.
- 1923 WALES, The National Museum of, Cardiff.
- 1883 WALKER, R. K., Esq., M.A., J.P., Watergate, Meath Road, Bray, Ireland.
- 1924 WALLWORTH, I. N. G., Esq., Fairbanks, Stanley Park Road, Carshalton.
- 1897 WALTERS, FRED. A., Esq., F.S.A., 28 Great Ormonde Street, W.C. 1, and St. Mildred's, Temple Ewell, Dover, *Hon. Secretary.*
- 1911 WARRE, FELIX W., Esq., O.B.E., M.C., 128 Church Street, W. 8.
- 1920 *WATSON, COMMANDER HAROLD NEWALL, R.N., Belmont, 10 Curzon Park, Chester.
- 1901 *WATTERS, CHARLES A., Esq., Springfields, Park Road, Hayton, 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.
- 1899 WELCH, FRANCIS BERTRAM, Esq., B.A., 1 Rue Salamine, Salonica.
- 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.
- 1920 *WHEELER, ERNEST H., Esq., 56 Caledonian Road, N. 1.
- 1915 WHITEHEAD, R. B., Esq., M.A., I.C.S. (retd.), M.R.A.S., 26 Marlborough Road, Southport, Lancs.
- 1921 WILKINSON, SURGEON-COMMANDER E. A. G., Kingshot, St. Cross, Winchester, Hants.
- 1908 WILLIAMS, T. HENRY, Esq., 15 Stanwick Road, W. 14.
- 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., 39 Harley House, N.W. 1.
- 1920 *WOODWARD, A. M. TRACEY, Esq., Chinese P.O. Box No. 1044, Shanghai, China.
- 1903 WRIGHT, H. NELSON, Esq., I.C.S. (retd.), 42 Ravenscroft Avenue, N.W. 11.

ELECTED

1920 WYMAN, ARTHUR CRAWFORD, Esq., 29 Place Dauphine,
Paris I.

1922 YOANNA, A. DE, Esq., B.A., M.D., 111 Pierrepont Street,
Brooklyn, N.Y.

1880 YOUNG, ARTHUR W., Esq., 12 Hyde Park Terrace, W. 2.

1919 ZIEGLER, PHILIP, Esq., Lilly Villa, Victoria Park,
Manchester.

HONORARY FELLOWS

ELECTED

- 1898 HIS MAJESTY VICTOR EMMANUEL III, KING OF ITALY,
Palazzo Quirinale, Rome.
- 1903 BAHRFELDT, GENERAL DER INFANTERIE A. D., PROFESSOR
MAX VON, Dr.Phil., Zinksgarten Strasse 2, Halle (Saale),
Germany.
- 1898 BLANCHET, M. ADRIEN, Membre de l'Institut, 10 Bd.
Émile Augier, Paris XVI.
- 1899 GABRIEL, PROF. DR. ETTORE, S. Giuseppe dei Nudi 75, Naples.
- 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 REYNACH, M. THÉODORE, Membre de l'Institut, 2 Place des
Etats-Unis, Paris.
-

MEDALLISTS

OF THE ROYAL NUMISMATIC SOCIETY

ELECTED

- 1883 CHARLES ROACH SMITH, Esq., F.S.A.
1884 AQUILLA SMITH, Esq., M.D., M.R.I.A.
1885 EDWARD THOMAS, Esq., F.R.S.
1886 MAJOR-GENERAL ALEXANDER CUNNINGHAM, C.S.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 M. W. H. WADDINGTON, Sénateur, Membre de l'Institut, Paris.
1894 CHARLES FRANCIS KEARY, Esq., M.A., F.S.A.
1895 PROFESSOR DR. THEODOR MOMMSEN, Berlin.
1896 FREDERIC W. MADDEN, Esq., M.R.A.S.
1897 DR. ALFRED VON SALLET, Berlin.
1898 THE REV. CANON W. GREENWELL, M.A., F.R.S., F.S.A.
1899 M. ERNEST BABELON, Membre de l'Institut, Paris.
1900 PROFESSOR STANLEY LANE-POOLE, M.A., Litt.D.
1901 S. E. BARON WLADIMIR VON TIESENHAUSEN, St. Petersburg.
1902 ARTHUR J. EVANS, Esq., M.A., F.R.S., F.S.A.
1903 M. GUSTAVE SCHLUMBERGER, Membre de l'Institut, Paris.
1904 HIS MAJESTY VICTOR EMMANUEL III, KING OF ITALY.
1905 SIR HERMANN WEBER, M.D.
1906 COMM. FRANCESCO GNECCHI, Milan.
1907 BARCLAY V. HEAD, Esq., D.Litt., D.C.L., Ph.D., Corr. de l'Inst.
1908 PROFESSOR DR. HEINRICH DRESSLER, Berlin.
1909 HERBERT A. GRUEBER, Esq., F.S.A.
1910 DR. FRIEDRICH EDLER VON KENNER, Vienna.
1911 OLIVER CODRINGTON, Esq., M.D., M.R.A.S., F.S.A.
1912 GENERAL-LEUTNANT MAX VON BAHRFELDT, Hildesheim.
1913 GEORGE MACDONALD, Esq., M.A., LL.D.
1914 JEAN N. SVORONOS, Athens.
1915 GEORGE FRANCIS HILL, Esq., M.A.
1916 M. THÉODORE REINACH, Membre de l'Institut, Paris.
1917 L. A. LAWRENCE, Esq., F.S.A.
1918 Not awarded.
1919 M. ADRIEN BLANCHET, Membre de l'Institut, Paris.
1920 H. B. EARLE-FOX, Esq., and J. S. SHIRLEY-FOX, Esq.
1921 PERCY H. WEBB, Esq.
1922 FREDERICK A. WALTERS, Esq., F.S.A.
1923 PROF. J. W. KUBITSCHKEK, Vienna.
1924 HENRY SYMONDS, Esq., F.S.A.
1925 EDWARD T. NEWELL, Esq., New York.

PROCEEDINGS
OF THE
ROYAL NUMISMATIC SOCIETY.

PROCEEDINGS OF THE
ROYAL NUMISMATIC SOCIETY.

SESSION 1924—1925.

OCTOBER 16, 1924.

PERCY H. WEBB, Esq., M.B.E., Treasurer, in the Chair.

The Minutes of the Meeting of May 15 were read and approved.

The following Presents received since the May Meeting were announced, and thanks ordered to be sent to their donors :

1. Aarbøger for Nordisk Oldkyndighed, 1924, Pt. 2.
2. American Journal of Archaeology, 1924, Pt. 2.
3. Antiquaries Journal, 1924, Pt. 3.
4. Bulletin de Correspondance Hellénique, 1923, Pts. VIII-XII ; 1924, Pts. I-VI.
5. Bulletin de la Société des Antiquaires du Nord, 1924, Pts. 1 and 2.
6. Journal of the Royal Society of Antiquaries of Ireland, 1924, Pt. 1.
7. Revue Belge de Numismatique, 1924, Pts. 1 and 2.
8. Syria, 1924, Pts. 1 and 2.
9. Athens, by C. T. Seltman ; *from the Cambridge University Press.*
10. Medals of T. Jefferson, by Robert Eidlitz ; *from the Author.*

Captain F. G. C. Rowe was proposed for election as a Fellow of the Society.

Mr. H. W. Taffs showed a Henry VIII halfpenny with m.m. portcullis, and farthings of York and Dublin of Edward I, all found at Dunwich; also a light penny of Henry IV of York.

A fine series of coins of Henry IV and V were shown in illustration of Mr. Shirley-Fox's paper by Messrs. L. A. Lawrence, J. S. Shirley-Fox, and Frederick A. Walters.

Mr. William Gilbert exhibited a solidus of Anthemius, being a variety of Cohen 6 in having the Christian monogram between the two soldiers on the reverse.

He also exhibited an unpublished penny token reading as follows:

Obv.—ALLICE. ONLEEY. AT. THE. BVLLS—A bull's head.

Rev.—HEAD. IN. LEADENHALL. STREET—Her 1 D 1668.

This house was a Tavern and is mentioned in the "Vademecum for Maltworms". George Onely, the landlord, was buried at St. Peter's, Cornhill (in which parish the tavern stood) on Jan. 27, 1656, and is described in the register as a vintner. His widow Alice (the issuer of the token) continued the business until her death in 1670, when she was buried in the cloister of the above church (on Dec. 1).

Mr. J. S. Shirley-Fox read a paper on "The Later Transitional Silver Coinage of Henry IV", in which he gave the results of a detailed study of the coinage, and laid down criteria for distinguishing the last coinages of Henry IV from the first of Henry V.

Mr. Walters, Mr. Lawrence, and Mr. Lockett contributed to the discussion.

NOVEMBER 21, 1924.

PROF. SIR CHARLES OMAN, K.B.E., M.P., LL.D., F.S.A.,
F.B.A., President, in the Chair.

The Minutes of the Meeting of October 16 were read and approved.

The following Presents to the Society were announced, and thanks ordered to be sent to their donors :

1. Annuaire de l'Académie Royale de Belgique, 1924.
2. Bulletin de l'Académie Royale de Belgique. Classe des Lettres, 1923, Pt. 12—1924, Pt. 9.
3. Bulletin de l'Académie Royale de Belgique. Classe des Beaux-Arts, 1923, Pt. 11—1924, Pt. 9.
4. Mitteilungen des Deutschen Archäologischen Instituts, Vols. xxxi-xxxix.
5. Revue Suisse de Numismatique, 1923, Pts. 1 and 2.
6. Zeitschrift für Numismatik, 1923, Pts. 1 and 2.
7. Andreas Alföldy, Der Untergang der römischen Herrschaft in Pannonien; *from the Author.*
8. Monsignore de Ciccio: Note et Appunti di Numismatica Siciliana; *from the Author.*
9. A. Mahieu, Numismatique du Congo; *from the Author.*
10. G. Severeanu, Le Statère d'Or de Pharsoios; *from the Author.*
11. Rev. H. P. Stokes: The Mediaeval Hostels of Cambridge; *from the Cambridge Antiquarian Society.*

Captain F. G. C. Rowe was elected a Fellow of the Society, and Dr. Cornelia G. Harcum and Mr. I. N. G. Wallworth were proposed for election.

Mr. William Gilbert exhibited a tetradrachm of Antioch of Antony and Cleopatra from the Bement Collection (lot 436) in extremely fine condition with both legends complete.

Miss Helen Farquhar exhibited a silver shell medallion of Charles II, probably by John Roettiers, from the Berney-Picklin collection; only one other specimen is known.

Mr. L. A. Lawrence showed a pair-cased watch, the inner case with arms of Charles I, and the outer with his bust,

probably Dutch work somewhat later than the reign of Charles I. Mr. Lawrence also showed a reckoning-counter of the time of Edward II, struck at the Mint, with reverse type, two sparrows, an almost exact anticipation of the reverse type of the new South African farthings.

Mr. Valentine showed a bronze ticket with the name William Howard of Chatham with a sun-face in the centre.

Mr. Percy H. Webb read a paper on "The Coinage of the Gallic Empire".

In view of the impossibility of reconciling the accounts given by the Roman historians of events in Gaul between the revolt of Postumus in 258 and the abdication of Tetricus in 273, he endeavoured to construct the history of that period from the evidence deducible from the coinage. He referred to the available records of hoards deposited during and after those years, from which it appeared that coins of Postumus were most numerous, and those of the Tetrici also very numerous but diluted by the issues of irregular or barbarous mints. Those of Victorinus were numerous and those of Marius scarce, but in considerably greater numbers than those of Laelianus. He discussed the style and fabric of the coins and submitted the following conclusions: that the rebellion of Laelianus took place in the last year of the reign of Postumus (A. D. 267), and that his coins were issued from Moguntiacum only; that the principal mint of Postumus was first at Lugdunum, and was removed to Cologne in or about A. D. 264, and that he did not associate either Victorinus or Postumus the younger with himself in the Empire; that the reign of Marius was next in order, and lasted for at least some weeks; and that his mints were at Cologne and some other place as yet unidentified, which used a grotesque portrait, and commenced to strike for Victorinus, but was quickly closed by him; that the reign of Victorinus commenced in A. D. 268 and, as he claimed three consulates, probably terminated in the early part of 270, and was therefore somewhat longer in proportion to that of Tetricus than is generally supposed; that

his mints, in addition to those already mentioned, were at Cologne and Lugdunum, and that the regular coinage of the Tetrici was probably from the mint of Lugdunum only, as was the Gallic coinage of Aurelian.

DECEMBER 18, 1924.

PROF. SIR CHARLES OMAN, K.B.E., M.P., LL.D., F.S.A.,
F.B.A., President, in the Chair.

The Minutes of the Meeting of November 21 were read and approved.

Dr. Cornelia G. Harcum and Mr. I. N. G. Wallworth were elected Fellows of the Society; Messrs. J. H. Chamberlain, Charles Chichele Oman, and Martin Samuel Spink were proposed for election.

The evening was devoted to Exhibitions.

The President exhibited a series of Seleucid silver coins; there were tetradrachms of every Seleucid of the regular line except Tryphon, who was represented by a drachm only, and Demetrius III. A valuable coin was a very fine tetradrachm of Demetrius I and Laodice.

The R. v. Edgar Rogers showed a series of Greek copper of Syria, Phoenicia, Palestine, Mesopotamia, and Arabia, all in very fine condition, and a denarius of Vespasian overstruck by Simon Barcochba, dated first year of the second revolt, with types grapes and wreath, with Simon's name (unpublished).

Mr. Percy H. Webb brought a very fine series of Roman quinarii and small denominations in bronze.

Mr. William Gilbert exhibited twelve Roman solidi, all in very fine condition, of the twelve Caesars.

Mr. L. A. Lawrence, F.S.A., showed a remarkable series of Roman and English brockages in silver and bronze and other interesting curiosities of minting.

Mr. Sidney Fairbairn showed a series illustrating the work of Cavino in copying Roman models.

Lt.-Col. H. W. Morrieson, F.S.A., exhibited a series of the silver coins of Elizabeth, 1561-1564, to show the varieties of the rose stamped on the obverse of these pieces.

Mr. Fredk. A. Walters, F.S.A., showed a groat of the light coinage of Henry IV, reading ANGLIE Z FRANCIE, and having a trefoil at end of legend and on breast an annulet and pellet at side of crown.

Mr. Lionel L. Fletcher showed a very fine series of forty-one eighteenth-century tokens of Ulster and of eighty-two colliery tokens of Cumberland, both series practically complete.

Mr. H. W. Taffs exhibited a large and varied collection of countermarked British Colonial currency of the end of the eighteenth and beginning of the nineteenth centuries.

Mr. V. B. Crowther-Beynon, F.S.A., showed the following unpublished seventeenth-century tokens:

1. *Decon.* Barnstable. *Obv.* ROBERT COMES = Mercer's Arms in beaded circle (m.m. Mullet).
Rev. IN BARNSTABLE = RC in beaded circle (m.m. Mullet).
2. *Gloucestershire.* Bristol City Farthing. Square or diamond shaped. Arms of Bristol reversed in a shield within a circle.
3. *London.* Charterhouse Square (Lead). *Obv.* IOHN.:NATTON or NATT. IN = Dove and olive branch.
Rev. CHARTERHOVSE SQUARE = I. N.
4. *London.* Flemish Churchyard. *Obv.* THE . SHVGER . LOFE . IN (m.m. Mullet). Sugar-loaf between two cloves.
Rev. FLIMICH . CHVRCH . YARD = R. E. B. (m.m. Mullet).
5. *London.* Fore Street. *Obv.* ISRAEL HOBS AT YE GOV = Lion rampant.
Rev. DEN LYON IN FOR STRET = HIS HALF PENY . 1 M H.
6. *London.* St. Katharine's. *Obv.* IACOB . VANDECOCK = I. M. V. (mm. Mullet).
Rev. AT . S . KATHERNES DOCK = I. M. V. (mm. Mullet).

Mr. Leopold Messenger showed a series of coins of Sarawak from 1863 to 1920, this set being the official collection of the Sarawak government recently on exhibition at the British Empire Exhibition.

Mr. B. A. Seaby on behalf of Messrs. Spink and Son, Ltd., showed the following fine series of rare and interesting pieces:

A case of badges and medals of guilds and corporations of the City of London.

A case containing a remarkable collection of old Club, Theatre, Sports, and Racing badges and tickets.

A remarkable collection of curious currencies:

Japan:

1. Tencho Oban (1573-92) of 18ct. gold.
2. Bunsei Cho-gin (base silver).
3. Genroku Cho-gin (silver).

China:

4. Tchou Dynasty before VII B.C. Bridge Money.
5. Tchou Dynasty before VII B.C. Bridge Money.
6. Ts'i Series Tchou Dynasty VII-II cent. B.C. Knife Money.
7. Ant's nose money. Six Tchus.

Burmah:

8. Tamarind Seed Money.

Siam:

9. Willow leaf Money. An unusually perfect specimen.
10. Maha Mongkut. Complete set of 4, 2, 1. Ticals, $\frac{1}{2}$, $\frac{1}{4}$, $\frac{1}{8}$, $\frac{1}{16}$, $\frac{1}{32}$.

Ceylon:

11. Fish Hook Money, in gold.
12. Fish Hook Money, in silver.

Congo:

13. Belgian Congo. Urua district. Bronze Saltire (Mahieu, p. 27).
14. Belgian Congo. Trumbash. Steel or iron Axe-head (Mahieu, p. 23).
15. Belgian Congo. Iron anchor (Mahieu, p. 25).

West Indies:

16. Ancient Carib shell string.

Four rare and interesting medals:

A very rare medal of Queen Caroline in silver, the British Museum having a specimen in lead only.

A Vernon medal with the unusual reverse reading: "Spanish insolence corrected by English bravery".

A medal of the Duke of Cumberland reading: "W. Duke of Cumberland, the British hero", *rev.* the rebels' flight from Carlisle.

A gold badge of the Ancient Order of the Friendly Brothers of St. Patrick, and two jettons of the time of Edward III, and a groat of Henry V with saltire to right of neck.

Mr. Philip Thorburn showed Moghul Mohurs of Rafi' al-Darjat, Shahjahanabad mint, 1131: 1 A.H., and of Muhammad Shah, a rare White Hun silver coin, and an ½th rupee of Wajid Ali of Oudh, Lucknow, 1271: 9.

JANUARY 15, 1925.

PROF. SIR CHARLES OMAN, K.B.E., M.P., LL.D., F.S.A.,
F.B.A., President, in the Chair.

The Minutes of the Meeting of December 18, 1924, were read and approved.

The following Presents to the Society were announced, and thanks ordered to be sent to their donors:

1. Antiquaries Journal, 1925, Pt. 1.
2. Finska Forminnensföreningens Tidskrift, 1924.
3. Proceedings of the Society of Antiquaries of Scotland, 1923-1924.
4. Suomen Museo, xxx-xxxi.
5. L. Forrer. Weber Catalogue, Vol. ii.
6. G. F. Hill. Becker the Counterfeiter.
7. J. G. Watson. Common Chinese Coins, Nos. 5-7; *from Messrs. Spink & Son, Ltd.*
8. Fifty-fourth Report of the Deputy-Master of the Royal Mint; *from the Deputy-Master.*

Messrs. J. H. Chamberlain, C. C. Oman, and M. S. Spink were elected Fellows of the Society.

Mr. H. P. Hall exhibited a series of seventeen first brass from Pertinax to Macrinus, and three bronze medallions of Florian and Maximianus Hercules, all in remarkable condition, also two bronze Roman coins with altered reverses.

The President showed an aureus of Tiberius, restored by Trajan, and Becker's imitation of Trajan's Horatius Cocles denarius, and the new 100-para piece of the Turkish Republic just issued.

Mr. Percy H. Webb brought a series of the originals of the coins later restored by Trajan.

Dr. Fairbairn showed a siege piece of Palma of 1814.

Mr. F. A. Walters, F.S.A., showed a Richard III half groat m.m. boar's head, and a groat of Henry IV of light coinage with HENRIC struck over RICARD; also a fine and well struck first brass of Postumus.

Lady Evans showed a silver gilt medal by Varin of Louis XIV and his mother.

Mr. W. H. Valentine showed four recent issues of Luxemburg (franc and 10 centimes), Denmark ($\frac{1}{2}$ krone), and Germany (5 pfennig).

Mr. Mattingly read a paper on the "Restored Coins of Trajan". This series is struck entirely in gold and silver, not in copper: the weights and style are of the age of Trajan, but the types are, or profess to be, those of an earlier time, restored by Trajan. For the Republican denarii the "restoration" is faithful down to small details; for the Imperial aurei, on the other hand, it is hardly more than nominal. The occasion of this issue was shown to be the calling in and the melting down of obsolete coinage by Trajan in the year A.D. 107. The reader discussed Mommsen's views of the measure, and argued against him that there must have been a definite demonetization of some of the earlier coins. The motives that directed Trajan's advisers in making their choice of types to restore were then discussed. In addition to the general desire to repre-

ELECTED

- 1918 *SLIGO, THE MARQUESS OF, F.S.A., F.R.G.S., 7 Upper Belgrave Street, S.W. 1.
- 1905 SNELLING, EDWARD, Esq., 26 Silver Street, E.C. 2.
- 1909 SOUTZO, M. MICHEL, 8 Strada Romana, Bucharest.
- 1922 SPENCER-CHURCHILL, CAPT. E. G., Northwick Park, Blockley.
- 1894 SPINK, SAMUEL M., Esq., 16-18 Piccadilly, W. 1.
- 1925 SPINK, MARTIN S., Esq., B.A., 16-18 Piccadilly, W. 1.
- 1902 STAINER, CHARLES LEWIS, Esq., Woodhouse, Iffley, Oxford.
- 1922 STARKEY, W. BEAMONT, Esq., Lyonsdown, Ilfracombe.
- 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., 19 Ellenborough Park N., Weston-super-Mare.
- 1896 *TAPPS, H. W., Esq., 35 Greenholm Road, Eltham, S.E. 9.
- 1879 TALBOT, COL. THE HON. MILO G., C.B., Bifrons, Canterbury.
- 1919 TARAPOREVALA, VICAJI D. B., Esq., Junction of Babulnath and Chowpatti Roads, Chowpatti, Bombay.
- 1917 TAYLOR, GLEN A., Esq., 63 Lewis Road, Neath, 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.
- 1925 THOMAS, CECIL, Esq., 7 Gloucester Terrace, S.W. 7.
- 1920 THOMAS, J. ROCHELLE, Esq., Elm House, Ellison Road, S.W. 13.
- 1918 THORBURN, PHILIP, Esq., 71 South Side, Clapham Common, S.W. 4.
- 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., Wesleyan Mission, Shimoga, Mysore, India.
- 1899 VLASTO, MICHEL P., Esq., 12 Allée des Capucines, Marseilles, France.

ELECTED

- 1905 WACE, A. J. B., Esq., M.A., Leslie Lodge, Hall Place, St. Albans.
- 1923 WALES, The National Museum of, Cardiff.
- 1883 WALKER, R. K., Esq., M.A., J.P., Watergate, Meath Road, Bray, Ireland.
- 1924 WALLWORTH, I. N. G., Esq., Fairbanks, Stanley Park Road, Carshalton.
- 1897 WALTERS, FRED. A., Esq., F.S.A., 28 Great Ormonde Street, W.C. 1, and St. Mildred's, Temple Ewell, Dover, *Hon. Secretary*.
- 1911 WARRE, FELIX W., Esq., O.B.E., M.C., 128 Church Street, W. 8.
- 1920 *WATSON, COMMANDER HAROLD NEWALL, R.N., Belmont, 10 Curzon Park, Chester.
- 1901 *WATTERS, CHARLES A., Esq., Springfields, Park Road, Hayton, 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.
- 1899 WELCH, FRANCIS BERTRAM, Esq., B.A., 1 Rue Salamine, Salonica.
- 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.
- 1920 *WHEELER, ERNEST H., Esq., 56 Caledonian Road, N. 1.
- 1915 WHITEHEAD, R. B., Esq., M.A., I.C.S. (retd.), M.R.A.S., 26 Marlborough Road, Southport, Lancs.
- 1921 WILKINSON, SURGEON-COMMANDER E. A. G., Kingshot, St. Cross, Winchester, Hants.
- 1908 WILLIAMS, T. HENRY, Esq., 15 Stanwick Road, W. 14.
- 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., 39 Harley House, N.W. 1.
- 1920 *WOODWARD, A. M. TRACEY, Esq., Chinese P.O. Box No. 1044, Shanghai, China.
- 1903 WRIGHT, H. NELSON, Esq., I.C.S. (retd.), 42 Ravenscroft Avenue, N.W. 11.

ELECTED

1920 WYMAN, ARTHUR CRAWFORD, Esq., 29 Place Dauphine,
Paris I.

1922 YOANNA, A. DE, Esq., B.A., M.D., 111 Pierrepont Street,
Brooklyn, N.Y.

1880 YOUNG, ARTHUR W., Esq., 12 Hyde Park Terrace, W. 2.

1919 ZIEGLER, PHILIP, Esq., Lilly Villa, Victoria Park,
Manchester.

HONORARY FELLOWS

ELECTED

- 1898 HIS MAJESTY VICTOR EMMANUEL III, KING OF ITALY,
Palazzo Quirinale, Rome.
- 1903 BAHRFELDT, GENERAL DER INFANTERIE A. D., PROFESSOR
MAX VON, Dr.Phil., Zinksgarten Strasse 2, Halle (Saale),
Germany.
- 1898 BLANCHET, M. ADRIEN, Membre de l'Institut, 10 Bd.
Emile Augier, Paris XVI.
- 1899 GABRICI, PROF. DR. ETTORE, S. Giuseppe dei Nudi 75, Naples.
- 1904 KUBITSCHK, PROF. J. W., Pichlergasse, 1, Vienna IX.
- 1893 LOERBECKE, 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.

MEDALLISTS

OF THE ROYAL NUMISMATIC SOCIETY

ELECTED

- 1883 CHARLES ROACH SMITH, Esq., F.S.A.
1884 AQUILLA SMITH, Esq., M.D., M.R.I.A.
1885 EDWARD THOMAS, Esq., F.R.S.
1886 MAJOR-GENERAL ALEXANDER CUNNINGHAM, C.S.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 M. W. H. WADDINGTON, Sénateur, Membre de l'Institut, Paris.
1894 CHARLES FRANCIS KEARY, Esq., M.A., F.S.A.
1895 PROFESSOR DR. THEODOR MOMMSEN, Berlin.
1896 FREDERIC W. MADDEN, Esq., M.R.A.S.
1897 DR. ALFRED VON SALLET, Berlin.
1898 THE REV. CANON W. GREENWELL, M.A., F.R.S., F.S.A.
1899 M. ERNEST BABELON, Membre de l'Institut, Paris.
1900 PROFESSOR STANLEY LANE-POOLE, M.A., Litt.D.
1901 S. E. BARON WLADIMIR VON TIESENHAUSEN, St. Petersburg.
1902 ARTHUR J. EVANS, Esq., M.A., F.R.S., F.S.A.
1903 M. GUSTAVE SCHLUMBERGER, Membre de l'Institut, Paris.
1904 HIS MAJESTY VICTOR EMMANUEL III, KING OF ITALY.
1905 SIR HERMANN WEBER, M.D.
1906 COMM. FRANCESCO GNECCHI, Milan.
1907 BARCLAY V. HEAD, Esq., D.Litt., D.C.L., Ph.D., Corr. de l'Inst.
1908 PROFESSOR DR. HEINRICH 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.
1922 FREDERICK A. WALTERS, Esq., F.S.A.
1923 PROF. J. W. KUBITSCHKE, Vienna.
1924 HENRY SYMONDS, Esq., F.S.A.
1925 EDWARD T. NEWELL, Esq., New York.

PROCEEDINGS
OF THE
ROYAL NUMISMATIC SOCIETY.

PROCEEDINGS OF THE ROYAL NUMISMATIC SOCIETY.

SESSION 1924—1925.

OCTOBER 16, 1924.

PERCY H. WEBB, Esq., M.B.E., Treasurer, in the Chair.

The Minutes of the Meeting of May 15 were read and approved.

The following Presents received since the May Meeting were announced, and thanks ordered to be sent to their donors:

1. Aarbøger for Nordisk Oldkyndighed, 1924, Pt. 2.
2. American Journal of Archaeology, 1924, Pt. 2.
3. Antiquaries Journal, 1924, Pt. 3.
4. Bulletin de Correspondance Hellénique, 1923, Pts. VIII-XII ; 1924, Pts. 1-VI.
5. Bulletin de la Société des Antiquaires du Nord, 1924, Pts. 1 and 2.
6. Journal of the Royal Society of Antiquaries of Ireland, 1924, Pt. 1.
7. Revue Belge de Numismatique, 1924, Pts. 1 and 2.
8. Syria, 1924, Pts. 1 and 2.
9. Athens, by C. T. Seltman ; *from the Cambridge University Press.*
10. Medals of T. Jefferson, by Robert Eidlitz ; *from the Author.*

Captain F. G. C. Rowe was proposed for election as a Fellow of the Society.

Mr. H. W. Taffs showed a Henry VIII halfpenny with m.m. portcullis, and farthings of York and Dublin of Edward I, all found at Dunwich; also a light penny of Henry IV of York.

A fine series of coins of Henry IV and V were shown in illustration of Mr. Shirley-Fox's paper by Messrs. L. A. Lawrence, J. S. Shirley-Fox, and Frederick A. Walters.

Mr. William Gilbert exhibited a solidus of Anthemius, being a variety of Cohen 6 in having the Christian monogram between the two soldiers on the reverse.

He also exhibited an unpublished penny token reading as follows:

Obv.—ALLICE. ONLEEY. AT. THE. BVLLS—A bull's head.

Rev.—HEAD. IN. LEADENHALL. STREET—Her I D 1668.

This house was a Tavern and is mentioned in the "Vademecum for Maltworms". George Onely, the landlord, was buried at St. Peter's, Cornhill (in which parish the tavern stood) on Jan. 27, 1656, and is described in the register as a vintner. His widow Alice (the issuer of the token) continued the business until her death in 1670, when she was buried in the cloister of the above church (on Dec. 1).

Mr. J. S. Shirley-Fox read a paper on "The Later Transitional Silver Coinage of Henry IV", in which he gave the results of a detailed study of the coinage, and laid down criteria for distinguishing the last coinages of Henry IV from the first of Henry V.

Mr. Walters, Mr. Lawrence, and Mr. Lockett contributed to the discussion.

NOVEMBER 21, 1924.

PROF. SIR CHARLES OMAN, K.B.E., M.P., LL.D., F.S.A.,
F.B.A., President, in the Chair.

The Minutes of the Meeting of October 16 were read and approved.

The following Presents to the Society were announced, and thanks ordered to be sent to their donors :

1. Annuaire de l'Académie Royale de Belgique, 1924.
2. Bulletin de l'Académie Royale de Belgique. Classe des Lettres, 1923, Pt. 12—1924, Pt. 9.
3. Bulletin de l'Académie Royale de Belgique. Classe des Beaux-Arts, 1923, Pt. 11—1924, Pt. 9.
4. Mitteilungen des Deutschen Archäologischen Instituts, Vols. xxxi—xxxix.
5. Revue Suisse de Numismatique, 1923, Pts. 1 and 2.
6. Zeitschrift für Numismatik, 1923, Pts. 1 and 2.
7. Andreas Alföldy, Der Untergang der römischen Herrschaft in Pannonien; *from the Author.*
8. Monsignore de Ciccio: Note et Appunti di Numismatica Siciliana; *from the Author.*
9. A. Mahieu, Numismatique du Congo; *from the Author.*
10. G. Severeanu, Le Statère d'Or de Pharsoios; *from the Author.*
11. Rev. H. P. Stokes: The Mediaeval Hostels of Cambridge; *from the Cambridge Antiquarian Society.*

Captain F. G. C. Rowe was elected a Fellow of the Society, and Dr. Cornelia G. Harcum and Mr. I. N. G. Wallworth were proposed for election.

Mr. William Gilbert exhibited a tetradrachm of Antioch of Antony and Cleopatra from the Bement Collection (lot 436) in extremely fine condition with both legends complete.

Miss Helen Farquhar exhibited a silver shell medallion of Charles II, probably by John Roettiers, from the Berney-Ficklin collection; only one other specimen is known.

Mr. L. A. Lawrence showed a pair-cased watch, the inner case with arms of Charles I, and the outer with his bust,

probably Dutch work somewhat later than the reign of Charles I. Mr. Lawrence also showed a reckoning-counter of the time of Edward II, struck at the Mint, with reverse type, two sparrows, an almost exact anticipation of the reverse type of the new South African farthings.

Mr. Valentine showed a bronze ticket with the name William Howard of Chatham with a sun-face in the centre.

Mr. Percy H. Webb read a paper on "The Coinage of the Gallic Empire".

In view of the impossibility of reconciling the accounts given by the Roman historians of events in Gaul between the revolt of Postumus in 258 and the abdication of Tetricus in 273, he endeavoured to construct the history of that period from the evidence deducible from the coinage. He referred to the available records of hoards deposited during and after those years, from which it appeared that coins of Postumus were most numerous, and those of the Tetrici also very numerous but diluted by the issues of irregular or barbarous mints. Those of Victorinus were numerous and those of Marius scarce, but in considerably greater numbers than those of Laelianus. He discussed the style and fabric of the coins and submitted the following conclusions: that the rebellion of Laelianus took place in the last year of the reign of Postumus (A. D. 267), and that his coins were issued from Moguntiacum only; that the principal mint of Postumus was first at Lugdunum, and was removed to Cologne in or about A. D. 264, and that he did not associate either Victorinus or Postumus the younger with himself in the Empire; that the reign of Marius was next in order, and lasted for at least some weeks; and that his mints were at Cologne and some other place as yet unidentified, which used a grotesque portrait, and commenced to strike for Victorinus, but was quickly closed by him; that the reign of Victorinus commenced in A. D. 268 and, as he claimed three consulates, probably terminated in the early part of 270, and was therefore somewhat longer in proportion to that of Tetricus than is generally supposed; that

his mints, in addition to those already mentioned, were at Cologne and Lugdunum, and that the regular coinage of the Tetrici was probably from the mint of Lugdunum only, as was the Gallic coinage of Aurelian.

DECEMBER 18, 1924.

PROF. SIR CHARLES OMAN, K.B.E., M.P., LL.D., F.S.A.,
F.B.A., President, in the Chair.

The Minutes of the Meeting of November 21 were read and approved.

Dr. Cornelia G. Harcum and Mr. I. N. G. Wallworth were elected Fellows of the Society; Messrs. J. H. Chamberlain, Charles Chichele Oman, and Martin Samuel Spink were proposed for election.

The evening was devoted to Exhibitions.

The President exhibited a series of Seleucid silver coins; there were tetradrachms of every Seleucid of the regular line except Tryphon, who was represented by a drachm only, and Demetrius III. A valuable coin was a very fine tetradrachm of Demetrius I and Laodice.

The Rev. Edgar Rogers showed a series of Greek copper of Syria, Phoenicia, Palestine, Mesopotamia, and Arabia, all in very fine condition, and a denarius of Vespasian overstruck by Simon Barcochba, dated first year of the second revolt, with types grapes and wreath, with Simon's name (unpublished).

Mr. Percy H. Webb brought a very fine series of Roman quinarii and small denominations in bronze.

Mr. William Gilbert exhibited twelve Roman solidi, all in very fine condition, of the twelve Caesars.

Mr. L. A. Lawrence, F.S.A., showed a remarkable series of Roman and English brockages in silver and bronze and other interesting curiosities of minting.

Mr. Sidney Fairbairn showed a series illustrating the work of Cavino in copying Roman models.

Lt.-Col. H. W. Morrieson, F.S.A., exhibited a series of the silver coins of Elizabeth, 1561-1564, to show the varieties of the rose stamped on the obverse of these pieces.

Mr. Fredk. A. Walters, F.S.A., showed a groat of the light coinage of Henry IV, reading ANGLIE Z FRANCIE, and having a trefoil at end of legend and on breast an annulet and pellet at side of crown.

Mr. Lionel L. Fletcher showed a very fine series of forty-one eighteenth-century tokens of Ulster and of eighty-two colliery tokens of Cumberland, both series practically complete.

Mr. H. W. Taffs exhibited a large and varied collection of countermarked British Colonial currency of the end of the eighteenth and beginning of the nineteenth centuries.

Mr. V. B. Crowther-Beynon, F.S.A., showed the following unpublished seventeenth-century tokens:

1. *Decon.* Barnstaple. *Obv.* ROBERT COMES = Mercer's Arms in beaded circle (m.m. Mullet).
Rev. IN BARNSTABLE = RC in beaded circle (m.m. Mullet).
2. *Gloucestershire.* Bristol City Farthing. Square or diamond shaped. Arms of Bristol reversed in a shield within a circle.
3. *London.* Charterhouse Square (Lead). *Obv.* IOHN · NATTON or NATT. IN = Dove and olive branch.
Rev. CHARTERHOVSE SQVARE = I. N.
4. *London.* Flemish Churchyard. *Obv.* THE · SHVGER · LOFE · IN (m.m. Mullet). Sugar-loaf between two cloves.
Rev. FLIMICH · CHVRCH · YARD = R. E. B. (m.m. Mullet).
5. *London.* Fore Street. *Obv.* ISRAEL HOBBS AT YE GOV = Lion rampant.
Rev. DEN LYON IN FOR STRET = HIS HALF PENY. I M H.
6. *London.* St. Katharine's. *Obv.* IACOB · VANDECOCK = I. M. V. (mm. Mullet).
Rev. AT · S · KATHERNES DOCK = I. M. V. (mm. Mullet).

Mr. Leopold Messenger showed a series of coins of Sarawak from 1863 to 1920, this set being the official collection of the Sarawak government recently on exhibition at the British Empire Exhibition.

Mr. B. A. Seaby on behalf of Messrs. Spink and Son, Ltd., showed the following fine series of rare and interesting pieces:

A case of badges and medals of guilds and corporations of the City of London.

A case containing a remarkable collection of old Club, Theatre, Sports, and Racing badges and tickets.

A remarkable collection of curious currencies:

Japan:

1. Tencho Oban (1573-92) of 18ct. gold.
2. Bunsei Cho-gin (base silver).
3. Genroku Cho-gin (silver).

China:

4. Tchou Dynasty before VII B.C. Bridge Money.
5. Tchou Dynasty before VII B.C. Bridge Money.
6. Ts'i Series Tchou Dynasty VII-II cent. B.C. Knife Money.
7. Ant's nose money. Six Tchus.

Burmah:

8. Tamarind Seed Money.

Siam:

9. Willow leaf Money. An unusually perfect specimen.
10. Maha Mongkut. Complete set of 4, 2, 1. Ticals, $\frac{1}{2}$, $\frac{1}{4}$, $\frac{1}{8}$, $\frac{1}{16}$, $\frac{1}{32}$.

Ceylon:

11. Fish Hook Money, in gold.
12. Fish Hook Money, in silver.

Congo:

13. Belgian Congo. Urna district. Bronze Saltire (Mahieu, p. 27).
14. Belgian Congo. Trumbash. Steel or iron Axe-head (Mahieu, p. 23).
15. Belgian Congo. Iron anchor (Mahieu, p. 25).

West Indies:

16. Ancient Carib shell string.

Four rare and interesting medals:

A very rare medal of Queen Caroline in silver, the British Museum having a specimen in lead only.

A Vernon medal with the unusual reverse reading: "Spanish insolence corrected by English bravery".

A medal of the Duke of Cumberland reading: "W. Duke of Cumberland, the British hero", *rev.* the rebels' flight from Carlisle.

A gold badge of the Ancient Order of the Friendly Brothers of St. Patrick, and two jettons of the time of Edward III, and a groat of Henry V with saltire to right of neck.

Mr. Philip Thorburn showed Moghul Mohurs of Rafi al-Darjat, Shahjahanabad mint, 1131: 1 A.H., and of Muhammad Shah, a rare White Hun silver coin, and an $\frac{1}{8}$ th rupee of Wajid Ali of Oudh, Lucknow, 1271: 9.

JANUARY 15, 1925.

PROF. SIR CHARLES OMAN, K.B.E., M.P., LL.D., F.S.A.,
F.B.A., President, in the Chair.

The Minutes of the Meeting of December 18, 1924, were read and approved.

The following Presents to the Society were announced, and thanks ordered to be sent to their donors:

1. Antiquaries Journal, 1925, Pt. 1.
2. Finska Forminnensföreningens Tidskrift, 1924.
3. Proceedings of the Society of Antiquaries of Scotland, 1923-1924.
4. Suomen Museo, xxx-xxxii.
5. L. Forrer. Weber Catalogue, Vol. ii.
6. G. F. Hill. Becker the Counterfeiter.
7. J. G. Watson. Common Chinese Coins, Nos. 5-7; from Messrs. Spink & Son, Ltd.
8. Fifty-fourth Report of the Deputy-Master of the Royal Mint; from the Deputy-Master.

Messrs. J. H. Chamberlain, C. C. Oman, and M. S. Spink were elected Fellows of the Society.

Mr. H. P. Hall exhibited a series of seventeen first brass from Pertinax to Macrinus, and three bronze medallions of Florian and Maximianus Hercules, all in remarkable condition, also two bronze Roman coins with altered reverses.

The President showed an aureus of Tiberius, restored by Trajan, and Becker's imitation of Trajan's Horatius Cocles denarius, and the new 100-para piece of the Turkish Republic just issued.

Mr. Percy H. Webb brought a series of the originals of the coins later restored by Trajan.

Dr. Fairbairn showed a siege piece of Palma of 1814.

Mr. F. A. Walters, F.S.A., showed a Richard III half groat m.m. boar's head, and a groat of Henry IV of light coinage with HENRIC struck over RICARD; also a fine and well struck first brass of Postumus.

Lady Evans showed a silver gilt medal by Varin of Louis XIV and his mother.

Mr. W. H. Valentine showed four recent issues of Luxemburg (franc and 10 centimes), Denmark ($\frac{1}{2}$ krone), and Germany (5 pfennig).

Mr. Mattingly read a paper on the "Restored Coins of Trajan". This series is struck entirely in gold and silver, not in copper: the weights and style are of the age of Trajan, but the types are, or profess to be, those of an earlier time, restored by Trajan. For the Republican denarii the "restoration" is faithful down to small details; for the Imperial aurei, on the other hand, it is hardly more than nominal. The occasion of this issue was shown to be the calling in and the melting down of obsolete coinage by Trajan in the year A.D. 107. The reader discussed Mommsen's views of the measure, and argued against him that there must have been a definite demonetization of some of the earlier coins. The motives that directed Trajan's advisers in making their choice of types to restore were then discussed. In addition to the general desire to repre-

sent Roman history as a whole, with Republic and Empire harmonized, considerations of history, legend, religion, and family history were shown to have played a part. In the series of Imperial aurei, it was argued, a particular interpretation of history was offered and only those Emperors were admitted whose memories were held in honour.

Sir Charles Oman drew attention to the deliberate inclusion among the Republican restorations of coins of Sulla and Pompey the Great. The Empire under Trajan could treat the old hatreds as dead. Tiberius appeared among the restored Emperors; Tacitus had not yet damned his memory in the *Annals*.

FEBRUARY 19, 1925.

PROF. SIR CHARLES OMAN, K.B.E., M.P., LL.D., F.S.A.,
F.B.A., President, in the Chair.

The Minutes of the Meeting of January 15 were read and approved.

The following Presents to the Society were announced, and thanks ordered to be sent to their donors:

1. Journal of Hellenic Studies, 1924, Pt. 2.
2. Revue Numismatique, 1924, Pts. 3 and 4.
3. Numismatische Zeitschrift, 1924.
4. H. W. Codrington. The Coins of Ceylon; *from the Author*.

Mr. L. G. P. Messenger exhibited a third brass of Carausius, *rev.* VICTORIA AVGG, apparently restruck on a coin of Tetricus.

Mr. G. C. Haines showed a small bronze coin of Justinian I, *rev.* *I* no m.m., not in the B. M. Catalogue.

Mr. L. Fletcher showed ten Russian copper coins of Peter the Great, four of the old type and four kopecks, and two $\frac{1}{2}$ -poluskhas of the new coinage.

Mr. Fredk. A. Walters, F.S.A., showed a groat and penny of David II of Scotland of the Aberdeen mint.

Mr. George F. Hill gave an account of a collection of Renaissance medals which he had recently purchased, and described the many hitherto unknown pieces contained in it. One of the most remarkable was a portrait medal of Edward Courtenay, Earl of Devonshire, made very shortly before his death in Italy.

Mr. Hill also read a paper on Alexander of Bruchsal, who was employed at the English mint from 1494 to 1509, and showed that he was not a native of Brussels as had been suggested, but of Bruchsal in Baden. Biographical data were supplied from various autobiographical records by M. Tournour, who also had discovered a portrait medal of the engraver by himself, a cast of which was exhibited. (This paper was printed in the *Numismatic Chronicle*, 1924, pp. 254-257.)

MARCH 19, 1925.

PROF. SIR CHARLES OMAN, K.B.E., M.P., LL.D., F.S.A.,
F.B.A., President, in the Chair.

The President exhibited a series of silver coins of the York mint from Edward I to Richard III.

The Minutes of the Meeting of February 19 were read and approved.

Mr. Fredk. A. Walters, F.S.A., exhibited a portrait testoon of Mary Queen of Scots of 1561 in very fine condition.

Mr. William Gilbert showed an aureus of Nero Drusus (Cohen 3) being lot 113 from the recent Récamier sale.

Mr. Gilbert also showed a seventeenth-century token of Ross (Ireland. Williamson 695) overstruck on a token of Nicholas White of High St., Dublin (Williamson 415), interesting in that it helps to show the above Ross token was an Irish piece—which has been doubted.

Mr. Lawrence exhibited a series of coins to illustrate his paper.

Mr. L. A. Lawrence, F.S.A., read a paper on 'The York Mint in Plantagenet Times'. Notice was taken of the earlier constitution of the York Mint or mints under Saxon and Norman kings. The mint then probably worked both the Royal and the Archiepiscopal branches concurrently, the difference between the coins being known by the moneyer's names. On removal of the names from the coins in Edward I's time the difference was shown by a quatrefoil in the centre of the reverse. Edward III allowed Archbishop Milton to work his mint in spite of there being no Royal mint in 1331. From that time the coins would seem to indicate that the Royal mint at York was only opened when large coins were wanted, and with them the Royal mint also issued pennies without the quatrefoil. During the time of working of the Royal mint, the archbishop's branch would appear to have been closed, as quatrefoil pennies are not to be found in strict agreement with the Royal pennies.

York was the great factory for supplying the country with its penny coinage, and the closing of the Royal mint caused the immediate opening of that of the Archbishop. The quatrefoil is present on all York pence of succeeding kings until the whole type of the penny was changed in the reign of Henry VII. Under Henry V, there are two non-quatrefoil pence—one is connected with the issue of large coins (royal) quite early in the reign. The other has no corresponding large coins and must therefore belong to a period when the Archbishop's mint was in the hands of the king's receiver. This receivership apparently took place when (a) there was a vacancy in the see, and (b) when the Archbishop did not function, on account of excommunication, imprisonment, or sequestration of the revenues. In all these cases it was necessary to show that the coins were from the Archbishop's mint, and this was done by removal of the quatrefoil or when initials were on the obverse, &c., removal of these or the quatrefoil.

The conclusions seem to be that royal pennies were only issued when groats were being struck, and that all other pennies without the quatrefoil were issued by the king's receiver for the reasons given above.

APRIL 16, 1925.

PERCY H. WEBB, Esq., M.B.E., Treasurer, in the Chair.

The Minutes of the Meeting of March 19 were read and approved.

The following Presents to the Society were announced, and thanks ordered to be sent to their donors:

1. Antiquaries Journal, 1925, Pt. 2.
2. Proceedings of the Royal Irish Academy, 1925, xxxvi, c. 1.
3. R. S. Le May. The Coinage of Siam; *from the Author*.
4. Catalogue of the Hewlett Collection; *from Messrs. Spink & Son, Ltd.*

Mr. Gilbert showed an aureus of Nero (Coh. 221) from the Ransom collection (lot 14) and another of Hadrian (Coh. 406) from the same sale (lot 24).

Mr. W. H. Valentine showed a large Chinese coin of the Emperor Shun Ti 1333-41.

Mr. Percy H. Webb read a paper on a find of coins of Aurelian to Carausius, made at Linchmere in Sussex, in the autumn of 1924. The owners, Mrs. Hoyle and Miss F. E. Abbott, brought the complete find to the British Museum, where the reader had examined it. A fine selection had been made and generously presented by the two ladies to the Museum. More than half of the coins were of the reign of Carausius, and they threw a good deal of light on problems of the time. As there were no coins of the later period after the peace with Rome, we could now tell with certainty what issues belonged to the years A. D. 286-289. Prominent among these issues were the

FO and L issues of London. Colchester is much less fully represented than London and had evidently not been striking long. There were no coins with the mint-mark RSR and no coins of Rouen. Rouen probably did not strike for Carausius till the middle of his reign, after his victory over the forces of Maximian. Almost all the coins in this hoard bore clear traces of original silver washing, proving—what had hitherto been less than certain—that Carausius followed the normal practice of his time in this respect. The mark XI, which appears on some four of the coins, possibly denoted that ten of them went to the aureus. This paper is printed in this volume of the *Numismatic Chronicle*.

A discussion followed in which Sir Charles Oman, Mr. F. A. Walters, and Mr. H. Mattingly took part.

MAY 21, 1925.

PROF. SIR CHARLES OMAN, K.B.E., M.P., LL.D., F.S.A.,
F.B.A., President, in the Chair.

The Minutes of the Meeting of April 16 were read and approved.

The following Presents to the Society were announced, and thanks ordered to be sent to their donors:

1. British Numismatic Journal, Vol. xvi; from Miss Helen Farquhar.
2. Numismatic Circular, 1924; from Messrs. Spink and Son, Ltd.
3. Miss Helen Farquhar. Royal Charities, Pt. 2.
4. Miss Helen Farquhar. A series of Portrait Plaques; Nos. 3 and 4; from the Author.
5. Th. Schultz. Die Reichs- und Regierungstitel auf römischen Münzen.

Messrs. Bryan Pontifex and F. B. Welch were proposed for election as Fellows of the Society.

Messrs. H. Garside and L. G. P. Messenger were appointed to audit the Society's accounts.

The Rev. Edgar Rogers exhibited ten rare and unpublished Seleucid copper coins.

The President exhibited a gold coin of Decentius and a silver coin of Vetricano.

Mr. Fredk. A. Walters, F.S.A., showed two half-groats of the Restoration period of Henry VI from the Bruun sale, one reading HENRICU and the other HENRIC.

Mr. P. Thorburn showed a rare round Bronze Chinese coin of the city of Yuen, and a set of three Korean coins, 3, 2, 1, each of the Hu mint.

Dr. Fairbairn showed a French satirical medal on the rumour of the fall of Sebastopol which gained currency about Oct. 3, 1854: obv. duck (*canard*): *Prise de Sebastopol: 45000 prisonniers, 800 canons*; rev. *histoire tres rare d'un tartare barbare de la mer noire 1854*.

Miss Helen Farquhar exhibited an extensive series of counters and medalets in illustration of her paper.

Miss Helen Farquhar read the paper entitled "Additional Notes on Silver Counters of the Seventeenth Century", which is printed in this volume of the *Numismatic Chronicle*, pp. 78 ff.

JUNE 18, 1925.

ANNUAL GENERAL MEETING.

PROF. SIR CHARLES OMAN, K.B.E., M.P., LL.D., F.S.A.,
F.B.A., President, in the Chair.

The Minutes of the Annual General Meeting of June 19, 1924, were read and approved.

Messrs. Bryan Pontifex and F. B. Welch were elected Fellows of the Society.

Messrs. L. G. P. Messenger and W. H. Valentine were appointed scrutineers of the ballot.

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 one Honorary Fellow of the Society :

M. le Vicomte Baudouin de Jonghe

and of the following seven Fellows of the Society :

G. W. Egmont Bieber, Esq.

Dr. R. T. Cassal.

Dr. Eduard Fiala.

Baron F. von Hügel.

Richard B. Seager, Esq.

W. Beresford Smith, Esq.

Mrs. Lewis Wigram.

They have also to announce the resignations of the following five Fellows :

Leonard Burrows, Esq.
 E. K. Burstal, Esq.
 J. E. Cree, Esq.
 H. C. Levis, Esq.
 K. D. Stewart, Esq.

On the other hand they have to announce the election of the following eight Fellows :

J. H. Chamberlain, Esq.
 Miss Cornelia G. Harcum, Ph.D.
 Charles Chichele Oman, Esq.
 Bryan Pontifex, Esq.
 Capt. F. G. C. Rowe.
 Martin S. Spink, Esq.
 I. N. G. Wallworth, Esq.
 F. B. Welch, Esq.

The number of Fellows is therefore :

	Ordinary.	Honorary.	Total.
June, 1924	275	10	285
Since elected	8	—	8
	<hr/> 283	<hr/> 10	<hr/> 293
Deceased	7	1	8
Resigned	5	—	5
	<hr/> 271	<hr/> 9	<hr/> 280

The Council have also to announce that they have decided to award the Society's Medal this year to Mr. Edward T. Newell, in recognition of his services to Greek Numismatics, especially for his studies in the coinage of Alexander the Great.

The Treasurer's Report which follows was then laid before the Meeting :

STATEMENT OF RECEIPTS AND DISBURSE-

FROM JUNE 1ST, 1924,

Dr.

THE SOCIETY IN ACCOUNT

	£	s.	d.	£	s.	d.
<i>To cost of Chronicle—</i>						
Printing	295	14	10			
Plates	43	2	6			
				338	17	4
„ <i>Rent</i>				50	0	0
„ <i>Refreshments</i>				6	7	10
„ <i>Insurance</i>				1	10	0
„ <i>Sundry Payments</i>				13	18	10
„ <i>On Deposit with Westminster Bank Ltd.</i>				200	0	0
				£610	14	0
<i>„ Balance carried forward—</i>						
General Account	139	8	2			
Research Account	32	14	2			
				172	2	4
				£782	16	4

MENTS OF THE ROYAL NUMISMATIC SOCIETY
TO MAY 31ST, 1925.

WITH PERCY H. WEBB, HON. TREASURER.

£s. d.

	£	s.	d.	£	s.	d.
<i>By Balance in hand, June 1, 1924—</i>						
General Account	222	7	11			
Research Account	31	3	2			
				253	11	1
<i>By Subscriptions—</i>						
Ordinary	290	5	0			
Life	42	0	0			
Entrance Fees	10	10	0			
				342	15	0
<i>By Contributions to cost of Plates</i>					12	11
<i>" Sales of Chronicles</i>					144	15
<i>" Dividends on Investments—</i>						
£942 London, Midland, and Scottish Railway 4% Preference Stock (less Income Tax)				29	4	0
				782	16	4

PERCY H. WEBB, *Hon. Treasurer.*

Audited and found correct,

LEOPOLD G. P. MESSENGER, }
HENRY GARSIDE. } *Hon. Auditors.*

June 12, 1925.

The Reports of the Council and of the Treasurer were adopted on the motion of the President.

Sir Charles Oman then handed the Society's Medal to Mr. Allan to be forwarded to Mr. Newell, and addressed the Meeting as follows :

This is the first occasion on which the silver medal of the Royal Numismatic Society has been awarded to one of our members who dwells across the Atlantic. It is an extraordinary fact that Mr. Newell has earned it by prolonged and valuable research into a section of coins not of his own hemisphere nor of Post-Columbian date, but belonging to Greek antiquity. He is a worthy representative of the modern school of American archaeologists, who have been busy during the present generation in research in the classical lands of the Mediterranean. Mr. Newell comes not from the old centres of American culture, but from the State of Wisconsin, in the North-West, beyond the Great Lakes. From an early age his interests were turned toward Greek studies, and especially toward Greek numismatics. He was born in 1886, and was already so much addicted to the study of coins that he joined our Society in 1905, before he had even come of age. He is still under forty, yet has been for some years president of the American Society, with which we so often interchange courteous greetings.

Mr. Newell's greatest work has been the study of the mints of Alexander the Great, and the publication of many monographs upon them, which have given us fixed data for the arrangement of the copious and difficult coinage of the great Macedonian Conqueror. The subject was such a large one that no student for many years has dared to tackle it. Müller's *Monnaies d'Alexandre le Grand* remains the sole book of reference. And every collector owns that Müller is not only quite out of date, owing to the discovery of many new types and mint-marks during the last fifty years, but that he was from the first working on the wrong lines, trying to identify every symbol as the badge of a different

town. Only a minority of them really serve this purpose. Mr. Newell has shown by patient research that a single city mint often used many symbols, which must belong to magistrates for the most part, and that the total number of Alexandrine places of issue must have been very much smaller than Müller suspected. He has dealt with many of the most important mints in a series of monographs, and (with the many years of activity that remain before him) has a reasonable prospect of completing the whole inquiry. Already we have all rearranged our Alexandrine tetradrachms and staters on new lines of local and historical sequence.

Only less important than Mr. Newell's work on the coins of Alexander is his monograph on the money of the Seleucid kings of Syria, that vast and rather neglected series of fine medallie portraits of an interesting dynasty, which presents so many puzzles of iconography, as well as of mint-places. His admirable "Coins of Antioch" has at last enabled us to see which of the Seleucid issues were struck in their capital city and which were not. The task was not an easy one, since for some perverse reason the mint-masters did not put any unvarying city symbol or monogram on their money, but only their personal names, contracted in various summary fashions. The working out of the sequence of these two-letter or three-letter signatures, and the determination of their Antiochene or other *provenance* was a work of extraordinary delicacy—one main trouble being that so many Greek names begin with the same letters, another that two magistrates, one much more permanent than the other, were generally signing and countersigning the later Seleucid tetradrachms.

I must not allude in detail to Mr. Newell's numerous smaller works, which in themselves contribute no small service to numismatic science. I will merely signify our admiration for him as an unwearied traveller in search of knowledge, and a collector of the wise and intellectual sort, who is not set merely on piling up rarities, or setting out rows of handsome pieces in mint-condition, but on deter-

mining points of history, local and dynastic, for which a coin in secondary condition, or another which is fairly common, may serve to fix a most important date. It is with the greatest pleasure that I hand to our secretary, for transmission to Mr. Newell, the medal which witnesses to our high appreciation of his services to ancient classical numismatics.

Mr. Allan then read the following letter of acknowledgement from Mr. Newell :

Century Club,
7 West Forty-third Street,
New York,
June 7.

John Allan, Esq.,
Hon. Secretary of the
Royal Numismatic Society.

Dear Sir,

It is indeed with the greatest surprise and pleasure that I learn of the high honour which the Council of the Royal Numismatic Society has seen fit to bestow upon me.

There can be no question but that the medal of this Society is looked upon by all as the very highest award that could possibly come to any numismatist. My surprise and gratification is therefore the more complete!

It is with considerable diffidence, but with a sincere hope that my future efforts in our chosen field of research will not belie your confidence, that I have the pleasure of accepting so great an honour.

Since, unfortunately, I cannot myself be present in London at this time, please convey to the gentlemen of the Council my deep appreciation and gratitude for the very great distinction which has been conferred upon me.

Believe me, with best regards,

Very sincerely yours,

EDWARD T. NEWELL.

The President then delivered the following address :

THE PRESIDENT'S ADDRESS.

None of the Fellows of the Society whose loss we deplore to-day was personally known to me, nor do I think that any of them were, in my time, attendants of our monthly meetings. But several of them were men of note. The reputation of our honorary Fellow, the Vicomte de Jonghe, was a European one, as that of a specialist in the coins of the Low Countries. He was for many years President of the Royal Numismatic Society of Belgium, and a frequent contributor to the *Revue Belge* on medieval currency, particularly that of his own country. We elected him as an honorary member so far back as 1893.

Dr. Fiala was a specialist on Bohemian coins, and wrote much on the mint of Prague. He contributed once to our *Chronicle* when he gave us an interesting article on Bohemian silver pennies with the inscription **ÆDELRED REX ANGLOR**—a most extraordinary borrowed type. He wrote also on German medieval and modern numismatics, and his monumental work on the Coins and Medals of the House of Guelf has an interest for English readers, as containing full accounts of the issues of the Hanoverian Electors who were also English kings. He was undoubtedly one of the foremost continental numismatists.

Mr. Richard Seager, who only joined the Society in 1921, was an American explorer, who spent most of his later years in Crete, where he conducted excavations on behalf of the University of Pennsylvania. The twenty-fourth number of the American Numismatic Society's Monographs consisted of his account of a large find of fourth-century coins near Canea. He had written several valuable monographs on excavations in Crete and adjoining Sporades. There was an appreciative notice of his work and personality in the *Times*.

Mr. Beresford Smith was, I believe, once a member of our Council, and a regular attendant at meetings, but he

retired to the country some time before I became myself a regular visitant.

Baron Friedrich von Hügel, not to be confused with his Cambridge brother, was a distinguished philosopher and Orientalist, and a writer of many books and articles—the best known of them *The Mystical Element in Religion*. The University of Oxford conferred on him the degree of D.D.—a very rare distinction for a layman. He had been for thirty-four years a member of the Society, but was not a professed numismatist—his interests being broader and wider, it must be confessed, than ours.

Mrs. Lewis Wigram was a very old member—one of our seniors. She joined the Society in 1869, and I can only find one of our fellows, Mr. McLachlan of Montreal, whose name has been on our roll for an even longer time. She never, I believe, contributed to our proceedings.

I ought perhaps to mention when concluding our obituary list a very distinguished Civil Servant, who had been one of our members a generation back, but resigned on leaving England for long residence in the Colonies. This is Sir William Ellison MacCartney, for some years Deputy-Master of the Mint during the days of Edward VII, and from 1912 onward Governor for many years first of Tasmania and then of Western Australia. Happy was the Deputy-Master of the Mint of 1910—he had not to strike the debased coinage of to-day, and dealt in real silver and the “good red gold”, which did not play the tricks of the wretched stuff which the machines have now to deal with.

The past year has been notable for a widespread resumption of the striking of metallic currency all over Europe. Since the war we had hitherto seen little but paper-money, and when actual coins appeared they were in substitute-metals, not in silver. Such were the handsome nickel francs and lire of Belgium and Italy—both rather happy experiments—and the much less satisfactory French tokens. In these last the original gilding has commenced to wear off, and a handful of French change now presents a rather shabby appearance, resembling demoralized *sous* rather than

anything of higher value. But this year the Soviet Government has struck silver and gold coins—obviously for foreign trade rather than for internal purposes. There is a large gold coin called (I think) a *chervonetz*, somewhat bigger than a British sovereign, and valued in bullion at about 22s., and a large silver coin, a substitute for the old rouble, struck in part at the British mint (an odd fact!) and containing 90 per cent. of silver as against the 50 per cent. which is all that our own shilling or half-crown can boast. Probably in consequence of the larger proportion of real silver, it looks, and wears, better than our own disgraceful currency. Germany has begun to issue real silver "reichsmarks" of a simple and very ugly type, with a badly drawn eagle on the obverse, and a mere value-inscription on the reverse. They are silver, but most depressing and commonplace pieces. The Austrian Republic, the Turkish Republic, and several others of the new states have also commenced to put out metallic issues, of varying degrees of artistic merit and metallic purity. But the denomination and their titles are of course new things to us.

By the hazard of the Ballot I was fortunate enough on May 20 to secure the privilege of introducing a motion in the House of Commons about the unsatisfactory condition of the British coinage—the first time that it has been discussed at length since Mr. Austen Chamberlain carried through his unfortunate Debasement Act of February 1920. The subject was debated for some three hours, and there is no doubt that the unhappy condition of our silver currency is now better known than it was before. I sent round the House a glass case—the same that is now circulating in this room—containing specimens of all the various debased moneys of the issues of 1920–1924 showing the particular defects caused by each of the different alloys successively used by the Mint, in its endeavour to carry out the impracticable orders of the Chancellor of the Exchequer. The 1920 issues turned brown; the 1921 issues split up and flaked off on the surface or the edge; the 1922–1923 issues turn saffron yellow, sometimes all over, sometimes in spots

only. As they become more worn, the yellow patches are extending all over the superficies. Lastly the 1924 issues, those struck during the tenure of power of Mr. Ramsay Macdonald's ministry, are already turning (very appropriately) *red*, the core of copper contained in the white surface becoming visible the moment that the shining silver facing is worn through. This issue is at the present moment looking quite bright and attractive, but the moment that it has had a couple of years of hard wear, the copper will become visible on the salient points—just as with the issues of the Emperor Gallienus, or the famous base testoons of Henry VIII, which won for that burly monarch in his latest years the nickname of "Old Copper Nose".

I grieve to say that my plea for an improvement in the purity of the coinage was refused by the Financial Secretary to the Treasury, who wound up the debate, on the mere plea that it would be rather expensive, would indeed cost so much as £300,000 a year. This argument I do not regard as conclusive, since there is in this year 1925 no need to do any coining at all—for the Mint is actually at this moment buying back superfluous silver coin from the banks, there being a redundant quantity of silver in circulation at present. In 1923 the Mint actually had to buy back half a million of fractional currency, and it is proposed to do the same in 1925. If, therefore, there is too much "silver" money out, why add to its bulk by throwing more upon the country? The first thing that should be done is to stop issuing any more of the red-copper-alloyed currency of the 1924 brand.

But if there was little comfort to be got from the answer of the Financial Secretary with regard to alloy, he gave us very satisfactory assurances as to a change in types being imminent. I was shown the report of the Advisory Council on things artistic, which the Master of the Mint has summoned to his help, and I find that their minute uses far more strong language against the present reverses of the British "silver" coins than ever I employed in Parliament, and says that they demand instant change. I am told that

this is to come shortly, so am not without hope that our half-crown—with its device most suitable for a wood-carving panel—and our florin with its parody of Queen Anne work may ere long be replaced by something better. My own plea is for Britannia holding out an olive-branch, and—for the inscription—Mr. Baldwin's happily inspired biblical motto, "GIVE PEACE IN OUR TIME O LORD". English inscriptions are not utterly unknown on our coinage, as witness the GOD WITH US of 1649-1660.

The Journal of the Society continues to keep up its reputation for extremely valuable contents, and extremely late publication. It was not till this month of June had begun that I was privileged to receive the second part of the volume of 1924, which theoretically belonged to last December. In view of the comparatively flourishing state of the finances of the Society at the present moment, I propose that we should now have three instead of two issues every year: this will bridge over the long interval between the receipt of successive parts, which disheartens some of our members, and (as I suspect) prevents collectors not resident in London from joining our ranks. For to them the Society only appeals as a publisher of numismatic information, and they have few or no chances of attending a meeting along with our London colleagues. A more frequent publication of parts would stimulate elections, unless I am much mistaken. But, as I am told, it would be easier to print more numbers of the *Chronicle* if more members would write papers. I hereby appeal to any friends now present to give us a contribution, publishing any exceptionally rare or beautiful coins which they may own, with a commentary showing the particular interest of each. Long reasoned dissertations, though most valuable, are not the only pieces of work that we require. And, in especial, notes on recent finds, however small, which have come under the eyes of provincial members are particularly to be coveted.

Our papers read during the session have been well divided between the various sections of numismatics, ancient and

modern, though as in 1923-1924 I miss the contributions on large subjects of Greek interest which were once our regular routine. It may be remarked, however, that if we have been rather short of definite Hellenic topics at our actual meetings, there are some palliatives for our disappointed desires in the *Chronicle*, where Mr. Newell's paper on the Parthians gives some interesting light on Seleucid currency in Mesopotamia in the third century B.C. Mr. Newell's paper is a worthy successor to many others which have earned him this year the Society's silver medal. We have also the very welcome paper on British Museum acquisitions in 1924, printed by our Vice-President, the Keeper of Coins, introducing us to a number of unknown or barely-known Greek coins of which we were glad to have full information.

Roman subjects, however, have been well represented and well discussed at our meetings; all the three papers which were read being of high interest and, I think, giving us new data on historic puzzles. The first was Mr. Mattingly's paper on the "Restored" Coins of Trajan, read in last January, in which the author endeavoured by a careful inspection of all the known types to discover what was in the mind of Trajan, or of his master of the mint, when he issued about the year 107 the long series of denarii and the few aurei which reproduce old Republican types, or those of the early Caesars, with on the reverse the unvarying legend **IMP CAES TRAIAN AVG GER DAC PP REST**. Mr. Mattingly showed that it is almost certain that this large and various issue commemorates the withdrawal from circulation of the large majority of the old Republican coins, which were now grown to be perceptibly heavier and purer than the silver struck since the time of Nero. Only the "Legionary" denarii of Mark Antony, which were of inferior alloy and weight, were allowed to remain current along with the new issues. These last were perhaps officially demonetized when M. Aurelius and L. Verus, fifty years later, struck "restitutionary" coins reproducing their types. But practically they remained in use somewhat longer, as

they are not unfrequently found mixed with silver of the family of Severus, in hoards buried well within the third century.

A study of the Republican pieces copied by Trajan produces some curious results. The first conclusion is that the set is constructed purely as representative of the old pre-imperial currency at large, not with any reasoned desire to emphasize certain historical events, or to conceal others. For example, denarii of Sulla, Metellus Scipio, and Pompey are reproduced, though the names of all three were hateful to the regular tradition of Caesarianism. On the other hand, some of the most interesting coins commemorating great Roman victories or political events are not in the series, while many types of no historical importance whatever are copied. But oddest of all, certain early Republican denarii with no names on them are given by Trajan inscriptions naming Horatius Cocles and Decius Mus—though these heroes died long ere Rome had a silver coinage at all. We can only suppose that an erroneous tradition at the mint of A. D. 107 gave a false attribution to these anonymous pieces of the third century B. C. The only possible deduction is that Trajan was reissuing a mass of familiar types, as a memorial of the old Republican currency which he was withdrawing, without having any propagandic and imperialistic end in view.

It is notable that among the comparatively few imperial coins which Trajan restored are both the aureus and the denarius of Tiberius—a fact that would seem to show that the reputation of the heir of Augustus was still fairly good till Tacitus and Suetonius “wrote him down”. There are of course no “restorations” of the admittedly impossible Caligula, Nero, and Domitian.

The second important paper on a Roman topic was that which Mr. Webb read to us in October, on the coins of the so-called “Gallic Empire”—the period of fifteen years during which Gaul, and the dependent Britain, and usually Spain also, obeyed a series of emperors who were never in possession of Rome or Italy. We have a most sketchy, and what

appears a most inaccurate account of them in the "Augustan History" and the other scanty records of the third-century empire. Mr. Webb investigated their annals on purely numismatic evidence, and deduced that Postumus never associated with himself as colleagues either a hypothetical Postumus Junior or Victorinus. Also that there is no trace whatever of the empress Victoria, mother of Victorinus, of whom the *Historia Augusta* has much to say. That Marius cannot, as we are usually told, have reigned for three days only, since his coins are by no means very rare, and were obviously struck not only at Moguntiacum, where he rebelled, but at some other mint which gave a very bad portrait of him. Our Treasurer also holds that Laelianus, whose coins really *are* scarce, and Marius also, must be placed before any accession of Victorinus to the throne, there being no coins whatever of the latter which seem earlier than those of either of the two short-lived usurpers on the Rhine. Lastly, Victorinus must have had a longer reign than is generally allowed to him: two years is not enough, as he struck money commemorating his third year of tribunical power, and his probable regnal dates are 268-269-270, and not (as has been often asserted) 266-267. Laelianus and Marius must both be screwed into a few weeks in the winter of 267-268; Postumus was murdered late in the first-named year—Victorinus rose to power early in the second. The reign of Tetricus, the last of the Gallic emperors, must therefore start in 270, not in 268, and this conclusion is corroborated by the fact that none of his coins have a higher regnal date than **TR•POT III**—we know that he surrendered to Aurelian in 273.

Our third Roman paper, also contributed by the Treasurer, was an account of a most interesting find of coins of Carausius, discovered in Hampshire, not very far from the spot where the great Blackmore hoard was dug up forty years ago. But while the latter embraced coins of the whole reign of Carausius, and of that of his successor Allectus, the new find would seem to belong to the earlier years of the great British usurper, since not only are coins

of Allectus wanting, but also there are none of the pieces which Carausius struck in honour of Diocletian and Maximian after he extorted a peace from them in the third year of his reign. Since there are no coins of the **PAX AVGGG** type, this hoard must have been buried earlier than the peace. Mr. Webb is therefore able to point out—a thing hitherto impossible—which were the first issues of Carausius, and which belong only to the last years of his reign. There were many very rare types in the find—e. g. the one with the four dancing children representing the four seasons—and several perfectly new types. But the most interesting thing of all was to discover that Carausius's coins which we call "Third Brass", and of which all the innumerable specimens hitherto known displayed only a brown bronze surface, were originally silvered, like the contemporary pieces of Diocletian and his colleagues. For the vast majority of the hoard showed traces of silvering, and many were as white as the usual base pieces of Probus and Carus in the last generation, and of the four colleague-emperors who were Carausius's contemporaries on the continent. This is an entirely new discovery, and one of great importance.

The papers which appear in this year's *Chronicle* on the Plevna hoard of coins of Trajanus Decius and his family by Messrs. Mattingly and Salisbury, and on the Romano-Campanian series (so-called) by Mr. Mattingly alone, were dealt with by me in my last annual address, so that I have only to express on this occasion my deep appreciation of their interest.

On English coins we have had this year two important papers, one by Mr. Shirley-Fox in our meeting of last October, the other from Mr. Lawrence on the Mint of York under the Plantagenets, in March of this year. Mr. Fox's paper dealt with the later transitional silver coinage of Henry IV, and gave the results of much minute comparison of the few individual specimens available of these rare pieces, from which he deduced tests whereby the last coinage of Henry IV could be separated with reasonable certainty

from the earliest issues of Henry V. In connexion with these papers, not only Mr. Fox himself, but Messrs. Lawrence, Walters, and Gilbert exhibited a number of the pieces from which such deductions can be drawn—few collectors can hope to accumulate a complete set in their own cabinet, and comparison is valuable.

In March Mr. Lawrence dealt with the often puzzling small currency of the Archiepiscopal Mint of York, and set forth with much learning his reasons for attributing the numerous but sporadic series that are forthcoming to particular periods in the lives of successive tenants of the see. It is often possible, as he showed, to find exact and suggestive correspondence between gaps in the coinage and periods when an archbishop was in disfavour with the king, or suspended from his functions by the pope. One important deduction was that the striking of the small coinage—pence and halfpence—would seem to have stopped at the *royal* mint of York whenever the archiepiscopal mint was in full work, while whenever the archbishop was in trouble, or a long *sede vacante* period was found, the royal mint tended to be particularly active. The archbishop, of course, struck no groats, his patent dating back to days before the groat existed, so that there is no problem with regard to the larger York silver, all of which is royal. The pence constitute the heart of the problem, and there is much ingenuity required to distribute them according to the indications that can be discovered. There was—always a good thing for the Society—a lively discussion at the end of this most interesting paper.

Mr. Brooke has given us for the *Chronicle* a continuation of his list of unpublished Anglo-Saxon coins in the British Museum. It was not read at any of our meetings, or discussion might have followed. The period covered was that of the early kings of Wessex, and theoretically of all England, from Egbert down to Ethelred I, the immediate predecessor of Alfred.

Oriental numismatics are this year represented only by Mr. Newell's great paper on the Early Parthians—if we except some exhibitions of rare Mogul coins—a *mohur* of

the usurper Rafi al-Darjat and others—by Mr. Thorburn. But the Parthian paper is of the highest interest, chronicling as it does the contents of the largest hoard of the early Arsacid kings that has ever been discovered, and one which it is easy to date from the chronology of the Greek pieces found mixed with the Oriental. Its most striking feature was two tetradrachms of the Hyrcanian usurper Himerus, whose very existence was doubted by some numismatists, but who is perfectly vindicated by the character of the pieces now forthcoming. There were also quite a number of the tetradrachms of Mithradates II, the conqueror of Babylon and Seleucia from the Greeks—coins hitherto considered of the first rarity. It is obvious that large silver constituted a much more important section of the early Parthian coinage than had ever been suspected before. For till now all the early reigns down to Orodes were represented, even in great national collections, by an extremely small number of tetradrachms—mostly those of Mithradates I with the reverse of the standing Heracles, and these by no means common. It is satisfactory to find that Mr. Wroth's distribution of the early drachms among the various monarchs is completely vindicated by Mr. Newell's commentary on this find, buried apparently about the year 95 B.C., and probably during civil troubles following the death of Mithradates II, since no coins of later kings are to be found in it.

The scope of our studies is not confined entirely to coins, and it is satisfactory to number among our read papers one by Miss Helen Farquhar on the iconography of Elizabeth Queen of Bohemia, the daughter of James I, and her spouse the Elector Palatine Frederic—better known perhaps by his unlucky nickname of the "Winter King". The engraved portraits of these sovereigns on metal were compared by Miss Farquhar with their representations in pictures, and she added to her paper notes on the curious set of jettons of the London "eries" which were issued somewhere in the second quarter of the seventeenth century—a series little studied hitherto. The Keeper of Coins contributed

a short paper on Alexander of Bruchsal, who worked at the London mint for Henry VII, and is proved to have been born at Bruchsal in Suabia, and not at Brussels, as had been often stated. The Latinized names of both towns were often given as Bruchsella, hence a mistake easy to make. Finally Mr. Barnard gives us in print another of his long papers on reckoning-counters, this time dealing with the interminable issues of the three Nuremburg families of Schultes, Krauwinkel, and Lauffer, whose names are so familiar to every collector who has picked through the miscellaneous coppers in any small dealer's window. The most interesting point in the paper is the working out of the genealogies of these three families, who intermarried freely. They are a puzzling crew, as there were three Hans Schultes to be noted, two Hans Krauwinkels, and two Wolf Lauffers, all working between 1550 and 1635 in succession. The sources of their jetton-types, often French or Burgundian in origin rather than German, are ingeniously worked out. The oddest transformation was that of Truth [Nuda Veritas] into Venus, owing to the exiguity of the raiment worn by both these classical ladies. Truth ultimately becomes in the inscription **VENUS DEA AMORIS**, though she had started as a melancholy lady enough, shedding tears from a *chantpleure*.

At our February meeting the Keeper of Coins, our Vice-President, gave us a paper on Medals, which may serve as an incitement to patient research for every one of our members, since it was a story of dull searching rewarded by an unexpected find. At a sale of antiquities at Christie's last year there was at the end of the day a "job lot" of casts and medals put up for auction. It was a vast accumulation of *miscellanea* in bronze and lead and other metals, on which the eye rested with disapproval, since it was first caught by masses of obviously modern and worthless stuff. Mr. Hill, however, had the courage to wade through the whole collection, and found to his surprise among the bulk of unattractive pieces some ten or a dozen quite early medals of value and interest—some unpublished, others published, but

of great rarity. The pick of the whole lot was a new portrait-medal of Edward Courtney, Earl of Devon, the scion of the House of York who in 1553 was spoken of as a possible husband both for Queen Mary Tudor and for her sister the Princess Elizabeth. He was, as we all know, granted his life after the suppression of Wyatt's conspiracy, but sent into exile in Italy, where he died in 1556, too soon to profit by the death of Queen Mary and the coming in of a new régime. This dated portrait-medal was executed at Ferrara only a few weeks before he died at Venice, and is of the highest iconographic interest. There were other medals in the lot which were well worth capture, and Mr. Hill has presented to the Museum—the bid was his own venture—a gift well worth having.

One of our members has published this year the most interesting and the most controversial numismatic work of the season, though not through the medium of the pages of the *Chronicle*, which could not indeed have contained the whole of this considerable volume. I allude, of course, to Mr. Charles Seltman's *Coinage of Athens before the Persian Invasions*. His main thesis is that the numerous tetradrachms and other coins with the head of Athene start only with the usurpation of Pisistratus, however archaic some of them may appear, and that we must look for the famous coinage of Solon in another direction. Mr. Seltman attributes to the great legislator and reformer of the coinage part of the large and puzzling series of Euboic-weight staters, which show as their types not Athene and the owl but various badges—amphora, half-horse, human leg, wheel, triskelis, &c., which have generally been attributed to various cities in Euboea or the Cyclades. These *Wappenmünzen*, as the Germans call them, he regards as bearing the family blazon of various Eupatrid families. When illustrated together the whole of the series bear a great resemblance, and it looks more rational to attribute them to one city, rather than to distribute them among many insular communities. Their incuse reverses are all very similar, and many of their obverse types can be identified as occurring on the shields

of warriors drawn on fifth-century Attic vases. The Alcmaeonidae, for example, seem to have been the owners of the white-leg badge which appears frequently on vases and sometimes on coins. Solon's particular issue, according to Mr. Seltman, consisted of didrachms with the amphora. There would appear to be no discoverable numismatic foundation for the statement preserved by Aristotle that the earliest Athenian coin was a βούς, with type ox. It is probable that the conception came from the fact that the ox was the normal unit of value in days before any coined money at all was in existence.

Of the Pisistratid money with owl and Athena Mr. Seltman distinguishes many series and sections, including one particularly barbarous set which he thinks may have been struck by the family of the tyrant while they were in exile in Thrace, a most attractive theory, for these coins, while particularly ill-designed, do not look as if they were in fabric the very oldest of the owl-series. Mr. Seltman does not agree with the view that the famous and vast decadrachms—now a little less rare than was once the case, for no less than ten of them are known—are medals commemorative of the victory of Marathon, but gives them for stylistic reasons to the period 486-484, some years after the great triumph over the Persians. There are an infinite number of controversial theses in this very suggestive book—some of them perhaps more ingenious than convincing. Readers of the *Chronicle* will find a very searching review of them in its last number from the pen of Mr. Robinson of the British Museum. I think, however, that one main result will be considered established by the critics, viz. that the *Wappennünzen* should be moved *en masse* to the Attic series, and considered its very earliest section.

A second book well worthy of notice produced during the year by one of our members is that of our Vice-President, the Keeper of Coins, on the famous forger Becker, his life, and his works—productions more creditable to his skill as an engraver than to his honesty. For "Hofrath" Becker, though he sometimes owned that he was producing facsimiles,

undoubtedly at others sold his forgeries as original antiques. Mr. Hill's book is lively, amusing, complete, and well illustrated. The reader will see that some of Becker's aurei might deceive the very elect, though his Greek forgeries were on the whole less convincing. It is satisfactory to find, from Mr. Hill's researches, that "vice did not prosper", and that the Hofrath lived in a state of intermittent bankruptcy, despite of many successful *coups*.

The Society had one "exhibition meeting" in December, which produced a show of very interesting pieces—I might name in particular Mr. Gilbert's series of Roman imperial aurei, all in brilliant condition, and Messrs. Spink's selection of early club and sporting medals. But these were only two items among a large and interesting selection drawn from every possible country and age, and including some rarities medieval and modern as well as Roman and Greek. The institution of exhibition meetings has justified its existence, and has probably come to stay.

I must apologize to the Society if this annual address of its President has omitted points of interest. It was written under the most difficult conditions—mainly from memory without the possibility of referring to documents—for the last week chances to have been one of such parliamentary stress as I have never before known,—with five midnight sittings, which have reduced every one who has been through them to a condition of low vitality and imperfect efficiency. In addition I chanced (by ill luck) to be examining in the Oxford Final Schools, and to have been involved in an exceptional number of non-parliamentary meetings and committees. I must ask the Society to wonder rather at the fact that this address has ever been completed, than at the rather incoherent account of the last numismatic year which it presents.

Mr. Fredk. A. Harrison proposed and Colonel H. W. Morrieson seconded a vote of thanks to the President for his address.

The result of the ballot for office-bearers for 1925-1926 was announced as follows:

President.

PROFESSOR SIR CHARLES OMAN, K.B.E., M.P., M.A., LL.D.,
F.S.A., F.B.A.

Vice-Presidents.

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F.S.A., F.B.A.

GEORGE F. HILL, Esq., M.A., LL.D., D.LITT., F.B.A.

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PERCY H. WEBB, Esq., M.B.E.

Secretaries.

JOHN ALLAN, Esq., M.A., M.R.A.S.

FREDERICK A. WALTERS, Esq., F.S.A.

Foreign Secretary.

V. B. CROWTHER-BENSON, Esq., M.A., F.S.A., M.B.E.

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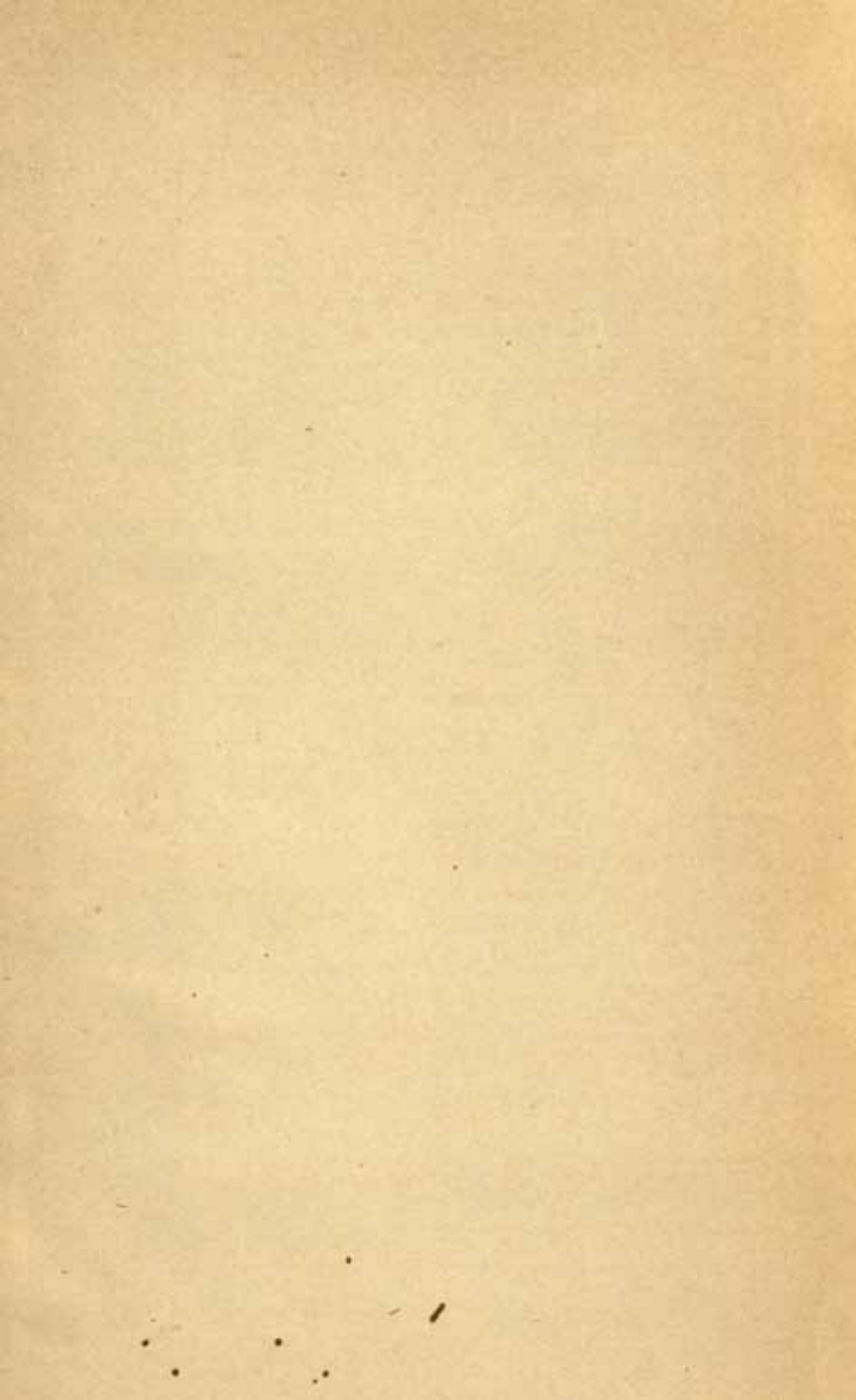
LIEUT.-COL. H. W. MORRIESON, R.A., F.S.A., F.R.S.A.

S. G. ROBINSON, Esq., B.A.

REV. EDGAR ROGERS, M.A., O.B.E.

F. S. SALISBURY, Esq., M.A.

Col. Morrieson proposed a vote of thanks to the auditors and scrutineers of the ballot, and the President adjourned the Society till October 15.



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