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THE
NUMISMATIC CHRONICLE,
AND
JOURNAL OF THE NUMISMATIC SOCIETY.





THE
NUMISMATIC CHRONICLE,
AND
JOURNAL
OF THE
NUMISMATIC SOCIETY.

EDITED BY

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AND
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NUMISMATIC CHRONICLE.

I.

ACCOUNT OF THE COLLECTION OF ROMAN GOLD COINS OF THE LATE DUKE DE BLACAS,

PURCHASED, WITH OTHER ANTIQUITIES, FOR THE BRITISH
MUSEUM.

(Continued from page 320, Vol. VII.)

CARACALLA.

- * 185. *Obv.*—ANTONINVS AVGVSTVS. Bust of Caracalla to the right, laureated, with *paludamentum* and cuirass.

Rev.—PONTIFEX TR.P. III. Caracalla in military dress standing to the left, holding Victory and spear; at his feet a captive seated.

Published by Cohen (*Méd. Imp.*, No. 240).

186. CARACALLA. *Rev.*—MINER. VICTRIX. (Cohen, *Méd. Imp.*, No. 104; a variety of two specimens in the Museum collection.)

- * 187. *Obv.*—ANTONINVS PIVS AVG. Bust of Caracalla to the right, laureated, with *paludamentum* and cuirass.

Rev.—COS. II. (in the *exergue*). Caracalla in a quadriga to the right, holding a sceptre, on the top of which an eagle.

Published by Cohen (*Méd. Imp.*, No. 21).

- * 188. *Obv.*—ANTONINVS PIVS AVG. Head of Caracalla to the right, laureated.

Rev.—PONTIFEX TR.P. X. COS. II. Æsculapius naked, standing facing in a distyle temple, leaning on a stick, round which is entwined a serpent; on either side of him a serpent; on the pediment a wreath.

Published by Cohen (*Méd. Imp.*, No. 242).

This coin was issued in A.D. 207. Other coins with Æsculapius for type, both in gold and brass,¹ struck in A.D. 215, are in existence, recording the visit of Caracalla to Pergamus, when he was afflicted with various diseases. His supplications to Æsculapius are said to have been of no avail.²

- * 189. *Obv.*—ANTONINVS PIVS AVG. BRIT. Head of Caracalla to the right, laureated.

Rev.—COS. III. P.P. Victory walking to the left, holding wreath and palm. *Quinarius*.

Published by Cohen (*Méd. Imp.*, No. 23).

- * 190. *Obv.*—ANTONINVS PIVS AVG. BRIT. Bust of Caracalla to the right, laureated, with cuirass.

Rev.—P.M. TR.P. XVI. IMP. II. COS. IIII. P.P. Caracalla in a quadriga to the right, holding a sceptre.

Published by Cohen (*Méd. Imp.*, No. 151).

- * 191. *Obv.*—ANTONINVS PIVS AVG. GERM. Bust of Caracalla to the right, laureated, with *paludamentum* and cuirass.

Rev.—P.M. TR.P. XVII. COS. IIII. P.P. Round temple of Vesta, before which Caracalla standing, sacrificing on a lighted altar; behind him a figure in a *toga*; before him, two vestals standing, and on either side an infant.

Published by Cohen (*Méd. Imp.*, No. 165), from the *Cab. de M. Feuillant*.

¹ Cohen, *Méd. Imp.*, Nos. 195, 464—469.

² Dion Cass., lxxvii. 15; Herodian, iv. 8, 8.

192. CARACALLA. *Rev.*—P.M. TR.P. XVIII. COS. IIII. P.P. (Cohen, *Méd. Imp.*, No. 169.)

* 193. *Obv.*—ANTONINVS PIVS AVG. GERM. Bust of Caracalla to the right, radiated, with *paludamentum* and cuirass.

Rev.—P.M. TR.P. XVIII. COS. IIII. P.P. Jupiter seated to the left, holding Victory and sceptre; at his feet an eagle. (Pl. IV., No. 1.)

Small medallion, wt. 201 + grs. Unpublished.

CARACALLA AND GETA.

* 194. *Obv.*—M. AVRELIVS ANTON. AVG. Bust of Caracalla to the right, laureated, with *paludamentum* and cuirass.

Rev.—P. SEPT. GETA CAES. PONT. Young bust of Geta to the right, bare, with *paludamentum* and cuirass.

Published by Cohen (*Méd. Imp.*, No. 4).

195. PLAUTILLA. *Rev.*—VENVS VICTRIX. (Cohen, *Méd. Imp.*, No. 17.)

GETA.

* 196. *Obv.*—P. SEPTIMIVS GETA CAES. Bust of Geta to the right, bare, with *paludamentum* and cuirass.

Rev.—PONTIF. COS. II. Geta in a quadriga to the right, holding a sceptre.

Published by Cohen (*Méd. Imp.*, No. 60).

197. GETA. *Rev.*—FELICITAS TEMPOR. (Cohen, *Méd. Imp.*, No. 21.)

198. GETA. *Rev.*—FELICITAS TEMPOR. (Cohen, *Méd. Imp.*, No. 18.)

199. GETA AND CARACALLA? *Rev.*—SEVERI INVICTI AVG. PII FIL. (Cohen, *Méd. Imp.*, No. 1. The Blacas specimen differs in the position of the bust of Geta from the specimens in the Museum and at Paris.)

200. MACRINUS. *Rev.*—FIDES MILITVM. (Cohen, *Méd. Imp.*, No. 10.)

* 201. *Obv.*—IMP. C. M. OPEL. SEV. MACRINVS AVG. Bust of Macrinus to the right, laureated, with *paludamentum* and cuirass.

Rev.—PONTIF. MAX. TR.P. COS. P.P. Female figure standing facing, looking to the right, and holding in each hand a standard.

Published by Cohen (*Méd. Imp.*, No. 29).

ELAGABALUS.

* 202. *Obv.*—IMP. ANTONINVS PIVS AVG. Bust of Elagabalus to the right, laureated, with the cuirass.

Rev.—P.M. TR.P. III. COS. III. P.P. Elagabalus holding a branch and sceptre in a quadriga to the left; in the *field* a star.

Published by Cohen (*Méd. Imp.*, No. 87). A variety published by Mionnet (*Méd. Rom.*, vol. i. p. 346) has no star in the *field*.

208. ELAGABALUS. *Rev.*—CONSERVATOR AVG. (Cohen, *Méd. Imp.*, No. 7; engraved pl. xv.)

204. ELAGABALUS. *Rev.*—VICTOR ANTONINI AVG. (Cohen, *Méd. Imp.*, No. 143.)

SEVERUS ALEXANDER.

* 205. *Obv.*—IMP. C. M. AVR. SEV. ALEXAND. AVG. Bust of Alexander to the left, laureated, with *paludamentum*.

Rev.—P.M. TR.P. III. COS. P.P. Female figure standing to the left, holding branch and sceptre. *Quinarius*.

Published by Cohen (*Méd. Imp.*, No. 117).

* 206. *Obv.*—IMP. C. M. AVR. SEV. ALEXAND. AVG. Bust of Alexander to the right, laureated, with *paludamentum* and cuirass.

Rev.—P.M. TR.P. V. COS. II. P.P. Mars helmeted, naked, with a flowing mantle, walking to the right, holding spear and trophy.

Published by Cohen (*Méd. Imp.*, No. 126).

- * 207. *Obr.*—IMP. C. M. AVR. SEV. ALEXAND. AVG. Bust of Alexander to the right, laureated, with the *paludamentum*.

Rev.—P.M. TR.P. VI. COS. II. P.P. Alexander, laureated, standing to the left, sacrificing at a lighted altar.

Published by Cohen (*Méd. Imp.*, No. 142).

208. SEV. ALEXANDER. *Rev.*—IOVI CONSERVATORI. (Cohen, *Méd. Imp.*, No. 86; see, for correction, *Errata*, vol. vi. p. 621.)

- * 209. *Obr.*—IMP. C. M. AVR. SEV. ALEXAND. AVG. Bust of Alexander to the right, laureated, with *paludamentum* and cuirass.

Rev.—LIBERALITAS AVG. Liberty standing to the left, holding *tessera* and cornu-copiae.

Published by Cohen (*Méd. Imp.*, No. 48). A variety of this coin in the Museum collection has the reverse legend, LIBERALITAS AVGVSTI.

210. JULIA MAEAEA. *Rev.*—VESTA. (Cohen, *Méd. Imp.*, No. 26; a beautiful coin.)

GORDIANUS PIUS.

- * 211. *Obr.*—IMP. GORDIANVS PIVS FEL. AVG. Bust of Gordian III. to the right, laureated, with *paludamentum* and cuirass.

Rev.—P.M. TR.P. VI. COS. II. P.P. Apollo half-naked, seated to the left, holding a laurel branch and leaning on a lyre.

Published by Cohen (*Méd. Imp.*, No. 118).

212. GORDIANUS PIUS. *Rev.*—AETERNITATI AVG. (Cohen, *Méd. Imp.*, No. 12.) *Quinarius*.

213. GORDIANUS PIUS. *Rev.*—FELICIT. TEMP. (Cohen, *Méd. Imp.*, No. 80.)

214. GORDIANUS PIUS. *Rev.*—IOVI STATORI. (Cohen, *Méd. Imp.*, No. 48.)

* 215. *Obv.*—IMP. CAES. M. ANT. GORDIANVS. AVG. Bust of Gordian III. to the right, laureated, with *paludamentum*.

Rev.—VIRTVS AVG. Mars helmeted, standing to the left, holding a branch of olive and a spear; at his feet a shield.

Published only in *silver* by Cohen (*Méd. Imp.*, No. 161).

* 216. *Obv.*—IMP. GORDIANVS CES. AVG. Head of Gordian III. to the right, laureated.

Rev.—DIVVS PATER T[R]AIANVS. Female figure standing to the left, holding winged *caduceus* and *cornu-copie*.

Unpublished.

I have already alluded to this barbarous coin under the coins of Trajan and Hadrian with Trajan father. (See Nos. 85, 86, 105, and 106.)

PHILIP I.

* 217. *Obv.*—IMP. M. IVL. PHILIPPVS AVG. Bust of Philip I. to the right, laureated, with *paludamentum* and cuirass.

Rev.—ROMAE AETERNAE. Rome helmeted, seated to the left, holding victory and sceptre; at her side a shield.

Published by Cohen (*Méd. Imp.*, No. 71).

* 218. *Obv.*—IMP. M. I[V]L. PHILIPPVS AVG. Bust of Philip I. to the right, laureated, with *paludamentum* and cuirass.

Rev.—SECVRIT. ORBIS. Security seated to the left, holding a sceptre, and supporting her head with her left hand.

Published by Cohen (*Méd. Imp.*, No. 95).

OTACILIA SEVERA.

- * 219. *Obv.*—OTACIL. SEVERA AVG. Bust of Otacilia to the right, with diadem.

Rev.—SAECVLVM NOVVM. Hexastyle temple, in the middle of which Rome seated facing. (Pl. IV., No. 2.)

Published by Cohen (*Méd. Imp.*, No. 29; engraved pl. ix).

This coin was issued in A.D. 248, in which year Philip I. celebrated the *ludi sæculares* with great pomp and magnificence. Numerous coins of Philip I., Otacilia, and Philip II., with legends and types referring to them, are in existence.³ These games have been thought by Orosius to have been instituted in honour of Christ and the Church, and Philip himself and his family have been claimed by Christian writers as having embraced the Christian faith.⁴

220. TRAJANUS DECIUS.—*Rev.* ADVENTVS AVG. (Cohen, *Méd. Imp.*, No. 5.)

- * 221. *Obv.*—IMP. TRAIANVS DECIVS AVG. Bust of Trajan Decius to the right, laureated, with *paludamentum* and cuirass.

Rev.—GENIVS EXERCITVS ILLYRICIANI. Genius standing to the left, holding *patera* and a cornucopiæ; behind, a standard.

Published by Cohen (*Méd. Imp.*, No. 80).

222. TRAJANUS DECIUS. *Rev.*—PANNONIAE. (Cohen, *Méd. Imp.*, No. 88.)

HERENNIUS ETRUSCUS.

- * 223. *Obv.*—Q. HER. ETR. MES. DECIVS NOB. C. Bust of Herennius Etruscus to the right, bare, with *paludamentum*.

³ See Cohen.

⁴ *Num. Chron.*, N.S., vol. vi. p. 191.

Rev.—PRINCIPI IVVENTVTIS. Herennius standing to the left, holding standard and spear.

A variety of Cohen (*Méd. Imp.*, No. 14), on which Herennius holds a wand and spear.

TREBONIANUS GALLUS.

* 224. *Obv.*—IMP. CAE. C. VIB. TREB. GALLVS AVG. Bust of Treb. Gallus to the right, laureated, with *paludamentum* and cuirass.

Rev.—ANNONA AVG. Abundance standing to the right, placing the left foot on a prow, and holding an anchor and ears of corn.

Published by Cohen (*Méd. Imp.*, No. 11).

* 225. *Obv.*—Same legend and obverse as No. 224.

Rev.—APOLL. SALVTARI. Apollo naked, standing to the left, holding branch of laurel and a lyre placed upon a rock. (Pl. IV., No. 3.)

Published by Cohen (*Méd. Imp.*, No. 14). The variety of this coin with the bust radiated, described by Cohen (*Méd. Imp.*, No. 15), without naming the collection, exists in the Museum.

This coin was struck in A.D. 252, in honour of *Apollo Salutaris*, with allusion to the pestilence which had begun in this year, and which was of so severe a nature as to last fifteen years. The same type occurs also upon the brass coins of Trebonianus Gallus,⁵ and upon the coins of Volusian.⁶ Some very curious brass coins of both Treb. Gallus and Volusian were also issued in this year, with the legend ARNAZI or ARNASI,⁷ and with the type of "Apollo standing on a mountain, holding a branch of laurel and a bow." This legend has been the cause of

⁵ Cohen, *Méd. Imp.*, Nos. 85, 86.

⁶ Cohen, *Méd. Imp.*, Nos. 10, 11, 87, 88.

⁷ Treb. Gallus, ARNASI, Æ., Medallion, *France* (Cohen, *Méd. Imp.*, No. 77); ARNAZI, Æ. II., *Musée de Vienne* (*Méd. Imp.*, No. 87); Volusian, ARNAZI, Æ. I., *British Museum*, Æ. II., *Wiczay* (*Méd. Imp.*, Nos. 89, 90).

much discussion. Banduri⁸ and Vaillant⁹ publish it without comment, but Hardouin¹⁰ has attempted an explanation in his usual style—*Arte Narboniensium Apollo Sanat Imperium*.¹¹ It was reserved for Pellerin to make anything like a reasonable conjecture. This latter numismatist¹² considers that the legend ARN . ASI (for he so divides it, as, indeed, it is upon the coin) contains the commencement of the names of two towns of Umbria, *Arna* and *Asisium*, which adjoined each other, and at which there was erected a statue of Apollo on an elevated spot, so that it might be invoked by all the neighbouring people. Eckhel seems to consider this interpretation very good. He says,¹³ “Hæc adversus viri præstantis sententiam movere facile, at difficile, melius quidquam et valiturum adferre.” M. Cohen¹⁴ has noticed the statement of Pellerin, with the reserve that this legend has not yet been understood with certainty.

The interpretation of Pellerin as to two towns seems dubious, but the legend may apply to one—*Arna*—for it is now known that the Emperor Vibius Trebonianus Gallus was born at Perugia,¹⁵ and it was there that an

⁸ *Num. Imp. Rom.*, vol. i. p. 62, fol. 1718.

⁹ *Num. Imp. Rom. Præst.*, vol. iii. p. 196, 4to. 1748.

¹⁰ *Opera Selecta*, p. 118, fol. 1709.

¹¹ Eckhel (*Doct. Num. Vet.*, vol. vii. p. 358) says, “Hardouinus in ejus explicatione vetere suo more in nugæ et deliria abit.”

¹² *Recueil des Méd.*, vol. iii. p. lii. Paris, 4to. 1763.

¹³ *Op. cit. l. c.* Eckhel (*l. c.* and vol. vii. p. 284) also considers these coins of the same kind as the second brass of Geta, with the legend STA. BOV. (Stabie and Bovillæ, towns of Campania) (?). I am not aware whether this coin exists as genuine. It is published and engraved by Vaillant (*Num. Acr. Imp. in colon. percussa*, part ii. p. 61. Paris, 1695).

¹⁴ *Méd. Imp.*, vol. iv. p. 277, note.

¹⁵ St. Marin, *Iscriz. Perugina*, p. 15—20; Noël des Vergers, *L'Etrurie et les Etrusques*, vol. ii. p. 381.

inscription was dedicated to his wife Afinia Gemina before he became emperor.¹⁶ The colony then acquired the name of *Vibia*, and many benefits were conferred on the place. The town of Arna was in Perusia,¹⁷ and it is very likely that the Emperor Treb. Gallus would erect a statue to Apollo *Arnazius* or *Arnasius* in his native country. At Arna "some remains of a temple still exist, and besides inscriptions, some of which attest its municipal rank, numerous minor objects of antiquity have been discovered on the spot."¹⁸

A very similar type of Apollo, as has been observed by the late Abbé Cavedoni,¹⁹ may be seen on some of the Etruscan mirrors,²⁰ and upon the coins of Metapontum,²¹ which doubtless represent the statue set up by the Metapontines, and mentioned by Herodotus.²²

From the inscription of the wife of Gallus above quoted, where the word *Bæbiana* appears, it would seem as if the *Bæbia* family came from Perusia,²³ and upon some *denarii* of this family, struck between B.C. 150—125,²⁴ Apollo is in a quadriga holding a brand, a bow, and an arrow, doubtless bearing reference to the pestilence which attacked Rome and Italy in B.C. 180. This type, as M. Cohen has observed, seems copied from the coins of Selinus in Sicily, at which place there was a continual plague.

¹⁶ Noël des Vergers, *op. cit.* vol. iii. *Append. Epig.*, p. iii. No. 32; Orelli, No. 997.

¹⁷ Orelli, Nos. 90, 91, 5005.

¹⁸ E. H. Bunbury, *Smith's Dict. of Geog.*, s.v. *Arna*.

¹⁹ *Bull. Arch. Ital.*, Ann. I. 1861, p. 63.

²⁰ Gerhard, *Miroirs Etrusques*, vol. i. pl. lxxvii., lxxxiii.

²¹ Carelli, *Num. It. Vet.*, pl. clv.

²² *Hist.*, iv. 15.

²³ Cavedoni, *op. cit.* p. 63.

²⁴ Cohen, *Méd. Cons.*, pl. viii., *Bæbia*, No. 6.

- * 226. *Obv.*—IMP. CAE. C. VIB. TREB. GALLVS AVG.
Bust of Treb. Gallus to the right, laureated, with
paludamentum and cuirass.

Rev.—LIBERTAS AVGG. Liberty standing to the
left, holding cap and sceptre.

Published by Cohen (*Méd. Imp.*, No. 32).

227. VOLUSIANUS. *Rev.*—AETERNITAS AVGG. (Cohen,
Méd. Imp., No. 7.)

228. VOLUSIANUS. *Rev.*—CONCORDIA AVGG. (Cohen,
Méd. Imp., No. 12.)

- * 229. *Obv.*—IMP. CAE. C. VIB. VOLVSIANO AVG. Bust
of Volusian to the right, radiated.

Rev.—LIBERTAS AVGG. Liberty standing to the
left, holding cap and sceptre. In a setting.

Published by Cohen (*Méd. Imp.*, No. 29).

VALERIANUS I.

- * 230. *Obv.*—IMP. C. P. LIC. VALERIANVS AVG. Bust of
Valerian I. to the right, laureated, with *paluda-*
mentum and cuirass.

Rev.—IOVI CONSERVA. Jupiter naked, with a mantle
over left shoulder, standing to the left, holding
thunderbolt and sceptre.

Published by Cohen (*Méd. Imp.*, No. 56) incorrectly, for the
obverse legend is *not* IMP. C. P. LIC. VALERIANVS P. F.
AVG.

231. VALERIANUS I. *Rev.*—LIBERALITAS AVGG. III.
(Cohen, *Méd. Imp.*, No. 79.)

- * 232. *Obv.*—IMP. C. P. LIC. VALERIANVS P. F. AVG.
Bust of Valerian I. to the right, laureated, with
paludamentum and cuirass.

Rev.—VIRTVS AVGG. Mars helmeted, standing to
the left, leaning on shield, and holding a spear.

Published by Cohen (*Méd. Imp.*, No. 160).

GALLIENUS.

- * 233. *Obv.*—IMP. C. P. LIC. GALLIENVS P. F. AVG.
Bust of Gallienus to the right, laureated, with
the cuirass.

Rev.—FELICITAS AVGG. Felicity standing to the
left, holding *caduceus* and *cornu-copie*.

Published by Cohen (*Méd. Imp.*, No. 123).

- * 234. *Obv.*—GALLIEN[V]S P. F. AVG. Head of Gallienus
to the right, radiated.

Rev.—FIDEI EQVITVM, within a laurel crown. A
hole in it.

Published by Cohen (*Méd. Imp.*, No. 137). A variety of this
coin, with the obverse legend GALLIENVS P. AVG., is in the
British Museum. (*Méd. Imp.*, No. 136.)

235. GALLIENUS. *Rev.*—IOVI CONSERVA. (Cohen, *Méd.*
Imp., No. 208.)

236. GALLIENUS. *Rev.*—IOVI CONSERVA. (Cohen, *Méd.*
Imp., No. 208.)

237. GALLIENUS. *Rev.*—IOVI CONSERVA. (Cohen, *Méd.*
Imp., No. 208.)

These last three varieties were selected for the difference
of fabric.

- * 238. *Obv.*—GALLIENVS AVG. Head of Gallienus to the
right, radiated.

Rev.—IOVI VLTORI. Jupiter naked, standing to the
left, looking to the right, carrying his mantle
over left arm, and holding a thunderbolt. In the
field to the left, S. In a setting.

Published by Cohen (*Méd. Imp.*, No. 243), who says that
there is in the *field*, V. I have been unable to discover it.

- * 239. *Obv.*—GALLIENVS AVG. Bust of Gallienus to the
right, radiated, with the cuirass.

Rev.—LIBERAL. AVG. Liberality standing to the
left, holding *tessera* and *cornu-copie*. In the
field to the left, S. Two holes in it.

Published by Cohen (*Méd. Imp.*, No. 326).

- * 240. *Obv.*—GALLIENO PIO AVG. Bust of Gallienus to the left, laureated, with the *paludamentum*.

Rev.—PAX AVG. Peace standing to the left, holding branch of olive and a sceptre. In the *field* S. C. (Pl. IV., No. 4.) Medallion, wt. 471 grs. A hole in it.

Published by Cohen (*Méd. Imp.*, No. 17).

It will be observed that there are upon this medallion the letters S. C. It was in all probability, in any case on the reverse, struck from a large brass die, and the type of PAX AVG. is known to exist in that metal. A silver medallion of Gallienus, with the legend LIBERALITAS AVGG. S. C., is published by Vaillant,²⁵ from Banduri,²⁶ who describes it as then existing in the collection of "D. Fontanus Eques Anglus." M. Cohen²⁷ also notices this latter piece, and considers it probably a large brass *argenté* or *saucé*, but he has made no remarks on the gold medallion of the Blacas collection.

- * 241. *Obv.*—GALLIENVS AVG. Head of Gallienus to the right, laureated.

Rev.—PAX AVG. Peace standing to the left, holding a branch of olive and a sceptre.

Published by Cohen (*Méd. Imp.*, No. 887).

- * 242. *Obv.*—IMP. GALLIENVS AVG. COS. V. Head of Gallienus to the right, laureated.

Rev.—VIRT. GALLIENI AVG. Hercules naked, standing facing, looking to the left, holding a branch and a club, and carrying a lion's skin on his left arm. (Pl. IV., No. 5.) Medallion, wt. 215 +. A hole in it.

Published by Cohen (*Méd. Imp.*, No. 22).

²⁵ *Num. Imp. Rom. Praest.*, vol. ii. p. 362.

²⁶ *Num. Imp. Rom.*, vol. i. p. 170.

²⁷ *Méd. Imp.*, vol. iv. p. 351, note.

- * 243. *Obv.*—GALLIENVS AVG. Head of Gallienus to the right, radiated.

Rev.—VOTIS X ET. XX within a laurel wreath.

Published by Cohen (*Méd. Imp.*, No. 710). A variety of this coin has been published by me from the Wigan collection (*Num. Chron.*, N.S., vol. v. p. 56; engraved Pl. IV., No. 12).

SALONINA.

- * 244. *Obv.*—CORN. SALONINA AVG. Bust of Salonina to the right, with diadem.

Rev.—VENERI GENETRICI. Venus standing to the left, holding an apple and a sceptre.

Published by Cohen (*Méd. Imp.*, No. 74).

SALONINA AND GALLIENUS.

- * 245. *Obv.*—SALONINA AVG. Bust of Salonina to the right, with diadem.

Rev.—CONCORDIA AVGG. Busts of Gallienus and Salonina facing each other, the former laureated and with cuirass, the latter with diadem. (Pl. IV., No. 6.) A hole in this piece.

Published by Cohen (*Méd. Imp.*, No. 8).

SALONINUS.

- * 246. *Obv.*—VALERIANVS NOBIL. CAES. Bust of Saloninus to the right, bare, with *paludamentum* and cuirass.

Rev.—PRINC. IVVENTVTIS. Saloninus in military dress standing to the left, holding a wand and spear; behind, two standards. (Pl. IV., No. 7.) A hole in it.

Published by Cohen (*Méd. Imp.*, No. 53).

POSTUMUS.

- * 247. *Obv.*—IMP. C. POSTVMVS P. F. AVG. Bust of Postumus to the right, with *paludamentum* and cuirass.

Rev.—AETERNITAS AVG. Three radiated unbearded busts, of which one is in the middle facing between two *vis-à-vis*. (Pl. IV., No. 8.)

Published by Cohen (*Méd. Imp.*, No. 8; engraved pl. ii.).

* 248. *Obv.*—IMP. C. POSTVMVS P. F. AVG. Bust of Postumus to the right, laureated, with *paludamentum* and cuirass.

Rev.—INVICTO AVG. Bust of Postumus to the left, radiated, with the cuirass, on which is the *agis*, and holding a sceptre over the right shoulder. (Pl. IV., No. 9.)

Published by Cohen (*Méd. Imp.*, No. 78). A specimen of this coin in *silver* is described by Mionnet (*Méd. Rom.*, vol. ii. p. 70; engraved), from the *Cabinet de M. Gosselin*, and was sold when the rest of this gentleman's collection was dispersed, for 262 francs 50 cents. (Gosselin, *Sale Cat.*, No. 1178, Paris, 1864).

249. *Obv.*—IMP. C. POSTVMVS P. F. AVG. Bust of Postumus to the right, laureated, with *paludamentum* and cuirass.

Rev.—VIRTVS POSTVMI AVG. Bust of Postumus to the right, with a highly ornamented helmet and cuirass.

Published by Cohen (*Méd. Imp.*, No. 197). A specimen of this coin is described in the *Sale Catalogue* of M. D. G. de A * * *, No. 768, Paris, 1867.

* 250. *Obv.*—Same legend as No. 249. Bust of Postumus to the left, laureated, with the cuirass.

Rev.—Legend and type the same as No. 249. (Pl. IV., No. 10.)

Unpublished.

The coin (No. 247) has been assigned by Caronni in the catalogue of the Hedervar Museum²⁸ to Junia Donata, the wife of Postumus, and he describes the bust in the middle as that of Junia Donata, between those of Postumus father and Postumus son. M. Prosper Dupré²⁹

²⁸ See the note of Cohen, *Méd. Imp.*, vol. v. p. 14.

²⁹ *Rev. Num.*, 1846, p. 20.

considers this piece a faithful imitation of that of Septimius Severus where the bust of Julia facing is between those of her sons, with the legend FELICITAS SAECVLI, and of that with the heads of Caracalla and Geta, and the legend AETERNITAS IMPERI. He is therefore of opinion that this piece represents the wife of Postumus between her two children, but as their heads are very similar, he is not quite certain which is the son, and which the daughter, though he inclines to consider the bust on the *left* to be the *son*, and on the *right* the *daughter*.³⁰ M. Dupré has also assigned the date of A.D. 262 for its issue, connecting it with a gold coin bearing the date P.M. TR.P. IMP. V. COS. III. P.P., on which Postumus and an *infant* are sacrificing before an altar.³¹

As regards Junia Donata, it may be remarked that there is not the slightest proof of her being the wife of Postumus, the only authority being a spurious coin published by Chifflet, from Goltzius.³²

It is therefore uncertain whom these three busts represent.

The coins with the legend INVICTO AVG. (No. 248) have been attributed to Postumus the *son* by Mionnet,³³ as also the billon coin with the legend PACATOR ORBIS,³⁴ but M. Cohen³⁵ says that if these coins repre-

³⁰ M. Charles Lenormant (*Trésor de Num. Icon. des Emp. Rom.*, p. 101) considers the three busts to be those of *males*, and the *three sons* of Postumus.

³¹ Cohen, *Méd. Imp.*, No. 108.

³² Eckhel, *Doct. Num. Vet.*, vol. vii. p. 447.

³³ *Méd. Rom.*, vol. ii. p. 70, *note*.

³⁴ M. Charles Lenormant (*Trésor de Num. Icon. des Emp. Rom.*, p. 101) was also of opinion that the bust of this coin represented Postumus the *son*.

³⁵ *Méd. Imp.*, vol. v. p. 24, *note* 2.

sent the son, then those also with the reverse legends VIRTUS POSTVMI AVG. (Nos. 249, 250) and VIRTVTI AVG. in gold, and VIRTUS POSTVMI AVG. and VIRTUS AVG. in brass, represent him also, as the heads are all similarly bearded, and similarly old or young (*à volonté*).

Dr. Colson has also published³⁶ a large brass coin of Postumus from his collection, with the reverse legend, . . . CVLVM AVGG., "a lion walking to the right," and citing two others from Banduri, with the legends ADVENTVS AVGG. and MONETA AVGG., considers the two G's to refer to Postumus and his son, and *not* to Postumus and Victorinus. But M. de Witte³⁷ has shown that there is no authority for the two G's on the coin quoted from Banduri; and as to the one with . . . CVLVM AVGG. in Dr. Colson's collection, he states that it certainly was struck to inaugurate the association of Victorinus to the kingdom.³⁸ The type of a "lion" appears on both the coins by Postumus and Victorinus. He also says that the coin seems re-struck, and in all probability on a large brass coin of Philip I., with the legend SAECVLARES AVGG. M. de Witte quotes the second brass coin of Postumus *son* from the Museo San Clemente, and proves it to be an altered piece.

It does not seem to me that we have any authority for attributing coins to either Junia Donata or Postumus the son.

251. POSTUMUS. *Rev.*—INDVLG. PIA POSTVMI AVG.
(Cohen, *Méd. Imp.*, No. 71.)

³⁶ *Rev. Num.*, 1859, p. 428.

³⁷ *Rev. Num.*, 1859, p. 487.

³⁸ *Cf. Eckhel, Doct. Num. Vet.*, vol. vii. p. 448.

- * 252. *Obr.*—IMP. C. POSTVMVS P. F. AVG. Bust of Postumus to the right, laureated, with *paludamentum*.

Rev.—LIBERALITAS AVG. Postumus seated to the left in a curule chair on an estrade; behind him a figure holding a wand (?). In front Liberty standing holding *tessera* and cornu-copie; at the foot of the estrade a Roman mounting the stairs.

Published by Cohen (*Méd. Imp.*, No. 84).

- * 253. *Obr.*—POSTVMVS AVG. Bust of Postumus to the left, helmeted, with the cuirass; on the helmet Victory in a *biga* to the left.

Rev.—P.M. TR.P. IMP. V. COS. III. P.P. Postumus seated to the left on a curule chair, holding a globe and a sceptre.

Published by Cohen (*Méd. Imp.*, No. 182).

- * 254. *Obr.*—IMP. C. POSTVMVS P. F. AVG. Bust of Postumus to the right, laureated, with *paludamentum* and cuirass.

Rev.—P.M. TR.P. III. COS. III. P.P. Postumus veiled, standing to the left before a lighted tripod, and holding a *patera* and sceptre.

Published by Cohen (*Méd. Imp.*, No. 119).

- * 255. *Obr.*—POSTVMVS PIVS AVG. Head of Postumus to the right, radiated and laureated.

Rev.—P.M. TR.P. VII. COS. III. P.P. Mercury standing facing, holding a purse and a *caduceus*, looking to the right towards Postumus veiled, standing to the left, holding *patera* and sceptre, and sacrificing at an altar. (Pl. IV., No. 11.)

Published by Cohen (*Méd. Imp.*, No. 125; engraved pl. ii.).

256. POSTUMUS. *Rev.*—PROVIDENTIA AVG. (Cohen, *Méd. Imp.*, No. 188.)

257. VICTORINUS. *Rev.*—COMES AVG. (Cohen, *Méd. Imp.*, No. 10.)

- * 258. *Obr.*—IMP. VICTORINVS P. F. AVG. Bust of Victorinus to the left, laureated, with the cuirass, and armed with a sceptre and shield.

Rev.—ROMAE AETERNAE. Bust of Rome to the right, helmeted, under the traits of Victorina (?). (Pl. IV., No. 12.)

Published by Cohen (*Méd. Imp.*, No. 60; engraved pl. iii.).

I have already, in a previous paper,³⁹ called attention to this rare coin, and engraved the reverse. In all probability the helmeted bust represents the portrait of Victorina, the wife of Victorinus.

259. TETRICUS I. *Rev.*—AEQVITAS AVG. (Cohen, *Méd. Imp.*, No. 8.)

* 260. *Obv.*—IMP. C. TETRICVS P. F. AVG. Head of Tetricus to the right, laureated.

Rev.—HILARITAS AVGG. Hilarity standing to the left between two children, holding a palm and a cornu-copiae.

Published by Cohen (*Méd. Imp.*, No. 7).

The same reverse may be found on a very rare gold coin of Tetricus I. and II., with the obverse legend IMPP. INVICTI PII AVG., described by Cohen⁴⁰ as *autrefois*, *Cabinet des Médailles*, and now existing in the Museum collection; and upon a gold coin of Tetricus II. in the *Musée de Turin*.⁴¹

* 261. *Obv.*—IMP. TETRICVS P. F. AVG. Bust of Tetricus I. to the right, laureated, with cuirass.

Rev.—SALVS AVGG. Health standing to the left, holding *patra* and spear, and feeding a serpent, which is entwined round an altar.

Published by Cohen (*Méd. Imp.*, No. 22).

* 262. *Obv.*—IMP. C. G. P. ESV. TETRICVS AVG. Bust of Tetricus I. to the right, laureated, with cuirass.

³⁹ *Nun. Chron.*, N.S., vol. v. p. 88.

⁴⁰ *Méd. Imp.*, No. 4.

⁴¹ *Méd. Imp.*, No. 1.

Rev.—SPES PVBLICA. Hope walking to the left, holding a flower, and raising her dress.

Published by Cohen (*Méd. Imp.*, No. 25).

* 263. *Obv.*—IMP. TETRICVS P. F. AVG. Bust of Tetricus to the right, laureated, with cuirass.

Rev.—VIRTVS AVGG. Tetricus in military dress standing to the right, holding spear and globe, and placing left foot on a captive.

Unpublished. Varieties of this coin exist in the Museum collection and at Paris (Cohen, *Méd. Imp.*, Nos. 35, 36).

264. CLAUDIUS GOTHICUS. *Rev.*—PAX EXERC. (Cohen, *Méd. Imp.*, No. 10.)

AURELIAN.

* 265. *Obv.*—IMP. C. L. DOM. AVRELIANVS AVG. Bust of Aurelian to the right, radiated, with the cuirass.

Rev.—APOLLINI CONS. Apollo, half-naked, seated to the left, holding a branch of laurel, and resting the left arm on a lyre. (Pl. V., No. 1.) Wt. 109.6 grs.

Published by Cohen (*Méd. Imp.*, No. 3).

The Emperor Aurelian showed great veneration for the sun, having evidently been early interested in its worship from his mother having exercised the functions of priestess in the town in which he was born, which is generally considered to be Sirmium.⁴² After the siege of Palmyra in 272, Aurelian ordered the Temple of the Sun, which had been destroyed, to be restored,⁴³ and eventually, in 274, built a magnificent temple at Rome for his own use.⁴⁴ Many of his coins show his attachment to this deity.

⁴² Vopisc. *In Aurel.*, 4.

⁴³ Vopisc. *In Aurel.*, 31.

⁴⁴ Vopisc. *In Aurel.*, 35. The sun is mentioned in other passages, 10, 14, 25, 28, 39.

266. AURELIAN. *Rev.*—P.M. TB. (*sic*) P. VII. COS. II.
P.P. (Cohen, *Méd. Imp.*, No. 24.)

* 267. *Obv.*—IMP. C. AVRELIANVS AVG. Bust of Aurelian to the right, radiated, with *paludamentum* and cuirass.

Rev.—VIRTVS AVG. Mars naked, helmeted, his mantle flowing, running to the right, holding trophy and spear. Wt. 109.7 grs.

Unpublished.

268. AURELIAN. *Rev.*—VIRTVS AVG. (Cohen, *Méd. Imp.*, No. 88. Cohen in his note mentions the Blacas specimen as weighing 109.6 grs., but this only weighs 89. I think he must allude to the coin described above (No. 267).)

* 269. *Obv.*—IMP. C. L. DOM. AVRELIANVS P. F. AVG. Bust of Aurelian to the right, laureated, with *paludamentum* and cuirass.

Rev.—VIRTVS AVG. Mars naked, helmeted, walking to the right, holding spear and trophy; at his feet a captive seated with his hands tied behind his back. A hole in this piece.

A variety of Cohen (*Méd. Imp.*, No. 85) where the bust of Aurelian has only the cuirass. This coin is in the Museum collection.

270. SEVERINA. *Rev.*—CONCORDIAE MILITVM. (Cohen, *Méd. Imp.* No. 1. An unpublished variety in the Museum has in the *exergue* the letter R for *Romæ*.)

TACITUS.

* 271. *Obv.*—IMP. C. M. CL. TACITVS AVG. Bust of Tacitus to the right, laureated, with *paludamentum* and cuirass.

Rev.—PAX PVBLICA. Peace standing to the left, holding olive-branch and sceptre.

Published by Cohen (*Méd. Imp.*, No. 4).

272. TACITUS. *Rev.*—ROMAE AETERNAE. (Cohen, *Méd. Imp.*, No. 9.)

273. TACITUS. *Rev.*—ROMAE AETERNAE. (Cohen, *Méd. Imp.*, No. 12, and *note.*) Pl. V., No. 2.

FLORIAN.

274. *Obv.*—VIRTUS FLORIANI AVG. Bust of Florian to the left, laureated, with cuirass, and holding sceptre and shield.

Rev.—VICTORIA PERPET. Victory standing to the right, placing her left foot on a helmet (?), and writing $\times \times$ on a shield, which is resting on the trunk of a tree. (Pl. V., No. 8.)

Published by Cohen (*Méd. Imp.*, No. 7; engraved pl. vii.).

PROBUS.

- * 275. *Obv.*—IMP. C. PROBUS P. F. AVG. Bust of Probus to the left, helmeted, armed with spear and shield.

Rev.—ADVENTVS AVG. Probus in military dress on horseback to the left, raising the right hand, and holding a spear; he is preceded by Victory holding a palm. (Pl. V., No. 4.)

Unpublished. A variety of this coin, with a soldier following Probus, and in the *field* two standards, is published by Cohen (*Méd. Imp.*, No. 9) from *Caylus*.

276. *Obv.*—IMP. C. M. AVR. PROBUS AVG. Bust of Probus to the right, laureated, with *paludamentum* and cuirass.

Rev.—HERCVLI INMORTALI (*sic*). Hercules naked, walking to the right, and looking behind him, holding a club and lion's skin, and dragging Cerberus after him. (Pl. V. No. 5.)

Published by Cohen (*Méd. Imp.*, No. 18).

This type, which commemorates the twelfth and last labour of Hercules, after which he received immortality, first occurs on a rare billon coin of Postumus, preserved in the Vienna Museum, which was published and engraved

by M. de Witte in his article "On some Inedited Coins of Postumus."⁴⁵ It is again reproduced on an *aureus* of Maximian Hercules struck at Treves, and now existing in the Paris collection.⁴⁶ On some of his coins Probus styled himself *Hercules Romanus Aug.*,⁴⁷ in imitation of Commodus and Postumus.

- * 277. *Obv.*—IMP. C. M. AVR. PROBVS AVG. Bust of Probus to the right, laureated, with cuirass, but showing a small portion of the *paludamentum*.

Rev.—MARS VICTOR. Mars helmeted, naked, with flowing mantle, walking to the right, holding spear and trophy.

Published by Cohen (*Méd. Imp.*, No. 21) from *Caylus*.

- * 278. *Obv.*—IMP. C. M. AVR. PROBVS AVG. Bust of Probus to the right, laureated, with *paludamentum* and cuirass.

Rev.—ORIENS AVG. The Sun radiated, half-naked, standing to the left, raising the right hand, and holding a globe; in the *exergue* SIS. (*Siscia*).

Published by Cohen (*Méd. Imp.*, No. 23).

279. PROBVS. *Rev.*—SECVRITAS SAECVLI. In *exergue* SIS. (Cohen, *Méd. Imp.*, No. 85. The *obv. leg.* differs from Cohen, being IMP. C. M. AVR. PROBVS P. AVG., and not P. F. AVG.)

- * 280. *Obv.*—IMP. PROBVS P. F. AVG. Bust of Probus to the left, laureated, with the *ægis* strapped on left shoulder, and holding a spear.

Rev.—VICT. PROBI AVG. Rome helmeted, seated to the left, holding a sceptre; in front two soldiers, of whom one holds a Victory and the other a standard; in the *field* another standard; in the *exergue*, a wreath. (Pl. V., No. 6.)

Published by Cohen (*Méd. Imp.*, No. 52).

⁴⁵ *Rev. Num.*, 1844, p. 345.

⁴⁶ Cohen, *Méd. Imp.*, No. 46.

⁴⁷ Cohen, *Méd. Imp.*, No. 19.

CARUS.

- * 281. *Obv.*—IMP. C. M. HAR. (*sic*) C. RVS P. F. AVG.
Bust of Carus to the right, laureated, with *paludamentum* and cuirass.

Rev.—VIRTAS (*sic*) CA. . . . NNAICTI (*sic*) AAG.
(*sic*). Hercules naked, standing to the right, placing his right hand behind him, and holding club, surmounted with lion's skin, placed on a rock. In the *exergue*, K.

Unpublished. Of very barbarous workmanship. The real coin, with the legend VIRTVS CARI INVICTI AVG., is preserved at Vienna (Cohen, *Méd. Imp.*, No. 19).

CARUS AND CARINUS.

- * 282. *Obv.*—IMP. C. M. AVR. KARVS AVG. Bust of Carus to the right, laureated, with *paludamentum* and cuirass.

Rev.—KARINVS NOBIL. CAES. Bust of Carinus to the right, laureated, with *paludamentum* and cuirass.

Published by Cohen (*Méd. Imp.*, No. 3).

NUMERIAN.

- * 283. *Obv.*—NVMAERIANVS (*sic*) NOB. CAES. Bust of Numerian to the right, laureated, with *paludamentum* and cuirass.

Rev.—VICTORIA CAESARIS. Victory in a *biga*, galloping to the left, holding wreath and palm.

Published by Cohen (*Méd. Imp.*, No. 9).

284. CARINUS. *Rev.*—VIRTVS AVG. (Cohen, *Méd. Imp.*, No. 29.)

285. MAGNIA URBICA. *Rev.*—VENERI VICTRICI. (Cohen, *Méd. Imp.*, No. 3; engraved pl. xi.)

DIOCLETIAN.

- * 286. *Obv.*—IMP. C. G. (?) VAL. DIOCLETIANVS P. F. AVG. Head of Diocletian to the right, bare; below, an incuse branch.

Rev.—IOVI CONSERVATORI. Jupiter naked, standing to the left, the mantle hanging behind him, holding a globe surmounted by a Victory (who holds wreath and palm-branch and a sceptre); at his feet an eagle, holding in its beak a crown; in the *exergue*, S. M. N. (Pl. V., No 7.) Medallion, wt. 829·8 grains.

Published by Cohen (*Méd. Imp.*, No. 8; engraved pl. xi.).

This magnificent medallion has also been published and engraved by M. Sabatier.⁴⁸ Neither this gentleman nor the artist has noticed the incuse branch under the head of Diocletian.⁴⁹ The letters S. M. N. (*Signata Moneta Nicomediæ*) allude to Nicomedia, which was established at the time of the monetary reform under Diocletian, and *not* to Narbonne, as proposed by M. Sabatier. It is a piece of 10 *aurei*, weighing 829·8 grains; but the full weight of the *aureus* of Diocletian being 83·4 grains, this piece is slightly under weight, as it should have weighed 834 grains. M. Sabatier has given its weight as 53·6 grammes (827·5 grains), and M. Cohen at 53·5 grammes (826 grains), both of which must be incorrect.

A very similar gold medallion, with the seated figure of Jupiter, and with the mint-mark ALE (*Alexandria*), exists in the *Bibliothèque*.⁵⁰ M. Cohen informs me that it weighs 53·59 grammes (827·4 grains). There was another specimen of this latter medallion published in 1847 by M. Meynaerts,⁵¹ evidently much worn. It is recorded as weighing 801·3 grains.

⁴⁸ *Rev. Num.*, 1859, pl. xii., No. 2.

⁴⁹ In Cohen's description and plate (*Méd. Imp.*, No. 8, pl. xi.) there is the same omission.

⁵⁰ Cf. *Rev. Num.*, 1859, pl. xii., No. 1. Cohen, *Méd. Imp.*, No. 2, pl. xi.

⁵¹ *Rev. Num. Belge*, vol. iii., p. 8, pl. i., No. 2.

- * 287. *Obv.*—IMP. C. C. VAL. DIOCLETIANVS P. F. AVG.
Bust of Diocletian to the right, radiated, with cuirass.

Rev.—IOVI CONSERVAT. AVGG. Jupiter naked, standing to the left, with a mantle hanging behind him, holding thunderbolt and sceptre.

Published by Cohen (*Méd. Imp.*, No. 31) erroneously as existing in the *Musée Britannique*.

- * 288. *Obv.*—The same legend as No. 287. Bust of Diocletian to the right, laureated, with *paludamentum* and cuirass.

Rev.—IOVI CONSERVAT. AVGG. Same type as No. 288.

Published by Cohen (*Méd. Imp.*, No. 32) erroneously as existing in the *Musée Britannique*.

- * 289. *Obv.*—IMP. DIOCLETIANVS AVG. Bust of Diocletian to the right, laureated, with *paludamentum*.

Rev.—IOVI CONSERVAT. AVG. Same type, but Jupiter has the mantle hanging on left shoulder. *Quinarius*.

Published by Cohen (*Méd. Imp.*, No. 40). It is AVG., and not AVGG.

290. DIOCLETIAN. *Rev.*—IOVI FVLGERATORI. In *cervique* P.R. (Cohen, *Méd. Imp.*, No. 60.)

291. DIOCLETIAN. *Rev.*—VICTORIA AVG. (Cohen, *Méd. Imp.*, No. 80.)

MAXIMIAN HERCULES.

- * 292. *Obv.*—MAXIMIANVS AVGVSTVS. Head of Maximian to the left, laureated.

Rev.—COS. II. Maximian in military dress on horseback to the right, raising his right hand. A hole in it.

Published by Cohen (*Méd. Imp.*, No. 25).

293. MAXIMIAN HERCULES. *Rev.*—IOVI CONSERVAT. AVGG. (Cohen, *Méd. Imp.*, No. 61.)

- * 294. *Obv.*—IMP. M. AVR. VAL. MAXIMIANVS AVG.

Bust of Maximian Hercules to the right, laureated, with cuirass.

Rev.—IOVI CONSERVAT. Jupiter half-naked, seated to the left, holding Victory and sceptre.

Published by Cohen (*Méd. Imp.*, No. 56).

- * 295. *Obv.*—IMP. C. M. A. MAXIMIANVS AVG. Bust of Maximian Hercules to the right, laureated, with *paludamentum* and cuirass.

Rev.—VIRTVTI HERCVLIS. Hercules naked, standing to the right, with his right hand behind him, and leaning on a club placed on a rock; in the *exergue* SC. (*Siscie*?).

Published by Cohen (*Méd. Imp.*, No. 106).

- * 296. *Obv.*—MAXIMIANVS P. F. AVG. Bust of Maximian Hercules to the right, covered with lion's skin.

Rev.—HERCVLI DEBELLAT. Hercules fighting the hydra, and seizing one of his heads in his left hand, holding a club in his right; in the *exergue* P. ROM. (*Prima Romæ*). (Pl. V., No. 8.)

Published by Cohen (*Méd. Imp.*, No. 43). The *exergue* letters incorrectly given as PRON.

- * 297. *Obv.*—MAXIMIANVS P. F. AVG. Head of Maximian Hercules to the right, laureated.

Rev.—HERCVLI VICTORI. Hercules naked, seated facing on a rock; on the right a club, and on the left a bow and quiver; in the *exergue* P. R. (*Prima Romæ*).

Published by Cohen (*Méd. Imp.*, No. 54; engraved pl. xiii.).

- * 298. *Obv.*—MAXIMIANVS P. F. AVG. Head of Maximian Hercules to the right, laureated.

Rev.—VIRTVS AVGG. Hercules strangling a lion; behind him a club; in the *exergue* P. R. (*Prima Romæ*).

ALLECTUS.

- * 299. *Obv.*—IMP. C. ALLECTVS P. F. I. AVG. Bust of Allectus to the right, laureated, with cuirass.

Rev.—VIRTVS AVG. Soldier helmeted, standing to the right, holding a spear, and leaning on a shield; in the *exergue* M. S. L. (*Moneta signata Londinio*). (Pl. V., No. 9.)

Published by Cohen (*Méd. Imp.*, No. 10), who describes the obverse legend as IMP. C. ALLECTVS FEL. AVG. The letters are, however, P.F.I. (*Invictus*). This legend also occurs upon the copper coins of Allectus struck at Camulodunum.

According to the interesting paper of Mr. de Salis, "On the Roman Coins struck in Britain,"⁵² the coins of Allectus, with the mint-mark of London, were struck between 293 and 296.

CONSTANTIUS CHLORUS.

* 300. *Obv.*—FL. VAL. CONSTANTIVS NOB. CAES. Bust of Constantius Chlorus to the right, radiated, showing portion of *paludamentum*.

Rev.—PRINCIPI IVVENTVTIS. Constantius standing to the right, laureated, and in military dress, holding a spear and globe; in the *exergue* P. ROM. (*Prima Romæ*). (Pl. V., No. 10.) Small medallion. Wt. 198 grains.

Published by Cohen (*Méd. Imp.*, No. 6).

* 301. *Obv.*—CONSTANTIVS N. C. Head of Constantius Chlorus to the right, laureated.

Rev.—COMITATVS AVGG. Two horsemen in military dress galloping to the left; the outside one carries a spear; in the *exergue* P. T. (*Prima Turraconi*).

Published by Cohen (*Méd. Imp.*, No. 7).

The two horsemen here represent Maximian Hercules Augustus and his Cæsar Constantius Chlorus. A gold coin of Diocletian of a similar type is described by Cohen as *autrefois*, *Cabinet de France*,⁵³ and the horsemen here

⁵² *Num. Chron.*, N.S., vol. vii. p. 57.

⁵³ *Méd. Imp.*, No. 6.

represent Diocletian and Maximian Augusti. A similar coin was also issued by Maximian Hercules, which is preserved at Paris.⁵⁴ Both these coins have the *exergual* letters P. R. (*Prima Romæ*). The similar coin of the Cæsar Galerius Maximian also exists at Paris,⁵⁵ but the description and engraving are both defective in not recording the *exergual* letters. In all probability, the set of *four* was issued both at Rome and at Tarraco.

GALERIUS MAXIMIAN.

* 302. *Obv.*—MAXIMIANVS CAES. Head of Galerius Maximian to the right, laureated.

Rev.—PROVIDENTIA AVGG. Prætorian camp; in the *exergue* P. R. (*Prima Romæ*).

Unpublished.

VALERIA.

* 303. *Obv.*—GAL. VALERIA AVG. Bust of Valeria to the right, with diadem.

Rev.—VENERI VICTRICI. Venus standing to the left, holding an apple and raising her veil; in the *field* a crescent and ☿; in the *exergue* S. M. SD. (*Signata Moneta Serdica*). (Pl. V., No. 11.)

Published by Cohen (*Méd. Imp.*, No. 1).

* 304. *Obv.*—GAL. VALERIA AVG. Bust of Valeria to the right, with diadem and with crescent.

Rev.—Same legend and type as No. 304; nothing in the *field*; in the *exergue* SIS. (*Siscia*). (Pl. V., No. 12.)

Published by Cohen (*Méd. Imp.*, No. 4; engraved pl. xvi.) from the *Cabinet de M. Hoffmann*.

The Museum now possesses *four* out of the *five* specimens of the gold coinage of this empress at present known

⁵⁴ Cohen, *Méd. Imp.*, No. 8.

⁵⁵ Cohen, *Méd. Imp.*, No. 4; engraved pl. xvi.

to exist. They were issued, as I have already pointed out,⁵⁶ at Nicomedia (*Cab. des Médailles, British Museum*), at Antioch (*Wigan coll., now British Museum*), at Serdica, and at Siscia (*both formerly in the Blacas collection, and now in the British Museum*).

MAXIMINUS DAZA.

- * 305. *Obv.*—MAXIMINVS AVGVSTVS. Head of Maximinus Daza to the right, laureated.

Rev.—IOVI CONSERVATORI AVGG. Jupiter naked, standing to the left, holding thunderbolt and sceptre; at his feet an eagle holding a wreath; in the field **II**. In the *exergue* S. M. TS. (*Signata Moneta Thessalonica*).

Published by Cohen (*Méd. Imp.*, No. 8).

306. MAXIMINUS DAZA. *Rev.*—PRINCIPI IVVENTVTIS. In the *exergue* S. M. SD. (Cohen, *Méd. Imp.*, No. 14.)

307. LICINIUS I. *Rev.*—IOVI CONS. LICINI AVG. In *exergue* S. M. N. E. (Cohen, *Méd. Imp.*, No. 18. For an explanation of the legend OBDV FILII SVI on the obverse, see *Num. Chron.*, N.S., vol. ii. p. 44.)

- * 308. *Obv.*—LICINIVS P. F. AVG. Head of Licinius I. to the right, laureated.

Rev.—MARTI CONSERVATORI. Mars standing facing, looking to the right, holding spear, and resting on shield; in the *exergue* P. R. (*Prima Roma*).

Published by Cohen (*Méd. Imp.*, No. 21) from the *Ancien Catalogue du Cabinet de France*.

- * 309. *Obv.*—IMP. LICINIVS P. F. AVG. Bust of Licinius I. to the right, laureated, with *paludamentum* and cuirass.

Rev.—PRINCIPI IVVENTVTIS. Licinius laureated, in military dress to the right, holding spear and globe; in the *exergue* P. OST. and star (*Prima Ostia*). *Quinarius*.

Published by Cohen (*Méd. Imp.*, No. 23).

⁵⁶ *Num. Chron.*, N.S., vol. v. p. 101.

For an account of the mint of Ostia, see *Num. Chron.*, N.S., vol. ii. p. 46.

- * 310. *Obv.*—LICINIVS AVGVSTVS. Head of Licinius I. to the right, laureated.

Rev.—SIC. X. SIC. XX. S.M. A. B. (*Signata Moneta Antiochiæ* 2) within a wreath of laurel.

Published by Cohen (*Méd. Imp.*, No. 28).

- * 311. *Obv.*—LICINIVS P. F. AVG. Bust of Licinius I. to the right, laureated, with *paludamentum* and cuirass.

Rev.—VBIQVE VICTORES. Licinius I. laureated and in military dress, standing to the right, holding spear and globe; on either side of him a captive; in the *exergue* P. TR. (*Prima Treveris*).

Published by Cohen (*Méd. Imp.*, No. 29) from the *Cabinet de M. Hoffmann*.

- * 312. *Obv.*—IMP. LICINIVS AVG. Bust of Licinius I. to the right, laureated, with cuirass.

Rev.—IOVI CONSERVATORI AVGG. Jupiter half-naked, seated to the left, holding thunderbolt and spear; in the *exergue* TR. (*Treveris*). *Quinarius*.

Published by Cohen (*Méd. Imp.*, No. 15).

LICINIUS II.

- * 313. *Obv.*—LICINIVS IVN. NOB. CAES. Bust of Licinius II. to the right, laureated, with *paludamentum* and cuirass.

Rev.—PRINCIPI IVVENTVTIS. Licinius II. laureated, in military dress, standing to the right, holding spear and globe. *Quinarius*.

Published by Cohen (*Méd. Imp.*, No. 5).

CONSTANTINE I.

- * 314. *Obv.*—IMP. CONSTANTINVS AVG. Bust of Constantine I. to the right, laureated, with ornamented cuirass.

Rev.—PONT. MAX. TRIB. P.P.P. PROCS (*sic*). Constantine I. seated to the left on a curule chair, holding a globe and sceptre. In the *exergue* TR. (*Treveris*). *Quinarius*.

Published by Cohen (*Méd. Imp.*, No. 81; engraved pl. iii.).

315. CONSTANTINE I. Rev.—GLORIA EXERCITVS GALL. In the *exergue* P. TR. (Cohen, *Méd. Imp.*, No. 68.)

* 316. Obr.—CONSTANTIENS P. F. NNG. (*sic*). Head of Constantine I. to the right, laureated.

Rev.—SECIPITAS PEIPETIAE (*sic*). Constantine in military dress standing to the left, crowning a trophy and holding a sceptre; at the foot of the trophy a helmet, shield, and cuirass; in the *exergue* SINN. (*sic*).

Published by Cohen (*Méd. Imp.*, No. 94) from the *Cabinet de M. Rollin*. Of very barbarous work.

317. CONSTANTINE I. Rev.—GAVDIVM ROMANORVM. In the *exergue* ALAMANNIA. (Cohen, *Méd. Imp.*, No. 59.)

* 318. Obr.—CONSTANTINVS P. F. AVG. Head of Constantine I. to the right, laureated.

Rev.—GAVDIVM ROMANORVM. Trophy, composed of cuirass, helmet, shields, and spears, at the foot of which are seated two captives; in the *exergue* FRAN. ET ALAM. S. M. T. (*Francia et Alamannia. Signata Moneta Thessalonice*). (Pl. VI., No. 1.)

Unpublished.

In the year A.D. 306, after the death of his father, Constantius Chlorus, Constantine the Great waged war against the *Franci* and the *Alamanni*, and is said to have used great cruelty towards these conquered nations;⁵⁷ the latter

⁵⁷ "Cæsis Francis atque Alamannis reges eorum cepit, et bestiis, cum magnificum spectaculum muneris parasset, objecit."

nation being again subdued in A.D. 311.⁵⁴ There is not much doubt but that the coins of Constantine, with the legend *GAVDIVM ROMANORVM*, and the *exergual* inscriptions *FRANCIA* and *ALAMANNIA*,⁵⁵ were first issued about the year A.D. 306. The issue of coins with the legend *ALAMANNIA* was again continued by Constantine I. in A.D. 317, when Crispus, Constantine II., and Licinius II. were made *Cæsars*. The Blacas specimen of the coin of Constantine I. (No. 318) affords an example of this series, and the coins of Crispus and Constantine II. may be found published by Cohen.⁵⁶

All the coins above mentioned, with the exception of the Blacas specimen (No. 318), were struck at Trèves, and to the pieces already quoted, struck at this town relating to these victories, may be added the rare gold coin published by Cohen,⁵⁷ from *Morell*,⁵⁸ of which the fol-

—Entrop. x. 3. *Ludi Franciei* are mentioned in the *Fasti* of Philocalus (A.D. 354) as being celebrated from the 15th to the 20th of July (*Corp. Inscr. Lat.*, ed. Mommsen, vol. i. p. 346), but it is not certain whether these games commenced from the victory of Constantine over the *Franci* in A.D. 306, or at the peace established with them by Constantius II. in A.D. 342 (*cf.* Mommsen, *op. cit.* p. 397).

⁵⁴ "Chamavos, Cheruseos, Vangionas, *Alamannos*, *Tubantes*."

—Nazarius, *Panegy.*, c. xviii. p. 585; Clinton, *F. R.*, vol. ii. p. 87.

⁵⁵ Cohen, *Méd. Imp.*, Nos. 59—61.

⁵⁶ Crispus, *Méd. Imp.*, No. 7; Constantine II., No. 26; the latter from *Schellersheim*. A *quinarius* of Crispus, with the *exergual* inscription *FRANCIA*, is also published by Cohen (No. 7) from the *Ancien Catalogue du Cabinet des Médailles*. This coin may refer to the victory of Crispus over the Franks in 320 (Clinton, *F. R.*, vol. i. p. 372). Small brass coins of Crispus, with the legend *ALAMANNIA DEVICTA*, and struck at Sirmium, were also issued (Cohen, Nos. 29, 30).

⁵⁷ *Méd. Imp.*, No. 62.

⁵⁸ *Specimen Universæ Rei Nummarie Antiquæ*, p. 82, pl. vii. Leipzig, 8vo. 1695. It is not published in the edition of 1683.

lowing is a description :—*Obv.* Three-quarter bust of Constantine I. to the left, with the *nimbus*, in the imperial consular dress, holding a globe on which is a Victory, and the *mappa*. *Rev.* Trophy between two captives; in the *exergue* FRANC. ET ALAM. TR. This remarkable piece, as we learn from Morell, was formerly in the collection of the Count of Schwarzburg, but its present possessor, or even its existence, is now not known. The doubt that might be raised against it on account of the *nimbus* is removed by the fact that another rare gold coin with similar obverse, but with the reverse legend VICTORIOSO SEMPER, and in the *exergue* S. M. T. (*Signata Moneta Thessalonica*), is described by Cohen,⁶³ as *autrefois*, *Cabinet des Médailles*, and that a rare brass medallion, representing on the reverse Constantine with the *nimbus*, and struck at Rome,⁶⁴ and also a fine gold medallion of Fausta, with a female figure with the *nimbus* on the reverse, are both still extant, and preserved in the *Cabinet des Médailles* at Paris.⁶⁵ The *nimbus* is of frequent occurrence on the coins of Constantine's successors. It affords no proof of the Christianity of Constantine, as monuments show that the *nimbus* was prevalent under Claudius, Trajan,⁶⁶ and Antoninus Pius.⁶⁷

⁶³ *Méd. Imp.*, No. 148.

⁶⁴ Cohen, *Méd. Imp.*, No. 168.

⁶⁵ Cohen, *Méd. Imp.*, No. 1, vol. vi. p. 182, note 1.

⁶⁶ Sabatier, *Mon. Byz.*, vol. i. p. 32, quoting from Ludolf Stephanus, *Nimbus und Strahlenkranz in den Werken der Alter Kunst*, 4to. St. Petersburg, 1859. I have been unable to verify this reference.

⁶⁷ On a large brass coin of this emperor, published and engraved by Oisellius (*Thes. Num. Antig.*, 4to. Amstel. 1677, p. 371, pl. lxvii. No. 1), but he has omitted to notice that the *nimbus* is surrounded with *spikes*, so that it becomes a *radiated*

It cannot, however, be safely asserted that either of the rare gold coins of Constantine with the *nimbus* is genuine, more especially the former, as the same reverse type of FRAN. ET ALAM., and with the usual style of obverse, was issued at another mint, that of Thessalonica (S. M. T.), and the piece is still extant (Blacas, No. 318). This coin was issued about A.D. 317.

319. CONSTANTINE I. *Rev.*—CONSTANTINVS AVG. In the *exergue* S. M. TS. (Cohen, *Méd. Imp.*, No. 48.)

* 320. *Obv.*—No legend. Head of Constantine I. to the right, with diadem.

Rev.—GLORIA CONSTANTINI AVG. Constantine standing to the left between two seated captives, holding a globe, surmounted by a Victory and a spear; in the *field* S.; in the *exergue* S. M. N. (*Signata Moneta Nicomediae*). Small medallion. Wt. 97.3 grs. A hole in it.

Published by Cohen (*Méd. Imp.*, No. 16).

321. CONSTANTINE I. *Rev.*—VICTORIA CONSTANTINI AVG. In the *exergue* S. M. N. C. (Cohen, *Méd. Imp.*, No. 131.)

322. CONSTANTINE I. *Rev.*—EQVIS ROMANVS. In the *exergue* S. M. N. (Cohen, *Méd. Imp.*, No. 8.) Small medallion.

323. CONSTANTINE I. *Rev.*—VICTORIA CONSTANTINI AVG. In the *exergue* M. TS. (Cohen, *Méd. Imp.*, No. 121.)

* 324. *Obv.*—CONSTANTINVS MAX. AVG. Bust of Constantine I. to the right, with diadem, and with *paludamentum* and cuirass.

Rev.—VICTORIA CONSTANTINI AVG. Victory seated to the right on cuirass, holding a shield

nimbus. A specimen of this coin is in the Museum collection. Cohen, in publishing this coin, or one of similar type (*Méd. Imp.*, No. 559), does not mention this peculiarity.

on which is inscribed VOT. XXXX., and which is presented to her by a genius; behind her a shield; in the *exergue* CONS. (*Constantinopoli*).

Published by Cohen (*Méd. Imp.*, No. 132).

325. CONSTANTINE I. *Rev.*—VICTORIA CONSTANTINI AVG. In the *exergue* S. M. TS. (*Cf.* Cohen, *Méd. Imp.*, No. 120.)

* 326. *Obv.*—CONSTANTINVS P. F. AVG. Head of Constantine I. to the right, laureated.

Rev.—VICTORIBVS AVGG. NN. VOTIS X. ET XX. Victory in a facing quadriga, holding a wreath and palm; in the *exergue* P. TR. (*Prima Treveris*).

Published by Cohen (*Méd. Imp.*, No. 142).

* 327. *Obv.*—CONSTANTINVS P. F. AVG. Bust of Constantine I. to the right, laureated, with *paludamentum* and cuirass.

Rev.—VICTORIBVS AVGG. NN. VOTIS. Victory seated to the right on a cuirass, holding a shield, on which is inscribed XXX., and which is presented to her by a genius; behind her a shield; in the *exergue* P. TR. (*Prima Treveris*).

Published by Cohen (*Méd. Imp.*, No. 141), but incorrectly, for he describes before the Victory "a trophy at the foot of which a barbarian seated to the left and turning his head."

Another coin of the same legend and date as this one, but with the type of a facing Victory holding next her chest a shield, on which are the figures XXX., exists in the British Museum. Of the apparently similar specimen in the Vienna Museum, Eckhel⁶⁸ has written—"Olim in hoc numo legi XXX. pro XX., ut videre est in Catalogo Musei Cæsarei. Verum cum Vota XXX. cum AVGG. NN. componi non possint, attentius eum iterum inspexi, et patuit superiores clypei flexus τοῦ X. speciem præbere;"

⁶⁸ *Doct. Num. Vet.*, vol. viii. p. 91.

and Cohen⁶⁹ has doubtless described the coin from Eckhel's alteration.⁷⁰ I should, however, be much inclined to consider this coin to be identical with the one in the Museum. A coin of Licinius in the Blacas collection, with the legend *VBIQVE VICTORES* (No. 311), of identical fabric, which is especially noticeable in the bust, shows that the style of coin must have been issued before the war with Licinius in A.D. 323, and as the *Vicennalia* of Constantine were not celebrated till A.D. 325,⁷¹ it follows that Constantine continued this system of coinage for a short time after the defeat and death of Licinius, altering the legend to *VICTORIBVS AVGG. NN. VOTIS XXX*. The letters *AVGG. NN.*, which were the cause of Eckhel's remark, evidently refer to the whole Constantinian family. These pieces weigh 83 + grains, and were probably issued as memorial coins, the average weight of the *aureus* being 68 grains.

* 328. *Obv.*—*CONSTANTINVS P. F. AVG.* Head of Constantine I. to the right, laureated.

Rev.—*VICTOR OMNIVM GENTIVM.* Constantine I. in military dress, standing to the left, holding globe and spear, and crowned by Victory behind him, who holds a palm. In the *exergue* S. M. T. (*Signata Moneta Thessalonicae.*) A hole in it.

Unpublished.

329. *CONSTANTINE I.* *Rev.*—*VIRTVS EXERCITVS GALL.*
In the *exergue* SIS. (Cohen, *Méd. Imp.*, No. 148.)

⁶⁹ *Méd. Imp.*, No. 140.

⁷⁰ The late M. Arneth (*Synop. Num. Antiq. Vindob.*, part ii. p. 196, Vienna, 1842) has also described this piece with XX., and with a reference to Eckhel. I can hardly think that he could have verified the coin.

⁷¹ Clinton, *Fast. Rom.*, vol. i. p. 378.

FAUSTA.

- * 330. *Obv.*—FL. MAX. FAVSTA. AVG. Bust of Fausta to the right.

Rev.—SPES REIPVBLICAE. Fausta standing facing, looking to the left, holding two infants in her arms; in the *exergue* R., a crown, and P. (*Roma Prima*).

Published by Cohen (*Méd. Imp.*, No. 3) incorrectly, for he gives the obverse legend as FLAV. MAX., &c.

Cohen⁷² suggests, as I have already previously pointed out,⁷³ that the two infants represent Constantine II. and Constans, and that the coin was issued in A.D. 317 or 318.

331. HELENA, WIFE OF CONSTANTIUS I. AND MOTHER OF CONSTANTINE I. *Rev.*—SECVRITAS REIPVBLICE (*sic*). In the *exergue* S. M. N. (Cohen, *Méd. Imp.*, No. 1. The Museum now possesses all three of the gold coins of Helena, struck respectively at *Sirmium*, *Thessalonica*, and *Nicomedia*; cf. F. W. Madden, *Num. Chron.*, N.S., vol. v. p. 114, pl. ix. No. 9; F. W. Madden, *Handbook of Rom. Num.*, pl. v. No. 1.)

CRISPUS.

- * 332. *Obv.*—No legend. Head of Crispus to the right, with diadem.

Rev.—CRISPVS CAESAR. Victory walking to the left, holding wreath and palm; in the *exergue* SIRM. (*Sirmio*).

Published by Cohen (*Méd. Imp.*, No. 2; engraved pl. v.)

- * 333. *Obv.*—FL. IVL. CRISPVS NOB. CAES. Bust of Crispus to the left, laureated, with *paludamentum* and cuirass.

Rev.—FELIX PROCESSVS COS. III. Crispus standing to the left, holding globe and sceptre; in the *exergue* SIRM. (*Sirmio*).

Published by Cohen (*Méd. Imp.*, No. 5; engraved pl. v.).

⁷² *Méd. Imp.*, vol. vi. p. 182, note 2.

⁷³ *Num. Chron.*, N.S., vol. v. p. 118.

CONSTANTINE II.

- * 334. *Obv.*—CONSTANTINVS IVN. NOB. CAES. Bust of Constantine II. to the right, laureated, with *paludamentum* and cuirass.

Rev.—VICTORIA CONSTANTINI CAES. Victory seated to the right on cuirass and shield, holding on her knee a shield, which is supported by a genius, and on which is VOT. X.; in the *exergue* SIRM. (*Sirmio*).

Published by Cohen (*Méd. Imp.*, No. 46).

CONSTANS.

- * 335. *Obv.*—FL. IVL. CONSTANS AVG. Bust of Constans to the right, laureated, with *paludamentum* and cuirass.

Rev.—SECVRITAS REIPVBLICAE. Security standing facing, with her legs crossed, looking to the right, placing her right hand on her head, and leaning on a column; in the *exergue* TR. (*Treveris*).

Published by Cohen (*Méd. Imp.*, No. 49), but not quite correctly.

- * 336. *Obv.*—CONSTANS P. F. AVG. Bust of Constans to the right, laureated, with *paludamentum* and cuirass.

Rev.—VICTORIA DD. NN. AVGG. Victory walking to the left, holding wreath and palm; in the *exergue* TR. (*Treveris*). *Quinarius*.

Published by Cohen (*Méd. Imp.*, No. 69).

CONSTANTIUS II.

- * 337. *Obv.*—FL. IVL. CONSTANTIVS PERP. AVG. Bust of Constantius II. to the left, with diadem, and with *paludamentum* and cuirass.

Rev.—GLORIA ROMANORVM. Constantinople, turreted (?), seated to the left, holding a globe, on which is a Victory, with palm and wreath, and a sceptre, and placing her left foot on the prow of a vessel; in the *exergue* S. M. ANT. (*Signata*).

Moneta Antiochie). (Pl. VI., No. 2.) Medallion.
Wt. 302 grs.

Published by Cohen (*Méd. Imp.*, No. 28). It is not quite certain whether the female figure on this medallion is turreted; but it is positively a *fillet* on the head of the figure on the large medallion described incorrectly by Cohen (*Méd. Imp.*, No. 30).

* 338. *Obv.*—Same legend and type as No. 337.

Rev.—GLORIA ROMANORVM. Rome helmeted, seated facing, holding a globe on which is a Victory and a spear on the same seat as Constantinople, turreted, holding a globe, on which is a Victory and a sceptre, and placing her right foot on the prow of a vessel; in the *exergue* S. M. ANT. (*Signata Moneta Antiochie*). (Pl. VI., No. 3.) Small medallion. Wt. 137 + grs.

Published by Cohen (*Méd. Imp.*, No. 27).

* 339. *Obv.*—Same legend and type as No. 337.

Rev.—GLORIA ROMANORVM. Constantius II. standing facing in a quadriga, throwing money from his right hand, and holding in his left a sceptre surmounted by an eagle, which holds in its beak a crown; in the *exergue* S. M. ANT. (*Signata Moneta Antiochie*). (Pl. VI., No. 4.) Small medallion. Wt. 82 + grs.

Published by Cohen (*Méd. Imp.*, No. 31; engraved pl. vii. *bis*).

* 340. *Obv.*—CONSTANTIVS AVGVSTVS. Bust of Constantius II. to the right, with diadem, and with *paludamentum* and cuirass.

Rev.—VICTORIAE DD. NN. AVGG. Two Victories standing holding a shield, on which VOT. XX. MVLT. XXX.; in the *exergue* TR. (*Trereris*). Small medallion. Wt. 81 grs.

Published by Cohen (*Méd. Imp.*, No. 44).

* 341. *Obv.*—FL. IVL. CONSTANTIVS NOB. CAES. Bust of Constantius II. to the left, laureated, with *paludamentum* and cuirass.

Rev.—CONSTANTIVS CAESAR. Victory walking to the left, holding wreath and palm; in the *exergue* CONS. (*Constantinopoli*).

Published by Cohen (*Méd. Imp.*, No. 58).

342. CONSTANTIUS II. *Rev.*—GLORIA REIPVBLICAE.
In the *exergue* R. S. M. Q. and palm. (Cohen,
Méd. Imp., No. 80.)
343. CONSTANTIUS II. *Rev.*—GLORIA REIPVBLICAE.
In the *exergue* TES. (Cohen, *Méd. Imp.*, No.
86.)
344. DELMATIUS. *Rev.*—DELMATIVS CAESAR. In the
exergue CONS. (Cohen, *Méd. Imp.*, No. 1.)
345. VETRANIO. *Rev.*—SALVATOR REIPVBLICAE. In
the *exergue* SIS. (Cohen, *Méd. Imp.*, No. 2.)

DECENTIUS.

- * 346. *Obv.*—D. N. DECENTIVS FORT. CAES. Bust of
Decentius to the right, bare, with *paludamentum*
and cuirass.
- Rev.*—VICTORIA AVG. LIB. ROMANOR. Victory
and Liberty standing, holding a trophy; in the
exergue TR. (*Treveris*).

Unpublished variety, the usual reverse legend being VIC-
TORIA CAES., etc. A specimen of this variety struck at Rome
(R. P.) exists in the Paris collection.

347. CONSTANTIUS GALLUS. *Rev.*—GLORIA REIPVBLICAE.
In the *exergue* TR. (Cohen, *Méd. Imp.*, No. 9.)
348. JULIAN II. *Rev.*—VIRTVS EXERC. GALL. In the
exergue KONSÑ. (CONSTANTINA = *Arles*). (Cohen,
Méd. Imp., No. 25; engraved pl. xi.)
349. JULIAN II. *Rev.*—VIRTVS EXERCITVS ROMANO-
RVM. In the *exergue* ANT. B. (Cohen, *Méd.*
Imp., No. 29.)
350. JOVIAN. *Rev.*—SECVRITAS REIPVBLICE (*sic*). In
the *exergue* SIRM. and palm. (Cohen, *Méd.*
Imp., No. 8.)
- 351, 352. VALENTINIAN I. *Rev.*—RESTITVTOR REIPVB-
LICAE. In the *exergue* * ANT. @. *, and
KONSÑ. (Cohen, *Méd. Imp.*, Nos. 24, 25.)
353. VALENTINIAN I. *Rev.*—VICTORIA AVGG. In the
exergue TR. OB. (Cohen, *Méd. Imp.*, No. 38.)
- * 354. *Obv.*—D. N. VALENTINIANVS P. F. AV. Bust of
Valentinian I. to the right, with diadem, and with
paludamentum and cuirass.

Rev.—VICTORIA DD. NN. AVG. Victory walking to the left, holding wreath and palm; in the *field* to left a star; in the *exergue* LVG. (*Lugduno*). (Pl. VI., No. 5.) *Quinarius*.

Published by Cohen (*Méd. Imp.*, No. 39).

355, 356, 357. VALENS. *Rev.*—RESTITVTOR REIPVBLICAE. In the *exergue* ANT. P *; * ANT. P. *; * CONS. and wreath. (Cohen, *Méd. Imp.*, Nos. 35, 36, 34.)

GRATIAN.

358. *Obr.*—D. N. GRATIANVS P. F. AVG. Bust of Gratian to the right, with diadem, and with *paludamentum* and cuirass.

Rev.—GLORIA ROMANORVM. Rome helmeted, seated facing, holding a globe and a sceptre; in the *exergue* TR. OB. T. (Pl. VI., No. 6.) Medallion. Wt. 308 grs. Has had a ring.

Published by Cohen (*Méd. Imp.*, No. 1).

359. GRATIAN. *Rev.*—GLORIA ROMANORVM. In the *exergue* TR. OB. T. (Cohen, *Méd. Imp.*, No. 2.) Small medallion. Wt. 138 grs.

360. GRATIAN. *Rev.*—PRINCIPIVM IVVENTVTIS. In the *exergue* S.M. TR. (Cohen, *Méd. Imp.*, No. 21.) See *Num. Chron.*, N.S., vol. v. p. 347.

361. GRATIAN. *Rev.*—VICTORIA AVGVSTORVM. In the *exergue* CON.OB. (Cohen, *Méd. Imp.*, No. 27.)

362. GRATIAN. *Rev.*—VICTORIA AVGG. In the *exergue* COM. (Cohen, *Méd. Imp.*, No. 24.)

363. VALENTINIAN II. *Rev.*—VICTORIA AVGG. In the *exergue* COM. (Cohen, *Méd. Imp.*, No. 17.)

364. VALENTINIAN II. *Rev.*—VICTORIA AVGG. In the *exergue* TR.OB.C. (Cohen, *Méd. Imp.*, No. 16.)

365. THEODOSIUS I. *Rev.*—VICTORIA AVGGG. P. In the *field*, SM. (*Sirmio*); in the *exergue* CO.M.OB. (Cohen, *Méd. Imp.*, No. 21.)

366. FLACCILLA. *Rev.*—SALVS REIPVBLICAE. S. In the *exergue* CON.OB. (Cohen, *Méd. Imp.*, No. 1.)

367. MAGNUS MAXIMUS. *Rev.*—RESTITVTOR REIPVBLICAE. In the *exergue* S. M. TR. (Cohen, *Méd. Imp.*, No. 6.)
368. MAGNUS MAXIMUS. *Rev.*—VICTORIA AVGG. In the *exergue* TR. OB. (Cohen, *Méd. Imp.*, No. 8.)
369. MAGNUS MAXIMUS. *Rev.*—VICTORIA AVGVSTORVM. In the *exergue* S. M. TR. (Cohen, *Méd. Imp.*, No. 10.) *Quinarius*.

EUGENIUS.

- * 370. *Obv.*—D. N. EVGENIVS P. F. AVG. Bust of Eugenius to the right, with diadem, and with *paludamentum* and cuirass.
- Rev.*—GLORIA ROMANORVM. Rome and Constantinople seated, each holding a Victory on a globe; Rome also holds a spear, and Constantinople, who is placing her right foot on the prow of a vessel, a cornucopiæ; in the *field* TR. (*Treveris*); in the *exergue* CO.M. (*Constantinopolis Moneta*, standard of Constantinople). (Pl. VI., No. 7.) Medallion. Wt. 137 grs.

Published by Cohen (*Méd. Imp.*, No. 1; engraved pl. xvi.).

371. EUGENIUS. *Rev.*—VICTORIA AVGVSTORVM. In the *field* TR.; in the *exergue* COM. (Cohen, *Méd. Imp.*, No. 4.) *Tremissis*.

HONORIUS.

- * 372. *Obv.*—D. N. HONORIVS P. F. AVG. Bust of Honorius to the right, with diadem, and with *paludamentum* and cuirass.
- Rev.*—AD. VENTVS D. N. AVG. Honorius in military dress, laureated, and with *nimbus*, on horseback to the left, raising the right hand; in the *field* MD. (*Mediolano*); in the *exergue* CO.M.OB. (Pl. VI., No. 8.) Small medallion. Wt. 103.6 grs.

Published by Cohen (*Méd. Imp.*, No. 1; engraved pl. xvii.).

- * 373. *Obv.*—Same legend and type as No. 372.

Rev.—GLORIA ROMANORVM. Rome helmeted, seated

facing, holding a globe and a reversed spear; in the *field* RM. (*Roma*); in the *exergue* CO.M.[OB]. (Pl. VI., No. 9.) Medallion; has a ring. Wt. 328.6 grs.

Published by Cohen (*Méd. Imp.*, No. 2; engraved pl. xvii.).

374, 375. HONORIUS. *Rev.*—CONCORDIA AVGG. and AVGG. I. In the *exergue* TES.OB. and CON.OB. (Cohen, *Méd. Imp.*, No. 7.)

376, 377. HONORIUS. *Rev.*—CONCORDIA AVGGG. In the *exergue* CO.M.OB. (Cohen, *Méd. Imp.*, No. 9.)

378. HONORIUS. *Rev.*—VICTORIA AVGGG. In the *field* RM. In the *exergue* CO.M.OB. (Cohen, *Méd. Imp.*, No. 21.)

379. CONSTANTIUS III. *Rev.*—VICTORIA AVGGG. In the *field* RV.; in the *exergue* CO.M.OB. (Cohen, *Méd. Imp.*, No. 1.)

380. CONSTANTINUS III. *Rev.*—VICTORIA AVGGG. In the *field* LD.; in the *exergue* CO.M.OB. (Cohen, *Méd. Imp.*, No. 3.)

381. JOVINUS. *Rev.*—VICTORIA AVGG. In the *exergue* TR. OB. S. (Cohen, *Méd. Imp.*, No. 5.)

382. PRISCUS ATTALUS. *Rev.*—INVICTA ROMA AETERNA. In the *field* RM.; in the *exergue* CO.M.OB. (Cohen, *Méd. Imp.*, No. 3.)

383. JOHANNES. *Rev.*—VICTORIA AVGVSTORVM. In the *field* RV.; in the *exergue* CO.M.OB. (Cohen, *Méd. Imp.*, No. 6.) *Tremissis*.

384, 385. VALENTINIAN III. *Rev.*—VICTORIA AVGGG.; in the *field* RM. and RV.; in the *exergue* CO.M.OB. (Cohen, *Méd. Imp.*, No. 11.)

386. VALENTINIAN III. *Rev.*—IMP. XXXXII. COS. XVII. P.P. In the *exergue* CO.M.OB. (Published by Cohen (No. 4) from *Caylus* and *Beger*; engraved by De Salis, *Num. Chron.*, N.S., vol. vii., pl. vii., No. 9.)

387. VALENTINIAN III. *Rev.*—VOT. XXX. MVL.T. XXXX. In the *field* RM.; in the *exergue* CO.M.OB. (Cohen, *Méd. Imp.*, No. 23.)

388, 389. VALENTINIAN III. *Rev.*—No legend. In the *exergue* CO.M.OB. (Cohen, *Méd. Imp.*, No. 26.) *Tremisses*.

EUDOXIA THE YOUNGER, WIFE OF VALENTINIAN III.

- * 390. *Obv.*—AEL. EVDOXIA AVG. Bust of Eudoxia to the right, with diadem; above, a hand holding a wreath.

Rev.—VICTORIA AVGGG. Victory standing to the left, holding a long cross; in the *field* to right a star; in the *exergue* CON.OB.

Unpublished by Cohen and Sabatier; published by De Salis (*Num. Chron.*, N.S., vol. vii., pl. vii., No. 14).

This rare coin has been published and attributed to Eudoxia the younger by Mr. de Salis, in his paper "On the Coins of the Eudoxias."⁷⁴ The reverse legend VICTORIA AVGGG. occurs also upon a rare coin of Valentinian III. preserved in the Museum, and the reverse was not in use during the reign of Theodosius II.

391. AELIA GALLA PLACIDIA, MOTHER OF VALENTINIAN III.

Rev.—VOT. XX. MVLT. XXX. In the *exergue* CON.OB. (Cohen, *Méd. Imp.*, No. 11; *Num. Chron.*, N.S., vol. vii., pl. vii., No. 5.)

392. AELIA GALLA PLACIDIA, MOTHER OF VALENTINIAN III.

Rev.—VOT. XX. MVLT. XXX. In the *field* RV.; in the *exergue* CO.M.OB. (*Num. Chron.*, N.S., vol. vii., pl. viii., No. 11.)

393. PETRONIUS MAXIMUS. *Rev.*—VICTORIA AVGG.; in the *field* RV.; in the *exergue* CO.M.OB. (Cohen, *Méd. Imp.*, No. 1.)

394. MAJORIAN. *Rev.*—VICTORIA AVGGG.; in the *field* AR.; in the *exergue* CO.M.OB. (Cohen, *Méd. Imp.*, No. 1.)

395. MAJORIAN. *Rev.*—No legend. In the *exergue* CON.OB. (Cohen, *Méd. Imp.*, No. 9.) *Tremissis.*

ANTHEMIUS.

- * 396. *Obv.*—D. N. ANTHEMIVS P. F. AVG. Bust of Anthemius helmeted, facing, with the *paludamentum*, and with spear and shield.

⁷⁴ *Num. Chron.*, N.S., vol. vii. p. 206.

Rev.—SALVS REIPVBLICAE. Anthemius and Leo standing facing, holding between them a globe, on which a cross, and each holding a spear; in the field a star; in the *exergue* CO.RM.OB. [*Num. Chron.*, N.S., vol. i. p. 123, note 6.]

Published by Cohen (*Méd. Imp.*, No. 3).

- * 397. *Obv.*—D. N. PROC. ANTHEMIVS P. F. AVG. Bust of Anthemius to the right, with diadem, and with *paludamentum* and cuirass.

Rev.—Same legend and type; in the *exergue* CO.M.OB.

Published by Cohen (*Méd. Imp.*, No. 2).

398. ANTHEMIUS. *Rev.*—SALVS REIPVBLICAE; in the *exergue* CO.M.OB. (Cohen, *Méd. Imp.*, No. 11.) *Quinarius*.

EUFEMIA.

- * 399. *Obv.*—D. N. AEL. MARC. EVFEMIAE P. P. AVG. Bust of Eufemia to the right, with diadem.

Rev.—VICTORIA AVGGG. *. Victory standing to the left, holding a long cross; in the *exergue* CO.RM.OB. [See No. 396.] Pl. VI., No. 10.

Published by Cohen (*Méd. Imp.*, No. 2).

400. OLYBRIUS. *Rev.*—No legend. In the *exergue* CO.M.OB. (Cohen, *Méd. Imp.*, No. 4.) *Tremissis*, from the same die as the Paris coin.

401. GLYCERIUS. *Rev.*—No legend. In the *exergue* CO.M.OB. (Cohen, *Méd. Imp.*, No. 6.) *Tremissis*.

JULIUS NEPOS.

- * 402. *Obv.*—D. N. IVL. NEOPOS P. F. AVG. Bust of Julius Nepos to the right, with diadem, and with *paludamentum* and cuirass.

Rev.—No legend. Cross within a laurel wreath; in the *exergue* CO.M.OB. *Tremissis*.

Published by Cohen (*Méd. Imp.*, No. 12).

ROMULUS AUGUSTUS.

- * 403. *Obv.*—D. N. ROMVLVS AVG. P. F. AV. Bust of Romulus Augustus to the right, with diadem, and with *paludamentum* and cuirass.

Rev.—Same as No. 402. *Tremissis*.

Published by Cohen (*Méd. Imp.*, No. 6).

EMPIRE OF THE EAST.⁷⁵

404. ARCADIUS. *Rev.*—VICTORIA AVGG. In *field* MD.;
in *exergue* COM. (Sabatier, *Mon. Byz.*, No. 19.)

EUDOXIA, WIFE OF ARCADIUS.

405. *Obv.*—AEL. EVDXIA AVG. Bust of Eudoxia to the right, with diadem; above, a hand holding a crown.

Rev.—SALVS REIPVBLICAE Δ. Victory seated to the right on cuirass and shield, and inscribing the monogram of Christ on a shield, which is resting on a column. In the *exergue* CON.OB.

- * 406. *Obv.*—Same legend and type as No. 405, excepting the hand holding a crown.

Rev.—No legend. Cross in wreath. In the *exergue* CON. *Tremissis*.

Only the first of these coins has been published by M. Sabatier under Eudoxia, wife of Arcadius,⁷⁶ and that, as stated in a note, owing to the suggestion of Mr. de Salis. The second was unpublished till noticed and attributed by Mr. de Salis, in his excellent paper "On the Coins of the Eudoxias," &c., in the last volume of the *Numismatic Chronicle*.⁷⁷

407. THEODOSIUS II. *Rev.*—CONCORDIA AVGG. In *exergue* CO.M.OB. (Cf. Sabatier, *Mon. Byz.*, No. 2.)

408. THEODOSIUS II. *Rev.*—GLOR. ORVIS TERRAR. In *exergue* CON.OB. (Sabatier, *Mon. Byz.*, No. 3.)

⁷⁵ References are to M. Sabatier's *Description Générale des Monnaies Byzantines*. Two vols. 8vo. Paris, 1862.

⁷⁶ *Mon. Byz.*, No. 3, vol. i. p. 110, note.

⁷⁷ Vol. vii. p. 210.

409. THEODOSIUS II. *Rev.*—IMP. XXXXII. COS. XVII. P.P. In *exergue* CO.M.OB. (Sabatier, *Mon. Byz.*, No. 5.)
410. THEODOSIUS II. *Rev.*—SALVS REIPVBLICAE. In *field* AQ. In *exergue* CO.M.OB. (Sabatier, *Mon. Byz.*, No. 9.)
411. THEODOSIUS II. *Rev.*—VICTORIA AVGVSTORVM. In *exergue* CON.OB. (Not published by Sabatier, and incorrectly attributed to Theodosius I. by Cohen, *Cf. Méd. Imp.*, No. 26). *Tremissis*.
412. THEODOSIUS II. *Rev.*—No legend. In *exergue* CON.OB. (Sabatier, *Mon. Byz.*, No. 16.) *Tremissis*.
413. EUDOCIA, WIFE OF THEODOSIUS II. *Rev.*—VOT. XX. MVLT. XXX.I. In *exergue* CON.OB. (Sabatier, *Mon. Byz.*, No. 1.)
414. MARCIAN. *Rev.*—VICTORIA AVGG. H. In *exergue* CON.OB. (Sabatier, *Mon. Byz.*, No. 4.)
415. MARCIAN. *Rev.*—VICTORIA AVGG. In *exergue* CON.OB. (Sabatier, *Mon. Byz.*, No. 7.) *Semissis*.
416. MARCIAN. *Rev.*—VICTORIA AVGVSTORVM. In *exergue* CON.OB. (Sabatier, *Mon. Byz.*, No. 8.) *Tremissis*.
417. PULCHERIA, WIFE OF MARCIAN. *Rev.*—VOT. XX. MVLT. XXX. A. In *exergue* CON.OB. (Sabatier, *Mon. Byz.*, No. 4.)
418. PULCHERIA, WIFE OF MARCIAN. *Rev.*—No legend. In *exergue* CON.OB. *. (Sabatier, *Mon. Byz.*, No. 9.) *Tremissis*.
419. LEO. I. *Rev.*—VICTORIA AVGGG. In *exergue* THS.OB. (Sabatier, *Mon. Byz.*, No. 4.)
- * 420. *Obv.*—D.N. LEO PERPETVVS AVG. Bust of Leo to the right, with diadem, with *paludamentum* and cuirass.
- Rev.*—SALVS REIPVBLICAE written round a wreath; within, the monogram of Christ; in the *exergue* CO.M.OB. *Semissis*.
- Unpublished.
421. LEO I. *Rev.*—VICTORIA AVGVSTORVM. In *exergue* CON.OB. (Sabatier, *Mon. Byz.*, No. 9.) *Tremissis*.

422. VERINA, WIFE OF LEO I. *Rev.*—No legend. In *exergue* CON.OB. (Sabatier, *Mon. Byz.*, No. 2.) *Tremissis*.
423. BASILISCUS. *Rev.*—VICTORIA AVGGG. In *exergue* CON.OB. (Sabatier, *Mon. Byz.*, No. 1.)
424. ZENO. *Rev.*—VICTORIA AVGGG. B. In *exergue* CON.OB. (Sabatier, *Mon. Byz.*, No. 1.)
425. ZENO. *Rev.*—VICTORIA AVGGG. H. In *exergue* CON.OB. (Sabatier, *Mon. Byz.*, No. 1.)
- 426, 427. ZENO. *Rev.*—VICTORIA AVGGG. In *field* MD.; in *exergue* CO.M.OB. (Sabatier, *Mon. Byz.*, No. 1.)
- 428, 429. ZENO. *Rev.*—VICTORIA AVGVSTORVM. In *exergue* CON.OB. (Sabatier, *Mon. Byz.*, No. 6.) *Tremissis*.
- 430, 431. ZENO. *Rev.*—No legend. In *exergue* CO.M.OB. (Sabatier, *Mon. Byz.*, No. 7.) *Tremissis*.
432. ANASTASIUS. *Rev.*—VICTORIA AVGGG. A. In *exergue* CO.M.OB. (Sabatier, *Mon. Byz.*, No. 2.)
433. ANASTASIUS. *Rev.*—VICTORIA AVGVSTORVM. In *exergue* CO.M.OB. (Sabatier, *Mon. Byz.*, No. 5.) *Tremissis*.
- * 434. *Obv.*—D. N. ANASTASIUS P. F. AVG. Bust of Anastasius to the right, with diadem.
Rev.—VICTORIA AVGVSTORVM. Victory walking to the right, holding palm and wreath. In the *exergue* CO.M.OB. *Tremissis*.
- Unpublished.
435. ANASTASIUS AND THEODORIC (Ostrogothic). *Rev.*—VICTORIA AVGGG. $\overline{\text{FR}}$. In *field* RA. and star; in *exergue* CO.M.OB. (Sabatier, *Mon. Byz.*, pl. xviii., No. 2.)
- 436, 437. JUSTINUS I. *Rev.*—VICTORIA AVGGG. A. and P. In *exergue* CON.OB. (Sabatier, *Mon. Byz.*, No. 1.)
- * 438. *Obv.*—D. N. IVSTINVS P. P. AVG. Bust of Justin I. to the right, with diadem.

Rev.—VICTORIA AVGGG. Victory seated to the right on arms, inscribing XXXX. on a shield. In the *field* to left, a star; to right, the monogram of Christ. In the *exergue* CON.OB. *Semissis*.

Published by Sabatier (*Mon. Byz.* No. 8) from Mionnet.

439. JUSTINUS I. Another example, but of barbarous work.

JUSTIN I. AND JUSTINIAN.

* 440. *Obv.*—D. N. IVSTIN ET IVSTINIAN. PP. AVG. The two emperors wearing the *nimbus*, seated facing. In the *exergue* CON.OB.

Rev.—VICTORIA AVGGG. B. Victory standing facing, holding a long cross and a globe, on which a cross. In the *field* to right, a star; in the *exergue* CON.OB.

This coin is a variety of any I can find published. The obverse legend of the Paris example (Sabatier, *Mon. Byz.*, No. 1) is D. N. IVSTIN. ET IVSTINI PP. AVG., whilst that published and engraved by Pinder (*Die Münzen Justinians*, p. 16, pl. i., No. 1) reads D. N. IVSTINVS ET IVSTINIAN. PP. AVG. Moreover, the cross, which is between the two seated emperors on these last two mentioned coins, is absent in the Blacas specimen.

441, 442. JUSTINIAN I. *Rev.*—VICTORIA AVGGG. F. In *exergue* CON.OB. (Sabatier, *Mon. Byz.*, No. 2.)

443. JUSTINIAN I. *Rev.*—VICTORIA AVGVSTORVM. In *exergue* CON.OB. (Sabatier, *Mon. Byz.*, No. 5.) *Tremissis*.

444. JUSTINUS II. *Rev.*—VICTORIA AVGGG. I. In *exergue* CON.OB. (Sabatier, *Mon. Byz.*, No. 1.)

445. TIBERIUS CONSTANTINE. *Rev.*—VICTORIA AVGG. S. In *exergue* CON.OB. (Sabatier, *Mon. Byz.*, No. 1.)

446. TIBERIUS CONSTANTINE. *Rev.*—VICTOR TIBERI AVS. In *exergue* CON.OB. (Sabatier, *Mon. Byz.*, No. 3.)

447, 448. MAURICIUS TIBERIUS. *Rev.*—VICTORI AVGG. B. In *exergue* CON.OB. (Cf. Sabatier, *Mon. Byz.*, No. 2. The Blacas specimens read on the obverse, D. N. MAVRI. TIB. P.P. AVI.)

449. MAURICIUS TIBERIUS. *Rev.*—VICTORIA AVGG. Δ. In *exergue* CON.OB. (Sabatier, *Mon. Byz.*, No. 7.)

- * 450. *Obv.*—D. N. MAVRI. TIB. P.P. AVI. Bust of Mauricius to the right, with diadem.

Rev.—VICTORIA AVGVSTORVM. Victory standing, holding crown and cross on globe; in field to right, a star; in the *exergue* CON.OB. *Tremissis*.

Published by De Saulcy (*Nun. Byz.*, pl. iv., No. 3), from the *Suite Soleirol*.

451. FOCAS. *Rev.*—VICTORIA AVGG. I. In *exergue* CON.OB. (Sabatier, *Mon. Byz.*, No. 1.)

452. FOCAS. *Rev.* VICTORIA AVGVSTORVM. In *exergue* CON.OB. (Sabatier, *Mon. Byz.*, No. 5.) *Tremissis*.

453. HERACLIUS I. *Rev.*—VICTORIA AVG. 4Є. In field N.; in *exergue* CON.OB. (Cf. Sabatier, *Mon. Byz.*, No. 2.)

454. *Obv.*—D. N. HERACLI. PERP. AVG. Bust of Heraclius I. to the right, with diadem, on the top of which is a cross.

Rev.—VICTORI HERACLI. AVI. Cross. In the *exergue* CON.OB. *Tremissis*.

This coin is not published by M. Sabatier under Heraclius I., emperor, but I find that under the coins of Heraclius and his son Constantine, he has described⁷⁸ a coin with a similar reverse legend from *Mionnet*.⁷⁹ On referring to *Mionnet*, I further find that this latter has quoted it from the *Mus. Vindob.*, and in this catalogue⁸⁰ a specimen identical with the Blacas piece is fully described, thus showing that M. Sabatier never looked at the Vienna catalogue. Similar coins of Tiberius Constantine, with the legend VICTOR TIBERI AVG., are also in existence.⁸¹

⁷⁸ *Mon. Byz.*, No. 54.

⁷⁹ *Méd. Rom.*, vol. ii. p. 434.

⁸⁰ *Cat. Mus. Vindob.*, vol. iii. p. 542, No. 7.

⁸¹ Sabatier, *Mon. Byz.*, Nos. 4, 5.

HERACLIUS I. AND HERACLEONAS.

* 455. *Obv.*—DM. N. HERACAI CONSVAIIB. The two busts of Heraclius I. and Heracleonas facing, separated by a cross; the bust of Heraclius on the right is bearded, that of Heracleonas beardless.

Rev.—VICTORIA CONSVAIIB. Cross on three steps.
In the *exergue* CON.OB.

Unpublished.

This coin is not published by M. Sabatier, nor by M. Barthélemy in his paper "On some Consular Coins struck under the Lower Empire."⁸² The only other gold coin of Heraclius and his son Heracleonas, for the attribution of which we are indebted to M. Barthélemy in his paper above mentioned, was formerly in the collection of M. Zaepffel, and is now in the British Museum. Its weight is 68 + grains (83 Paris grains). The obverse legend is the same, but on the reverse there is the legend VICTORIA CONSABIA *instead of* VICTORIA CONSVAIIB., being a similar reverse legend to that on the coins of Heraclius and his son Constantine.⁸³ The Blacas specimen differs from this one in its size and general appearance, and it weighs 67 grains. The coins of Heraclius I. and Heracleonas are attributed by M. Barthélemy to 640, in which year the Emperor Heraclius named his second son consul. The new consul was only fourteen years old, and consequently beardless.

456. HERACLIUS AND HIS SON CONSTANTINE.

Rev.—VICTORIA AVGG. T. In *exergue* CON.OB.
(Sabatier, *Mon. Byz.*, No. 51.)

⁸² *Rev. Num.*, 1859, p. 247.

⁸³ Sabatier, *Mon. Byz.*, No. 8.

457. HERACLIUS AND HIS SON CONSTANTINE.

Rev.—VICTORIA AGGIF (*sic*). In *exergue* CON.OB.
(Sabatier, *Mon. Byz.*, No. 52.)

458. ARAB IMITATION OF HERACLIUS AND CONSTANTINE.

(Sabatier, *Mon. Byz.*, vol. i. p. 88.)

459. CONSTANTINE III. (CONSTANS II.)

Rev.—VICTORIA VVS4AX (*sic*). In *field* Z.; in
exergue CON.OB. (Sabatier, *Mon. Byz.*, No. 2.)

460. CONSTANTINE III. (CONSTANS II.), CONSTANTINE POGONATUS, HERACLIUS, AND TIBERIUS.

(*Cf.* Sabatier, *Mon. Byz.*, No. 16.)

461. CONSTANTINE III. (CONSTANS II.), CONSTANTINE POGONATUS, HERACLIUS, AND TIBERIUS.

(Sabatier, *Mon. Byz.*, No. 19.)

462, 463. CONSTANTINE IV. POGONATUS, HERACLIUS, AND TIBERIUS.

(*Cf.* Sabatier, *Mon. Byz.*, Nos. 3 and 1.)

464. CONSTANTINE IV. POGONATUS.

Rev.—VICTORA AVG4Δ. In *exergue* CON.OB.
(Sabatier, *Mon. Byz.*, No. 20.)

465. CONSTANTINE IV. POGONATUS.

Rev.—VICTORIA AVG4S. In *field* to right, 4
(Sabatier, *Mon. Byz.*, No. 22.) *Semissis*.

466. JUSTINIAN II. RHINOTMETUS, STRUCK BY ROMOALD II., DUKE OF BENEVENT, A.D. 694—720.

Rev.—VICTORI AVG4S. In *field* to left, R. (Romald); in *exergue* CON.OB. (Sabatier, *Mon. Byz.*, No. 6.)

467. JUSTINIAN II. RHINOTMETUS.

Rev.—dn. ihs. chs. REX REGNANTI4M. (Sabatier, *Mon. Byz.*, No. 2.)

468. JUSTINIAN II. RHINOTMETUS.

Semissis of barbarous work.

469. TIBERIUS ABSIMAR.

Rev.—VICTORIA AVS⁴. In *exergue* CON.OB.
(Sabatier, *Mon. Byz.*, No. 1.)

470. TIBERIUS ABSIMAR.

Rev.—VICTA AVIS. In *exergue* CON.OB. (*Cf.* Sabatier, *Mon. Byz.*, No. 28.) *Tremissis*.

471. FILEPICUS DARDANES.

Rev.—VICTORIA AVS⁴S. In *exergue* CON.OB.
(*Cf.* Sabatier, *Mon. Byz.*, No. 1. On this Blacas specimen the name is spelt FILEPPIOVS.)

472. THEODOSIUS ADRAMYTENUS.

Rev.—VICTORIA AVS⁴S. (Sabatier, *Mon. Byz.*, No. 3.) *Semissis*.

473. LEO III. THE ISAURIAN.

Rev.—VICTORIA AVS⁴Z. In *exergue* CONOB.
(Sabatier, *Mon. Byz.*, No. 1.)

474. LEO III. THE ISAURIAN.

Rev.—Same as No. 473 (Sabatier, *Mon. Byz.*, No. 4.)
Tremissis.

475—478. CONSTANTINE V. COPRONYMUS AND LEO III.

(Sabatier, *Mon. Byz.*, Nos. 16, 17, 14, 18.)

479. CONSTANTINE V. COPRONYMUS.

Rev.—VICTORI AVSTO. In *field* a star and R.; in
exergue CONOB. (Sabatier, *Mon. Byz.*, No. 29.)
Tremissis.

480. CONSTANTINE VI. AND IRENE, WITH LEO III., CONSTANTINE V., AND LEO IV.

(Sabatier, *Mon. Byz.*, No. 1.)

481. CONSTANTINE VI. AND IRENE.

(Sabatier, *Mon. Byz.*, No. 3.)

482. MICHAEL II. AND THEOPHILUS.

(Sabatier, *Mon. Byz.*, No. 2.)

- 483, 484. THEOPHILUS.
(Sabatier, *Mon. Byz.*, Nos. 1, 2.)
- 485, 486. THEOPHILUS.
(*Cf.* Sabatier, *Mon. Byz.*, Nos. 4, 5, and 6).
Semissis.
487. MICHAEL III., THEODORA, AND THECLA.
(Sabatier, *Mon. Byz.*, No. 1.)
- 488, 489. BASIL II. AND CONSTANTINE XI.
(Sabatier, *Mon. Byz.*, Nos. 1, 5.)
- 490, 491. CONSTANTINE XI. PORPHYROGENITUS.
(Sabatier, *Mon. Byz.*, Nos. 1, 3.)
- 492—495. CONSTANTINE XII. MONOMACHUS.
(Sabatier, *Mon. Byz.*, Nos. 1, 2, 3, 7.)
496. THEODORA.
(Sabatier, *Mon. Byz.*, No. 1.)
497. CONSTANTINE XIII. DUCAS.
(*Cf.* Sabatier, *Mon. Byz.*, No. 5.)
498. ROMANUS IV. AND EUDOCIA.
(Sabatier, *Mon. Byz.*, No. 1.)
- 499, 500. MICHAEL VII.
(Sabatier, *Mon. Byz.*, No. 2.)
501. MICHAEL VII. AND MARIA.
(Sabatier, *Mon. Byz.*, No. 11.)
502. NICEPHORUS III. BOTANIATES.
(Sabatier, *Mon. Byz.*, No. 4.)
503. ALEXIUS I. COMNENUS.
(Sabatier, *Mon. Byz.*, No. 1.)
- 504, 505. JOHN II. COMNENUS.
(Sabatier, *Mon. Byz.*, Nos. 1, 2.)
506. MANUEL I. COMNENUS.
(Sabatier, *Mon. Byz.*, No. 2.)

507. ANDRONICUS I. COMNENUS.

(Sabatier, *Mon. Byz.*, No. 1.)

508. ISAAC II. ANGELUS.

(Sabatier, *Mon. Byz.*, No. 1.)

509. ISAAC II. ANGELUS.

(A variety of No. 508, with horizontal legend, published by Sabatier.)

510, 511. ALEXIUS III. ANGELUS.

(This attribution is that of Mr. de Salis. M. de Saulcy (*Num. Byz.*, pl. xxx., No. 4) described it in its proper place, but attributed it, as his specimen was not legible, to Isaac Angelus and his son Alexius(?). M. Sabatier (*Mon. Byz.*, pl. lii. 16, 17) has incorrectly given it to Alexius I. Comnenus. The figures on the obverse are Alexius III. and St. Constantine.)

512. JOHN III. DUCAS VATATSES (NICÆA).

(Sabatier, *Mon. Byz.*, No. 1.)

513. MICHAEL VIII. PALÆOLOGUS.

(Sabatier, *Mon. Byz.*, No. 1.)

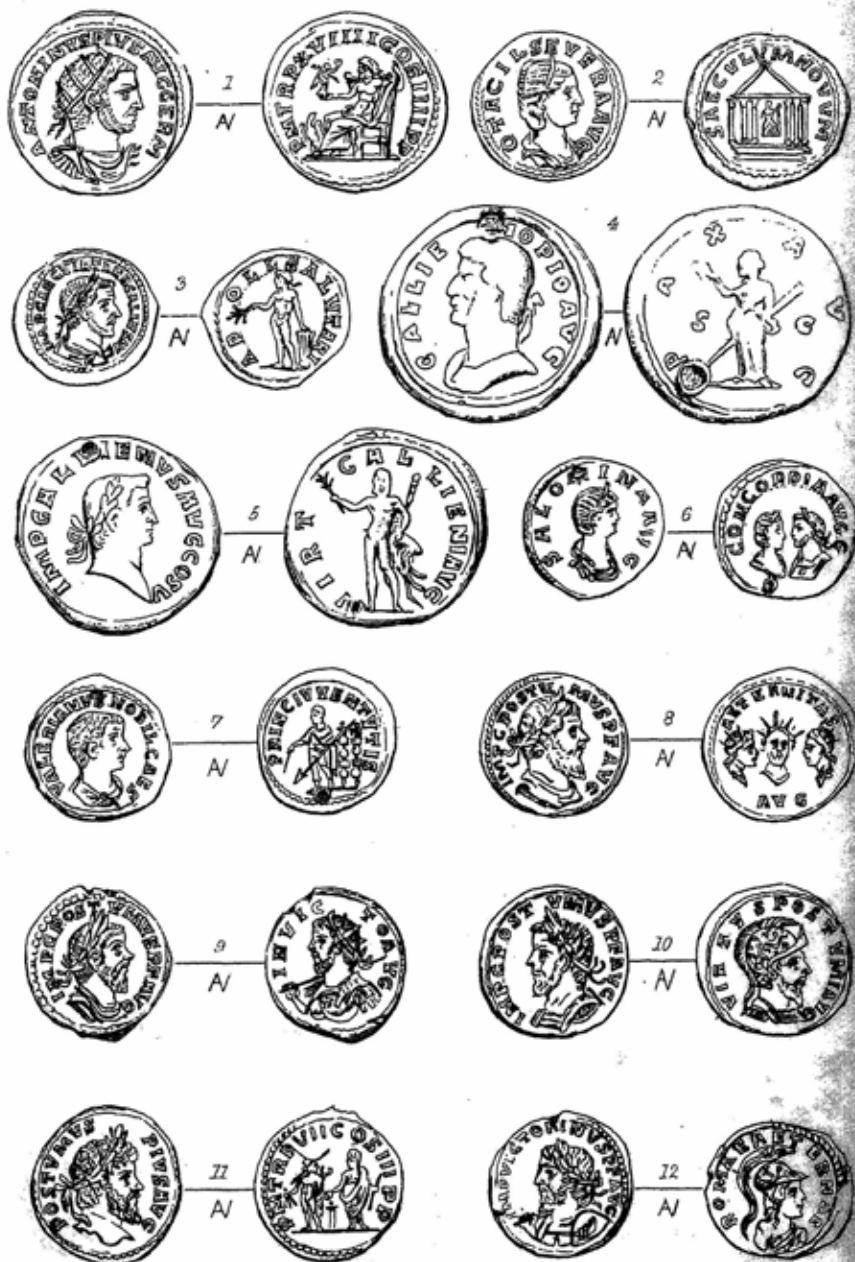
514. ANDRONICUS II. PALÆOLOGUS.

(Sabatier, *Mon. Byz.*, No. 1.)

515. ANDRONICUS II. AND MICHAEL IX.

(Sabatier, *Mon. Byz.*, No. 1.)

FREDERIC W. MADDEN.



F. J. Lenoir, Del.

COINS FROM THE BLACAS COLLECTION.
PL. IV.





1
N



2
N



3
N



4
N



5
N



6
N



7
N



8
N



9
N



10
N



11
N

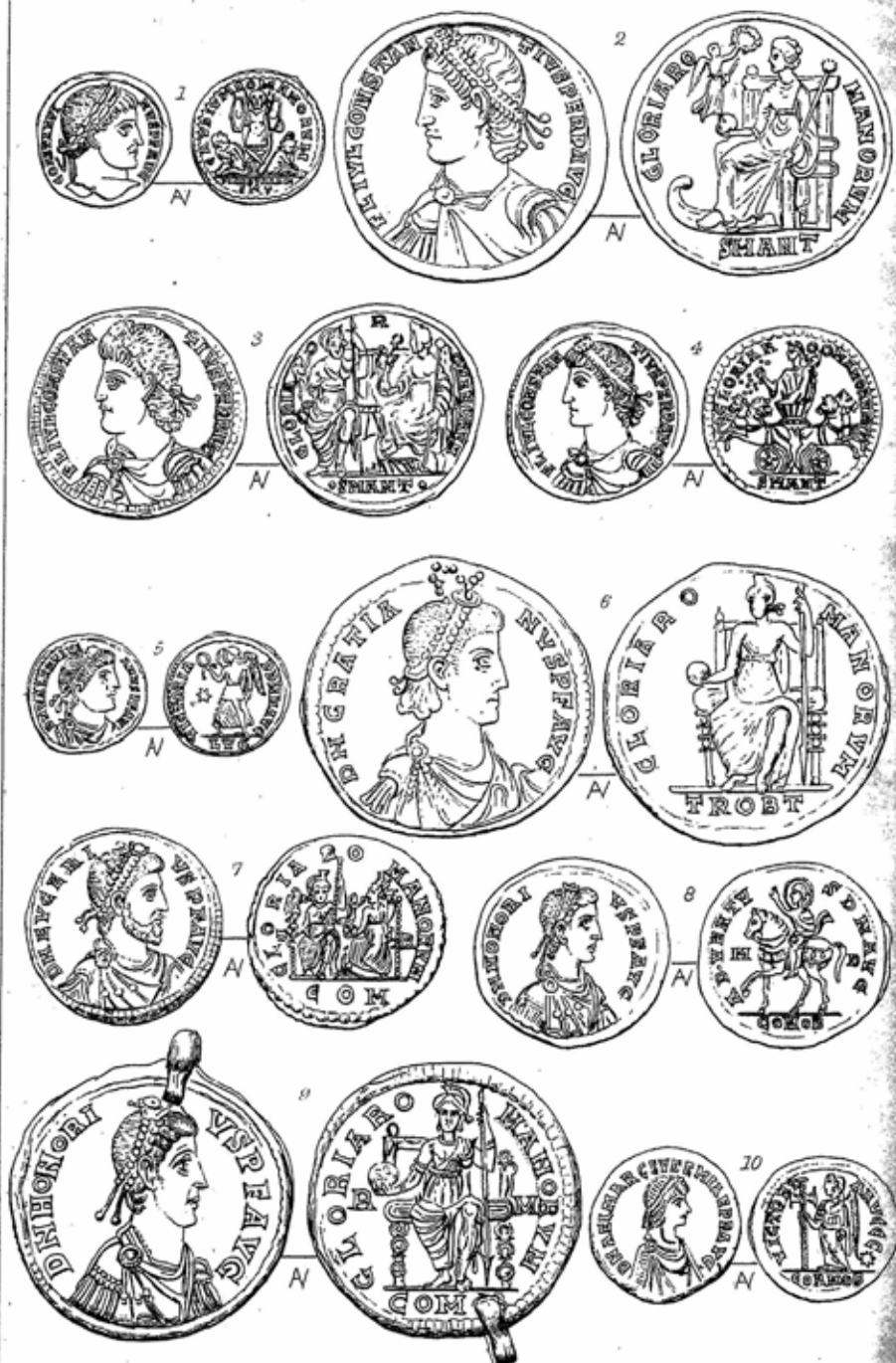


12
N

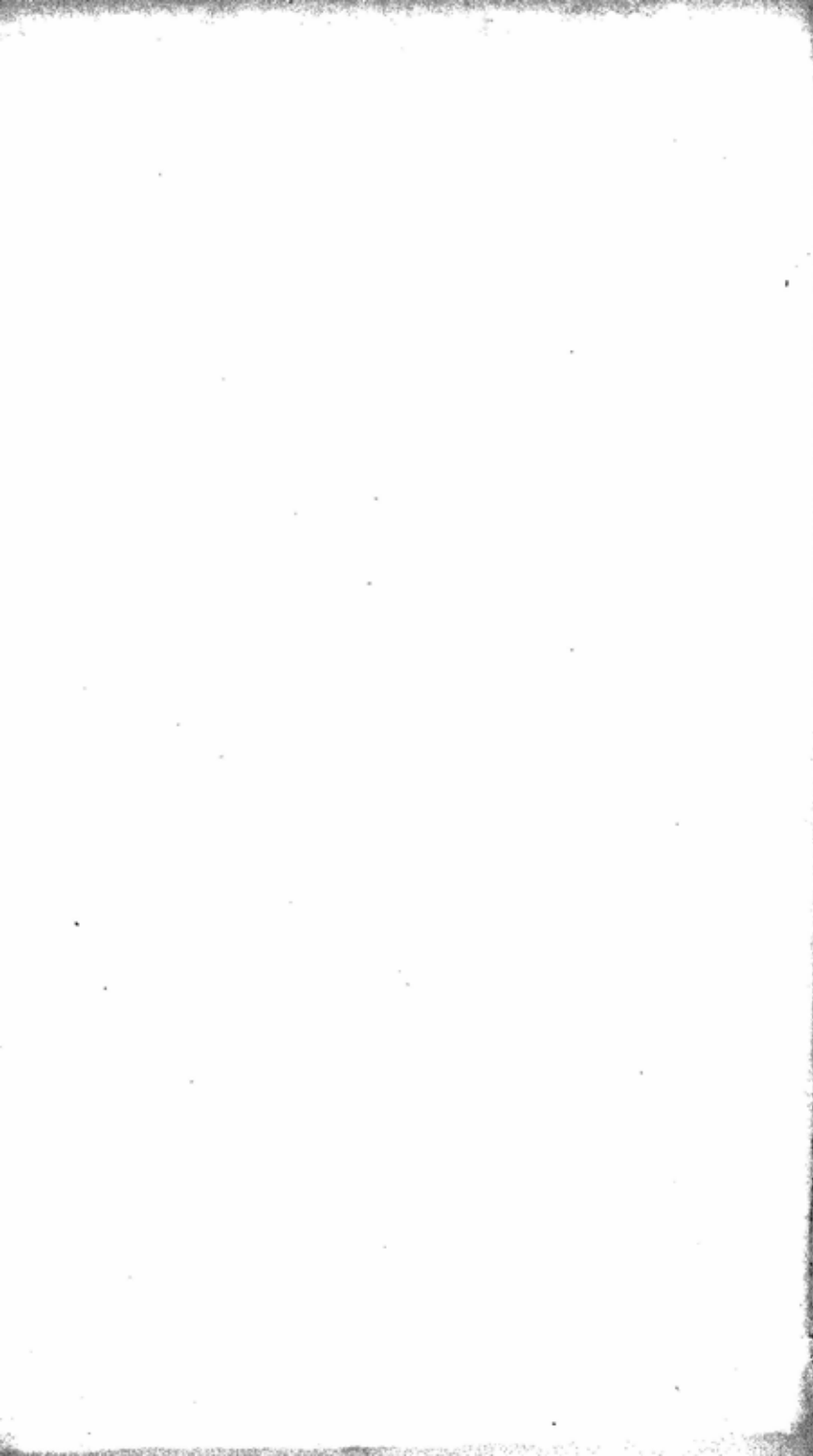


J. J. Leu. Del.





F. J. Les Dues



II.

GREEK WEIGHTS IN THE BRITISH MUSEUM.

WHEN Mr. Poole¹ published, in 1863, forty specimens of Greek weights acquired at Athens by Mr. Burgon, he almost exhausted the collection of the British Museum. Since then it has been augmented by the following items:—(I.) 8 specimens purchased from Mr. Merlin at Athens in 1866, of which several had already been published;² (II.) 50 added by the Blacas collection; (III.) 48 in the collection of the late Mr. Woodhouse, of Corfu, which has finally reached the Museum. The two latter collections are mostly inedited. In both cases, too, a difficulty sometimes arises as to where specimens were found, though usually it is presumed that those coming from Mr. Woodhouse were found in Corfu.

The state of preservation is such as might be expected from a material like lead; the loss is very unequal, and often difficult to estimate.

While making these preliminary remarks I may state the denominations and relative value of the unit, and of the several fractions employed by the Greek systems of coinage.

¹ Smith's "Dict. of Bible," art. *Weights*.

² Schillbach, "Annali del. Instit. di Corresp. Archæol.," vol. xxxvii., 1865.

Talent = 60 minas.

Mina = 100 drachmas.

Drachma = 6 obols.

These are the simple divisions used in reckoning. For the convenience of ordinary exchange, multiples of drachmas and fractions of obols were employed, the drachma corresponding in this respect to our shilling. In Korinth it was otherwise, a stater equal in value and weight to an Attic didrachm being used as the nominal coin. That Athens also, in early times, employed the didrachm or stater in the same way, may be seen from the word *δραχμή*, which means a "handful,"—that is, half the unit of weight for the time; also from a passage in Pollux³—*δίδραχμον τὸ δὲ παλαιὸν τοῦτο ἦν Ἀθηναίοις νόμισμα, καὶ ἐκαλεῖτο βοῦς, ὅτι βοῦν εἶχεν ἐντετυπωμένον*. The Korinthian stater differed from the Attic didrachm in this respect, that it was divided into three, while the latter had only two parts or drachmas.

Greek weights follow the same denominations and divisions as Greek coins; but in practice this variation is observed, that while coins never exceed the weight of a drachma, or a small multiple of a drachma—passing, however, downwards to the lowest convenient fraction,—weights, on the other hand, seldom fall under a drachma, and rise usually to minas and fractions of minas. When a new system of coinage was adopted by a state—as in the case of Solon at Athens—the system then superseded continued (in every case, for anything we are told to the contrary) in the weights, though requiring to be sharply looked after. A decree published by Böckh (C. I. Gr. 210),

³ ix. 60, quoted by Böckh for a different purpose, *M. U.* p. 121. Cf. Hultsch, "Metrologie," p. 105.

which is much later than the time of Solon, shows the system superseded in coins still prevailing in commerce, and at the same time a strong tendency on the part of traders to assimilate their weights to the coinage. Specimens of these Presolonic weights have been discovered, and it is satisfactory to find in them confirmation of the statement of Plutarch⁴ as to the precise change or depreciation introduced by Solon, especially as no Presolonic coins have come down to us. In other cases the liability to loss of such material as lead, the inequality of the loss, and the notorious scarcity of specimens, combine to render it most difficult to evolve from the weights themselves anything like a complete arrangement into systems; and it is only by keeping the various Greek systems of coinage in view that we are enabled to calculate approximately the loss of particular pieces, and then to assign them to particular places.

The various Greek and Græco-Asiatic coinages of any importance may be represented in a tabular form, thus:—⁵

GOLD.

Gram.

16.5.	Phokæa stater	{	The most usual fraction is $\frac{1}{6}$, of which, says Mommsen, nine-tenths of the Asiatic gold coins consist; also $\frac{1}{12}$, $\frac{1}{24}$, &c. $\frac{1}{3}$ is rare; $\frac{1}{4}$ never found.
16.5.	Kyzikos stater		
16.5.	Kræsos stater		
—			
16.8.	Royal Persian stater	{	Here the fractions are formed by 2, 4, &c. The Persian stater, divided by 2, is called <i>στάρηρ</i> <i>Δαρεικός</i> , and is not further divided as such.
17.0.	Lampsakos stater		
17.0.	Euboic (so called)		
—			

⁴ Solon, c. 15.

The French system of weights is used in this table.

Gram. SILVER (a).

17·3. Attic tetradrachm; 8·69, didrachm; 4·346, drachma.

17·3. Korinthian distater; 8·69, stater; 2·89, drachma, or $\frac{1}{2}$ stater.

SILVER (b).

10·59. Miletus stater: fractions are, $\frac{5}{8} = 8·39$; $\frac{4}{8} = 6·61$;
 $\frac{3}{8} = 5·14$; $\frac{2}{8} = 3·63$; $\frac{1}{8} = 1·71$.

11·0. Coinage of certain Græco-Asiatic Towns	} The $\frac{1}{2}$ was the usual fraction.
11·14. Median siglos	
12·0. Æginetan stater	
12·0. Presolonic stater or didrachm	

SILVER (c).

14·22. Coins of Græco-Asiatic towns: Sardis, Klazomenæ, Chios, Lampsakos. The usual fractions are, $\frac{1}{2}$, $\frac{1}{3}$, $\frac{1}{4}$.

14·34. Tyrian tetradrachm; drachma = 8·59.

14·28. Ptolemaic tetradrachm; drachma = 8·57 – 8·46.

14·73. Rhodian tetradrachm; fractions, $\frac{1}{2}$, $\frac{1}{3}$, $\frac{1}{4}$.

12·64—12·40. Cistophorus. Mommsen takes it to be a revival of the Æginetan didrachm, which had by the Roman time become obsolete.

It is agreed upon that the oldest Greek coins as yet discovered are to be found among those gold pieces of Phokæa with a stater of full 16, and a *hecta* or 1-6th weighing 2·7 gram. Other gold pieces, following the same standard and almost equally old, are traced to the neighbouring town of Kyzikos. Though this community of coinage included several other towns on the coast of Asia Minor, as may be seen from the types, yet the name “Phokaic” seems to have been generally applied to them, at least as far as their currency on the mainland of Greece is concerned. Nine-tenths of ancient Greek gold coins consist, says Mommsen, of the so-called Phokaic *hecta*. As there is no reason to suppose that Phokæa so far surpassed its neighbours as to be able to force its coinage

upon them, we are compelled to assume the existence of a commercial league, such as was well known on that coast.⁶ The importance which would attach to the coinage of such a league in those early times would be very great, and thus a currency may have been produced designed to compete with the royal coins of Lydia and Persia. Whether it fell out so or not, the stater of Kræsus and of the Persian kings is identical in weight with the Phokaic. In Persia, however, as in Athens, with the extension of her transactions through the vigour of Darius Hystasper, the old stater of 16 gram. was found too large, and the hecta of 2·7 too small. That monarch therefore introduced a new stater, called after him *Δαρείκος*, half the weight of the old one, *i.e.*, 8·5 gram., without, however, abandoning the old system, as happened in Athens.

As to the mainland of Greece, it naturally confined its coinage to silver, as Italy to copper. But trade with those gold-coining Græco-Asiatic towns would introduce a foreign gold currency, which in course of time it would be found expedient to adopt. The name only of one gold coinage and its relative value has come down to us, —*i.e.*, the Euboic. From the statements of its relative value, it is now seen to have been identical in unit, but not in fractions, with the Phokaic, and to have perhaps formed the nearest prototype of the silver system introduced into Athens by Solon.

Along with this gold there existed among the Græco-Asiatic towns a silver currency. That it was of later origin, and founded in some way upon the gold system, may be supposed from the fact that Asia was as distinctly a gold-coining as Greece a silver-coining region. The

⁶ Newton, Transactions of Royal Soc. of Lit., vol. viii. N.S. Herodotus, I. 192.

silver integer, called *siglos* or *stater*, weighs 11 or 11·14 gram. A silver piece of 11·14, or its half, 5·57, is (relatively to its weight) to the gold piece of 16·80, or its half, the Daric, 8·40, as 2 : 3 ; and so a gold piece of 16·80 or 8·40 would be equal *in value* to fifteen silver pieces of 11·14 or 5·57 gram., the usual ratio of gold to silver being presumably 10:1, though by the time of Herodotus it had reached in round numbers 13:1.

As to the mainland of Greece and the silver coinages existing there, we find (1) evidence of a drachma of about 5·7 gram., in Athens down to the time of Solon, and in Ægina until it succumbed to the importance of the Solonic Attic ; (2), a drachma of 3·4 gram. circulating wherever the Solonic-Attic and Korinthian, which were in integer identical, had not found their way. The latter drachma (3·4 gram.) is obviously the third of the Asiatic siglos of 11·14 gram., and the fact of its existence in late times in out-of-the-way regions suggests that it was the first immigrant system from Asia Minor. As to the other drachma (5·7 gram.), we are reminded happily, says Mommsen, of the dismembering and reconstructing element of Hellenic civilisation, which, recognising its own wants, chose the half of a coin divisible, as far as they had known, only by 3, as their integer. This is the drachma of Ægina and Athens down to Solon's time. Still, so long as the importance of the Asiatic towns endured, it would be necessary to continue the use of a didrachm as an exact equivalent to the siglos, and it may be to this time that the passage of Pollux⁷ refers. In Korinth, also, the didrachm or stater, identical with the Attic Solonic didrachm, remained to the last.

⁷ ix. 60 : διδραχμον· τὸ δὲ παλαιὸν τοῦτο ἦν Ἀθηναίοις νόμισμα, κ.τ.λ.

Such changes must have happened very slowly, and when we reach the time when the didrachm was employed by Athens and Ægina only for the sake of exchange with the siglos, or for ordinary convenience, we must admit that of such didrachms there could only be fifty in a mina; that is, that the didrachm, or more properly stater, was a double integer. As far as coins go, we do not require such an admission; but weights go farther. Among others we have a class (No. 102—121), with the design of a tortoise, and usually inscribed TETAPT[ov] and HMI-TETAPT[ov]. In weight they are fourths and half-fourths of a double *Solonic* mina, and it is, I think, very probable that they usurped the place of fourths and half-fourths of a double *Presolonic* mina. We must, therefore, assume the existence, not of a large mina, but of a dimnoun which would contain 100 didrachms. The name HMI-TETAPT[ov] may show, since ὀγδoov was at their disposal, that they kept the double and single system strictly apart, and leave us to infer that the double was only employed for convenience of exchange. But we prefer to think that the piece existed long before the name "half-fourth," and that the evidence points to an early time, when what we call didrachm and dimnoun were respectively a stater and a mina, and the only known fractions of a talent.

Coming now to the *Solonic Attic* system, it is said⁸ that Solon, to relieve public distress, created out of 100 old drachms 138 new ones; or rather, 100 new out of 73 old ones. The drachma introduced by him weighs 4.346 gram., and, accordingly, the superseded drachma would be about 6 gram. (138:100::6:4.346). A *Solonic* didrachm (silver) was equal in weight to a *Daric* of gold;

⁸ Plutarch, Solon, c. 15.

and as the latter was a well-known coin in Athens (though not under that name), it is assumed with almost certainty that Solon supported his measure with the hope of convenience arising from the identity in weight of current gold and silver coins. As to the superseded system, with its drachma of about 6 gram., no Attic coins remain to confirm the statement of Plutarch. On the other hand, we have the Æginetan drachma of the same weight in sufficient numbers; and besides, the decree already cited [Böckh C. I. Gr. No. 210], stating the same ratio between the old and new systems, and ordering the old to be continued as a weight. This decree is believed to be much later than the time of Solon, and seems to have been directed against a tendency in the market to substitute weights on the same system as the coins. No. 122, inscribed MNA ATOP, and 123, MNA, are obviously minas of the old system, yielding drachmas of 6.45 and 6.32 gram. The same increase is found on the four specimens of Solonic mina yielding the following drachmas: 4.62; 4.56; 4.53; 4.50.

The Æginetan system has been identified with the Presolonic Attic. The only class of weights which appears to belong to it are those with design of tortoise and half-tortoise; and here the fact that they are all fourths and half-fourths of a double *Solonic* mina reminds us that the Æginetan, too, must have yielded to the pressure of the new Attic system of coins.

Gram. Tr. Grains.

1. 0.65 (= 10, Blacas)	□ incised	} Ordinary Attic obol, tri- obol, pentobol, and drachma, the normal weights of which are 0.72, 2.17, 3.62, 4.346.
2. 2.07 (= 32 „ )	||| „	
3. 3.95 (= 61 „ )	||| „	
4. 4.48 (= 69 „)	┌ „	

Gram. Tr. Grains.					
5.	1.17 (= 18, Martin Rey)		|	incised	} Sicilian-Italian litras.
6.	2.33 (= 36 ,, )		||	„	
7.	4.40 (= 68 ,, )		|||	„	
8.	5.70 (= 88 ,, )		|||	„	
9.	6.67 (= 103 ,, )		||||	„	
10.	7.77 (= 120 ,, )		||||	„	
11.	8.41 (= 130 ,, )		||||	„	
12.	10.86 (= 160 ,, )		||||	„	
13.	11.20 (= 174 ,, )		||||	„	
14.	4.48 (= 69, Blacas)	.	┠	incised. Attic drachma; normal weight, 4.846.	
15.	6.67 (= 103 ,,)	.	⏏	„ Attic drachma, plus 8 obols.	
16.	7.12 (= 110 ,,)	.	⏏	„	
17.	7.90 (= 122 ,, )	.	||||	„ Perhaps 4 triobols, in normal weight, 8.6.	
18.	8.29 (= 128 ,,)	.	┠┠	„	} Attic didrachms = 8.692.
19.	8.29 (= 128 ,,)	.	H	„	
20.	8.87 (= 137 ,,)	.	H	„	
21.	9.32 (= 144, Woodhouse)	/		„	
22.	10.86 (= 168, Blacas)	.	⏏	„ Reduced tridrachm of Roman period.	
23.	12.80 (= 190 ,, )	.	|||	„ Tridrachm; the loss intelligible.	
24.	14.24 (= 220, Woodhouse)				} Tetradrachms: 24, 25, 26, of a late, reduced period; 27, 28, 29, may be accounted for by loss.
25.	14.70 (= 227, Blacas)	.	Δ		
26.	14.76 (= 228 ,,)		⏏		
27.	15.54 (= 240 ,,)		⏏		
28.	15.86 (= 245, Woodhouse)		K		
29.	16.32 (= 252, Burgon)		⏏		

- Gram. Tr. Grains.
30. 17·86 (= 268, Burgon) . HH III ; rev. X . Tetradrachm,
plus 3 obols.
31. 20·20 (= 312 „) . K
32. 20·20 (= 312 „)
33. 23·31 (= 360 „)
34. 24·86 (= 384 „)
35. 24·86 (= 384, Woodhouse)
36. 26·42 (= 408, Burgon) . IIII
37. 26·87 (= 415, Woodhouse) Small diota in relief.
38. 27·98 (= 432, Burgon) . H Korinthian tristater =
Attic hexadrachm.
39. 28·75 (= 444 „) . T Korinthian tristater =
Attic hexadrachm.
40. 58·29 (= 890, Woodhouse) T On both sides. Double
Korinthian tristater.
41. 55·95 (= 864 „) IIII Double Korinthian trista-
ter.
42. 81·09 (= 480) Burgon .
43. 81·41 (= 485, Woodhouse) } Octodrachm (late).
44. 82·38 (= 500 „) }
45. 83·03 (= 510, Blacas) . P HH } Octodrachm (Solonic),
46. 84·20 (= 528, Burgon) . P HH } i.e. $\text{P} [\epsilon\upsilon\tau\epsilon \kappa\alpha\iota] \tau\rho\epsilon\iota\varsigma$.
47. 86·01 (= 556, Woodhouse) Octodrachm (?)
48. 88·85 (= 600 „) Small diota; octo-
drachm (?)
49. 40·41 (= 624 „) E : Enneadrachm.
50. 40·41 (= 624 „) Half Pegasus.
51. 40·41 (= 624 „)
52. 40·80 (= 630 „)
53. 48·19 (= 744, Burgon) . Δ Dekadrachm (?)
54. 49·48 (= 686, Woodhouse) KYII TPC : tristater of Ky-
zikos.
55. 45·07 (= 696 „) KYII ΔICTA (bronze) : Di-
stater of Kyzikos.

- | | Gram. | Tr. Grains. | | | |
|-----|--------|---------------------|---------------|---|--|
| 56. | 56.73 | (= 876, Burgon) | ΟΔ 70 | } $\frac{1}{3}$ Solonic mina. | |
| 57. | 57.51 | (= 888 „) | ΞΔ | | |
| | | | ΟΔ 70 | | |
| 58. | 57.51 | (= 888 „) | Η | | Fourth diota, resembling the letter B inverted; $\frac{1}{12}$ of Attic Presolonic mina. |
| 59. | 78.88 | (= 1140, Burgon) | Ρ | } $\frac{1}{3}$ Solonic mina;
Ρ[εμπτη-
μόνον]
M[γὰς. | |
| 60. | 80.05 | (= 1236 „) | ΞΣ, i.e. ΔΕΜΟ | | |
| 61. | 80.88 | (= 1248, Blacas) | | | |
| 62. | 85.49 | (= 1320, Woodhouse) | Ρ | | |
| 63. | 86.91 | (= 1342, Burgon) | Λ, i.e. ΡΜ | | |
| 64. | 104.14 | (= 1608 „) | ΡΜ | | |
| 65. | 80.95 | (= 1250, Woodhouse) | \|\|\|\| |  |  |
| 66. | 90.15 | (= 1392 „) | | | |
| 67. | 90.15 | (= 1392 „) | | | |
| 68. | 91.70 | (= 1416 „) | ΕΥ
ΔΗ | | rev. H. |
| 69. | 110.86 | (= 1704, Burgon) | | | Crescent. |
| 70. | 105.70 | (= 1632, Woodhouse) | | | „ |
| 71. | 82.88 | (= 1272, Merlin) | | | „ |
| 72. | 82.88 | (= 1272, Blacas) | | | „ |
| 73. | 80.88 | (= 1248 „) | | | „ |
| 74. | 76.16 | (= 1176, Burgon) | | | ΔΗ[ΜΟ. |
| 75. | 76.16 | (= 1176 „) | | | „ |
| 76. | 78.05 | (= 1128, Blacas) | | | „ |
| 77. | 78.05 | (= 1128 „) | | | „ |
| 78. | 71.50 | (= 1104, Woodhouse) | | | „ |
| 79. | 67.61 | (= 1044 „) | | | ΔΕΜΟ. |
| 80. | 68.21 | (= 976 „) | | | ΔΑΜΟ. |
| 81. | 63.72 | (= 984, Blacas) | | | Half crescent. |
| 82. | 62.17 | (= 960, Burgon) | | | „ |
| 83. | 62.17 | (= 960, Blacas) | | | „ |

- Gram. Tr. Grains.
84. 59·10 (= 912, Burgon) Half crescent.
85. 59·10 (= 912 ") " "
86. 59·10 (= 912 ") " "
87. 54·40 (= 840 ") " "
88. 52·85 (= 816, Blacas) " "
89. 49·09 (= 768, Woodhouse) " "
90. 298·45 (= 4608, Burgon) Diota; $\frac{1}{2}$ Attic dimnoun
(Solonic).
91. 287·56 (= 4440, Blacas) . , TPITH; $\frac{1}{2}$ Attic dimnoun
(Solonic).
92. 285·49 (= 4416, Burgon) . , $\frac{1}{2}$ Attic dimnoun
(Solonic).
93. 192·76 (= 2976, Woodhouse) , , Δ ·MO
94. 191·19 (= 2952, Woodhouse) Half diota
95. 158·55 (= 2448, Blacas) . , Δ ·EMO; $\frac{1}{2}$ Attic dimnoun
(Solonic?).
96. 148·18 (= 2210, Burgon) . , Δ ·EMO } $\frac{1}{2}$ Attic dimnoun
97. 148·00 (= 2208, Woodhouse) , , Δ ·EMO } (Solonic).
98. 105·82 (= 1634, Blacas) Fourth diota; Δ ·EMO; $\frac{1}{2}$ Attic
dimnoun (Pre-
solonic).
99. 63·72 (= 984, Burgon) Diota within wreath.
100. 59·84 (= 924 ") " "
101. 55·18 (= 852 ") " "
102. 242·22 (= 3840, Burgon) Tortoise
103. 225·88 (= 3480 ") " Δ ·EMO } $\frac{1}{2}$ Attic dim-
104. 223·88 (= 3456 ") " Δ ·EMO } noun (Solo-
105. 219·80 (= 3396, Blacas) " " " } nic).
106. 210·28 (= 3246, Burgon) " TETAPT }
107. 186·52 (= 2880 ") "] MO

Gram.	Tr. Grains.		
108. 124·85	(= 1920, Woodhouse)	Half tortoise	
109. 121·24	(= 1872, Burgon)	. „	ΔHMO
110. 121·24	(= 1872 „)	. „	
111. 118·13	(= 1824 „)	. „	
112. 116·58	(= 1800, Woodhouse)	Circular; $\frac{\Delta E}{TET}$	} $\frac{1}{2}$ Attic dim- noun (Solo- nic).
113. 116·58	(= 1800, Merlin)	Half tortoise	
114. 116·58	(= 1800, Blacas)	. „	
115. 114·25	(= 1764, Burgon)	. „	
116. 110·36	(= 1704 „)	. „	
117. 111·14	(= 1716, Blacas)	. „	
118. 108·80	(= 1680 „)	. „	
119. 108·80	(= 1680 „)	. „	
120. 77·72	(= 1200, Burgon)	. „	
121. 69·30	(= 1080 „)	. „	
122. 645·08	(= 9980, Burgon)	Dolphin: MNA ΑΓΟΡ	} Mina empe- rica.
123. 632·64	(= 9790 „)	. „	
124. 462·56	(= 7171 „)	. „	} Mina demo- sia.
125. 456·93	(= 7056 „)	. „	
126. 453·87	(= 7000, Woodhouse)	. „	
127. 450·77	(= 6960, Blacas)	. „	
128. 255·57	(= 3936, Calvert)	HMIMN: Astragalus rising from surface.	
129. 223·82	(= 3456, Merlin)	HMIM: Head of dolphin.	
130. 110·36	(= 1704, Woodhouse)	Dolphin: FIT: ΓΑΝ (?) $\frac{1}{2}$ Attic mina demosia.	
131. 234·06	(= 3624, Woodhouse)	ΑΓΟΠΑΝΟΜΩΝ M.	
132. 155·44	(= 2400, Blacas)	$\frac{T}{\odot}$ ΔΥΑ. (Bronze.)	
133. 121·24	(= 1872, Woodhouse)	Bull's head in relief (copper).	

	Gram.	Tr. Grains.	
134.	144.56 (= 2232, Woodhouse)	H	(doubtful appearance).
135.	140.54 (= 2170	,,)	Δ
136.	139.90 (= 2160	,,)	Γ, Π } both circular.
137.	136.78 (= 2112	,,)	
138.	193.00 (= 2980	,,)	Π Π Π Π (Bronze.)
139.	608.80 (= 9400, Woodhouse)	Mina emporica;	remains of iron ring attached.
140.	510.03 (= 7875	,,)	
141.	468.39 (= 7232	,,)	} Mina demosia or So- lonic.
142.	466.32 (= 7200	,,)	
143.	390.15 (= 6024	,,)	Triangular shape.
144.	357.19 (= 5515	,,)	
145.	276.10 (= 4263	,,)	Diota (?); $\frac{1}{2}$ Attic Solonic dimnoun (?).
146.	205.95 (= 3180	,,)	$\frac{1}{2}$ mina demosia; much injured. In form of cube, with iron ring attached.
147.	832.24 (= 5130, Sambon)	In form of an astragalus;	$\frac{1}{2}$ mina emporica (?). (Bronze.)

5—13. This set of weights was acquired by the British Museum in 1850 from M. Martin Rey, of Lyons, and were found in a cemetery there. The third piece in the series is not in the collection.

Mommsen classes them along with the Italian-Sicilian silver (and in Sicily also gold) coins discussed at p. 93 *et seq.* of his "Geschichte d. Röm Münzwesens." In that series the various pieces fall in this order:—5.80, 5.65, 4.3, 3.28, 2.5, and 1.18 gram. At that time (1862) he traced the origin of those coins to the very old Syrakusan gold piece of 1.17 gram., explaining it as an equivalent in gold for the Attic tetradrachm of 17.46 gram. silver, with the ratio of gold to silver as 15.1. Then he called the pieces 5.80, 3.28, 2.5, and 1.18, respectively, drachma, tribol,

half-drachma, and fifth of drachma, or litra, treating the 4·3 piece as a depreciation of the drachma. From the more complete evidence of these weights (5-13) he now sees that this whole system of Italian-Sicilian silver coins is based on the Æginetan stater reduced from 12·5 to 11·6 gram., and divided not into 10 obols, but into 10 litras, the decimal division being as peculiarly Italian as the duodecimal Greek.

14. Is No. 4 repeated.

22. ΗΗ : tridrachm yielding drachma of 3·62 gram., *i.e.*, the Attic drachma of late Roman period. *See* Böckh, M. U., p. 105.

30. ΗΗΙΙΙ. For this way of expressing a certain number of drachmas *and a half*, cf. Nos. 45, 46.

36. ΙΙΙΙ (26·42). Unintelligible.

40. T on both sides (= 58·29) double Korinthian tri-stater. It is cut round the edge to give the appearance of being two tristaters welded together.


54. KYI [kov] TPIC [τάρηρ,] 44·43 gram. The stater would be 14·81. Mommsen⁹ quotes a distater of Kyzikos = 29·80, *i.e.*, 14·90 for the stater; and a stater KYI CTA [τάρηρ] = 18·70. This Woodhouse specimen has lost a great deal, and may very probably have been originally as nearly as possible 48 gram., the weight yielded by the coins of Kyzikos.

55. Is of bronze, not suspicious in appearance, but quite unintelligible.

58. Β : [57·51] bears the sign of a quarter of a diota, resembling the letter B reversed.¹⁰

⁹ Münzwesen, p. 7. Cf. C. I. Gr. 3681. Longpérier, *Annali dell' Instit.*, 1847, pp. 336, 337. Lenormant, *Rev. Num. Franç.*, 1856, p. 7.

¹⁰ Cf. No. 98.

63. 86·91  As this figure resembles the Greek letter M with horizontal line from one foot to the other, and since the weight suits exactly, it may be taken as a monogram of Γ M, *i.e.*, Γ [εμπτημόριον] M [vās]. Cf. No. 64.

91. 287·56. Diota, TPITH: taking this as a third, we have an integer of 862·68. That is just double the Attic Solonic mina. The same result is obtained from that larger class of weights with sign of tortoise. Mr. Poole calls this integer a large mina; I prefer to call it a dimnoun, or double mina; in the first place, because it has exactly the weight of a double Solonic mina, and, in the second place, because we see no other means of explaining such denominations as EMITP[ιστον] and EMITET[απτον], while such words as EKTON and ΟΓΔΟΟΝ were not only at their disposal, but were employed for specimens exactly half the weight of those named EMITPIT and EMITET.¹¹

98. 105·82; $\frac{1}{4}$ diota; ΔΕΜΟ. If all weights with sign of diota are to be taken as *thirds*, and we have seen the word TPITH on no other class, this specimen would be $\frac{1}{3}$ of some integer. $105·82 \times 12 = 1269·84$, *i.e.*, just double the Presolonic mina (No. 122). We call this one, therefore, $\frac{1}{3}$ of the Presolonic Attic, or its equivalent, the Æginetan dimnoun.¹²

102—119. What was said of the diotæ (91) applies also to the tortoise weights. The latter class, it will be seen, in this as well as in other collections, is much more abundant than the former. This will tend to show in what favour the system of division by four stood among the Greeks over that by three, so familiar to the Orientals.

¹¹ Cf. 56, 57, 58.

¹² Contrast 58, which also bears the sign of $\frac{1}{4}$ diota.

122. 645·08, Dolphin; MNA ΑΓΟΡ[*ἀγόρων*] This completion of the word depends on No. 131. It gives a drachma of 6·45 gram. That is a little over what we have already quoted evidence to show was the Presolonic drachma.

128. 255·57; HMIMN. This specimen was found in Krete. It is over-weight; but that may be traced to an intentional over-coinage, as the *astragalus* rising upon it seems to suggest.

130. 110·36; Dolphin. The inscription seems unintelligible; but the weight is clearly $\frac{1}{4}$ of the Solonic Attic mina.

131. 234·06; ΑΓΟΠΑΝΟΜΩΝ M is a fac-simile, the original of which was found in Corfu, and is now in the Museum at Athens. Mustoxydes (*Delle Cose Corciresi*) and Schillbach (*Annali dell' Instit.*, vol. xxxvii. 1865) publish the original without being able to find any other explanation of it than by taking M as a numeral, *i.e.*, 40 drachmas, though the drachma of 5·8 gram. which this would give is, Schillbach confesses, too heavy for those of Korkyra or Korinth.

132. 155·44; $\frac{T}{\Theta}$ ΑΥΑ (bronze), with figure of owl. Longpérier reads it *Θυριάτων τρίτα δία*; but Schillbach doubts the possibility of *δία* for *δύο* or *δύω*, and takes it as a third of the Solonic Attic mina, *i.e.*, $155·44 \times 3 = 466·32$. Böckh, C. I. Gr. 210, publishes it in doubt as to its being a tessera.

A. S. MURRAY.

III.

NOTE ON GREEK WEIGHTS.

By PROFESSOR THEODOR MOMMSEN, OF BERLIN.

THE set of weights discovered by Mr. Murray seems to me of very great importance; and I think he is quite right in combining them with the Italo-Sicilian coins enumerated in my R. M. W., p. 93. Examining these anew, I believe to have discovered their origin, and at the same time the place occupied by the weights in question in the ancient system. They belong to the Æginetan stater, reduced from 12·5 gram. to about 11·6, and divided, which is new and very interesting, not in *oboli*, but in *litræ*, after the decimal system. Some gold coins, it is true, which have been compared with those appertaining to this system, must be separated and expelled, especially those of Syracusæ with the lyre and with the head of Artemis Soteira. My explanation, too, is erroneous, as it appears now. But the discovery is very curious, and merits to be noticed somewhere. I should be very glad to learn from Mr. Murray—(1^o) if the provenance of the coins from the south of France is well ascertained, and if they may not have been brought to England from the south of Italy or from Sicily; (2^o) if the set appears complete,—that is to say, if there is no ground for supposing that the heaviest weights, marked with 11 and 12, have been lost, though I fear very much that this question may prove unanswerable.

MOMMSEN.

IV.

ANGLO-SAXON COINS WITH RUNIC LEGENDS.

[Read before the Numismatic Society, March 19th, 1868.]

IN the second volume of the *Numismatic Chronicle* for the year 1840 there is a remarkably ingenious article by a writer who signs himself "L. Y. H.,"¹ on some of the Anglo-Saxon Sceattas, in which he notices several of those coins bearing Runic legends, and attributes one of them (Plate IV., Fig. 7) to Sledda, King of the East Saxons between the years 587 and 596 A.D.

Before entering on the question as to whether or not this is a correct attribution, I should like to make a few remarks on the origin and the date of the introduction into this country of the Runic characters. Tradition ascribes the invention of the Runes to Woden, the great ancestor of the whole Teutonic race. However this may be, it is certain that they are of very high antiquity, and were common to all the Scandinavian nations from a very early period. Concerning their introduction into this country Professor Stephens says, in his wonderful work on the "Old Northern Runic Monuments of Scandinavia and England," p. 78:—"We suddenly find an entirely new alphabet, carvings in letters altogether strange and unknown—THE RUNES. They appear at the close of the Roman period, and are employed by the 'barbarians' who overturned the Roman and Keltic systems, and who

¹ Possibly the terminals of Daniel Henry Haigh.

wrested a large part of the country from its Roman-Kymric, or Kelto-Roman, or Romanised British populations. They did not fall down from heaven or spring up out of the earth; but just as the Kelts brought with them their Ogham staves, and the Romans their Latin alphabet, so the 'barbarians' brought with them these their native characters."

Whence the Northern races received this alphabet, and when they received it, we cannot in the present state of philological science affirm with certainty; but a comparison of the Phœnician, old Greek, and old Latin alphabets with the old Northern or Runic, will, I think, satisfy any unprejudiced inquirer that they all have much in common, and are all the descendants of some one remote ancestor.

What this source of all our Western alphabets may be it concerns us not, as numismatists, to inquire; our province is simply to chronicle what has been left us of the numismatic monuments of antiquity, to elucidate, to engrave, and, wherever we can, to attribute and fix the date of doubtful and difficult pieces. We shall thus make our contribution, however small it may be, to the cause of philological inquiry. We must, however, be cautious and critical; we must keep our imaginations in check, and not be too eager to ascribe every doubtful coin on which a letter or two only may be legible to some known historical personage. Let us read what we see upon a coin, and only what we see, not what we would wish to see; if we ourselves cannot explain it, some one else, with better means of doing so at his disposal, may.

These remarks have, of course, a greater application to some portions of numismatic history than to others. In the present instance I would wish more particularly to draw

the attention of the society to that very dark and difficult period of English numismatic history between the departure of the Romans, early in the fifth century, and the accession of Offa to the throne of Mercia in A.D. 755, the time of the introduction of the silver penny. During these three centuries the only coins as yet attributed in our numismatic works with anything like certainty are,—a sceatta and a styca of Aldfrith of Northumbria, 685—705; two sceattas of Beonna of East Anglia, 690—714; and the sceattas which read EOTBEREHTVS, and have been attributed to Eadberht of Northumbria, 737—758. The great series of the sceattas is still a sealed book to us; we know literally nothing about them; we cannot even determine whether they were first struck by the Saxons after their settlement in this country, or whether they were already in circulation among the Northern nations, and introduced by them into Britain.

The latter is perhaps the more probable supposition of the two, for they have been found in Friesland as well as in England. Like the Merovingian coins, they are rude imitations of well-known Roman types—at least a great number of them are so; imitations, barbarous in the extreme, and executed by men who were not even acquainted with the Roman alphabet; wherefore I do not attach any importance whatever to the endeavours which have been made by some to explain letters and legends in the Roman character which are more or less legible on most of them. For instance, I think the interpretation of the letters TIC on a large class of these coins, suggested by Mr. Lindsay in his "Coinage of the Heptarchy," an extremely fanciful one; he says these letters appear to form the initials of the sentence TENEO IESV CRISTO!

I would not attempt any explanation whatever of these and similar letters. I believe the artist, if such he may be called, who copied these sceattas, was not able to read the Latin legend of the original Roman coin, but imitated, to the best of his ability, some of the clearer letters of the inscription, occasionally filling up what he could not clearly see with OO, VV, TT, and II, and letters easy of delineation: we not unfrequently find the same letter repeated four or five times on the same coin. It is, then, in my opinion, mere waste of time and ingenuity to be offering explanations and interpretations of that which probably never had any distinct meaning at all of its own; interpretations which, at the best, are only guesses, and guesses which teach us nothing. If we can read a name upon a coin, by all means let us do our best to explain it, and give it a date and a local habitation,—we shall then have done real service to the science of numismatics; but to endeavour, by fanciful and far-fetched guesses, to assign a meaning to a mere jumble of barbarous imitations of letters, is simply pen and paper wasted and time thrown away.

Of course what I have just said does not apply in general to all barbarous coins, but only to barbarous *imitations* of the coins of more civilised nations. A very slight knowledge of the common Roman types will suffice to convince the student that the majority of these sceattas are only imitations, and that the Latin letters legible upon them are also imitations, and have no distinct meaning of their own.

Not so the Runes. The old Northern Futhorc was the native alphabet of the people who struck these coins. Every Runic legend must therefore be capable of interpretation. Every letter has its meaning, if we could but

discover it. Sufficient attention has not been bestowed upon these native Anglo-Saxon legends. I am fully aware how difficult it is to make anything out of a few scattered specimens; a single coin is so easily misread for want of the corroborative evidence furnished by others of the same class. The collection of sceattas with Runic legends in the British Museum is, unfortunately, a very poor one. Ruding gives a few more in his plates; but plates cannot be relied on, especially when the artist has been working in the dark, copying blindly lines to him meaningless.

Sir Francis Palgrave says on this subject, in his "History of the Anglo-Saxons" (London, 1867, p. 123), "It may perhaps be thought that a spell has been cast over the learned, and that some sportive Puck yet lurks about the Runes, and seduces the grave antiquaries into these interminable wanderings. Let me be allowed, however, to observe, that I doubt whether in these and similar instances any true reading can ever be obtained, unless the object itself (or a cast from it) be inspected by those who undertake the task of interpretation. No draughtsman's copy, however skilful he may be, will ever be accurate, unless he can read the inscription and his mind guides the pencil. If he be ignorant of its meaning, he may mistake an accidental indentation or flaw for a letter;—he will omit the line nearly effaced by time which joined the parts; he will lengthen a curve that has been broken, and shorten a limb which has been partly filled up; and the aggregate of these errors, though each may be trifling in itself, will cast an impenetrable veil over features which, under the most favourable circumstances, were sufficiently obscure."

I have no doubt whatever that, if we had a larger collection of sceattas at our disposal, we should be able to dispel many of the clouds which hang over this obscure period of our numismatic history. The collectors of these coins should combine, and give up collecting for collecting's sake, and deposit each his mite in the national collection. In the mean time we must do as best we may.

I shall here briefly notice a few of the Rune-bearing sceattas in the British Museum and other well-known collections, which I think may be attributed to noted persons mentioned in our ancient chronicles,—premising that for some of the following attributions I am indebted to the learned work of the Rev. Daniel H. Haigh on the “Conquest of Britain by the Saxons.” My excuse for noticing these attributions in this place is, that no one of our numismatic works has as yet given them correctly. Ruding makes no attempt to decipher the characters; Hawkins passes over them without a word; Mr. Lindsay, in his “Coinage of the Heptarchy,” endeavours to explain a few of the legends; but I am afraid his interpretations will not bear the test of a close examination. It is high time, therefore, for numismatists to acknowledge these discoveries, and to chronicle them in a work devoted solely to numismatic inquiry.

The most numerous class of Rune-bearing sceattas, of which there are fifteen specimens in the British Museum, is well known to all English numismatists; several examples are engraved in Ruding's 2nd plate.

The obverse exhibits a rude bust turned to the right, wearing a radiated crown; in the field behind the head is the letter A, often accompanied by annulets, and occasionally by the letter T; in front of the bust is the legend,

EPA or ÆPA in the Runic character. This legend is written sometimes backwards and sometimes upside down, as may be seen by a glance at the plate, where I have engraved three of these legends (Pl. IV., Nos. 1, 2, 3).

Mr. Lindsay, in his "Coinage of the Heptarchy," reads these legends SAPE, which he explains as denoting the name and title of St. Peter: he tells us that the character $\frac{1}{2}$ is a monogram of SA. Now here I think he is mistaken. In all the Anglo-Saxon Runic alphabets in which F occurs, it stands for the letter A. The character which Mr. Lindsay has mistaken for a monogram is simply this letter retrograde and upside down. There can be no doubt whatever that the true reading of this legend is EPA or ÆPA.

This Epa is said to have been a brother of the Mercian Peada, slain in the battle of Maserfield, 642 A.D. I do not know upon what authority, for I find no mention of this brother of Peada's either in the Saxon Chronicle or in Bede. If we accept this attribution, we must place these coins of Epa first in the Mercian series, and before those of Peada, who succeeded Penda in 655. If, however, it be found that it is erroneous, we shall be obliged to remove them to Eba, who is mentioned after the death of Penda, under the title of Dux Merciorum;² they would then follow the coins of Peada in the Mercian series.

Let us now turn to examine the reverse of these coins, which is one of the commonest of the sceatta types, for

² Peanda interfecto, Wlfredus filius ejus donante Cadwallone successit ei in regnum, qui consociato sibi Eba et Edberto Merciorum ducibus rebellavit adversus Oswi, sed jubente tandem Cadwallone, pax inter eos perpetua reformata est. (*Eulogium Historiarum*, Ed. Haydon, vol. ii. p. 377.)

it occurs not only upon these Rune-bearing coins, but also upon those which have legends in the Roman character. It consists of a square compartment, within which we find various imitations of letters; on the best examples these letters are usually $\begin{smallmatrix} \text{T} & \text{T} \\ \text{O} & \end{smallmatrix}$ $\begin{smallmatrix} \text{T} & \text{T} \\ \text{X} & \text{X} \end{smallmatrix}$. Now I take this device to be simply a copy of the Roman legend $\begin{smallmatrix} \text{V} & \text{O} & \text{T} \\ \text{X} & \text{X} & \end{smallmatrix}$, which we frequently find written on the square military standard. The similarity in the arrangement of the letters is very striking. Roman coins of this and similar types had doubtless a large circulation in Britain. Nos. 4 and 5 of Pl. IV. are two coins of Constantine II. and Crispus struck in London. If the reader will compare with these the sceatta of Peada (Pl. IV., No. 6), I think he will agree with me that all these sceattas are imitations, more or less rude, of these Roman types.

We may attribute then to Mercia, if not with absolute certainty, assuredly with a high degree of probability, all the coins of this type, be their legends Latin or Runic.

Next in the series we come to the coins which have been attributed to Peada, the son of Penda, King of Mercia. Penda had been conquered and slain in a battle fought near the river Vinwed (Winwidfield, near Leeds) by Oswiu, King of the Northumbrians, A.D. 655; whereupon Peada, who had for several years been Ealdorman or Prince of the Middle Angles, or South Mercians, under his father Penda, succeeded, with Oswiu's permission, to the crown of South Mercia, which was divided by the river Trent from the country of the North Mercians, which Oswiu united to his own kingdom of Northumbria.

Peada embraced the Christian religion, and married Elfleda, the daughter of Oswiu. He was destined, how-

ever, to an early death, for in the very next year he was murdered by the treachery, it is said, of his wife, during the celebration of the festival of Easter.³

In the British Museum there are three coins which may with all but certainty be attributed to this unfortunate prince. Two of them are, as far as I am aware, unpublished; the third is the coin which was attributed by L. Y. H., in the second volume of the Chronicle, to Sleda, King of the East Saxons.

The obverse of the first of these coins has a helmeted bust to the right, in front of which is an imitated Latin legend.

The reverse is the same as that of the coins of *ÆPA* noticed above,—viz., $\begin{smallmatrix} T & T \\ O & \\ X & X \end{smallmatrix}$ in a square compartment, clearly copied from the Roman military standard. Above the standard, on either side, is the letter *ſ*, which is probably intended as the initial letter of the kingdom of Mercia. Between the square and the outer edge of the coin, on the right side, we read, beginning at the top, the letters *PADA* in Runic. (Plate IV., Nos. 6 and 10.)

The coin noticed by L. Y. H. (*Num. Chron.*, vol. ii. p. 152) has the obverse similar to the preceding. The first thing that strikes us on looking at the reverse is the great improvement upon what we may call the "standard type." The standard itself is preserved, but instead of the meaningless imitation of the Roman $\begin{smallmatrix} V & O & T \\ X & X & \end{smallmatrix}$, we find the king's name written in clear and elegant Runes; round the standard there are, as usual, a few Latin letters and a cross, the three lower limbs of which terminate in annulets. Ruding, in order to keep the

³ Bede, "Ecc. Hist.," iii. 24. "Anglo-Saxon Chronicle," an. 655.

cross at the top of the coin, and not understanding the Runes, has engraved this piece upside down; the draughtsman has also united the first two letters of the king's name. This blunder has apparently led astray the ingenious author of the article above mentioned, for he mistakes the first letter \mathfrak{N} , P, for a \mathfrak{S} , which he calls an S, but which is in reality an ST; and the second for a monogram composed of the letters \mathfrak{T} , \mathfrak{M} , L and E. Thus he gets the name SLEDA, and ascribes the coin to Sledda, King of the East Saxons between the years 587 and 596. (Num. Chron., First Series, vol. ii. p.154.)

I have no doubt but that the writer of the article in question, had he seen the coin itself, would have read the legend properly, not as a monogram (Pl. IV., No. 9) SLEDA, but as (Pl. IV., No. 10) PADA.

The third and last of the coins of Peada differs from the two I have just described. The obverse presents a bust turned to the right, the head bound by a fillet; there is, as usual, an imitated Latin legend.

The reverse type is also new to us. It consists of a small beaded circle, within which is an equilateral cross, with an annulet in each angle; outside this circle is the name PADA, followed by some apparently blundered Roman legend.

The next coins we are able to attribute are the sceattas, formerly given to Ethilberht I., King of Kent. As they have been often noticed in the Chronicle, I need not describe them. It is now, I believe, universally admitted that they should be ascribed to Æthelræd, King of Mercia, A.D. 675-704. (*Vide* Num. Chron., First Series, vol. ii. p. 155.)

In the British Museum there are three of these coins, each differing slightly from the other. I have engraved

their reverses on Pl. IV., Nos. 11, 12, 13. The name of the king is written in two lines *βουστροφηδόν*, on two of them from left to right, and on the other from right to left. The last specimen furnishes us with a very peculiar form of the TH.

There is a coin attributed by Mr. Haigh to Oswiu of Northumbria, 642-670. It is engraved in Mr. Lindsay's "Coinage of the Heptarchy" (pl. I., fig. 19), and there it plainly reads WIGUÆRD (Pl. IV., No. 14). Mr. Haigh, on pl. II., fig. 6, of his "Anglo-Saxon Conquest of Britain," gives the legend of this coin thus, AUSWIGUARD (Pl. IV., No. 15), which he translates "Oswiu the Chief." He sees the letters AUS upon the coin, which are certainly not visible in Mr. Lindsay's engraving. There is a coin, moreover, in the Hunterian Museum (Ruding, pl. 2, fig. 8), which reads unmistakably WIGUD (Pl. IV., No. 18). Now this is remarkably like WIGUÆRD. Is it possible that Mr. Haigh can have mistaken some lines or Latin letters for the letters \mathfrak{A} \mathfrak{U} \mathfrak{S} (AUS)? I confess that I am not quite satisfied with this attribution of Mr. Haigh's, and still less with Mr. Lindsay's reading of the same coin. He reads the name WINUFRD, and supposes it may be a coin of Winfrid, an Archbishop of Maintz, who was murdered by the Pagaus in 754. This is most certainly an erroneous reading, for in the first place the Rune \mathfrak{X} is a G, not an N, and \mathfrak{F} is an Æ, not an F. The coin reads plainly enough WIGUÆRD. I cannot find in the Saxon Chronicle or in Bede any name resembling this; perhaps some of my numismatic friends may be able to assist me.

I have now noticed all the Rune-bearing sceattas in the British Museum and our chief numismatic works. It

will be seen that they belong, without exception, to the kingdom of Mercia, and were struck during the latter half of the seventh century.

Peada reigned in Mercia A.D. 655-56. He was succeeded by Wulfhere, his brother, who reigned nineteen years. Of this king we have at present no coins.

Æthelræd, the third brother, came to the throne in 675, and after a reign of twenty-nine years retired into a monastery in A.D. 704.

From this time until the accession of Offa in 755, a period of fifty years, during which three kings reigned in Mercia, we have as yet no coins. I have no doubt but that sooner or later sceattas will be found, probably with Runic legends, resembling those of Æpa, Peada, and Æthelræd, both of Wulfhere, Peada's successor, and of Kenred, Ceolred, and Ethelbald, who ruled Mercia in succession between the years 704 and 755, the date of the accession of Offa, who introduced the penny in place of the sceatta, previously the only silver coin in circulation throughout the island, and in whose time the Roman alphabet had in England all but superseded the Runes.

Before I conclude this notice, and while I am still upon the subject of Runes, I wish to draw the attention of the society to what I take to be one of the earliest Rune-bearing coins; it is an imperial gold solidus, an imitation of the VICTORIA AVGGG. type of Honorius, and probably struck quite early in the fifth century, for Honorius died in the year 423:—

Obv.—A diademed bust of emperor to right, wearing paludamentum.

Rev.—Emperor standing right, holding a standard and a globe surmounted by a Victory, and placing his foot upon a prostrate captive.

The legend is evidently an imitation—the work of an artist unacquainted with the Latin language.

This coin formed part of the collection of King George III., and has lain for years unnoticed in the British Museum. My attention has lately been drawn to it by the Count de Salis, who sent an impression of it to Professor Stephens of Copenhagen, in whose magnificent work it will shortly be published; it bears, besides the barbarous imitation of the Latin legend, a very perfect inscription in Anglo-Saxon Runes. Unfortunately Professor Stephens has misread this Runic legend: probably the impression from which he took it was not quite perfect. He reads it *SLÆNOMODU* (Pl. IV., No. 19), and thus translates it, *SLÆN O MODU* "Siaen owns this mot." (coin or die).

He goes on to say that such a man's name as *Siaenomod* is not likely, although, if taken for *Sinmod*, it is possible; so he prefers dividing the legend and translating.

Whether or not he be correct in this is doubtless an open question. For my own part, I should be inclined to consider the legend as forming only one word, and that probably the name of the moneyer or of the place of mintage; but, however this may be, Professor Stephens is certainly wrong in his reading of the Runes; the legend, correctly read, is *SCANOMODU* (Pl. IV., No. 18), not *SLÆNOMODU* (Pl. IV., No. 19).⁴ I have sent an impression of this solidus to Mr. Haigh, who is of opinion that it is of English workmanship, for

⁴ After writing the above, it struck me that, although Professor Stephens' work was already in course of printing, there might yet be time for him to correct the error above alluded to. I therefore sent him a sharp impression of the Runic solidus, and I have just received a letter from him in acknowledgment of the same, in which he tells me that he has had the Runic side of the coin re-engraved and the error corrected. This is very satisfactory, as it would have been a thousand pities that, in so

the letter \mathfrak{Z} he informs me occurs on the Gilton sword pommel. The second letter \mathfrak{K} for C only occurs on our old English monuments, and \mathfrak{N} , common with us, is very rare indeed on the Scandinavian bracteates. Although then we do not know where this coin was found, I think we may conclude, from the evidence of the Runes themselves, as well as from the fact that it formed part of King George's collection, that it was picked up somewhere in England. Consequently we must place it at the head of the Saxon series, long before any of the sceattas noticed above. It is, although of barbaric workmanship, essentially a Roman coin, for in weight it corresponds with the solidi of the period. It is the first link in the descending chain of imitations from the original Roman prototype, and we cannot assign a later date to it than about 440 A.D.

This precious solidus may, perhaps, have been used as a personal ornament, like the Scandinavian bracteates, for there are traces of a ring or loop, which seems to have been once attached to the coin for the purpose of suspending it to a necklace.

It is highly probable that the Saxons would make this use of the beautiful Roman gold coins, and that they would make imitations of them for a similar purpose, in the same way as their Scandinavian brethren copied their ornamental bracteates from the thin dish-like coins of the Eastern Empire.

It is quite possible, then, that this piece may have been intended from the first as a personal ornament, and not as a coin, in which case I should be inclined to follow Pro-

perfect and complete a work as Professor Stephens', a coin of such interest and value should be wrongly engraved. Had it occurred to me before that Professor Stephens might still have had time to correct his slight mistake, I would not have perpetuated this mis-reading by engraving it upon my plate.

fessor Stephens in his method of interpreting the Runic legend, and to consider it as indicating the name of the owner rather than that of the artist. If it be objected to this that such a name as Scan be improbable, I have still another suggestion to make, which, to my mind, appears by no means unlikely.

The Runes, as is now generally admitted, were in the earliest times simply a means of aiding the memory and of Preserving a record of the history of past ages. The word *Rune* is probably derived from the name of the instrument with which these letters were cut or scratched upon wood or stone. Now, the art of writing, though undoubtedly existing among the Teutons, was very far from being generally known; and the common people would naturally look with a kind of superstitious reverence upon those who possessed the strange power of communicating their thoughts to one another in unspoken words by this means. Thus the word *Rune* came to have the secondary meaning of a *mystery*, and the very letters themselves were regarded with awe, as possessing inherent powers for good or for ill.⁵ There were certain combinations of these letters used as charms against diseases, others for engendering love or hatred, others again for insuring victory in battle, &c. &c. Is it not possible, after all, that the inscription upon this

⁵ This superstition seems to have been rather encouraged than otherwise by the Pagan priests. Tacitus alludes to the custom of casting lots with small slips of wood inscribed with runes: "Auspicia, sortesque, ut qui maximè, observant. Sortium consuetudo simplex: virgam, frugiferæ arbori decisam, in surculos amputant, eosque, notis quibusdam discretos, super candidam vestem temerè ac fortuitò spargunt: mox, si publicè consulatur, sacerdos civitatis, sin privatim, ipse paterfamilias, precatus deos, cælumque suspiciens, ter singulos tollit, sublatis, secundùm impressam antè notam, interpretatur."—Tacitus, Ger. X.

gold piece may be a charm to defend the wearer from evil, or to obtain for him victory over his enemies? If so, we have small chance of ever discovering its meaning: it must still remain to us a *Rune, a mystery*.

Whatever may have been its original intention, it is doubtless one of the earliest pieces struck in England after the departure of the Romans. Hengest and Horsa landed in Britain in the year of our Lord 428: from this date, if not previously, the barbarians of the North made frequent incursions into the island, formed settlements, and brought with them their own manners, customs, laws, language, and ancient futhorc, or alphabet, handed down to them through ages from their remote forefathers, from those prehistoric times before the great dispersion of mankind, when the whole Aryan race dwelt together as one family, speaking one language,⁶ on the banks of the Euphrates and the Tigris; an alphabet not derived from the Latin, the Greek, or the Phœnician, but like them a simplification of a still earlier symbolic system, similar perhaps to that of which the Egyptians alone continued to make use long after the other nations had adopted easier modes of writing.

BARCLAY V. HEAD.

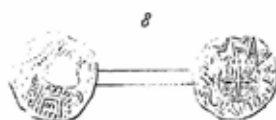
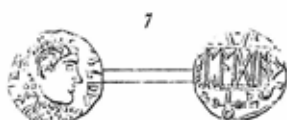
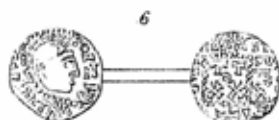
⁶ One proof, among many, of the priority of the art of writing to the dispersion of the Aryan race is the fact that we find a large number of words having reference to it common to the Teutonic and classic languages. Cf. the Anglo-Saxon *scriban*, the German *schreiben*, with the Latin *scribere*, and the old Norse *Græf*, *Grafan*, with the Greek *γράφειν*.

Mr. Haigh, in his "Saxon Conquest," chapter ii., on the Antiquity of Phonetic Writing as practised by the Teutonic Races, goes deeply into this subject, and not only proves in the clearest manner the antiquity of the art of writing among the Teutons, but actually traces it up to Woden, who lived about the time of the separation of the children of Japhet. Those who would cast aside as worthless all tradition, which is unwritten history, should read this chapter.

1
M C F

2
W C E

3
F C F



9
M C F

10
C F M



14
P I X N F

15
F N Y P I X N F

16
P I X N

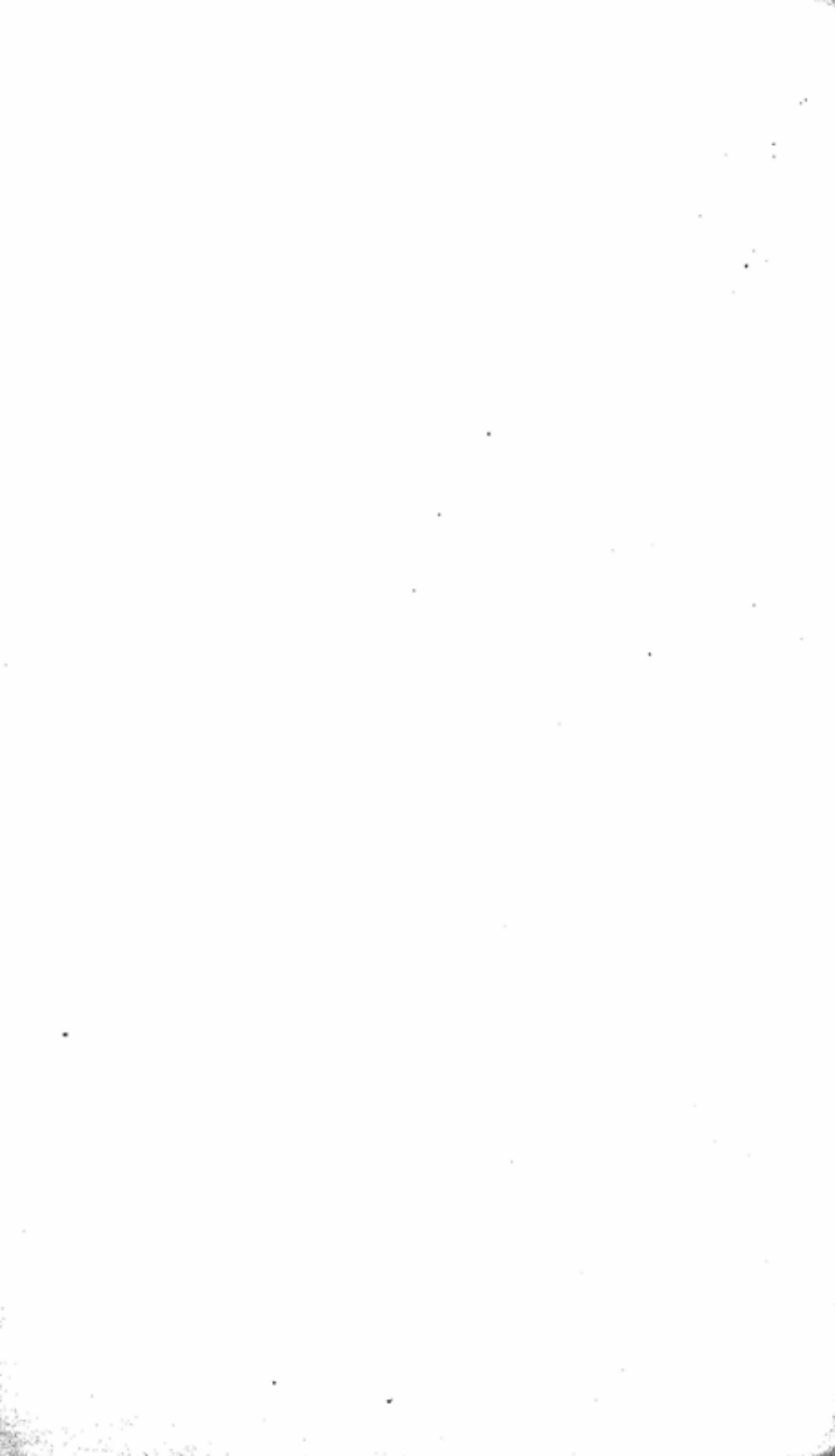


18



18
Z I F T X M X N

19
Z I F T X M X N



NOTICE OF RECENT NUMISMATIC PUBLICATIONS.

In Nos. 3 and 4 (May—August) of the *Revue Numismatique* for 1867 there are the following articles :—

1. "Letter to M. A. de Longpérier from M. F. de Sauley, on Gaulish Numismatics, xxvi. Remi and Carnutes."
2. "On some kinds of Greek Coins mentioned in Ancient Authors and in Inscriptions," by M. F. Lenormant.
3. "On the Coins attributed by M. Bompois to Meleager, King of Macedonia," by M. L. Müller.
4. "Inedited Coin representing the Image of Jesus the Saviour, the Chalcean," by M. A. Dumont.
5. "Coins of Rheims. Merovingian Money," by M. L. Maxe-Werly.
6. "Denier of Philip Augustus, struck at Issoudun," by M. A. de Longpérier.
7. "Essay on the Mints of Provence from its Reunion to the Crown. Coins of René," by M. A. Carpentin.
8. "Imitation of Coins of Charles VI. by Jean-sans-Peur, Duke of Burgundy, Count of Flanders," by M. L. Deschamps.
9. "Rectification of an Article on some Obsidional Franco-Italian Coins," by M. V. Promis.
10. "Anciennes Monnaies Hermétiques faites d'Or et d'Argent Philosophal," by M. P. Martin Rey.
11. "Introduction to the Study of Jettons," (conclusion,) by M. A. d'Affry de la Monnoye.

In the *Bulletin Bibliographique* are notices of two numismatic works.

In the *Chronique* there is an engraving and a description by M. J. Cumano, of Faro (Portugal), of a denarius of Titus Labienus, the father of Quintus, whose coins are well known. On the reverse is the representation of a town, with the legend CINGVLVM, a town built by Titus Labienus at his own expense (*Bell. Civ. i. 15*). M. A. de Longpérier has appended a note expressing some slight doubt of its genuineness, and it is much to be feared that it is a modern forgery. It would answer well to assert that it was found at Munda, for, if the piece was true, Spain is the only place where it could have been struck. The piece must be seen and examined before numismatists can accept it as genuine.

There is also a notice of a find of Carlovingian coins at Gannat (Allier), and the concluding portion of the list of the works and articles of the late Celestino Cavedoni by M. le Baron de Witte.

In the *première livraison* of the *Revue Numismatique Belge* for 1868 there are the following articles :—

1. "Catalogue of Obsidional Coins and *Pièces de Nécessité*" (eighth article), by M. P. Mailliet.

2. "Don Antonio, King of Portugal, his History and Coins," by M. R. Chalon.

3. "The Thirty-eight Inedited Jettons of the list Van Mieris-le-Petit," by M. J. Dirks.

4. "Observations on some Anglo-Saxon Coins," by M. le Comte Maurin Nahuys.

5. "Documents pour servir à l'Histoire des Médailles," by M. de la Fons Méricocq.

In the *Correspondance* is a letter from M. Fr. Seguin to M. R. Chalon, on some Russian coins.

In the *Mélanges* are notices of various numismatic publications, finds of coins, &c. Among these latter there is a notice by M. J. Dirks of the find of an *aureus* (*sic*) of Arcadius, with, on the reverse, the letters M. D., explained by M. Dirks, M (*andato*) D (*ecurionum*). It may be as well to point out that the piece is a *solidus*, and that the letters MD. stand for *Mediolanu* (Milan).

In the *Nécrologie* is a notice of the late M. P. O. Van der Chijs.

The second part of the "Die Münzen und Medaillen Graubündens" (The Coins and Medals of the Canton Grisons), by C. F. Trachsel, has just appeared. The number concludes with the coins of Ulrich VI. von Mont, 1661—1692. (See *Num. Chron.*, N.S., vol. vii. p. 248.)

V.

COINS OF ALEXANDER'S SUCCESSORS IN THE EAST,
THE GREEKS AND INDO-SCYTHIANS.

BY MAJOR-GENERAL A. CUNNINGHAM.

PART I.—THE GREEKS OF BACTRIANA, ARIANA, AND INDIA.

INTRODUCTION.

WHEN Alexander dismounted from the hardly tamed Bukephalus, his father Philip exclaimed, with tears of joy, "Seek another kingdom, my son, for Macedonia is too small for thee." Afterwards, when Philip planned the invasion of Persia, his most ambitious dreams, perhaps, never reached the vast extent which his son's conquests actually realized. Even Alexander himself, on hearing of Philip's victories, is said to have lamented that his father would leave nothing for him to conquer¹—so little can even the most comprehensive mind grasp of the future.

In the summer of B.C. 334, Alexander crossed the Hellespont at the head of thirty thousand infantry and

¹ " . . . fertur Pellæus Eoûm

Qui domuit Porum, cum prospera sæpe Philippi

Audiret, lætos inter flevisse sodales,

Nil sibi vincendum patris virtute relinqui."

Claudian, de IV. Cons. Hon. Panegyri., 374—377.

four thousand five hundred cavalry. He forced the passage of the Granicus in spite of all the efforts of Memnon, the ablest officer of the Persian army, and afterwards defeated Darius himself in two decisive battles at Issus and Arbela. On the death of Darius, in B.C. 330, Alexander followed his murderer Bessus to the frontiers of Bactria, where he was obliged to give up the pursuit in consequence of the simultaneous revolt of the satraps of *Aria*, *Drangiana*, and *Arachosia*. With characteristic rapidity he made a forced march of about seventy miles to Artakoana, the capital of Aria, with his cavalry and mounted archers, and nearly surprised the revolted satrap in his palace.

There Alexander seems to have paused in his career to consider his present position and future movements. He had just before heard of the assumption of the regal title of Artaxerxes by Bessus, in Bactria; and the organized revolt of these Eastern satraps now showed him that resistance had not died with Darius. His first plans were most probably confined to the humiliation of Persia; but they seem gradually to have been enlarged by success, until they embraced the complete subjugation of the Persian empire, and the conquest of India, even to the mouth of the Ganges. Alexander's comprehensive mind contemplated much more than a predatory excursion, resulting only in plunder; and when he determined on the conquest of Bactria and India, he had also formed plans for their permanent occupancy and future government. Indeed, after his death there was found amongst his papers the rough draught of a scheme for the amalgamation of the different nations of Europe and Asia into one people under his own single rule. This he purposed to effect by securing the good-will of his conquered

subjects. How well he succeeded in his purpose was afterwards shown by the peaceful submission of the eastern provinces to the sway of the Seleukidæ, which was quite undisturbed for more than two generations.

With his usual judgment, Alexander now determined to leave no enemy behind him. He therefore turned aside from the pursuit of Bessus, to crush the rebellious satraps of Aria, Drangiana, and Arachosia. This being done, he resumed his pursuit of Bessus through the territories of the Paropamisadæ to Bactria. On crossing the Oxus into Sogdiana, Bessus was delivered into his hands by Spitamenes, the governor of the province. The whole country then submitted to the conqueror, and Grecian garrisons were established in all the principal cities. When Spitamenes betrayed Bessus, he no doubt thought that he would be permitted to retain his own government, and that, on the departure of Alexander, he might be able to form Sogdiana into an independent kingdom. He now openly rebelled, and so great was his skill that he managed to keep the field for two entire years, when, being signally defeated, he was treacherously murdered by his Scythian allies. The spirit of organized resistance died with this heroic Persian nobleman; yet many of the petty chiefs still held out, and retreated to their mountain fastnesses, where they vainly hoped that Alexander would be unable or unwilling to follow them. But danger only inflamed his natural ardour, while difficulty stimulated his energy and increased his perseverance. His romantic disposition sought danger wherever she was to be found, and he courted her, as the knights of chivalry wooed their brides, by force of arms. The two provinces of Sogdiana and Bactria were thus finally subdued and permanently annexed to the Macedonian empire in B.C. 328.

Early in the following spring Alexander crossed the Indian Caucasus, and at the *τριοδον*, or meeting of the three roads from Bactria, India, and Arachosia, founded the city of Alexandria ad Caucasum, or Alexandria Opiane. The remainder of the year B.C. 327 was spent in the reduction of the various cities and strongholds of the Kabul valley, ending with the capture of the famous rock-fort of Aornos. In the spring of B.C. 326 he crossed the Indus at *Embolima*, or Ohind, and marched to Taxila, where he was hospitably entertained by the Indian king Mophis, or Omphis.

From Taxila, Alexander advanced to the Hydaspes, where he was so stoutly opposed by Porus that he could only pass the river by a stratagem. Then followed a great battle between the Greeks and Indians, the submission of Porus, and the foundation of the cities of Nikæa and Bukephala. Next came the capture of the hill-fortress of Sangala, and the advance to the Hyphasis, beyond which the Greek army, dispirited by long marches and the warlike character of the people, refused to proceed. There, says Gibbon, "on the eastern bank of the Hyphasis, on the verge of the desert, the Macedonian hero halted and wept." Then retracing his steps to the banks of the Hydaspes at Nikæa, he prepared a fleet to carry him to the Indian Ocean. On his voyage down the Hydaspes, towards the end of B.C. 326, he received the submission of Sopeithes, or Sophites, who possessed the large tract of country between the Indus and the Hydaspes, in which the valuable salt mines are situated. Continuing his descent of the river, he reached the junction of the Akesines, or Chenâb, from whence he made a successful expedition against the Oxydrakæ and Malli, ending with the capture of their chief city, which was

almost certainly Multan. Thence sailing down the Indus, he conquered successively the kingdoms of Musikanus, Oxykanus, and Mæris of Patalene, and reached the Indian Ocean about the middle of B.C. 325.

From the mouth of the Indus, Alexander returned to Patala, leaving Nearchus in command of the fleet, with orders to sail for the mouth of the Euphrates. He then began a long and harassing march through Gedrosia and Karmania to Persepolis and Babylon, where he shortly after died in May, B.C. 323.

At a meeting of the principal officers held after Alexander's death, his half-brother Arrhidæus, and his expected son by Roxana, were declared joint sovereigns of the magnificent empire which he had raised. The chief provinces were divided amongst the most powerful officers. Europe was assigned to Lysimachus, Antipater, and Kraterus; Egypt was given to Ptolemy; Asia Minor was divided between Antigonus, Kassander, and Eumenes, and some others of less note; while the provinces of Upper Asia were left under the charge of the governors appointed by Alexander.

The eastern provinces of Alexander's empire were *Bactriana*, *Ariana*, and *India*, or the countries watered by the Oxus, the Helmand, and the Indus.

Bactriana comprised Sogdiana, Bactria, and Margiana, all of which were included by Alexander in one satrapy under Philip.

Ariana comprised Aria and Drangiana in one satrapy, under Stasanor; and Arachosia and Gedrosia in a second satrapy, under Siburtius.

India comprised the three satrapies of the *Paropamisadæ*, the *Punjab*, and *Sindh*. The first, to the west of the Indus, was placed under Oxyartes, the father of Roxana.

The second, which included the kingdoms of Taxiles, Porus, and Sophites, with the territories of the Oxydrakæ and Malli, to the east of the Indus, was placed under the military governorship of Philip, the son of Machetas, while the civil rule was left in the hands of the native sovereigns. The third, which included the kingdoms of Musikanus, Oxykanus, Sambus, and Mæris of Patalene, or the country now forming Sindh, was entrusted to Python, the son of Agenor.

Philip, the satrap of the Punjâb,² was killed in a mutiny of the mercenary soldiers shortly before the death of Alexander, and was succeeded by Eudemus.³ The other Philip, the satrap of Bactriana, was transferred to Parthia at the redistribution of the provinces by Antipater in B.C. 321, and his place was filled by Stasanor, of Aria who was himself succeeded by Stasander.

In the great war that followed between Antigonos and Eumenes, in B.C. 317, the Eastern satraps were summoned to join the standard of Eumenes, as the upholder of the sovereignty of Alexander Aegus, the son of Roxana. Eudemus, the satrap of India, who had treacherously murdered Porus, joined the royal standard with three thousand five hundred troops and one hundred and twenty elephants.⁴ Oxyartes, the father of Roxana, also sent a small contingent to the assistance of Eumenes; and Stasander, the satrap of Aria, joined him with a large force.⁵ But Siburtius, the satrap of Arachosia, sided with Antigonos; and Pithon, the son of

² Arrian, *Anabasis*, vi. 27. Φίλιππον τὸν σατράπην τῆς Ἰνδῶν γῆς.

³ Curtius (*Vit. Alex.*, x. 1) calls him Eudemon.

⁴ Diodorus, *Hist. Univers.*, xix. 5.

⁵ Diodorus, *Hist. Univers.*, xix. 9.]

Agenor, satrap of Sindh, must have followed his example, as he was afterwards entrusted by Antigonus with a high command. Justin, who, however, calls him satrap of Parthia, says that he joined Eumenes.⁶ No mention is made of Stasanor, the satrap of Bactria; but as he retained his government at the redistribution of the provinces after the defeat of Eumenes, it seems probable that he was not hostile to Antigonus. At the same time Siburtius was confirmed in the government of Arachosia, and Evagoras was appointed satrap of Aria, in the place of Stasander.⁷

The power of Antigonus was dominant in Upper Asia from B.C. 316 to 312, when his son Demetrius was defeated by Ptolemy and Seleukus at the decisive battle of Gaza. Seleukus then recovered his satrapy of Babylonia, and established the Seleukidan era on the 1st of October, B.C. 312. But he was immediately called into the field to oppose the Eastern satraps, who, under the command of Nikanor of Media, were advancing towards Babylon to support the interests of Antigonus. Seleukus met them at the passage of the Tigris, and defeated them with great slaughter. Nikanor himself escaped, and took refuge with Antigonus; but Evagoras,⁸ the satrap of Aria, and several "other principal chiefs" were killed on the field. Amongst them were probably included Siburtius of Arachosia, and Stasanor of Bactria, as there is no further mention of them in history.

Seleukus now turned his arms against the eastern provinces of Parthia, Bactriana, and Ariana, all of which

⁶ Justin, xli. 4.

⁷ Diodorus, *Hist. Univers.*, xix. 15.

⁸ Diodorus (*Hist. Univers.*, xix. 24) calls him Evagrius.

cheerfully submitted to him;⁹ and in B.C. 326, when he assumed the title of king, his rule was undisputed from the Euphrates to the Oxus and Indus. A year or two later he conducted an expedition against Sandrokokottus, or Chandra Gupta, King of India, who, after the departure of Eudemus, in B.C. 317, had overpowered the Macedonian garrison,¹⁰ and made himself the sole master of the Punjâb, and perhaps also of the Kabul valley. Seleukus crossed the Indus, and, according to some authors, advanced as far as the Ganges. Chandra Gupta hastily assembled an army of sixty thousand men, with an incredible number of elephants, to oppose him, and presented so bold a front that Seleukus thought it prudent to court his alliance, which was secured by a matrimonial connection.¹¹ The Indian prince surrendered five hundred elephants, in exchange for which Seleukus renounced all right to Alexander's Indian conquests. By this treaty the satrapies of the Paropamisadæ and of the Upper and Lower Indus, or the Punjâb and Sindh, were permanently added to the dominions of Chandra Gupta, and Ariana and Bactriana became the most easterly provinces of the kingdom of Seleukus. The alliance thus begun between the two countries was afterwards continued by the residence of Megasthenes, the ambassador of Seleukus to the Indian court, at Palibothra. To him and his successor, Daimachus, the ambassador of Antiochus Soter,¹² the ancients were indebted for nearly all their knowledge of the Indian continent.

⁹ Justin, xv. 4. Bactrianos expugnavit. Plutarch. in Demet. Diodorus, xix. 24 and xx. 12.

¹⁰ Justin, xv. 4.

¹¹ Strabon. Geogr., xv. 2—9.

¹² Strabon. Geogr., xv. 1—9.

After the battle of Ipsus, in B.C. 302, when the dominions of Antigonus were divided amongst his victorious rivals, the whole of Syria, with a great part of Asia Minor, was added to the dominions of Seleukus, whose territories now extended from the Mediterranean to the Indus. The capital was then moved from Babylon to the new city of Antiocheia, on the Orontes, at the extreme western boundary of the kingdom, and the eastern provinces were entrusted to the government of his son, Antiochus. Seleukus was assassinated in B.C. 280, and was succeeded by his son, who is generally known as Antiochus Soter. During his reign of nineteen years the eastern provinces would appear to have enjoyed a profound peace, as there is no mention of them in history, except the bare facts that Antiochus rebuilt the city of Alexandria, in Margiana, founded the city of Soteira, in Ariana, and maintained the Indian alliance by the embassy of Daimachus to Allitrochades, or Amitrochates, the son of Chandra Gupta.

Antiochus II., surnamed Theos, succeeded his father in January, B.C. 261. Shortly after his accession he engaged in war with Ptolemy Philadelphus, partly to recover Cyrene for Magas, the husband of his sister, and partly to gain possession of Phœnicia, the old object of dispute between the founders of the two kingdoms. The war lasted for many years, and was only terminated in B.C. 249, shortly before the death of Ptolemy, by the marriage of Antiochus with his daughter Berenike. Ptolemy died in B.C. 247, when Antiochus at once dismissed Berenike, and recalled his former wife, Laodike, who, distrusting his fickle disposition, caused him to be poisoned in January, 246.

Antiochus II. was succeeded by his son Seleukus II.,

surnamed Kallinikos, who was immediately attacked by Ptolemy Evergetes, to avenge the death of his sister, Berenike. Seleukus was unable to offer any effectual resistance, and retreated towards the north, while Ptolemy pursued his career of conquest towards the east, as far as the confines of Bactria and Ariana. The invader was then compelled to return by disturbances in his own kingdom, and Seleukus at once recovered all the conquered provinces up to the Euphrates, while Ptolemy retained Syria and the rich maritime districts of southern Asia Minor. In commemoration of the recovery of his dominions, Seleukus assumed the title of Kallinikos, and founded the city of Kallinikon in Olymp. 134—1, or B.C. 244. In the following year he prepared to attack Ptolemy; but his brother Antiochus Hierax, on whose assistance he had relied, turned against him, and sought to establish an independent kingdom in Asia Minor. Antiochus was at first successful, and even managed to obtain possession of Mesopotamia and part of Armenia; but about B.C. 238 he was finally defeated, and obliged to fly to Egypt. Seleukus then prepared to attack Arsakes, the king of Parthia, whose brother, during the later years of the troubled reign of Antiochus Theos, had slain the Macedonian governor of the province, and declared himself independent. Diodotus, the governor of Bactria, and other chiefs had followed his example, and all the eastern provinces of the empire had thrown off their allegiance to the Seleukidæ.

The Parthian revolt is now generally assigned to B.C. 250, and that of Bactria to the same period; but the date of these events is so intimately mixed up with the history of Bactrian independence that I must reserve its discussion for the present, while I give a brief account

of the countries that were then permanently detached from the great Syrian empire founded by Seleukus Nikator.

GEOGRAPHY.

The dominions of Seleukus Nikator and his successors extended from the banks of the Indus to the shores of the Mediterranean. The eastern provinces of this vast empire were Parthiene, Bactriana, Ariana, and India, which stretched from the Caspian Sea to the banks of the Satlej, and from the Sir, or Jaxartes, to the Indian Ocean.

PARTHIENE comprised Parthia proper and Hyrkania, both lying to the south-east of the Caspian Sea. It was bounded by the Chorasmian desert on the north, and by the Karmanian desert on the south.

BACTRIANA comprised Bactria proper, Sogdiana, and Margiana, or the countries lying on the Oxus and its tributaries. On the north it was bounded by the Jaxartes, or Sir River; on the south by Ariana; on the west by Parthiene and the Chorasmian desert; and on the east by the Komedian mountains, or Belut Tagh.

ARIANA comprised Aria, Drangiana, Arachosia, and Gedrosia, or the countries lying on the rivers Arius and Hermandus and their tributaries. It was bounded on the west by the great Karmanian desert; on the north by Bactriana; on the east by the Indian mountains which separate the valleys of the Helmand and Indus; and on the south by the Erythræan Sea, or Indian Ocean.

INDIA comprised the territory of the Paropamisadæ to the west, and the rich province of the Panjâb to the east of the Upper Indus, and the valley of Sindh on the Lower Indus.

The government of the whole empire was divided

among seventy satraps, each of whom possessed, and most probably exercised, the right of coinage in one or more of the chief cities of his satrapy. The coins of some of the great cities of the western provinces can be recognised at once by their well-known symbols, as well as by their monograms. But the coins of the great eastern cities rarely possess any symbols, and their monograms are more difficult of decipherment owing to the greater poverty of our information regarding these remote provinces of the Syrian empire.

PARTHIA.

In the time of Ptolemy, the chief cities of Parthia were *Hekatompylos* the capital, *Apameia*, and *Ambrodax*. To these Pliny adds *Calliope* and the rock-fort of *Issatis*, both on the Median frontier. Strabo also includes *Rhagæ* and *Herakleia* in Parthiæne, but notes that they formerly belonged to Media. *Hekatompylos* is mentioned by the historians of Alexander, and again by Polybius in his account of the campaigns of Antiochus the Great. As it is omitted by Isidorus of Charax in his list of Parthian cities, it must have ceased to be the capital of the country some time before the Christian era. Its probable site was at Dâmghân, where Fraser found considerable ruins. Wilson has suggested Jah-Jerm as a more probable site, because Dâmghân is too near the Caspian gates; and his suggestion has been followed by Mr. Vaux in Smith's Dictionary, and by Mr. Riley in his translation of Strabo. But there are two distances to be considered—namely, the forward distance to the capital of Aria, as well as the backward distance from the Caspian Gates. According to Pliny, Hekatompylos was 133 Roman miles from the

Caspian Gates, and either 562 or 575 miles from the capital of Aria; or, respectively, as 1 to $4\frac{1}{3}$, which agrees almost exactly with the position of Dâmghân. I believe that Wilson must have been misled by following Strabo instead of Pliny, as Strabo makes the two distances 1,960 stadia and 4,530 stadia, which are respectively equal to 245 and 566 Roman miles. But from a comparison of another passage of Strabo it is evident that there is a mistake in the first distance. His words are, "from the Caspian Gates to Rhagæ are 500 stadia, according to Apollodorus; and to Hekatompylos, the royal seat of the Parthians, 1,260 stadia." By adding these two together Strabo obtained 1,760 stadia, or by some change of the figures 1,960 stadia, as in the first passage. But as Rhagæ was in Media, to the west of the Pylæ Caspiæ, Hekatompylos was only 1,260 stadia, or $157\frac{1}{2}$ Roman miles, beyond the Gates, according to the second passage. That the greater number is erroneous is clearly shown by his description of Tape in Hyrkania as being "near the sea, distant 1,400 stadia from the Pylæ Caspiæ;" for as Parthia was to the south-west of Hyrkania, its capital must have been considerably nearer to the Gates than Tape. I conclude, therefore, that the distance of 133 Roman miles, as stated by Pliny, is correct; and that the number in Strabo should be its equivalent of 1,060 stadia.

Rhagæ was an ancient city of Media, but being only 500 stadia, or $57\frac{1}{2}$ miles, beyond the Parthian frontier, or Caspian Gates, it was an early acquisition of the Parthian kingdom. According to Strabo, it was rebuilt by Seleukus Nikator as *Európus*, and its name was afterwards changed to *Arsakeia* by the Parthians. Its position has been identified by Ker Porter with the ruins of *Rha*, or *Rhe*, near Teheran.

Apameia and *Herakleia* were also in Media. Pliny calls the former *Apamea Rhagiane*, and Strabo places the latter near Rhagæ; but as he mentions each of them as distinct from Rhagæ, they must have been separate places, although perhaps quite close to the ancient city. Their positions have not been identified.

In the time of Isidorus of Charax the capital of Parthia was *Zaulôë*, which the Greeks called *Parthaunisa*, or *Nisæa*. It contained the royal tombs, and was most probably the same as the famous city of Nishapur.

HYRKANIA.

In Hyrkania the principal cities noted by Ptolemy are *Amaruseia* and *Hyrkania Metropolis*. Strabo mentions *Talabroke*, *Samariane*, *Karta*, and the royal residence *Tape*, which was situated near the sea. Polybius notices only two places, *Tambrake* and *Syrinx*, of which the latter, both for strength and situation, was considered as the capital of all Hyrkania. To these Isidorus adds *Asaak*, or *Arsakeia*, a city of Astabene, built by Arsakes I., in which was preserved a perpetual fire. According to Ptolemy, the Astabeni occupied the north-western part of Hyrkania, near the Caspian Sea.

Hyrkania, or *Hyrkana Metropolis*, is generally admitted to be the same as the modern *Gûrgân*, or *Gârkan*, to the north-east of Astarâbâd. It is, no doubt, the same place as *Zadrakarta*, or the "royal city" of Alexander's historians, and the same as the *karta* of Strabo. I conclude also that it must be the *Syrinx* of Polybius, as *Gurgân* is called *Jurjân* by the early Arab geographers, to which Συρηνίς is a very near approximation in Greek characters.

Tambrake, or *Tambraz*, according to Polybius, was an open town of great extent, containing a royal palace. It is, no doubt, the same place as Strabo's *Talabroke*, as the names are almost identical. I think also that his *Tape* may possibly be the same, as it contained a royal palace, like *Tambrake*, and was near the sea, which at once suggests its identification with *Astarabad* as the most probable representative of *Talabroke*. *Tape* may be an abbreviation of *Taprake*.

BACTRIA.

The chief cities of Bactria, in the time of Ptolemy, were *Zariaspa*, *Chatrakarta*, *Baktra Regia*, *Marakanda*, and *Eukratidia*. Strabo mentions "*Baktra*, which they call also *Zariaspa*," *Darapsa* or *Adrapsa*, and *Eukratidia*. In the time of Alexander, the chief cities were *Aornos* and *Baktra*. *Zariaspis* is also mentioned by Arrian; and, although not specially noted, it is clear that it was the capital city of the province, as Alexander wintered there during the Sogdian campaign, and there left the royal household.

Zariaspa, or *Baktra*, is universally admitted to be the modern city of Balkh. Ptolemy alone makes *Baktra Regia* a different place from *Zariaspa*. His *Zariaspa* is certainly *Balkh*, as it is situated amongst the *Zariaspa*, and on the *Zariaspes* river. Now the great fire-temple of Balkh was called *Azar-i-Asp*, from which the Greeks made *Zariaspa*. I think also that Strabo's *Adrapsa* may be only a slight alteration of *Zariaspa*, as *Adar-i-Asp* is the common pronunciation of *Azar-i-Asp*.

Aornos I take to be the *Baktra Regia* of Ptolemy, which he places on the *Dargydus* river, to the south-east

of Zariaspa. This position corresponds exactly with that of the old fortified city of *Samangân*, near Haibak, on the Khulm River. There the valley of the river becomes so narrow that it is called *Darâ-i-Zandân*, or the "Dungeon-defile," and "so high are the rocks that the sun is excluded from some parts of it at mid-day."¹³ Near this Aornos Ptolemy places the *Varni*, or *Uarni*, a people who most probably derived their name from the place. According to Moorcroft, the ruins of *Samangân* are very extensive,¹⁴ and in the time of Edrisi it was equal in size to Khulm.¹⁵

Eukratidia is placed by Ptolemy on the Dargydus River, immediately to the eastward of Zariaspa. Its position, therefore, corresponds so exactly with that of Khulm as to leave no doubt of the identity of the two places. It was founded by Eukratides, King of Bactria.

SOGDIANA.

The great cities of Sogdiana, according to Ptolemy, were *Drepsa Metropolis*, *Oxiana*, *Maruka*, *Alexandreia Oxiane*, and *Alexandreia Eschate*. Pliny mentions the town of Panda, as if it was the capital of the country; and also, "at the very extremity of their territory, *Alexandria*, founded by Alexander the Great." Ammianus, who copies Ptolemy, notices *Alexandria*, *Cyreschata*, and *Drepsa Metropolis*, without any remarks as to their situation or history.

Drepsa Metropolis is placed by Ptolemy on a small stream which falls into the Oxus. I believe that *Drepsa* is only another name for *Samarkand*, or *Marakanda*, which,

¹³ Burnes' Travels into Bokhara, iii. 174.

¹⁴ Travels, ii. 402. Tradition refers the foundation of *Samangân* to Rudâba, the wife of Rustam.

¹⁵ Jaubert's Translation, i. 475.

according to Strabo, was destroyed by Alexander. Now Samarkand is situated on the *Zar-afshân*, or "gold-scattering" river, which, in a Greek form, would be the *Darapsanes*; and the city of Marakanda, on its bank, would have been called *Marakanda Darapsiane*, or simply *Darapsa*, or *Drepsa*, to distinguish it from the Marakanda in Bactria. As there is no trace of the name amongst the monograms, it is probable that the city did not recover its importance for some time after the death of Alexander. The *Panda* of Pliny is perhaps only a mutilated form of the old name.

Alexandreia Oxiane, which was situated on the Oxus immediately to the north of Zariaspa, or Balkh, is most probably *Termed*, an ancient town described by the old Arab geographers.

Alexandreia Eschate may perhaps be *Ush*, to the south of Andajân.

Kyreschate, or *Cyra*, the town of Cyrus, is most probably *Kokân* or *Kukand*, the city of *Ku*, which is traditionally said to have been founded by *Kur*, or *Cyrus*. It was destroyed by Alexander.

Nautaka is mentioned by Arrian¹⁶ as the place where Alexander wintered during his Sogdian campaign. To this city also Bessus retired¹⁷ when Alexander approached the Oxus. It must, therefore, have been situated somewhere on the route between Baktra and Marakanda, and most probable at *Kesh*, a large town to the south of Samarkand. After the destruction of the latter city by Alexander, I presume that *Nautaka* became the capital of Sogdiana, and continued to be so during the Greek occupation of the country.

¹⁶ Anabasis, iv. 18.

¹⁷ Arrian, Anabasis, iii. 28.

MARGIANA.

The chief towns of Margiana were *Antiocheiu Margiane*, *Jasonion*, and *Nisaia*. The first is mentioned by numerous authorities : by Ptolemy and his copyist, Ammianus ; by Pliny and his copyist, Solinus ; as well as by Strabo and Isidorus of Charax.

Antiocheia, the capital of Margiana, was named after Antiochus Soter. According to Pliny, it was originally founded by Alexander the Great, and named Alexandria ; but, "having been destroyed by the barbarians, it was rebuilt by Antiochus, the son of Seleucus, on the same site, like that of Seleucia, intersected by the River Margus, which flows in a divided stream through *Zotale*, and he desired that it should be named Antiochia."¹⁸ As I understand this difficult passage, the site of the restored city, intersected by the divided waters of the Margus, was, like that of Seleucia, intersected by the waters of the Tigris. But all the early editors understood Pliny to say that the restored city was named Seleucia ; and this view is corroborated by Solinus, who distinctly states that the rebuilt city was called Seleucia.¹⁹ Cellarius, however, and the modern editors are unanimous in rejecting *Seleuciam*, for which they read *Syrilmnam*, apparently as a correction of *Syrianam*, which is the reading adopted by Philemon Holland. Mr. Riley translates *Syriam* as "a Syrian city ;" but I think that the term must refer to the site, and I would therefore render it, "like the Syrian city," that is, of Seleucia on the Tigris.

¹⁸ Nat. Hist. vi. 18, "Qua diruta a barbaris, Antiochus Seleuci filius eodem loco restituit *Seleuciam*, interfluente Margo, qui corruvatur in *Zotale*, maluerat illam Antiochiam appellari."

¹⁹ C. 51, "Quam mox a barbaris excisam, Antiochus Seleuci filius reformavit, et de nuncupatione domus suæ dixit *Seleuciam*."

The position of Antiocheia Margiane has always been identified with that of Merv; but I think that the smaller city of *Meru-ur-Rud* has a better claim to this distinction. Ptolemy places Jasonion at the junction of the Margus with another stream from the Sariphan mountains, which is most probably the lower course of the *Arius*, or *Hari-rud*, after the junction of the *Tejend*. The *Hari River* does not now reach the *Murgháb*, but it formerly joined it in the neighbourhood of *Meru Shah-i-ján*, or *Shah Jehán*, which latter title may perhaps be the original of *Jasonion*. According to Ptolemy, Antiocheia was to the south-east of Jasonion, which corresponds precisely with the position of *Meru-ur-Rud* of the Arab geographers, or the *Maru-chak* of the present day. In support of this opinion, I may cite the statement of Curtius that Alexander "selected sites for six new cities in the neighbourhood of *Marginia*—two seated towards the south, and four towards the east, at moderate intervals, that the garrisons might not have far to go for mutual aid."²⁰ The Margian Alexandria was therefore not *Marginia* itself, but some one of the six new cities; and, as it was situated on the Margus, I conclude that it must have been the modern *Maru-chak*, or *Maru-ur-Rud* of the early Arab geographers. Pliny's description of the site as intersected by the divided waters of the Margus is specially true of *Maru-ur-Rud*, of which Edrisi says: "L'eau est amenée par un grand nombre de canaux à la ville."²¹ For this reason the Greeks called the Margus or

²⁰ Vit. Alex., vii. 10, "Superatis deinde amnibus Ocho et Oxo, ad urbem Marginiam pervenit. Circa eam sex oppidis condendis electa sedes est; duo ad meridiem versa, quatuor spectantia orientem, modicis inter se spatiis distabant, ne procul repetendum esset mutuum auxilium."

²¹ Jaubert's Translation, i. 466.

Murghâb River the *Epardus*, or Irrigator.²² Maru-ur-Rud was the capital of some of the early Arab governors. According to Pliny, Antiochia was situated in the fertile district of *Zocale*, or *Zothale*, or *Itale*, from which I infer that the name of the city may have been *Antiocheia Zocalene* or *Iotalene*, as a monogram, forming the letters ΙΩ, is common on the coins of Antiochus II.

Nisaia is most probably the *Neshin* of the Arab geographers, which was situated in Gharjistân, on the Upper Murghâb, to the south-east of Merv.

ARIA.

The chief cities of Aria, according to Ptolemy, were *Bitaza*, *Areia*, *Alexandreia in Ariis*, *Siphare*, *Soteira*, and *Zimyra*. Strabo names only three cities, *Artakaëne*, *Alexandreia*, and *Achaia*, all of which were called after their founders. Isidorus likewise gives three cities, *Kandake*, *Artakaan*, and *Alexandreia in Ariis*. Pliny mentions *Artacoana*, *Alexandria* on the Arius, and *Artacabene*, and in another place *Achaïs*, which I take to be the same as the *Achaia* of Strabo.

Bitaza, or *Bitaxa*, which Ptolemy places on a branch of the Arius River, amongst the Nisæi, is almost certainly the ancient city of *Tûs*, on the Tejend branch of the Hari Rud, in the district of Nishapur. I believe also that *Tûs* is the *Susa* of Arrian.²³

Areia of Ptolemy is not mentioned by any other authority; not even by his copyist, Ammianus. Judging from its position on the western frontier of Aria, near the *Masdoranus* mountain, I infer that it may be the fort of *Muzdarân*, at the entrance of the Darband Pass. As

²² Arrian, *Anabasis*, iv. 6. ²³ Arrian, *Anabasis*, iii. 25.

the people in the immediate vicinity of Areia are named *Mazorani*, or *Masdorani*, this identification seems highly probable.

Alexandreia in Ariis.—Wilson identified Areia with Herât; but as the measurements of Alexander's surveyors were made to and from Alexandreia, and as Herât has always been a position of importance, and is traditionally said to have been built by Alexander, I think that Herât has a very strong claim to be identified with Alexandreia. We know also from Pliny that the *Arius* River flowed past the Greek city, as the *Hari Rûd* now flows past Herât.

Artakoana is mentioned by Arrian as the ancient capital of Aria, which contained the royal palace. All the original authorities agree in describing it as a separate city, distinct from Alexandreia, while all the modern writers are unanimous in identifying them as the same city. I think it most probable that they were two distinct but contiguous cities, forming one capital, which was called *Alexandreia* by the Macedonians, and *Artakoana* by the natives of the country, and perhaps also by the Greeks.

Soteira is mentioned by Ptolemy and Ammianus, and by Stephanus Byzantinus, who states that it was founded by Antiochus Soter. As Pliny²⁴ describes *Artacabene* as a very ancient and beautiful city, which was strengthened by Antiochus, I have a suspicion that *Soteira* was only a new name for the old capital of *Artakoana* or *Alexandreia*. As we have an exactly similar instance in the rebuilding and renaming of Antiocheia Margiane, it seems highly probable that Antiochus Soter may have given his title to the neighbouring city of Herât.

²⁴ Nat. Hist., vi. 23.

Achaïs is mentioned by Pliny just before his notice of the Derbices, a well-known nomad people of Margiana. He states that the city was originally founded by Alexander as *Heraclea*; but, having been destroyed, it was rebuilt by Antiochus, and named *Achaïs*.²⁵ Solinus gives the same name, but places the city amongst the Caspii. The *Achaia* of Strabo, however, was a city of Aria. I conclude, therefore, that *Achaïs*, or *Achaia*, was in the extreme north-west corner of Aria, on the western frontier of Margiana, and either at or near the ancient city of *Sarakhs*, which is probably the *Sirok* of Isidor, and the *Sariga* of Ptolemy.

DRANGIANA.

The principal cities of Drangiana noted by Ptolemy are *Prophthasia*, *Ariaspe*, and *Pharazana*. Isidorus mentions only *Parin* and *Korok* in Drangiana proper; but in *Sakastene*, which certainly formed a part of the ancient Drangiana, as its name is still preserved in Sejestân and Seistân, he notices several towns, as *Barda*, *Min*, *Palakenti*, and *Sigal*, the capital. It is highly probable also that Isidorus's Arian district of *Anabon* properly belonged to Drangiana, as its chief city, named *Phra*, is almost certainly the modern Furrah.

Prophthasia is mentioned by both Strabo and Pliny in their accounts of the marches of Alexander. The former places it at 1,500 or 1,600 stadia, equal to 183 to 200 Roman miles, from Alexandria in Aria, while Pliny makes the distance 199 Roman miles, or from 172 to 183 British miles. Wilson has identified it with *Peshâwarun*, an old city to the north of the *Hâmân*, or Lake of Seistan, which is about 180 miles to the south of Herât.

²⁵ Nat. Hist. vi. 18; also Solinus, c. 48.

Palakenti of Isidorus is most probably represented by Pulaki on the Helmand, which, according to Christie, still possesses immense ruins.

ARACHOSIA.

The chief cities of Arachosia noted by Ptolemy are *Azôla*, *Phôklis*, *Alexandreia*, and *Arachotus*. Isidorus names *Biüt*, *Pharsaga*, *Chorochoad*, *Demetrias*, and *Alexandropolis*, the capital, which was seated on the Arachotus River. Pliny also notices *Arachosia*, with its river and city of the same name.

Azôla, or *Ozôla*, is most probably the *Ho-sa-lo* of the Chinese pilgrim, Hwen Thsang, which I have identified with *Guzar*, or *Guzaristan*, on the Upper Helmand.

Phôklis may be either Kelat-i-Ghilji on the Turnak River, between Ghazni and Kandahar, or Ghazni itself. I think also that it must be the *Demetrias* of Isidorus, as the place named after the Bactrian king was most probably the stronghold of the country.

Alexandreia is probably Kandahar, and perhaps also the *Pharsaga* of Isidorus.

Arachôtus, the capital of the country, was situated on the Arachotus River, at 2000 stadia, or 230 British miles, according to Strabo, from the *τριοδον*, or meeting of the three roads to the north of Ortospana; but, according to Pliny, the distance was only $175 + 50 = 225$ Roman miles, or 206 British miles. The site of the capital must therefore be looked for somewhere to the north of Kelât-i-Ghilji, which is 225 miles from Kabul. Now in this very position stands the great ruined city of *Zohâk*, on the Upper Argandâb River, which is about 25 miles to the north of Kelât, and 200 miles from Kabul. This, therefore, would appear to be the most probable site of the

famous city of *Arachôtus*, or *Cutin*, which, according to Pliny, was founded by Semiramis.

Biüt, or *Bwr*, must, I think, be a mistake for *Bíst*, or *Bwr*, the great city at the junction of the Helmand and Argandâb, which is of vast antiquity, as I possess several bronze arrow-heads and other relics found in its ruins. It is perhaps the *Bigis* of Ptolemy, and is undoubtedly the *Beste* of Pliny, which he places on the Erymanthus, or Helmand river.

GEDROSIA.

According to Ptolemy, the capital of Gedrosia, named *Parsis*, was situated on the Arabis River, in the district of *Parisene*, and to the east of the *Parsiki* Montes. Its position has not been identified. In the time of Alexander, the capital was called *Pura*; but this would appear to have been a different place from the *Parsis* of Ptolemy, on a comparison of his coast-names with those of Nearchus.

PAROPAMISADÆ.

The chief towns of the Paropamisadæ noted by Ptolemy are *Naulibis*, *Kabura* or *Ortospana*, and *Parsiana*, and to the eastward *Kaisana* or *Karnasa*. *Ortospana* and *Alexandreia* are also mentioned by both Strabo and Pliny in their accounts of the measurements of Alexander's surveyors. The names of many other towns in the Kabul valley are recorded by Ptolemy, as well as by Alexander's historians; and as this was the principal seat of Greek power in Ariana, it is of special importance that the sites of all the larger cities should be fixed as accurately as possible, to enable us to make use of the mint monograms on the coins for the illustration of their history. But as

I have discussed all these sites in my forthcoming work on the Mediæval Geography of India, I need state here only the results of my investigations.

Ortospana, or *Kabura*, is Kabul, the people of which are named *Kabolitæ* by Ptolemy. His *Arguda* is most probably *Argandi*; his *Locharna* is *Logarh*; and his *Bagarda* is perhaps *Wardak*; all three being situated to the south of Kabul.

Alexandreia ad Caucasum, or *Alexandreia in Opianum*, as it is named by Pliny²⁶ and Stephanus of Byzantium,²⁷ I have identified with *Opîân*, 36 miles to the north of Kabul. *Alexandreia* is not found in Ptolemy's list of the towns of the Paropamisadæ; but as his *Niphandæ*, with a very slight alteration, may be read as *Ophiandæ*, I think that we may perhaps recognise the Greek capital under this apparently different name.

Kapisa, which is placed by Ptolemy close to *Niphandæ*, is said by Pliny to have been destroyed by Cyrus. It is most probably the modern town of *Kushân*, in the Ghorband valley, which gives name to the Kushân Pass.

Cartana is described by Pliny as situated at the foot of the Caucasus. It was probably therefore near *Alexandreia*, which agrees with Ptolemy's position of *Karsana*. Pliny adds that in later times it was called *Tetragonis*, or the "Square."²⁸ I have identified this city with the famous ruins of *Begrâm*, 27 miles to the north of Kabul, of which the principal mass is described by Masson as forming a perfect square.²⁹ From this ancient site Masson obtained upwards of thirty thousand coins in a few years.

²⁶ Nat. Hist., vi. 17.

²⁷ In voce *Alexandreia*, εν τῇ Ὀπιανῇ κατὰ τὴν Ἰνδικήν.

²⁸ Nat. Hist., vi. 25. The town said to be "sub Caucaso."

²⁹ Travels in Biluchistan, &c., iii. 155—159.

Nagara or *Dionysopolis* is mentioned only by Ptolemy ; but from its position to the south of the Kophes, about midway between Kabul and the Indus, it would appear to be the Nysa of Alexander's historians. Its site is more precisely fixed by the bearings and distances given by the Chinese pilgrims, from whose account Ptolemy's *Nagara* has been identified with the Sanskrit *Nagara-hāra*, and with the present ruined site of Begram, near Jalalabad.

Peukelaotis and *Peukelas* are the Greek names of a large city, situated on the northern bank of the Kabul River, and at a short distance from the Indus. The first name is derived from *Pukkalaoti*, and the other from *Pukkala*, which are the Pali forms of the Sanskrit *Pushkalavati* and *Pushkala*, a well-known city to the west of the Indus. The itineraries of the Chinese pilgrims enable us to fix its exact position at Hashtnagar, on the left bank of the Lower Swāt River. As I cannot find any monogram on the coins that represents this important city, I think that its name must have been changed by one of the earlier Greek princes ; and I would suggest the probability that it was named *Demetrias*, by Demetrius, the son of Euthydemus, when he conquered the Panjāb, and changed the name of Sangala to Euthydemia, in honour of his father.

Embolima is fixed by Ptolemy near the junction of the Kabul River with the Indus, which agrees with the accounts of Alexander's historians, who place it on the Indus, either at or near the confluence of the Kabul River. I take *Ἐμβολίμα* to be a pure Greek word, meaning a "projecting point" of land, such as is commonly formed at the junction of two rivers, and which is specially remarkable at the meeting of the Kabul River with the Indus. I have, therefore, identified Embolima with the

modern town of *Ohind* on the Indus, and with the *Utakhanda* of the Chinese pilgrims.

Aornos I have identified with the ruined hill-fort of *Rânigat*, above *Nogrâm*, which, like the famous fort captured by Alexander, is accessible only by a single path cut in the rock.

PENTAPOTAMIA OR PANJÂB.

The chief towns of the Panjâb noted by Ptolemy are *Bukephala* and *Kaspeira*; but we know from the Buddhist chronicles, as well as from Alexander's historians, that *Taxila* and *Sangala* were amongst the principal places of the country prior to the Christian era.

Taxila was the capital of the *Sindh Sâgar* Doâb at the time of Alexander's expedition; but, after Seleukus Nikator had ceded his Indian provinces to Chandra Gupta, it became the head-quarters of the Indian governor of the Panjâb. There Asoka held his court in the following reign, and there resided the satraps of the Greek kings, and of their successors, the Indo-Scythian princes of Ariana and India, for upwards of two centuries. It seems probable that the name was changed during the Greek occupation, as I find the monograms of *Taxila* on the coins of the earlier kings only. Now we know from Philostratus that this city possessed a famous temple of the Sun; and I am therefore inclined to think that *Taxila* may have been called *Heliopolis*, or *Apollôneia*, either by Eukratides or by one of his successors, Heliokles or Apollodotus. The position of *Taxila* I have identified with the extensive ruins around *Shâhdheri*, which are situated 8 miles to the east of Hasan Abdâl, 36 miles from the Indus at *Ohind*, and 20 miles to the north-west of *Râwal Pindi*.

Bukephala was founded by Alexander on the site of his camp on the Hydaspes, which I have identified with Jalâlpur.

Nikaia was also founded by Alexander on the battlefield where he defeated Porus. I have identified the site of this city with that of *Mong*, an ancient town on the eastern bank of the Hydaspes, opposite Jalâlpur.

Sagala or *Euthydemia* of Ptolemy is admitted by general consent to be the Sangala of Alexander's historians, and the *Sâkala* of the Buddhists and Brahmans. Its position I have identified with that of a precipitous curved hill the *Rechna Doâb*, sixty miles to the westward of Lahor. A swamp still exists at the foot of the hill covering the hollow, and I found traces of brick fortifications at the east end, where the wall joined the hill. The hill itself is still called *Sangala-wâla-Tiba*, or the "Sangala hill;" but the city is said to have been named *Uttamnagar*, which at once recalls the *Euthydemia* of Ptolemy.

Kaspeira is noted by Ptolemy as the capital of the *Kaspeiræi*. He places it at a bend on the lower course of the *Rhuadis* or Râvi, just above its junction with the *Chenâb*. The position of *Kaspeira*, therefore, corresponds exactly with that of the great city of Multân, which is situated on the old bank of the Ravi, at the point where the former channel changes its course from south-east to east. Now the most ancient name of Multân is said to have been *Kasyapa-pura*, that is, the "town of *Kasyapa*," or the Sun. This is usually pronounced *Kasap-pur*, which I take to be the original of Ptolemy's *Kaspeira*. The great antiquity of Multan is undoubted; and as the name of *Kasyapapura* is mentioned by Abu Rihân in the 11th century, I think that it has a very strong claim to be identified with the *Kaspapuros* of

Hekataeus and Herodotus, from which town Skylax began his voyage, in the reign of Darius, the son of Hystaspes.

SINDH.

The chief towns on the Lower Indus were the capitals of *Musikanus*, *Oxykanus*, and *Sambus*, above the Delta, and of *Mæris* within the delta. To these may be added *Harmatelia*, or the City of Brahmans, which would appear to have belonged to Musikanus. The first I have identified with *Alor*, which was perhaps the *Binagara* of Ptolemy, as he places it on the Indus, to the east of *Oskana*, the probable capital of Oxykanus. The latter I have identified with *Mahorta*, a ruined fortress, ten miles from Larkâna. The capital of Sambus, named *Sindomâna*, has been recognised by every inquirer in the modern *Sehwan*, a lofty fortress on the west bank of the Indus.

Harmatelia of Diodorus is the Brahman city of Curtius and Arrian, which I have identified with *Brahmasthanala*, or *Brâhmânabâd*. The ruins of this famous city still exist near an old bed of the Indus, at 47 miles to the north-east of Haidarabad. This place is now known as *Bambhrahathul*, or the "Ruined Tower." The coins found in these ruins by Mr. Bellasis were chiefly Muhammadan; but as the explorer's excavations were very limited, it is most probable that they were confined to the later Muhammadan capital of Mansura, and that the old Hindu city still remains to be explored.

Patala, the capital of the delta, I have identified with the *Pitasila* of the Chinese pilgrim, Hwen Thsang, and with the modern Haidarâbâd, or *Nirunkot*, as it was called at the time of the Muhammadan invasion.

Minnagar I have identified with *Manhâbari* of the Arab geographers, and with the modern *Thatha*.

Barbari of Ptolemy, or the *Barbarike Emporium* of the Periplus, is probably *Bamblâra* on the Ghâra creek, which was formerly a branch of the Indus.

THE ARIAN AND INDIAN ALPHABETS.

On the coins of the Seleukidæ the legends are confined to the Greek language and characters; but the founders of the independent Greek kingdoms of Ariana and India adopted the practice of giving the Greek legends on the obverse of their coins, and a translation on the reverse in the language and alphabetical characters of their native subjects. Thus, on the square copper coins of Agathokles we find the Greek legend ΒΑΣΙΛΕΩΣ ΑΓΑΘΟΚΛΕΟΥΣ, and on the reverse a *translation* of the title, with a transcript of the king's name, in Indian characters, which I read as *Rajine Agathuklayesa*—"of King Agathokles." On the reverse of the similar coins of Pantaleon, the king's name is transcribed in Indian characters as *Pantalevasa*.³⁰ The title of *Rājine*, or *Rājino*, has not hitherto been read. The first letter is a slightly waved line, instead of the usual straight stroke of Asoka's inscriptions; but this wavy form of the letter R is found in the short inscriptions on the ancient Buddhist pillars at Gaya. On the best coins, the letter is inflected with the long vowel *ā*, thus making *Rā*. The second character, *ji*, also differs in form from the standard letter of Asoka's edicts; but it agrees with that of the great rock inscription at Khalsi, and of some of the shorter inscriptions at Sānchi, near

³⁰ See A and B in the accompanying plate of the Arian and Indian Alphabets.

Bhilsa.³¹ The last letter is *ne* on the coins of Agathokles, and *no* on those of Pantaleon. The three characters therefore read *Rājine*, or *Rājino*, which is the regular *Pali* form of the Sanskrit possessive *Rājnya*, "of the king."

The name of Agathokles is also found inscribed in Arian characters on a rare copper coin, which offers on one side the legend No. 2, or *Akathukreyasa*, and on the other side the legend No. 1, which I read as *Hinduja Sāme*, or "lord of the Indians." *Sāmi* is the regular *Pali* form of the Sanskrit *Swāmin*,³² and takes *sāme* in the genitive. The legend is therefore equivalent to the Greek Ἰνδῶν βασιλεως, and the *regis Indorum* of Justin.

The Greek princes of Bactria, Diodotus and his son of the same name, with Antimachus Theos and Euthydemus, use Greek legends only; but all the Greek princes of Ariana and India, nearly thirty in number, make use of the Arian language and characters on the reverses of their coins.

The language used in the Arian translations of the titles is purely Indian; but the Arian alphabet has nothing in common with the Indian alphabet, save the adoption of a series of cerebral letters to express certain sounds which are peculiar to the dialects of India. The two alphabets are even read in different directions—the Indian from left to right, as at present, and the Arian from right to left, like all others of Semitic origin. The origin of the Arian alphabet has been ably discussed by Mr. E. Thomas,³³ who concludes that it is cognate with the Phœnician. This also was the opinion of Gesenius, as he couples the inscriptions on the coins of the Arian Greeks

³¹ See Bhilsa Topes, Plate xvi., insers. Nos. 3 and 5.

³² Lassen, Institutiones Linguae Præcriticæ, p. 257.

³³ Numismatic Chronicle, New Series, iii., 229.

with those on the coins of the Achæmenidæ and Arsakidæ of Persia, and describes them as bearing legends "Græcis et Persicis literis inscripta."³⁴ In Asoka's inscription on the Kapurdigiri rock, which is the earliest Arian record that has yet been found, the alphabet is already mature, with all the cerebral letters complete. At present, therefore, we possess no data for determining even the probable period when it was first employed; but, from its wide-spread use over all the provinces of Ariana and India subject to the Eastern Greeks, it could not have been of very recent origin in B.C. 250.

The Arian inscriptions hitherto discovered range from B.C. 250, in the time of Asoka, to A.D. 100, or perhaps even later. The principal records were found at Wardak, to the south of Kabul; at Hidda, on the Kabul river; at Kapurdigiri, to the north-east of Peshâwar; at Shahdheri, or the ancient Taxila; at Mânikyâla; and at Kangra, on the Bias River, in the Eastern Punjâb. But the coins bearing Arian inscriptions have a much greater range, as they are found in considerable numbers, from the shores of the Hâmûn Lake, in Drangiana, to the banks of the Jumna and the Delta of the Indus. Throughout this wide extent of country the Arian alphabet was in general use for upwards of three centuries. But the language was Indian, as the coins of the Greek Eukratides, the Indo-Scythian Kadphises, and the Parthian Pakores alike record the well-known Hindu title of *Maharaja*.

The Arian and Indian alphabets are exhibited in the accompanying plate. The discovery of the Indian alphabet is wholly due to James Prinsep, and, had he lived, that of the Arian alphabet would have been his also. But,

³⁴ *Scripturæ Linguaeque Phœniciae*, i., 74.

unfortunately, he was cut off in the midst of his brilliant discoveries, leaving the task to be slowly completed by others. The values of most of the unknown characters were afterwards recognised by myself, and the few still remaining were discovered by Mr. Norris during his examination of the Kapurdigiri version of Asoka's edicts. The resolution of the compound letters was a much more difficult task, as the forms of the combined characters are generally so much changed as not to be easily recognised. But most of them are now known—some having been discovered by myself at an early date, and the others simultaneously by Mr. Dowson and myself in 1864, on reviewing all the known Arian inscriptions.

The first discoveries in the Arian alphabet were made by Masson,³⁵ who pointed out to James Prinsep the native transcripts of the Greek names of Menander, Apollodotus, and Hermæus, and the native equivalents of the Greek titles of ΒΑΣΙΛΕΥΣ and ΣΩΤΗΡΟΣ. This clue was eagerly followed up by Prinsep, who successfully recognised no less than sixteen, or just one-half, of the thirty-three letters of the Arian alphabet. He discovered, also, three out of the five initial vowels, and two of the five medial vowels. I will now make a brief review of the characters in detail, giving in each case the authority for the value assigned, and the name of the discoverer. This review is rendered necessary by the discovery of some new names and titles, which were unknown to Mr. Thomas, as well as by a few slight but important differences in the readings of some of the known names.

A. The initial vowel was determined by Prinsep from the name of Apollodotus. The short medial *a* is inherent

³⁵ Journal of the Bengal Asiatic Society, 1835, p. 329.

in all consonants, and the long medial *d* is represented by a dot at the foot of the consonant.

I. The initial form was happily guessed by Prinsep from its cross stroke, resembling that of the medial *i* attached to the consonants, which was well determined from the names of Eukratides, Antimachus, and Anti-alkidas.

U. The initial form of this letter was supposed by Prinsep to be represented by the second letter in the name of Eukratides; but he admitted that "other evidence was wanting."³⁶ This character, however, is the letter *v*, inflected with the vowel *u*, and the true reading of the Arian rendering of the name is *Evukratidasa*. We have an analogous instance of a Pali rendering of a diphthong, in *chāvu* for *chau*. The true initial *u* is given by Norris, from the Kapurdigiri inscription. It is simply the letter *a* with a footstroke to the left. The two forms of *u* initial and *vu* are found on the coins of Kozola Kadaphes, in the title of *Yaiāsa*, or *Yavugasa*, in which with the preceding short vowel *a* they probably represent the diphthong *au*, equivalent to AO of ZAOOY.³⁷

The medial *u* is formed by attaching the same footstroke to all the consonants, as in *Akathukreyasa* (No. 2) and in *Apulaphanasa* (No. 24). It is also found in the word *putra*, or "son," which is so frequently used on the coins of the earlier Indo-Scythians. In the later examples it takes the form either of a loop or of two separate footstrokes.

O. The initial *o* does not occur on the coins, but was

³⁶ Journal of the Bengal Asiatic Society, 1888, p. 639.

³⁷ As the Turks change *r* to *z*, I take the ZAO of the earlier coins to be the PAO of the later coins.

found by Mr. Norris in the Kapurdigiri inscription, in the word *orodhaneshu*, corresponding to *olodhanesu* of the Indian Pali version at Dhauri. The medial *o*, which is of common occurrence in the inscriptions, is rarely found on the coins. It is, however, well defined in the names of *Zoilus* and *Artemidorus* (Nos. 7 and 17), where it is represented by a short downward stroke attached to the upper or horizontal limb of the consonant. This vowel was first determined by myself from the name of Gondophares, and was afterwards verified by my readings of the names of Moas and Zeionises.

E. The initial *e* was one of the first letters recognised by Prinsep from the name of Eukratides, and his determination has since been verified by the native transcript of the name of *Epander* (No. 22), as well as by the inscriptions. The medial form was also an early discovery from the names of *Heliokles*, *Menander*, and *Hermæus* (Nos. 5, 11, and 25), and it has since been amply confirmed by its occurrence in several new names.

A reference to the plate will show the rare simplicity of this scheme of vowels, each of which is formed by the addition of a different short stroke to the standard initial *a*; while, as observed by Mr. Thomas, "the same discriminating signs suffice, in combination with consonants, to represent the medial form of their several fundamental letters." In the accompanying plate, I have given the letter *k* inflected with each of the vowels, from which it will be easily seen how each may be attached to any of the consonants.

K is found in the names of Eukratides, Heliokles, and Antialkidas (Nos. 4, 5, and 15), and was recognised by Prinsep in 1838, with its inflections *ki* and *ku*, and in a compound form as *kr*.

KH was identified by Prinsep as the representative of the Greek χ in the name of Antimachus (No. 12), and its value has since been confirmed by its occurrence in the name of Archebius (No. 15).

G was unknown to Prinsep, and was first discovered by myself on the coins of Gondophares and his nephew Abdagases; and its value has since been verified by Mr. Norris, from the Kapurdigiri inscription.

GH was also a discovery of mine, from the bilingual coins of *Kumanda Amogha-bhuti*; and its value has since been confirmed by Mr. Norris.

NG has not yet been met with.

CH and CHH were first recognised by Mr. Norris; but a variant form of the aspirate was discovered by myself, in the title of *chhatrapa*, on the coins of the satraps *Zeionises* and *Rájubula*. The identity of *Chhatrapa* with the Sanskrit *Kshatrapa* and the Greek *Σατράπης* has been admitted by every scholar, except the late Professor H. H. Wilson. With his usual scepticism on most points not emanating from a Brahmanical source, he expressed his opinion³⁸ that "the legends of these coins had not been satisfactorily read; and he especially objected to the reading of the word *Kshatrapasa*, or satrap, the letters of which were very doubtful, and no other evidence being found to prove that this title had ever been borne by a Hindu prince." But as I had shown the accuracy of my reading by applying the value of the letter *chh* to the term *sachha-dharma*, or "true *dharma*," Wilson's objection was a mere ebullition of his accustomed scepticism. His statement that no other evidence had been found to prove that the title of satrap had ever

³⁸ London Athenæum, 15th March, 1856.

been borne by a Hindu prince is strangely incorrect, as Prinsep had found the title in the Girnar Bridge inscription of Rudra Dâma, a Hindu prince; and Wilson's own translation of this inscription, afterwards furnished to Mr. Thomas,³⁹ contains the title of *Mahakshatrâpa* applied to Rudra Dâma.

J was discovered by Prinsep in the well-known title of *Maharajasa* (No. 27), which is the translation of ΒΑΣΙΛΕΩΣ; and its value was confirmed by the native translation of ΝΙΚΗΦΟΡΟΥ as *jayadharasa*, and by the more high-sounding title of the later kings as *rajatirajasa*, or "king of kings."

JH has not been found in the inscriptions; but I agree with Mr. Thomas that the initial letter of the native transcript of the name of *Zoilus* is most probably this Arian letter inflected with the vowel *o* (No. 7). The common *j* is used for the initial of *Zeionises*, and the letter *y* in the names of Azas and Azilises. The initial letter of *Zoilus* differs from the common *j* in having an additional sidestroke.

NY was first recognised by Mr. Norris in the Kapur-digiri inscription; and I have since found it in the word *rajnya*, on a well-preserved silver coin of *Kunanda*.

T. The cerebral and dental letters were not discriminated by Prinsep; but, "from the variety of symbols to which the form of *d* and *t* must be ascribed, he was inclined to think that the alphabet was provided with the full complement."⁴⁰ They were first discriminated by Mr. Norris from the Kapur-digiri inscription, and at least two of them have since been recognised on the coins.

³⁹ E. Thomas, Prinsep's *Indian Antiquities*, ii., 68.

⁴⁰ *Journal of the Bengal Asiatic Society*, 1838, p. 641.

TH is found in the name of *Theophilus*, inflected with the vowel *e* (No. 19). It also occurs in the Arian transcript of the Macedonian month Artemisius, as *Arthamisiyasa*, and in one of my Yusufzai inscriptions in the well-known word *prathame*, "first," which I recognised before the publication of Mr. Norris's paper on the Kapurdigiri inscription. But, as the Sanskrit *prathama* is spelt with the dental *th*, there must be an error in one of the inscriptions.

D is found in the name of Apollodotus (No. 6), interchangeably with the dental letter. It occurs also in *apaḍi-hatasa* (No. 31), as the translation of ANIKHTOY.

N is not easily discriminated from the dental letter, but it is found in the name of the Hindu month of *Srāvana*, in one of my Yusufzai inscriptions, and in numerous words in the great Kapurdigiri record.

T was early recognised by Prinsep in the names of Eukratides and Apollodotus (Nos. 4 and 6).

TH has been found only in the Kapurdigiri inscription.

D was recognised by Prinsep in the names of Eukratides, Apollodotus, and Diomedes.

DH was also determined by Prinsep from the word *dhramikasa*, which is the Arian translation of ΔΙΚΑΙΟΥ (No. 35).

N was recognised by Prinsep in the names of Philoxenes and Menander (Nos 13 and 11).

P was also determined by Prinsep from the name of Apollodotus. On my bilingual coin of Demetrius this letter has a horizontal footstroke (No. 30), in the word *aparajitasa*, the translation of ANIKHTOY.

PH is found in two different forms on the earlier and later coins, both of which were first recognised by myself. The earlier form occurs in the names of Philoxenes,

Telephus, and Apollophanes ; and the later form on the coins of Gondophares.

B was first made known by Mr. Norris from the Kapur-digiri inscription, and has since been found on the coins of Archebius (No. 16).

BH was originally discovered by myself in the word *bhrāta-putrasa*, or "brother's son," as the translation of ΑΔΕΛΦΙΑΩΣ, on the coins of Abdagases, and in the word *bhrātasa*, or "brother," as the translation of ΑΔΕΛΦΟΥ, on the coins of Vonones and Spalahores. This discovery I applied to the coins of *Kunanda*, on which I was the first to read his title of *Amogha-bhuti*.

M was recognised by Prinsep in the names of Menander and Hermæus, and in the well-known title of Maharaja.

Y was determined by Prinsep from the word *jayadhara*, as the translation of ΝΙΚΗΦΟΡΟΥ, and also from the transcript of the name of Hermæus, which is rendered by *Heramayasa*. But the transcript of Kalliope as *Kaliyapaya* is decisive, as *ya* is the feminine possessive termination.

R was also determined by Prinsep from the name of Hermæus, and its value was afterwards fully confirmed by his reading of *maharajasa*.

L was recognised by Prinsep in the names of Apollodotus, Philoxenes, Lysias, and Antialkidas ; and it has since been found in several *new* names.

V was found by Mr. Norris in the Kapurdigiri inscription, in *devānam*, *savata*, *vijaya*, and other well-known Indian words. I had previously recognised the same character on the coins of Abdagases, where it is used as the equivalent of the Greek B, which is pronounced as *v* by the modern Greeks.

H was recognised by Prinsep in the name of Heliokles, and in the title of *Maharaja*.

S was also recognised by Prinsep in the name of Lysias (No. 14), and in the possessive termination of all the Arian translations of the Greek titles, as *maharajasa*, *mahatasa*, &c.

Ş is found in the name of Spalirises, in which it was discriminated by Prinsep from the dental s.

SH is found on the coins of Azilises, whose name is transcribed as *Ayilishasa*. Its value, however, was first definitely fixed by Mr. Norris from the Kapurdigiri inscription.

In the accompanying plate I have inserted all the principal compound letters of both alphabets, that have yet been found either on coins or in inscriptions. Many of these are apparent at the first glance, and require no comment; but others, like the combinations with the prefixed *r*, are not so obvious, and require some explanation of the grounds on which their values have been determined.

rkhe. This character is found in the transcript of the name of Archebius (No. 16), which I read as *Arkhebiyasa*. The horizontal line of the *r* is placed across the lower limb of the *hh*.

rt is found in the transcript of the name of Artemidorus (No. 17).

rth occurs in the Wardak inscription, in *Arthamisiyasa*, the Arian transcript of the Macedonian month Artemisius. In this compound, the tail of the *th* is turned upwards to join the horizontal stroke of the *r*. In the earlier form the *r* was simply placed across the lower member of the other letter.

rm was first made known by me in 1853 as occurring

in the names of *Indra Varma* and *Aspa Varma*, and in the word *dharma*. It is formed in the same way as the others, by placing the upper limb of the *r* across the right horn of the *m*, which is lengthened for the purpose of forming the junction.

vri. This character occurs on a small silver coin in my own possession, which has a bilingual legend in Arian and Indian Pali. The coin is of *Vrishni Raja*, and the value of the Arian compound is ascertained by the corresponding Indian character which is placed beside it in the plate.

st was first recognised by myself in the native transcripts of the names of Straton and Hippostratus (Nos. 10 and 20), and was afterwards confirmed by my reading of the Greek title of Στρατηγός on the coins of Aspa Varma as *Strategasa*.

sp was first recognised by Prinsep in the names of Spalahores and Spalirises, and was afterwards verified by my own reading of the name of *Aspa Varma*, the general of the Indo-Scythian prince Azas.

sv is found on the coins of Himakadphises, in the well-known titles of *Maheşvara* and *Sarva-lokeşvara*.

shk is found in the names of Kanishka and Huvishka in the inscriptions from Mânikyâla, Zedi, and Wardak. The combination was discovered by myself in the first inscription in 1841, and was confirmed in 1860 by my reading of the name of Huvishka in the Wardak inscription.

The transcripts of the Greek names have been sufficiently discussed in my account of the alphabet; but the translations of the titles require a separate notice. They will be found in the plate immediately after the names.

No. 27. *Maharajasa*, "of the king." This is the usual

rendering of ΒΑΣΙΛΕΩΣ, which is found on the coins of all the Greek kings from Demetrius and Eukratides to Hermæus and Apollophanes. But, on the coins of Panteleon and Agathokles, the Indian Pali translation is *rajino*, as I have already noticed.

The more pompous title of ΒΑΣΙΛΕΩΣ ΒΑΣΙΛΕΩΝ is not used by any of the Greek princes of Ariana and India.⁴¹ Its first appearance is on the coins of the Indo-Scythian king Moas, with the simple translation of *Rajatirajasa* for the Sanskrit *Rajadhirajasya*, or "king of kings." His successors, Azas and Azilises, adopted the still more sounding translation of *maharajasa rajarajasa*, or "great king, king of kings," without making any change in the Greek title.

No. 23, *trāddāsa* is my reading of the translation of ΣΩΤΗΡΟΣ, from *trānam*, "safety," and *dātri*, "a giver," or *trāddātri* in Sanskrit, which becomes *trāddāta* in Pali. Professor Lassen proposed *tāddāra* as the Prakrit form of the Sanskrit *trātā*, "preserver."

⁴¹ I am aware that Raoul Rochette (Journal des Savants, 1888, p. 753) has published a coin with the legend ΒΑΣΙΛΕΩΣ ΒΑ— ΑΠΟΛΛΟΔΟΤΟΥ; but as his engraving shows the very imperfect state of the coin, I infer that the legend was only partially visible, which is confirmed by the jumbled arrangement of the letters, the second instead of the first letter of the title being opposite the last letter of the name—a departure from symmetry which is quite unknown throughout the whole series of the Greek coins of Ariana and India. From the description of the device, as surrounded by a square of "elongated globules," and from the position of the name opposite the title, I recognise the coin as a specimen of the class which bears the figure of Apollo standing to the right, and holding out his bow, with the legend ΒΑΣΙΛΕΩΣ ΣΩΤΗΡΟΣ ΚΑΙ ΦΙΛΟΠΑΤΟΡΟΣ ΑΠΟΛΛΟΔΟΤΟΥ arranged on three sides. The two letters following the initial title, which R. Rochette has read as ΒΑ, must therefore be ΣΩ of ΣΩΤΗΡΟΣ.

No. 29, *mahatasa*, the translation of ΜΕΓΑΛΟΥ, is the Sanskrit *mahat*, "great." On the common coins of Eukratides the title of ΒΑΣΙΛΕΥΣ ΜΕΓΑΛΟΥ is translated by the simple term *maharajasa*; but on the later coins this is expanded to *maharajasa rajadirajasa*, "of the great king, the king of kings." On the didrachms of Apollodotus the title of ΜΕΓΑΛΟΥ is left untranslated in the native legend.

No. 30, *aparajitasa* is the translation of ΑΝΙΚΗΤΟΥ, found on my unique bilingual coin of Demetrius. The term is pure Sanskrit, *aparājita*, "unconquered or invincible;" but it would seem not to have satisfied the critical taste of the later kings, as they are unanimous in their adoption of the term which follows, viz. :—

No. 31, *apaḍihatasa*, which is found on the coins of Philoxenes, Lysias, and Artemidorus. It is the spoken form of the Sanskrit *apratihata*, the "unbeaten or irresistible."

No. 32, *jayadharasa* is found on the coins of Antialcidas and Archebius as the translation of ΝΙΚΗΦΟΡΟΥ, and on those of Amyntas as the equivalent of ΝΙΚΑΤΟΡΟΣ. Its literal meaning is "victory-holder," from *jaya*, victory, and *dhara*, holder or possessor.

No. 33, *praticchasa* is found only on the coins of Straton, as the translation of ΕΠΙΦΑΝΟΥΣ. Mr. Thomas has suggested that either the Sanskrit *pratishṭhita*, "renowned," or possibly *pratiksha*, "venerable or respectable," may be the original of this term. But I think that the simpler form of *pratishṭhā*, "famous," is perhaps the true original of *praticchha*.

No. 34, *priyapitasa* is found only on some of the later coins of Straton as the translation of ΦΙΛΟΠΙΤΟΡΟΣ, which at once suggests the original Sanskrit form of

priyapitā, or "lover of his father," from *priya*, a lover, and *pitā*, father.

No. 35, *dhramikasa* was recognised by Prinsep as the translation of ΔΙΚΑΙΟΥ. The original Sanskrit form is *dharmika*, from *dharmma*, "law, justice." On some of the coins it takes the abbreviated form of *dhramiasa*.

The title of ΕΥΕΡΓΕΤΟΥ is found only on the unique silver coin of Telephus, which is now in the Bodleian Museum at Oxford. The upper parts of the letters are wanting; but they may be read, as suggested by Mr. Thomas, as *Kalāna-kramasa*, "of the beneficent," from the Sanskrit *Kalyāna-karmma*, "good works."

The only remaining Greek title, ΘΕΟΤΟΚΟΥ, which is found on the coins of Agathokleia, has no translation, as the Arian legend of her coins gives only the name and titles of her husband Straton.

CONSONANTS. VOWELS & COMPOUNDS										A	ḪAḪṬṬḪ	Agathuklayesa
ARIAN		INDIAN		ARIAN		INDIAN		ARIAN		B	ḪAḪṬḪ	Pantalavasa
B.C.	A.D.	B.C.	A.D.	B.C.	A.D.	B.C.	A.D.	B.C.	A.D.			
250	100	250	100	250	100	250	100	250	100	1	ḪPYṬḪ	Hinduiz Same
Ḫ	Ḫ	Ḫ	Ḫ	Ḫ	Ḫ	Ḫ	Ḫ	Ḫ	Ḫ	2	ḪAḪṬḪ	Alcathukereyasa
ḪḪ	Ḫ	Ḫ	Ḫ	Ḫ	Ḫ	Ḫ	Ḫ	Ḫ	Ḫ	3	ḪḪḪḪ	Deme
g	Ḫ	Ḫ	Ḫ	Ḫ	Ḫ	Ḫ	Ḫ	Ḫ	Ḫ	4	ḪḪḪḪḪ	Evukratidasa
gḪ	Ḫ	Ḫ	Ḫ	Ḫ	Ḫ	Ḫ	Ḫ	Ḫ	Ḫ	5	ḪAḪḪḪḪ	Heliyakreyasa
ng	Ḫ	Ḫ	Ḫ	Ḫ	Ḫ	Ḫ	Ḫ	Ḫ	Ḫ	6	ḪḪḪḪḪ	Apaladatas
ch	Ḫ	Ḫ	Ḫ	Ḫ	Ḫ	Ḫ	Ḫ	Ḫ	Ḫ	7	ḪḪḪḪ	Jhopilasa
chḪ	Ḫ	Ḫ	Ḫ	Ḫ	Ḫ	Ḫ	Ḫ	Ḫ	Ḫ	8	ḪḪḪḪḪ	Diamedasa
j	Ḫ	Ḫ	Ḫ	Ḫ	Ḫ	Ḫ	Ḫ	Ḫ	Ḫ	9	ḪAḪḪḪḪ	Diyanisayasa
ḪḪ	Ḫ	Ḫ	Ḫ	Ḫ	Ḫ	Ḫ	Ḫ	Ḫ	Ḫ	10	ḪḪḪḪ	Stratasa
ny	Ḫ	Ḫ	Ḫ	Ḫ	Ḫ	Ḫ	Ḫ	Ḫ	Ḫ	11	ḪḪḪḪ	Menadrusa
Ḫ	Ḫ	Ḫ	Ḫ	Ḫ	Ḫ	Ḫ	Ḫ	Ḫ	Ḫ	12	ḪḪḪḪḪ	Antimakhasa
ḪḪ	Ḫ	Ḫ	Ḫ	Ḫ	Ḫ	Ḫ	Ḫ	Ḫ	Ḫ	13	ḪḪḪḪḪ	Phulasinasa
ḪḪ	Ḫ	Ḫ	Ḫ	Ḫ	Ḫ	Ḫ	Ḫ	Ḫ	Ḫ	14	ḪḪḪḪ	Lisiasa
ḪḪ	Ḫ	Ḫ	Ḫ	Ḫ	Ḫ	Ḫ	Ḫ	Ḫ	Ḫ	15	ḪḪḪḪḪḪ	Antialikudasa
Ḫ	Ḫ	Ḫ	Ḫ	Ḫ	Ḫ	Ḫ	Ḫ	Ḫ	Ḫ	16	ḪAḪḪḪḪ	Arkhediyasa
Ḫ	Ḫ	Ḫ	Ḫ	Ḫ	Ḫ	Ḫ	Ḫ	Ḫ	Ḫ	17	ḪḪḪḪḪḪ	Artemidorasa
ḪḪ	Ḫ	Ḫ	Ḫ	Ḫ	Ḫ	Ḫ	Ḫ	Ḫ	Ḫ	18	ḪḪḪḪḪ	Amitasa
Ḫ	Ḫ	Ḫ	Ḫ	Ḫ	Ḫ	Ḫ	Ḫ	Ḫ	Ḫ	19	ḪḪḪḪḪ	Theophilasa
ḪḪ	Ḫ	Ḫ	Ḫ	Ḫ	Ḫ	Ḫ	Ḫ	Ḫ	Ḫ	20	ḪḪḪḪḪḪ	Hipastratasa
Ḫ	Ḫ	Ḫ	Ḫ	Ḫ	Ḫ	Ḫ	Ḫ	Ḫ	Ḫ	21	ḪḪḪḪḪ	Teliphasa
p	Ḫ	Ḫ	Ḫ	Ḫ	Ḫ	Ḫ	Ḫ	Ḫ	Ḫ	22	ḪḪḪḪḪ	Epadrasa
ph	Ḫ	Ḫ	Ḫ	Ḫ	Ḫ	Ḫ	Ḫ	Ḫ	Ḫ	23	ḪḪḪḪḪ	Nikiasa
Ḫ	Ḫ	Ḫ	Ḫ	Ḫ	Ḫ	Ḫ	Ḫ	Ḫ	Ḫ	24	ḪḪḪḪḪḪ	Apulaphanasa
ḪḪ	Ḫ	Ḫ	Ḫ	Ḫ	Ḫ	Ḫ	Ḫ	Ḫ	Ḫ	25	ḪAḪḪḪḪ	Heramayasa
m	Ḫ	Ḫ	Ḫ	Ḫ	Ḫ	Ḫ	Ḫ	Ḫ	Ḫ	26	ḪḪḪḪḪḪ	Kaliyapaya
y	Ḫ	Ḫ	Ḫ	Ḫ	Ḫ	Ḫ	Ḫ	Ḫ	Ḫ	27	ḪḪḪḪḪ	maharajasa
Ḫ	Ḫ	Ḫ	Ḫ	Ḫ	Ḫ	Ḫ	Ḫ	Ḫ	Ḫ	28	ḪḪḪḪḪ	tradatasa
Ḫ	Ḫ	Ḫ	Ḫ	Ḫ	Ḫ	Ḫ	Ḫ	Ḫ	Ḫ	29	ḪḪḪḪḪ	mahatasa
v	Ḫ	Ḫ	Ḫ	Ḫ	Ḫ	Ḫ	Ḫ	Ḫ	Ḫ	30	ḪḪḪḪḪḪ	aparajitasa
s	Ḫ	Ḫ	Ḫ	Ḫ	Ḫ	Ḫ	Ḫ	Ḫ	Ḫ	31	ḪḪḪḪḪḪ	apadihatasa
Ḫ	Ḫ	Ḫ	Ḫ	Ḫ	Ḫ	Ḫ	Ḫ	Ḫ	Ḫ	32	ḪḪḪḪḪ	jayadharasa
ḪḪ	Ḫ	Ḫ	Ḫ	Ḫ	Ḫ	Ḫ	Ḫ	Ḫ	Ḫ	33	ḪḪḪḪḪ	pratichasa
Ḫ	Ḫ	Ḫ	Ḫ	Ḫ	Ḫ	Ḫ	Ḫ	Ḫ	Ḫ	34	ḪḪḪḪḪḪ	priyapitasa
Ḫ	Ḫ	Ḫ	Ḫ	Ḫ	Ḫ	Ḫ	Ḫ	Ḫ	Ḫ	35	ḪḪḪḪḪḪ	dhramikasa

T. S. S. S.



VI.

AN ACCOUNT OF ANGLO-SAXON COINS AND GOLD
AND SILVER ORNAMENTS FOUND AT TREWHIDDLE,
NEAR ST. AUSTELL, CORNWALL, A.D. 1774.

AND SOME REMARKS ON OTHER ANGLO-SAXON HOARDS.

A SHORT notice of this discovery may be found in the ninth volume of "Archæologia" (page 187), written by the late Philip Rashleigh, Esq., of Menabilly, from which it appears that on November 8th, 1774, the discovery was made, during the process of "streaming" for tin, about seventeen feet below the surface, in a tenement, parcel of the manor of Trewiddle, in the valley between St. Austell and the sea, in the county of Cornwall.

That notice was read before the Society of Antiquaries in 1788, and is illustrated by a very accurately engraved plate (Archæologia, vol. ix. 187), which represents the silver ornaments, together with two articles in gold, but which gives a representation of only one of the coins of the common type of King Burgred. Scarcely any description of the ornaments is given; and although the coins were numerous, and comprised some very rare types, very little is said about them. It may be interesting to antiquaries that we should rescue from oblivion what can be learnt of this valuable hoard, before the knowledge of its component parts shall have suffered from lapse of time or from dispersion.

As to the *coins*, about 114 were secured and collected

from the workmen, who had a scramble for the treasures. Of these, seventy are preserved in my collection, which I inherited as the great-nephew of Mr. Philip Rashleigh, who first collected them from the workmen; five are preserved at Penrose, near Helston, Cornwall, in the collection of John Jope Rogers, Esq., who also possesses all the silver ornaments; and twelve others, now lost sight of, were long in the hands of the Rev. Richard Hennah, of St. Austell; and about twenty-seven were dispersed in various directions, and have never been described.

As to the *ornaments* found with the coins, it is believed that at first they all passed into the hands of John Rashleigh, Esq., of Penquite, Cornwall, whose son, the late Sir Colman Rashleigh, Bart., gave them to the Rev. Canon Rogers, of Penrose, the father of the present owner, John Jope Rogers, Esq., who has lately published an interesting account of this discovery in No. viii. of the Transactions of the Royal Institution of Cornwall, October, 1867.

The ornaments consisted of two gold objects (since lost), one of them having been a circular pendent ornament, enriched with filagree; a silver chalice-shaped cup, broken into several pieces, the hollow of the bowl having suffered much from oxidation; a silver cord (considered to have been a "*disciplinarium*") of curious twisted workmanship, terminating in four nobbed lashes, like a scourge, at one end, whilst the other end is looped and rove through a dark mottled amulet of glass; a penannular brooch; the tip of a belt; buckles; richly chased bands, supposed to have been bracelets; a long curved pin, the head of which is curiously fashioned with fourteen facets chased in various ornamental patterns, and partly nielloed. Of the

above ornaments, all of which are of a rare period, two articles are conspicuous, viz., the silver cup and the silver "disciplinarium." The Rev. Dr. Rock does not hesitate to pronounce the use of the latter to have been rightly conjectured. The former has been thought by some to have been a sacramental cup; but Dr. Rock and other eminent archaeologists think that its use was not sacred, but secular, as it is believed that sacramental cups of that date were never made with a rim at the edge, such as this has. Upon one embossed ring, or ferule of silver, a cross is engraved; and this symbol of Christianity, coupled with the use of the "disciplinarium," may have led to the conjecture that the cup was also of sacred use. Mr. C. S. Gilbert, in his "History of Cornwall" (vol. ii. 869), says that this silver cup contained the coins, when found.

The following is a list of the kings, with the number of their coins found at Trewiddle:—

A.D.	
757—796. Offa of Mercia	1
796—818. Coenvulf, ditto	2
820—824. Beornvulf, ditto	1
839—852. Berhtulf, ditto	10
852—874. Burgred, ditto	45
874. Ciolvulf, ditto	1
808—840. Eanred of Northumberland—silver penny (unique)	1
880—870. Ceolnoth, Archbishop of Canterbury	6
800—887. Ecgbearht, sole monarch	8
837—857. Ethelvulf, ditto	10
867—872. Ethelred, ditto	2
872—901. Alfred, ditto	2
814—840. Louis le Debonaire of France	1
Other Saxon pennies never described, about 29	

Total 114

Thus, the latest commencement of a reign, amongst these kings, is that of Ciolvulf, A.D. 874; so that the coins must have been secreted after that date. But as there are but two coins of Alfred, who commenced his reign in A.D. 872, and who reigned until a later period than any of the other kings whose coins were found at Trewiddle, it is probable that the treasure was buried about A.D. 876-7, or early in King Alfred's reign.

We learn from the Saxon Chronicle, that the Danish army invaded the south-west parts of England, and that Alfred drove them beyond Exeter, A.D. 877. Mention is also made of the Danes being on the coast of Devon and Cornwall, with twenty-three ships, in A.D. 878. Cornwall would then have been in a state of alarm and disquiet, especially about the coast; and the fear of a landing of the enemy in St. Austell bay may have occasioned the burial of this hoard in the pretty valley near the sea coast, where it was found, and where it had lain hid, unknown and undisturbed, for nine centuries.

The following coins are those which came into the possession of the late Philip Rashleigh, Esq., of Menabilly, and are now in my collection.

KINGS OF MERCIA.

OFFA. A.D. 757 to A.D. 796.

Type Ruding, pl. 4, 13, Hawkins, 66.

Obv.—∴ OFFA REX. The king's head in profile to the right, the bust reaching to the edge of the coin.

Rev.—IBBA. One letter in each angle of an ornamented cross, inclosed by a quatrefoil of fine work.
Weight 17½ grs.

COENVULF. A.D. 796 to A.D. 818.

Obv.—COENVULF REX. \bar{Y} Head in profile to the right.
Type Ruding, pl. 6, 12.

Rev.— \overline{Y} ERHEARDI YONETA. A double cross; no inner circle. Weight $22\frac{1}{2}$ grs.

The late Mr. Hennah, of St. Austell, had another coin of this type.

BEORNWULF. A.D. 820 to A.D. 824.

Type, this coin is engraved in Ruding, App., pl. 27.

Obv.—+ BEORNVULF REX. A very rude head in profile to the right, and within the inner circle.

Rev.—+ $\cdot\cdot\Omega\cdot\cdot$ ON $\cdot\cdot$ N $\cdot\cdot$ A $\cdot\cdot$ A cross crosslet, within a circle. Weight 22 grs.

BERHTULF. A.D. 839 to A.D. 852.

1. Type engraved in Ruding, App., pl. 27, 1.

Obv.—BERHTVULF REX. Head in profile to the right; bust to the edge of the coin.

Rev.—+ E \overline{A} NB \overline{A} LD YONE TA. The last two letters forming the type of the centre, and being divided by a long cross. Weight $14\frac{1}{2}$ grs.

2. Type engraved in Ruding, App., pl. 27, 2.

Obv.—BERHTYULF REX. A very rude head, as the last coin.

Rev.—+ BRID YONETA. In the centre of the coin the letter \overline{A} . Weight $13\frac{1}{2}$ grs.

3. *Obv.*—Legend and type as the last coin.

Rev.—+ BYRNY \overline{A} LD. A cross crosslet, with wedges connecting the extremities. Weight 18 grs.

4. *Obv.* and *Rev.*—Legends as the last coin; but the type on the reverse differs, inasmuch as the cross crosslet has *not* wedges at the extremities. Weight 18 grs.

5. Type engraved from this coin in Ruding, App., 27, 3.
The obverse as before; but the reverse has a large letter $\overline{\text{X}}$ in the centre of the coin.

This coin is broken; the fragment weighs $13\frac{1}{2}$ grs.

6. *Obv.* and *Rev.*—Legends and head as before; but the reverse type is a cross, with two limbs of it plain and two limbs cross crosslet. Ruding, pl. 7, 1.
Weight $18\frac{1}{8}$ grs.

7. *Obv.*—As before; type engraved from this coin in Ruding, App., 27, 4.

Rev.—+BYRHE . . . M. A cross moline.

This coin is broken. Weight $10\frac{1}{8}$ grs.

8. *Obv.* and *Rev.*—Type as the last coin, but with a different moneyer, DENEHEΠH. Weight 18 grs.

9. *Obv.* and *Rev.*—Legends as the last coin, but the type on reverse is a cross crosslet. Ruding, pl. 7, 4.
Weight $18\frac{1}{8}$ grs.

BURGRED. A.D. 852 to 874.

Types as Ruding, pl. 7 and 8, all varying slightly in the obverse form of head or bust.

1. *Obv.*—+BVRLED REX. Head to the right, bust to edge of coin.

Rev.—+DVDDA MONETΠ. Legend in three lines, and on the obverse beginning over the forehead.
Weight $18\frac{1}{8}$ grs.

2. *Obv.*—As the last coin.

Rev.—DVDΠ M◇NETΠ. As before.

This moneyer is on coins of Cuthred, King of Kent.
Weight $16\frac{1}{8}$ grs.

3. *Obv.*—+BVRERYED REX.

Rev.—As the last coin. A broad coin. Weight $19\frac{1}{8}$ grs.

4. *Obv.*—BVRLED REX—.

Rev.—DVDYINE MONETΠ. Weight $19\frac{1}{8}$ grs.

5. *Obv.* and *Rev.*—As the last coin, but from a different die ;
a piece is broken off. Weight $14\frac{3}{10}$ grs.
6. *Obv.*—+ BVRLR~~ED~~ REX—. Head and bust peculiar.
The legend beginning over the forehead.
Rev.—+ DVDECIL MONET π . Weight $16\frac{2}{5}$ grs. Ruding,
pl. 7—1, 2, 15.
7. *Obv.*—+ BVRLR ED REX A. A broad coin.
Rev.—The same moneyer as the last coin.
A small piece broken from the coin. Weight $19\frac{2}{5}$ grs.
8. *Obv.*—+ BVRLRED REX—X.
Rev.—+ DIL π MONET π . Weight $20\frac{3}{5}$ grs.
9. *Obv.*—BVRLRED REX.
Rev.—As the last coin. Weight $18\frac{2}{5}$ grs.
10. *Obv.*—Legend as on coin No. 4.
Rev.—LIAFM π N MONET α . Weight $18\frac{1}{5}$ grs.
11. *Obv.*—+ Legend as coin No. 2.
Rev.—OSMVND MONETA. Weight $16\frac{4}{5}$ grs.
12. *Obv.* and *Rev.*—As the last coin.
This coin has a coppery appearance. Weight $22\frac{1}{5}$ grs.
13. *Obv.*—As the coin No. 4.
Rev.—OSMVNE MONETA. Weight $19\frac{2}{5}$ grs.
14. *Obv.*—As No. 1, but with a rose in the king's breast.
Rev.—HVLRED MONETA. Weight $18\frac{1}{5}$ grs.
15. *Obv.*—BVRLRED REX—. Head with a double circle
around it.
Rev.—HVLRED M ϕ NETA. Weight $20\frac{2}{5}$ grs.
16. *Obv.* and *Rev.*—The same, though from a different die.
Weight $18\frac{1}{2}$ grs.
17. *Obv.*—+ BVRLRED REX Y. The same.
Rev.—HVLRED MONET α . Weight $15\frac{1}{5}$ grs.

18. *Obv.*—Legend, obverse and reverse, similar to No. 16.
Weight $16\frac{5}{8}$ grs.

19. *Obv.*—The same as No. 2.

Rev.—EENRED MONETA. Weight $16\frac{1}{8}$ grs.

20. *Obv.*—Legend as No. 4.

Rev.—VVINE MONETA. Weight $15\frac{5}{8}$ grs.

21. *Obv.*—+ BVRLRED REX M—. The bust divides the legend.

Rev.—Legend as the last coin. Weight $15\frac{5}{8}$ grs.

This coin is similar to Æthelbeart's coins, who was sole monarch A.D. 856—866.

22. *Obv.*—Legend as No. 4.

The coin is cracked.

Rev.—+ NAMIANMONETA. Weight $16\frac{1}{8}$ grs.

23. *Obv.*—BVRLRED REX—✕

Rev.—BEALZTANMONETA. Weight $17\frac{5}{8}$ grs.

24. *Obv.*—BVRLRED REX Y.

Rev.—Legend as the last coin. Weight $16\frac{5}{8}$ grs.

25. *Obv.*—Legend as No. 9.

Rev.—BERHEAM MONETA.

A small piece of the coin broken. Weight $16\frac{5}{8}$ grs.

26. *Obv.*—Legend as No. 4.

The coin is cracked.

Rev.—+ BERHEAM MONETA. Weight $15\frac{5}{8}$ grs.

27. *Obv.*—Legend as No. 24.

Rev.—HEAVVLV MONETA. Weight $18\frac{5}{8}$ grs.

28. *Obv.*—Legend as No. 4.

Rev.—As the last coin. Weight $17\frac{1}{8}$ grs.

29. *Obv.*—BVRLRED RE Y.

Rev.—BERHTHEL M+NETA. Weight $18\frac{5}{8}$ grs.

80. *Obv.*—+ BVRLRED REX—. Head and bust peculiar.
Ruding, pl. 7, 4.
Rev.—TATA MONETA. Weight 23½ grs.
81. *Obv.*—Legend as No. 9.
Rev.—HEREFERÐ MONETA. Weight 14½ grs.
82. *Obv.*—BVRLRED REX Y.
Rev.—LVNEHEL MONETA. Weight 16½ grs.
83. *Obv.*—Legend as No. 9. The edge broken.
Rev.—LVNEHL MONETA. Weight 13½ grs.
84. *Obv.*—Legend as No. 4.
Rev.—Legend as the last coin. Weight 16½ grs.
85. *Obv.*—BVRLRED RE Y.
Rev.—LVÐHERE MONETA. Weight 19 grs.
86. *Obv.*—BVRL . . . Half a coin. The head surrounded
 by a dotted circle.
Rev.—LVÐHEI . . . M . . ET. Weight 9½ grs.
87. *Obv.*—+ BVRLRED REX.
Rev.—VVLFEARD MONETA. Weight 16½ grs.
88. *Obv.*—+ BVRLRED RE.
Rev.—YIFEARD MONETA. Weight 9½ grs.
89. *Obv.*—Legend as No. 9.
Rev.—+ HYSSA MONETA. Weight 17 grs.

Two types of Burgred's reign occur amongst those at Penrose, which differ from the above, viz.—

1. *Obv.*—BVRLRED RE+.
Rev.—HYÐHERE MONETA.

This moneyer occurs also in the Gravesend hoard.

2. *Obv.*—As No. 1.
Rev.—HEAVVL F MO:ET.

The late Mr. Hewitt, watchmaker of Fowey, had a few (about four) coins of Burgred from the same hoard. But the only difference from the above was in a coin like No. 87, which had the letter Y after the king's title on obverse.

CIOLVULF II. A.D. 874.—The last king of Mercia.

Obv.—CIOLVULF REX \bar{Y} . The king's head in profile to the right, very rude; the bust to the edge of the coin.

Rev.—+ E $\bar{\Lambda}$ NVULF YONE : T : Within the inner circle the letter $\bar{\Lambda}$.

This coin is engraved in Ruding, App. 27. Weight $21\frac{1}{2}$ grs.

N.B.—This moneyer occurs on the single coin of Ciolvulf which was found with the Gravesend hoard in 1888.

KING OF NORTHUMBERLAND.

EANRED. A.D. 808 to A.D. 840.

Silver penny.

Obv.—EANRED REX. The king's head in profile to the right; the bust to the edge of the coin.

Rev.—+ $\bar{\Delta}$ ES MONETA $\bar{\Lambda}$. A cross, two limbs of which are crosslet, two are moline.

See Mr. Hawkins's remarks on this unique coin, in pages 41 and 42 of his work on English Silver Coins.

SOLE MONARCHS.

ECGBEORHT. A.D. 800 to A.D. 837.

1. *Obv.*—+ EICGBEORHT REX. A very rude head to the right, and within the inner circle.

Rev.—+ DVNVN YONET $\bar{\Lambda}$. Weight $20\frac{1}{2}$ grs. A cross botone. An unique variety.

Engraved in Ruding, App., 27, 1. See Hawk., page 55.

2. *Obv.*—+ EICBE $\bar{\Lambda}$ RHT REX. No head, but a plain cross within the inner circle.

Rev.—+ OBT $\bar{\Lambda}$ YONETA. A cross with six limbs, very rude.

Engraved in Ruding, App., 27, 2. Weight $22\frac{1}{2}$ grs.

There was another coin of Ecgbearht in this hoard, which the late Rev. R. Hennah possessed; but its description has never been published.

ETHELVULF. A.D. 837 to A.D. 856.

1. *Obv.*—EDELVULF REX. Head to the right, bust to the edge of the coin.

Rev.—† YANINE Y. Weight 14 grs. A cross with eight limbs.

Engraved in Ruding, App., 27, 1.

2. *Obv.*—Legend as the last coin. A very rude head to the right, contained within the inner circle.

Rev.—† BEALYVND. A cross potent. Weight 20½ grs.

Engraved in Ruding, App., pl. 27, 2. Hawk., 56, 12.

3. *Obv.*—Legend as before. Bust to the edge of the coin.

Rev.—† EDELHERE. A cross, two limbs moline, and two patonæ.

Engraved in Ruding, App., pl. 28, 3. Weight 17½ grs.

4. *Obv.*—† EDELVULF REX DORB (Doroberria, Canterbury). The word DORB is within the inner circle.

Rev.—VVILHEM MONETA LANT. The word "Cant" within the inner circle.

Ruding, pl. 15, 5. Weight 19 grs.

5. *Obv.*—† EDELVULF REX. A plain cross, with a wedge in each angle.

Rev.—† MANN MONETL SAXONIORVM. The word "Saxoniorum" is within the inner circle, in three lines.

Ruding, 15, 6. Weight 19 grs.

6. *Obv.*—Legend as the last coin. Head to the right, bust to the edge of coin.

Rev.—† EDELMOD MONETA. The legend crossways.

Ruding, pl. 14, 2. Weight 18 grs.

Another specimen of this type is at Penrose.

Obv.—† E WIF REX (broken). DORIBI in centre of coin.

Rev.—† VVEPLH (EARD) LANT. In monogram in centre of coin.

ÆTHELRED I. A.D. 866 to A.D. 871.

1. *Obv.*—ÆDELRED REX. Head to the right, bust to edge of coin.

Rev.—BITRNMOD MONETÆ ·· A ·· The legend in four lines across the coin.

Ruding, 15, 5. Weight 15½ grs.

2. *Obv.*—Legend and head, as the last coin.

Rev.—TORHTMVND MONETÆ ·· A ·· Legend as before, in four lines. Weight 14½ grs.

ALFRED. A.D. 872 to A.D. 901.

1. *Obv.*—ÆELBRED REX. A fine head to the right, bust to the edge of coin.

Rev.—SILESTEF MONETÆ. The legend in three lines.

Ruding, 15, 5. Weight 19 grs.

2. *Obv.*—ELFRED RE+. No head. A small cross.

Rev.—FRÆNBÆLD. In two lines across the coin.

Engraved in Ruding, App., pl. 28. Weight 21½ grs.

ARCHBISHOP OF CANTERBURY.

CEOLNOTH. A.D. 830 to A.D. 870.

1. *Obv.*—+ ÆEONOD ÆRHIEPI. Archbishop full face, bust to edge.

Rev.—+ LIL MONETÆ DORVERN. In the centre of the coin is the word CIVITAS.

Ruding, xiii. 4. Weight 15 grs.

2. *Obv.*—ÆEOLNOD ARHIEP. Full face, as No. 1.

Rev.—+ ΓI MONETÆ DOROVERL CIVITAS in the centre.

Ruding, App., 27. Weight 13½ grs.

3. *Obv.*—+ ÆIALNOD ÆRE. Full face, as No. 1.

Rev.—+ BIORNYOD YONET. In the centre is a monogram, probably for "Dorov. Civ."

Ruding, 18, 7. Weight 19 grs.

4. *Obv.*—+ EIALNOÐ ARCEPIS. As No. 1.

Rev.—+ VVHERE YONETA. The Christian monogram in the centre.

Ruding, 18, 5. Weight 18 grs.

5. *Obv.*—EOLNOÐ ARCHIEP. As No. 1.

Rev.—+ EDELVALD YONETA. The legend crossways, like Ethelvulf, No. 6. Weight 16½ grs.

LOUIS LE DEBONAIRE, KING OF FRANCE. A.D. 814 to 840.

Obv.—+ H LVDOVIEVS IMP. A cross with pellet in each angle.

Rev.—+ PRTIANA RELIGIO. The front of tetrastyle temple. Weight 21½ grs.

Since the discovery of the Trewiddle coins and ornaments, five other hoards of silver pennies have come to light, which were found in different parts of England, but all of them buried apparently within a few years of each other, and during the same disturbed period of our history, and each bearing some similarity to the other.

It is hoped that the following lists of nine hoards will be examined with interest, as supplying us with a very fair notion of the kind of money that was current throughout England during the ninth and the beginning of the tenth centuries.

SEVINGFON HOARD

Consisted of about 70 coins, and silver ornaments. This hoard was buried in the mid-south of England, about A.D. 871-2. Discovered A.D. 1834. See Arch., vol. xxvii. 301.

No. of Coins.	A.D. A.D.
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4 Coenvulf, Mercia	796-818
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1 Ceolulf, do.	819-820
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5 Berhtulf, do.	839-852
----------------------	---------

2 Vulfred, Arch. of Cant.	803-830
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5 Ceolnoth, do.	830-870
----------------------	---------

5 Ethelstan, East Anglia...	870-898
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1 Ecgbearht, sole monarch	800-837
---------------------------	---------

14 Ethelulf, do.	837-857
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DORKING HOARD

Consisted of about 700 coins, and six ounces of fragments of coin. This hoard was buried in the south-east of England, about A.D. 871-2. Discovered A.D. 1817. See Arch., vol. xix. 3.

No. of Coins.	A.D. A.D.
---------------	-----------

1 Ceolulf I., Mercia	819-820
----------------------------	---------

1 Beornulf, do.	820-824
----------------------	---------

1 Lofica, do.	824-825
--------------------	---------

1 Wiglaf, do.	825-839
--------------------	---------

23 Berhtulf, do.	839-852
-----------------------	---------

1 Burgred, do.	852-874
---------------------	---------

86 Ceolnoth, Arch. of Cant.	830-870
-----------------------------	---------

16 Ethelweard, E. Anglia	855
--------------------------	-----

3 Edmund, do.	855-870
--------------------	---------

3 Ethelstan, do.	870-898
-----------------------	---------

10 Ecgbearht, sole mon. ...	800-837
-----------------------------	---------

285 Ethelulf, do.	837-857
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249 Ethelbearht, do.	856-866
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1 Pepin of France	752-768
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GRAVESEND HOARD

Consisted of about 550 coins, and a silver cross. This hoard was buried in the south-east of England, about A.D. 874-5. Discovered A.D. 1838. See Num. Chron., vol. iii. 14.

No. of Coins.	A.D. A.D.
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429 Burgred, Mercia	852-874
---------------------------	---------

1 Ceolulf, do.	874
---------------------	-----

3 Ceolnoth, Arch. of Cant.	830-870
----------------------------	---------

5 Ethelweard, E. Anglia	855
-------------------------	-----

50 Edmund, do.	855-870
---------------------	---------

2 Ethelstan, do.	870-898
-----------------------	---------

3 Ethelulf, sole monarch	837-857
--------------------------	---------

57 Ethelred, do.	867-872
-----------------------	---------

1 Alfred, do.	872-901
--------------------	---------

1 Louis le Debonaire	814-840
----------------------------	---------

CROYDON HOARD		TREWIDDLE HOARD		GUERDALE HOARD	
Consisted of about 250 coins, and silver ornaments and ingots. This hoard was buried in the south-east of England, about A.D. 874-5. Discovered A.D. 1862. See Num. Chron., N.S., vol. ii. 302, and vol. v. 232.		Consisted of about 114 coins, and gold and silver ornaments. This hoard was buried in the south-west of England, about A.D. 877. Discovered A.D. 1774. See Arch., vol. ix. 187, and Royal Institution of Cornwall, No. viii., Octob. r, 1867.		Consisted of about 7,000 coins, and silver ornaments and ingots. This hoard was buried in the north-west of England, about A.D. 914. Discovered A.D. 1840. See Num. Chron., vol. v. 1.	
No. of Coins.	A.D. A.D.	No. of Coins.	A.D. A.D.	No. of Coins.	A.D. A.D.
		1 Offa, Mercia	757-796		
		2 Coenwulf, Mercia	796-818		
		1 Beornwulf, do.	820-824		
		10 Berhtulf, do.	830-852		
200 Burgred, Mercia	852-874	45 Burgred, do.	852-874		
		1 Cielwulf, do.	874	2 Cielwulf, Mercia	874
		6 Ceolnoth, Arch. of Cant.	830-870	1 Ceolnoth, Arch. of Cant.	830-870
1 Ethelweard, E. Anglia... ..	855			3 Etherned, do.	871-891
11 Edmund, do.	855-870			59 Plegmund, do.	891-923
		1 Eanred, Northd., silver penny.....	808-840	1,770 Edmund (Saint)	
		3 Ecgbeorht, sole mon. ...	800-837	2 Ethelred (E. Anglia?) about 860	
		10 Ethelwulf, do.	837-857	23 Ethelstan, E. Anglia 870-898	
13 Ethelred, sole monarch 867-872		2 Ethelred, do.	867-872	2,000 Cant. or Guthred, Northd.	883-894
16 Alfred, do.	827-901	2 Alfred, do.	872-901	304 Siefred or Sigefreth, Northd.	893-901
				1 Adclwuld do.	901-905
				2 Sstric do.	914-921
				801 Ecclesiastical coins of York	880-900
				857 Alfred, sole monarch 872-901	
				45 Edward, elder, do....	901-925
Louis le Debonaire	814-840	1 Louis le Debonaire	814-840	34 Louis le Debonaire ...	814-840
Charles le Chauve	840-923			727 Charles le Chauve ...	840-923
Oriental coins				228 Other foreign coins ...	879-924
				27 Oriental coins	

HEXHAM HOARD			KIRK-OSWALD HOARD			YORK HOARD		
Consisted of about 8,000 stycas, and was buried at Hexham, about A.D. 847. See Arch., vol. xxv.			Consisted of about 542 stycas, and was buried at Kirk-Oswald, about A.D. 867—8.			Consisted of about 3,000 stycas, and was buried in York city, about A.D. 869. See Num. Journ. xxv.		
No. of Coins.		A.D. A.D.	No. of Coins.		A.D. A.D.	No. of Coins.		A.D. A.D.
Heardulf, of Northd. 796—806								
2,000	Eanred, do.	808—840	99	Eanred, of Northd.	808—840	223	Eanred, of Northd.	808—840
2,000	Ethilred, do.	840—844	350	Ethilred, do.	840—844	672	Ethilred, do.	840—844
100	Redulf, do.	844—848	14	Redulf, do.	844—848	24	Redulf, do.	844—848
			15	Osbert, do.	848—862	57	Osbert, do.	848—862
60	Eanbald, Arch. of York	796—820	1	Eanbald, Arch. of York	796—820	4	Eanbald, Arch. of York	796—820
800	Vigmund, do.	831—854	58	Vigmund, do.	831—854	124	Vigmund, do.	831—854
			5	Uulfhere, do.	854—892	16	Uulfhere, do.	854—892
						94	Uncertain.	

An examination of the first five hoards, in the table given above, will give the numismatist a very good idea of the coins and treasure which formed the circulating medium of the whole of the southern parts of England at the time that Alfred succeeded to the kingdom; and the sixth hoard gives us the coins current throughout the north and, probably, throughout the whole of England, during the early part of the reign of his son, Edward the Elder. These, taken in connexion with the three hoards of Northumbrian Stycas, give nearly a perfect view of the coins current in the kingdoms of the Heptarchy for upwards of a century previous to their final amalgamation into a sole monarchy. It will be seen that the currency of the south-western parts of England was composed, as we

might have expected, chiefly of Mercian and West-Saxon coins, and contained not a single specimen of the coinage of the eastern parts of the island ; and only one specimen, an unique coin, from the northern regions. The Trewhiddle hoard is the only one of those given, which does not contain a coin from East Anglia. It is true that it contained coins of the Kentish Archbishop, but then his influence was as much western as eastern. Again, it will be seen that the currency of the south-eastern territory was also composed of a large proportion of Mercian coins, but mixed with coins of the East-Anglian kings. Again, in the more northern territory, the currency at the beginning of the tenth century, as represented by the Cuerdale treasure, seems to have been almost unmixed with Mercian or with East-Anglian coins ; for only two specimens of Ciolvulf, the last king of Mercia, and a few coins of Ethelstan, the last real king of East-Anglia, were found amongst that very numerous collection. The copper coinage of Northumberland, the *styca*, which had been the only coinage current in that kingdom for two centuries, was probably fast disappearing at the time that the first six hoards were deposited. It appears never to have circulated beyond the boundaries of its own kingdom ; and it is remarkable that it should have existed so long, while all the rest of the Heptarchy had a silver currency. Probably the comparative smallness of the value of the *styca* was found very convenient for purposes of exchange. I believe that the Northumbrian *styca*, whether struck in copper or silver, has never been found mixed with the silver coins of the other kingdoms ; nor have they ever been discovered out of the territory of Northumbria. The only instance that I know of even a Northumbrian silver penny having been found in company with copper

stycas is that to which I shall have occasion to allude presently, viz., the penny attributed to Athelwold, brother of Edweard the Elder (who was elected by the Northumbrians in A.D. 901), and which is said to have been found at York, mixed with a mass of copper stycas. One coin of this king was in the Cuerdale hoard. Although no Northumbrian stycas were found at Cuerdale, the ecclesiastical (and other) mints of York were well represented there; indeed, it would have been strange if they had not: and if copper or silver stycas had been current as money at the time of the deposit of this treasure, surely some of them would have been found at Cuerdale.

The long series of kings, and the variety of coins, in the Trewiddle and Dorking lists is to be noticed, extending over a period of upwards of a hundred years. In the Trewiddle hoard this is the more remarkable, for the number of coins is comparatively small. It is possible that, owing to the remote and isolated position of the extreme west, the coins of the earlier kings remained longer in circulation, and money was more scarce.

The lists given above seem to determine the hitherto doubtful question, whether Guthrum of the East-Angles took the name of Ethelstan earlier than A.D. 878. I believe he must have taken the name of Ethelstan, and was baptised, very soon after he became king of East Anglia, in A.D. 870; for the coins found at Sevington and at Dorking contained specimens with the name of Ethelstan, and with the Christian symbol, the cross, and yet no coins of Alfred, who commenced his reign A.D. 872, were found with them. If these coins had been buried after the beginning of Alfred's reign, we may assume with certainty that some of his coins must have appeared amongst them.

It is almost unnecessary to call attention to the fact that all the hoards mentioned were found within the distance of incursions of a day or two from the sea coast, thus connecting their secretion with the invasions of the Danes, and demonstrating the state of alarm which the hostile army must have created, wherever there was a chance of an approach of the enemy. The pennies, which in the foregoing lists are attributed to five kings of Northumberland, require a special notice. One of them is the penny of Eanred, found at Trehiddle; the others were found at Cuerdale. It need not surprise any one that silver coins of Northumberland, if any existed, should have been found at Cuerdale in Lancashire. If coins had been issued by the authority of Cnut, Siefred, Athelwald, or Sitric, whether as deputies or as independent kings, we should expect to find them amongst such a treasure as that of Cuerdale. But it is not so easy to account for the appearance of an unique Northumbrian coin in the county of Cornwall. The similarity of the coin to Mercian workmanship, and its having been found in Mercian company, seem to me to suggest an explanation different to that surmised by Mr. Hawkins in his work on silver coins, page 41. I have already hinted at the probability that this coin affords evidence of an attempt to introduce a silver coinage into Northumbria, instead of the copper styca; and it is possible that the artist who was employed to make the die copied a Mercian type. The name of the moneyer is found on no other Saxon coin, and, therefore, no argument can be drawn from it, except that the moneyer was probably *not* a Mercian. The coin is well executed, and the engraver may have been a stranger brought from abroad, possibly from France, in order to execute the work; and perhaps he imitated the Mercian type and style of workmanship, thinking that thus it would

more easily pass into the general currency. If this suggestion should be correct, the presence of this coin in Cornwall is not more strange than that of the well-known coin of a contemporary king of France, which was found with it.

The pennies attributed to Cnut, Siefred, Athelwald, and Sitric of Northumberland have not been so long known as the silver penny of Eanred, and they need an introduction into the northern series. The last of the Northumbrian kings who issued copper stycas were Osbercht (A.D. 848—867) and Aella, A.D. 862—867. After this date the series of kings was interrupted; and this kingdom, which held out the last of all the Heptarchy with a semblance of independence, was gradually, during the reign of Eadweard the Elder, becoming merged into the sole monarchy of the West Saxons, until it was completely absorbed under the rule of Eadgar.

As to the coin attributed to Athelwald, and reading ALVALDVS: in A.D. 901, we find Athelwald, who had got into trouble with his brother Eadweard, and who had fled to York, was elected king by the Northumbrians. But it is probable that his authority was at first subordinate to the ecclesiastical power of the see of York. This will account for the Cuerdale coin having the legend ALVALDVS, without the title of REX; and for its general resemblance to the ecclesiastical types of York, which were found with it, and which have the same reverse legend, "Dominus Deus Rex." There can be no doubt that at this time a silver coinage was current in Northumberland, the copper coinage having disappeared, and that the Royal and ecclesiastical mints were in active work before the arrival of Athelwald (see the Cuerdale coins, with "Cnut," "Siefred," "Mirabilia," "Ebraice," &c.). I hope to enter into this

subject on another occasion, when I trust I shall be able to prove the correctness of this attribution to the brother of Eadweard the Elder.

The coins with the legend SITRIC COMES have such a strong resemblance to coins of Eadweard and of his period, that there is every probability they were issued by his son-in-law, Earl Sitric, who possibly was acting under his authority, and who succeeded Athelwald in Northumberland. Besides, there can be little doubt that he is the same person who afterwards appears as SITRIC REX upon an unique coin in my possession, of the York type of St. Peter, with the sword, and as SITRIC CVNVNC on the coin now in the British Museum, lately in the Pembroke collection. This Sitric was the father of Anlaf, the second Danish king of Northumberland, of that name.

My object in calling attention to these early Northumbrian pennies is to point out the probability of an attempt having been made to introduce into that kingdom a silver coinage before the time of Regnald; and that the Eanred penny of Trewiddle is rightly given to Eanred of Northumberland, which Mr. Hawkins seemed to doubt.

If the examination of these nine hoards of early Saxon coins, when placed side by side, has been found interesting, I hope it may suggest to numismatists the importance of comparing other hoards of Saxon coins, buried during the reigns which succeeded that of Alfred. Such lists would be of interest, as showing how the power of the "sole monarchs" gradually spread over the whole country—a power evidenced by the increase of their mints, which were established at last in every important town of the kingdom.

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VII.

LONDON AND CALAIS GROATS OF HENRY IV., V.,
AND VI.

Read before the Numismatic Society, Feb. 20, 1868.

THREE Henries ascended the English throne in succession, and issued money extending over a period of sixty-two years; but so slight was the difference made in the type or legend of their coins, that, with very few exceptions, all those weighing at the rate of 15 grains to the penny are at the present time vaguely given to Henry V. or VI., and a few years since they were still more vaguely described as belonging to Henry IV., V., or VI. Henry III. placed the numerals III., or the word TERCII, on his coins, but his example was not followed by succeeding monarchs, until Henry VII., after a lapse of nearly 250 years, again adopted numerals as a distinguishing mark.

That some alteration, however, was made, by which the coins of Henry IV., V., and VI. are to be separated, admits of little doubt; and to show how very slight such distinctions sometimes were, I cannot do better than mention the following instance:—In the reign of Henry V., “the wardens of the mint at St. Lo were commanded to coin groats of the same kind as those struck at Rouen, with this distinction only, that a single point was to be placed for a difference under the second letter from the beginning



1 R



2 R



3 R



4 R



5 R



6 R



R
7



J. J. Lee, Del.

GROATS OF HENRY V AND VI.

11

of the inscription, on each side of the coin."¹ This mark is what the French called a "point secret." A few groats of excessive rarity were struck in London before the thirteenth year of Henry IV.; others, by no means common, issued after the forty-ninth year of Henry VI., are by their weight readily distinguished from the remainder; and if we add to these another rare variety coined after the thirteenth year of Henry IV., to which I shall again allude, we see at a glance how this question at present stands, and how very meagre our information is. If all these rarities are selected from a large find of the Henry coins, the bulk remains seemingly undiminished.

In our numismatic researches respecting the coinage of Henry IV., V., and VI., we derive but little assistance from documentary evidence, and, therefore, it is principally by becoming very familiar with the coins that further information can be obtained. Very recently the first coinage or open crown money of Henry VII. was generally considered to belong to the light coinage of Henry VI., but this question is now so satisfactorily settled as to require no further discussion.

My present intention is to limit myself solely to the London and Calais groats, and, without giving a long and complicated list of all the varieties which have come under my notice, I will endeavour, while drawing a broad distinction between each reign, to include the several types in my arrangement. I take the London and Calais groats together, because in my opinion the latter should be included in the English series. Coins issued at Calais far exceed those struck in England. They are of the same

¹ Ruding, vol. i. p. 261.

type, weight, and purity of metal; both coinages were issued at the same time, and by the same authority. If further proof be needed that the Calais money was intended for general currency in this country, I have but to call attention to the large hoards of these coins so constantly turning up here, and point to the very large proportion struck at Calais, in comparison with those issued from the English mint.² In order to lay my views respecting the groats of Henry IV., V., and VI. clearly before the society, I will take each reign separately.

HENRY IV.

1 October, 1399.—20 March, 1413.

Two distinct coinages were issued in this reign. Before his thirteenth year the groat³ weighed 72 grains; this coin is so exceedingly rare as to be almost unique. The groat issued after his thirteenth year⁴ was reduced to 60 grains; there are some varieties of it, with the Roman N and with the old English R, in London. These coins are easily recognised by the strong resemblance they bear to the money of his predecessors, Edward III. and Richard II. With reference to the groats of Henry IV., it will

² I am induced to make these remarks because some division of opinion exists as to whether the Calais money should be admitted into a purely English cabinet of coins. No mention is made of them in the *Silver Coins of England* by Mr. Hawkins.

³ I cannot trace the heavy groat of Henry IV. It is not in the Museum collection. Ruding states that a specimen was in the Willet cabinet, and with Snelling gives the coin but one annulet on the reverse; Hawkins, however, mentions two. The half-groat, stated to be unique, sold at Martin's sale for £1 5s.

⁴ The half-groat of this coinage was "not detected" at the time Hawkins's work was published; but last year a very poor and cracked specimen appeared at Lindsay's sale, and produced £1 4s.

be seen that I simply confirm the opinion of those who have gone before me, if such confirmation be needed; and my only object in alluding to this part of the subject is to open a path to the following reigns, and at the same time to make myself intelligible to those who have not paid much attention to this portion of the English coinage. It is considered very doubtful whether the mint at Calais was in operation during the reign of Henry IV., no coins having, I believe, appeared in proof thereof. The London groat, struck after his thirteenth year (Hawkins, 325), has a trefoil after POSVI. It reads $\pi\text{NGLI}\alpha$, and small crosses or trefoils are between the words of the legend. Annulets often appear on the coins of Henry IV.

HENRY V.

20 March, 1413.—31 August, 1422.

No English or Calais coins have yet been ascribed with certainty to this king, although it is admitted that a somewhat considerable portion of those not yet classified must belong to him. Documentary evidence satisfies us that a quantity of bullion was coined into silver during the reign of Henry V.; and this being the case, the coins have, without doubt, come down to us. By what means, then, are they to be traced and classified? All the coins of the Henries, resembling those of Edward III. and Richard II., having by general consent been allowed to Henry IV., we may take it for granted that Henry V. introduced a coinage quite distinct from that of his fathers. In fact, the coins handed down to us leave no room for controversy on this point. Consequently the great difficulty is to distinguish the coins of Henry V. from those struck early in the reign of Henry VI. All

the money coined by Henry V. weighed the same as that last introduced by his father, and, therefore, we have only the type of the coins to guide us, aided by such documentary evidence as can be brought to bear on the subject. In 1421, the ninth year of Henry V., "silver money was so scarce, that though a noble were so good of gold and weight as six shillings and eight pence, men could get no white money for it."⁵ The early silver coins of the fifth Henry we may, therefore, be prepared to find comparatively rare; and not in a good state of preservation, if we may assume that they were subjected to the various processes mentioned by Ruding, vol. i. p. 257:—"In 1414 the second Parliament met at Westminster, and amongst other things made an ordinance for the money of the realm, to remove, as it is therein stated, the damages, mischiefs, and deceits which so abounded in the kingdom, from the washers, clippers, and counterfeiters of the money of the land." The king was given full authority to remedy this as he should think fit and proper; but in the following year to such an extent had clipping, filing, and washing arrived, that a second statute declared, "that those who clipped, washed, or filed the money of the land should be judged traitors to the king and to the realm, and should incur the pain of treason."⁶

It is not, however, so much on account of our finding the London groats with a mullet on the left breast comparatively rare, and in a worse state of preservation than any other variety of the 60-grain groats, that I assign them to King Henry V., but because I am firmly of opinion they cannot belong to his father or to his son. No one, I believe, supposes them to belong to the former king, and

⁵ Ruding, vol. i. p. 265.

⁶ Ruding, vol. i. p. 258.

if any collector is of opinion that they were issued in the reign of the latter, he must also have formed the erroneous idea that Henry V. issued no coins; for what unclassed type can with any probability be supposed to have preceded these mullet groats? They stand quite alone, and in my opinion must have preceded the coins of the great coinage. If they had formed part of that coinage, we should no doubt have found Calais money like them; for we know that when the London and Calais mints worked together, the type of both coinages was ordered to be alike, and the coins bear witness that this order was faithfully carried out. One question remains. Were the mullet-groats struck in the reign of Henry VI., after the Calais mint ceased working? I do not believe a single argument can be brought forward to support such a supposition. As I proceed, it will be seen that everything points in the opposite direction. Mr. Longstaffe is with me here. It is satisfactory to find that, working from a different point of view, we have arrived at one conclusion on a matter of importance. Mr. Longstaffe is of opinion "that the great annulet coinage was the immediate successor of that which on the half-groat had the Star⁷ on the king's breast and ANGLIA , instead of ANGL ."⁸ The mullet-groats are of very coarse and tame work: the features of the king are blurred and sunken, giving to the face an emaciated expression. The nose and mouth, probably from the rough way in which the die was cut, are, as a rule, flattened together; on the throat there is an egg-shaped lump; the neck is long and thin, and the shoulders sloping and narrow. So far as I can see, there is nothing in the shape of the crown, or in the arrangement of the

⁷ *Nun. Chron.*, N.S. vol. vii. p. 80.

⁸ The groats read ANGLIA and ANGL .

hair, to assist us in distinguishing the groats of Henry V. from those of his successor. The legend on the mullet-groat is

⊕HENRIC¹DI¹GR¹ANGL¹IA or ANGL¹FRANCO⁹
 ⊕POSVI ⊕ DEVM¹AN¹DIVTORE¹MEVM
 CIVITAS¹LONDON¹

I can discover no resemblance whatever in these coins to the money of Edward IV., but, on the contrary, we trace in them some affinity to the issue of Henry IV. (See Pl. VI. No. 1.)

In the place of a trefoil we always find a quatrefoil after POSVI; small crosses divide the words of the legend, as in previous reigns. Groats of Henry IV. usually read ANGLIA, but I have never seen one of Henry VI. or Edward IV. reading thus. The half-groat with a mullet on the breast is rarer than the groat, and I am not aware that this type is represented by a penny, halfpenny, or farthing.

Having assigned the groats with a mullet on the left breast to an early coinage of Henry V., others must be looked for struck later in his reign; and this brings me to the annulet question. Undoubtedly the great difficulty in an arrangement of the coins of Henry V. and VI. is to be found in the annulet or eyelet-hole money. These pieces once classified, all else is easily grappled with. It may not be out of place here to give the opinion of some writers on this subject. Snelling, referring to Archbishop Sharpe, says, "The usual distinction of those with the annulets, or eyelet-holes on each

⁹ I have a specimen reading FRANCO.

side of the head, to Henry V. being by no means satisfactory." Ruding writes respecting the coins of Henry V., "I know not any means by which they can be distinguished from the others" (vol. i. p. 266).

In Till's essay on the Roman denarius and English silver penny we find the following remark:—"Henry IV., V., and VI. struck pennies; but it is impossible, with any degree of certainty, to appropriate them. Those with the eyelet-holes on each side of the head are generally ascribed to Henry V., but that distinction may be erroneous."

Speed appropriates to Henry V. a coin with eyelet-holes, but gives no reason for such appropriation. In Knight's "Old England" a well-known account, quoted from Otterborne, is given of how Henry V. incurred his father's displeasure by his loose excesses; and how attired in the garb of his college (Queen's, at Oxford), a gown of blue satin full of eyelet-holes, he appeared before his father, and begged forgiveness. An engraving of a groat with an annulet¹⁰ on each side of the bust is then, on the foundation of this story, given to Henry V. In Stow's Survey of London the meeting between Henry IV. and his son is also described, but in different language. The story of the gown full of eyelet-holes, coupled with Speed's assertion, and supported by Leake, has led many, and does still lead many, to suppose that all the annulet money belongs to Henry V. Speaking for myself, I feel nowise inclined to attach any importance to the incident mentioned by Stow, or to the assertion of Speed. Ruding refers to

¹⁰ It appears very singular that nearly all writers on this subject take their cue from the Calais money, and speak of an eyelet-hole on each side of the head; the London money has only annulets on the reverse.

the latter as the "accurate Speed," and certainly the statement he makes is to some extent verified by a portion of the annulet money. If annulets had for the first time appeared on money of the Henries weighing 15 grains to the penny, Speed's word alone would have carried great weight with it. But even as it is, do we not find annulets very common on the coins of Edward I. and Edward III., as well as on the money of Henry IV.? After all, this mark was only an old mark, and, as such, it was but natural that Henry V. should continue it. Can it be argued with any show of reason that the groats of superior workmanship, having on them ornamental marks hitherto unknown, and closely resembling the coinage of Edward IV., were first introduced in the reign of Henry V., and that Henry VI., instead of following or improving on them, should again have reverted to inferior work, and to the old discarded annulet? Henry VI., or rather those who acted for him, had no reason, like Charles II., for ignoring improvements made by his predecessor.

The Rev. Mr. Pownall, speaking of Calais money struck in the reign of Henry V., observes, "Calais money struck in his name must hold place in the short interval between December 1, 1421, and August 31, 1422. May this circumstance be borne in mind by those who continue to look on all that common class of Calais money, with the annulet or eyelet-hole on each side of the king's head, as being of Henry V."¹¹ Admitting this statement to be correct, it must also be borne in mind that the mint at Calais was in active¹² operation during, at all events, part

¹¹ *Num. Chron.*, N.S. vol. vii. p. 80.

¹² In the reign of Henry VI. (1442) the mint at Calais had fallen into great decay, so that it could not be sustained as it was in the reign of Henry V. (*Rud.* vol. i. 275.)

of the time mentioned. We also learn from the extract I have given from Ruding, that in 1421 there was a great scarcity of "white money," and this small quantity appears for the most part to have been damaged by passing through the hands of washers, clippers, and filers. Taking these circumstances into consideration, we can easily understand why great exertion should be used to supply speedily the great deficiency of silver money; and many instances are, I believe, on record of what can be accomplished in a few months without the incentives here offered. I do not think it therefore follows that a rare variety of the Calais money, as Mr. Pownall assumes,¹³ must necessarily belong to Henry V. If a rare variety can be found to answer such expectations, Mr. Pownall's argument might be substantiated; but I do not find any such examples, and the uncertain documentary evidence of the period, unless actually supported by coins, is not, I think, to be depended on. I will now describe the annulet money.

Annulet money struck at Calais can readily be divided into three types. Type 1 I give to Henry V.; types 2 and 3, I am of opinion, belong to Henry VI. Of London annulet money, I have not seen specimens to correspond with types 2 and 3 of the Calais money.

London Annulet (Groats).—Type 1.

⊕HENRIC·DI·GR·R·ENGLIE or ENGL & FRAN·

⊕POSVI·DE·VM·DIVTOR·MA·VM.

·CIVITAS·LONDON·

These groats have an annulet in two quarters of the reverse, but not on each side of the head, as is the case

¹³ *Num. Chron.*, N.S., vol. vii. p. 15.

with the Calais money. In other respects they are almost a fac-simile of those already described with a mullet on the breast; the only difference being that, in addition to the annulets on the reverse, another takes the place of the quatrefoil after POSVI. They also read $\pi\text{RGLI}\epsilon$, or πRGL , and have small crosses between the words of the legend. This groat cannot exactly be called a very common coin: we never find on it any of those marks which I am firmly of opinion identify themselves with the coinage of Henry VI. (See Pl. VI. No. 2.)

Calais Annulet Groats.—Those of type 1 always have an annulet on each side of the head; but in other respects they are precisely similar to the London groats of this type. They read $\pi\text{RGLI}\epsilon$, or πRGL , and small crosses divide the words. (See No. 3.)

Types 2 and 3 of the Calais groats are quite distinct from type 1, and I am of opinion that they were issued early in the reign of Henry VI. I may mention here that there is a variety of the annulet money, London and Calais, of rather better work than type 1; the portrait of the king is similar, but the features have not the same flattened appearance. These groats, however, stand quite distinct from those I consider to have been issued by Henry VI.; they differ very slightly from type 1, but I will not now venture an opinion respecting them.

The York groat, given by Hawkins (336) to Henry VI., comes under type 1 of the annulet money; it reads also $\pi\text{RGLI}\epsilon$; and for these reasons I certainly consider it belongs to Henry V. The specimens I have seen of this coin at the Museum further confirm me in this opinion. Mr. Longstaffe is opposed to this view. He infers, "that the regal money of the Henries, the gold, and the larger denominations of silver were struck

at York in the time of Henry VI. only.”¹⁴ But Mr. Pownall questions this. He says, “at least I myself am not prepared to say no coins were struck at York in Henry V.’s time, in the face of that ordinance, made by his parliament (in 1421), that a mint should be worked there for the relief of the northern counties.”¹⁵

I must not omit to mention that a few days back Mr. Head kindly afforded me a view of a selection of the London groats found at Stamford, and which are intended for the national collection. One thing immediately attracted my attention. The heavy groats of Edward IV., and those of the Henries resembling them, were in a very fine state of preservation, whereas the annulet money was in very poor condition, and there was very little of it.

HENRY VI.

1422—1461.

WHETHER some of the London groats, having annulets on them, were struck in the time of Henry VI. I am not prepared to say; but it will be seen from my remarks on the coinage of Henry V. that I do not appropriate to that monarch all the annulet money struck at Calais; and it is not unlikely that the following groats, with a clearly defined portrait of the king, exhibiting likewise a marked improvement in workmanship to type 1, may be of an early issue of the reign of Henry VI.

Calais Annulet Groats.—Type 2.

⌘ HENRIC DI GRÆ REX ANGL & FRAN.
 ⌘ POSVI DEVM ADIVTOREM MEVM.
 VILLÆ CALISIE

¹⁴ *Num. Chron.*, N.S., vol. vii. p. 81.

¹⁵ *Num. Chron.*, N.S., vol. vii. p. 10.

These groats present to us a young portrait, totally different from those which in my opinion belong to Henry V. The head of the king is larger, the neck is shorter, and the features are prominently cut, resembling to a great extent the heavy groats of Edward IV. The egg-shaped lump on the throat has disappeared. An annulet is always to be found on each side of the head, in two quarters of the reverse, and also after POSVI, as with type 1. Small crosses are likewise between the words of the legend. (See No. 4.) I have never seen a specimen of this groat reading ANGLIE . They are usually in better condition than the coins I have ascribed to Henry V., and are also rarer.

Calais Annulet Groats. Type 3.—Obverse similar to Type 2; but a change here takes place on the reverse. Some of these coins have only an annulet between the pellets in one quarter; a trefoil appears on the right of the king's crown, and another takes the place of the annulet after POSVI.¹⁶ (See No. 5.) On a second variety the annulets on the reverse disappear altogether, and for the first time new marks are adopted. A rosette usurps the place of an annulet after POSVI, and another appears after ATLISIE . (See No. 6.) Specimens of Type 3 are very scarce, and they are, I believe, the last coins of the Henries on which an annulet is to be found. They are of what may be called a transitional character, for, on the groats to follow, new marks are introduced in rapid succession. The annulet exhibits itself again on the coinage of Edward IV. In the reign of Henry VIII. it makes its last appearance on the silver coins of England.

¹⁶ It may be asked why I do not give this variety to Henry V. The coin will not allow me to do so. It is of good workmanship, and much resembles the coinage of Edward IV.

All the London and Calais annulet groats having now passed under notice, there yet remains to be classified a considerable number on which the annulet does not appear. These again display a further improvement; they resemble, not only in general appearance, but also in marks, the coinage of Edward IV., as the following rough outline will show:—

Mint Marks.—Cross; Cross pierced; Cross voided; Cross crosslet; and one variety has no M.M.

Other Marks.—Lozenge; Rose; Leaf; Pine cone; Mullet; Cross; Three pellets; Single pellet; Trefoil, Lis, &c.

ΠΝΓΛ & FRΠΝΑ is usually to be found on these coins; but on some we have ΠΝΓΛΙ, with other shorter abbreviations. As before mentioned, I have never seen a groat reading ΠΝΓΛΙΑ which I could give to Henry VI.

All these groats I assign to Henry VI. because—

Firstly. In point of workmanship they are decidedly the best of the series, and on them are introduced marks hitherto unknown.

Secondly. In marks and general appearance they closely resemble the groats of Edward IV.; they are also usually in better preservation than the annulet money And—

Thirdly. The coins refuse to admit of any other classification; for it may be said they speak for themselves.

In confirmation of this, Ruding on Mint Marks thus writes:—"In the reign of Henry VI. the marks began to be varied, and their number increased very rapidly in that of Edward IV." *The marks began to be varied in the reign of Henry VI.* All this appears to me very conclusive, and clearly settles one important part, at least, of this

question. London and Calais groats without annulets have new marks, and belong to Henry VI.; excepting only the groat with a mullet on the breast, which stands distinct from the rest. With this allowed, and knowing that Henry V. did issue coins late in his reign, part of the annulet money is all that remains to be given to him.

An abstract of the preceding pages leaves the following result:—

HENRY IV.

All groats, weighing 60 grains, issued by Henry IV. closely resemble those of Edward III. and Richard II., and are without difficulty recognised by this resemblance. Mint-mark Cross, trefoil after POSVI. (See Hawkins, 325.) This classification is generally accepted as the correct one.

HENRY V.

Early Coinage.—London only, mint-mark Cross or Cross pierced, mullet on breast, egg-shaped lump on throat, quatrefoil after POSVI, legend $\pi\text{NGLI}\bar{\epsilon}$ or πNGL . (See Pl. VI. No. 1.)

Annulet Money. Type 1.—London and Calais. Mint-mark Cross or Cross pierced; portrait, type, and legend similar to the mullet-groat. London groats of this type always have an annulet in two quarters of the reverse, and after POSVI. Those struck at Calais have an additional annulet on each side of the king's head. (See Nos. 2 and 3.) These I consider to be the first of the common annulet money, and to belong to a late coinage of Henry V.

An intermediate type of the Calais money here intervenes, respecting which it will be seen I do not offer an opinion.

HENRY VI.

Calais Annulet Money. Type 2.—Mint mark Cross or Cross pierced. Improved workmanship, alteration in portrait, no appearance of egg-shaped lump on throat, annulets as usual. I have not seen a groat of this type reading *ANGLIA*. (See No. 4.)

Calais Annulet Money. Type 3. Nos. 5 and 6.—No. 5 has an annulet only in one quarter of the reverse, and a small trefoil appears to the right of the king's crown; on No. 6 we find no annulet on the reverse, and for the first time new marks are introduced, which increased very rapidly in the later years of Henry VI.

All London and Calais groats without annulets, excepting of course those given to Henry IV. and those with a mullet on the king's breast, belong to Henry VI. (See No. 7, also Hawkins, Nos. 328, 329, and 330.)

J. FRED. NECK.

NOTICE OF RECENT NUMISMATIC PUBLICATIONS.

In Nos. 5 and 6 (September—December) of the *Revue Numismatique* for 1867 there are the following articles :—

1. "Letter to M. Adrien de Longpérier on Gaulish numismatics. XXVII. Coins of Avenio (Avignon), of Cimenclium (Cimiez), and of Mastramela (Miramas)," by M. F. de Sauley.

2. "Description of a find of some very small silver coins in Sicily," by M. Antonino Salinas.

3. "On some Greek coins mentioned in ancient authors and in inscriptions," (second article) by M. F. Lenormant.

4. "Coins of some Phœnician kings of Citium," by M. de Vogüé.

5. "L'Eucratidion. Dissertation on a gold inedited coin of Eucratides, King of Bactria," by M. A. Chabouillet.

This article forms the first portion of a dissertation on the magnificent gold medal (we use the word advisedly) of Eucratides, recently purchased for the *Bibliothèque Impériale* of Paris, by special order of the Minister of Public Instruction, the 18th of July, 1867. It is a piece of twenty staters, and was acquired for the enormous sum of 80,000 francs, or £1,200. In the present number of the *Numismatic Chronicle* will be found the commencement of a series of papers on "Bactrian Coins," by General Cunningham, who will doubtless give to numismatists some interesting details on this remarkable piece in its proper place in his monograph.

6. "Byzantine seals in the collection of M. le Baron de Köhne, and from other sources," by M. E. Miller.

7. "Mélanges de Numismatique. Austrasian tremisses," by M. Charles Robert.

8. "Deniers of Count Hugues, struck at Lyons in the middle of the tenth century," by M. A. de Longpérier.

9. "Miscellaneous Coins of Lorraine and of the Duchy of Bar," by M. F. de Pfaffenhoffen.

In the *Bulletin Bibliographique* are notices of the following works and papers :—1. "The Legions of the Rhine," by Charles Robert, article of M. H. de Longpérier. 2. "Date of the Birth of Julius Caesar," by M. le Comte de Salis. 3. "Coins and Medals of the Canton Grisons," by M. C. F. Trachsel. 4. "Inedited Coin of the Grand Master of the Order of St. John of Jerusalem in Rhodes," by M. P. Lambros.

In the *Chronique* are the following notices :—

1. Notice of the late Duke de Luynes.
2. Jeannin du Bois, engraver of seals in the fourteenth century.

3. The *Atia* family, by M. A. de Longpérier.

This is another note on the supposed denarius of T. Labienus, published in the last number of the *Revue Numismatique*, and alluded to by us in the *Numismatic Chronicle*, N.S., vol. viii., p. 91. M. de Longpérier seems inclined to consider this specimen a forgery, and that it should be placed in the same category as those published in the Pembroke Collection. A notice of this piece and some other forgeries, by Mr. Bunbury, will be found in the "Miscellanea" of the present number of the *Chronicle*.

In the *Nécrologie* is a notice of the late M. Prosper Dupré, by M. le Baron de Witte, accompanied by a brief account of his collection of Greek coins recently sold at Paris.

The number concludes with a short notice, by M. A. de Longpérier, of a document relating to *monnaies coupées*, and a notification of a medal struck under Charles VII., by M. François Lenormant.

In the *deuxième livraison* of the *Revue Numismatique Belge*, for 1868, there are the following articles :—

1. "Catalogue of Obsidional Coins and Pieces of Necessity," (ninth article), by M. le Lieut.-Col. P. Mailliet.
2. "Imperial inedited coins," by M. S. T. Baxter.
3. "A Medal unknown to Van Loon.—Jean Baptiste Maes," by M. R. Chalon.
4. "Don Antonio, King of Portugal" (supplement), by M. R. Chalon.
5. "The *Tirs Fédéraux* of Switzerland, and their Medals," by M. F. Sequin.
6. "Numismatic Curiosities—Rare or inedited Coins" (tenth article), by M. R. Chalon.

In the *Correspondance* are letters from MM. le Comte Maurin Nahuys and Domenico Pierrugues to M. R. Chalon.

In the *Mélanges* are notices of various numismatic publications.

RECHERCHES SUR LA MONNAIE ROMAINE, DEPUIS SON ORIGINE
JUSQU'À LA MORT D'AUGUSTE. PAR LE BARON D'AILLY.

The first and second parts of the second volume of this magnificent work have now made their appearance, and a third

and last part is promised a few months hence. The first part contains an account of the anonymous coins bearing the legend ROMA, first of the denarii, quinarii, sestertii in silver, the 60, 40, or 20 sesterce pieces in gold, and the *Victoriatus* and its half, and next of the *As* and its parts. The chapter and plates devoted to the coins with retrograde legends and those with abnormal devices are well worthy of study.

The second part of the volume is devoted to the uncertain coins which bear isolated symbols. The symbols are arranged alphabetically, and are upwards of fifty in number. The care and minute attention bestowed by the author on the series of coins which he has had under examination cannot be better exemplified than by the exhaustive manner in which he has treated these apparently unimportant adjuncts, which, however, if properly investigated, throw much light on early Roman numismatics. Another instance of the conscientious manner in which the author has conducted his researches is afforded by the frequent lists of the exact weights of the various specimens extant in different collections. The plates by Dardel are all that can be desired.

In the Transactions of the Royal Society of Literature, vol. ix., 2nd series, p. 15, is a paper on some coins of Cnossus in Crete, by Mr. John Hogg, F.R.S. The coins in question are engraved in Pashley's Travels in Crete. With regard to the word ΠΟΛΙΤΗΣ which occurs on the obverse of one of these coins, and which by Chishull and Liddell and Scott has been considered as a form of *δαλχος* or *δαχλος*, the author shows that it is far more probably the name of a magistrate. The female head, both bare and with a starry crown, on the obverse of some of the silver coins, with the labyrinth and the letters A P on the reverse, which has by some been regarded as that of Juno, he considers to be that of Ariadne, who was so intimately connected with the labyrinth. The female head with a crown, decorated with flowers, he admits to be Juno represented as Queen of Heaven.

The sixth volume of that valuable repertory of antiquarian information, the *Collectanea Antiqua* of M. C. Rouch Smith, has just been completed. The principal though not the only numismatic features of the volume are two admirable plates by the late Mr. Fairholt, of coins of Carausius in the cabinet of C. Warne, Esq., among which will be found many rare and some hitherto unpublished types.

MISCELLANEA.

FALSE DENARII OF LABIENUS AND OTHERS.—In the last number of the *Numismatic Chronicle* (Part I. for 1868) I find mention, in the Notices of Recent Numismatic Publications, of a supposed denarius of Titus Labienus, with the town of Cingulum on the reverse, in the possession of M. J. Cumano, of Faro in Portugal. The editor adds:—"M. A. de Longpérier has appended a note expressing some slight doubt of its genuineness, and it is much to be feared that it is a modern forgery." In confirmation of the doubts thus expressed, I think it may be worth while to mention that I have in my possession a coin of precisely similar type, which is an undoubted forgery. I purchased it at the Pembroke Sale (lot 421) with a genuine (but unfortunately plated) coin of the well-known type of Q. Labienus, with a horse on the reverse. The coin in question is catalogued by Burgon as *false*; and no practised numismatist can have a moment's doubt on the subject. Mr. Burgon adds, "This last coin is imaginary, having no antique prototype, and is a curious specimen of the learned forgeries produced in the early part of the sixteenth century, which were made to fit certain passages in the ancient authors then most read."

I may add that several other forgeries of a similar character, derived also from the Pembroke collection, are now in my cabinet. They are all figured in the "*Museum Pembrochianum*" (Part 3, tab. 111); but as that work is somewhat rare, and so strangely arranged that the coins in question may easily escape the notice of numismatists, it may perhaps be worth while to draw attention to them, by repeating the description of them here.

FALSE DENARII.

Obv.—P. SCIPIO AFRIC. Bald and beardless head to left.

Rev.—CART. SVBAC. Scipio in triumphal quadriga to right.

Obv.—M. T. CICERO. Laureated head to right.

Rev.—MINERVE (*sic*). Minerva seated to left, behind her a globe on a tripod.

Obv.—L. (?) CAESAR. Head to right (not laureated, and bearing very little resemblance to the usual por-

traits of J. Cæsar; yet it is figured as a genuine denarius of the Dictator in the Mus. Pemb., pt. 3, t. 22).

Rev.—An eagle standing, with the letters A. D. N. M. in the field.

Obv.—Helmeted and bearded head to right.

Rev.—L. CATILINA. A winged elephant (1) in front—an uncertain object.

Obv.—Helmeted head to right; legend in front, T. LABIENVS.

Rev.—A walled town, with battlements, and a gate in the centre; above, CINGVLVM.

Obv.—Bearded head, with radiated crown, to left.

Rev.—TOTILE (*sic*), in two lines, within a wreath.

To these may be added a coin of somewhat similar character, though its historical import is not so clear.

Obv.—VARRO. PRO. Q. A bearded terminal bust, as on the well-known coin of the Terentia family (Cohen, No. 16).

Rev.—A wreath, a licitor's axe, and an object like a comb (?), with the legend DEVICSPART' (*sic*).

This coin did not belong to the Pembroke collection, and I do not remember how it came to my hands. I insert it here because it has rather more resemblance to a real denarius than any of the others, and might therefore be some day produced as a genuine coin.

Some years ago a forgery of a similar kind was sent up to me from a collector in the country, as a very rare denarius of the Porcian family. It had the head of M. Cato, and (if I remember rightly) an elephant on the reverse. Its style of execution at once showed me to what class it belonged; and I have no doubt that M. Cumano's Labienus will prove to be "*ejusdem farinae*."

These coins are not without interest as *literary curiosities*, showing the desire felt, after the revival of letters, to supply the want of historical portraits of distinguished persons. Some of these have also been reproduced without question by the earlier writers on numismatics.

I remember to have seen somewhere, but I cannot recall *where*, some of the forgeries here described, in *gold*; and I suspect that the *originals* were all struck in that metal, several

of those in my possession, and most others that I have seen, being *casts*. The Labienus, however, and the coin with the name of Varro, are exceptions, being undoubtedly struck from a die: the weight of the former is slightly below that of a true denarius.

I may perhaps venture to add that the coins of Cingulum with the head of Labienus are noticed as modern forgeries in the article "Cingulum" in Dr. Smith's "Dictionary of Ancient Geography."

E. H. BUNBURY.

To the specimens mentioned by Mr. Bunbury may be added the false denarii of Sertorius, published by me in the *Numismatic Chronicle*, vol. v., p. 74.—F. W. M.

ANGLO-SAXON COINS FOUND AT IPSWICH.—I find amongst the coins of Æthelred II., which I have recently procured from the Ipswich hoard, the following varieties not in Mr. Evans's lists, *Num. Chron.*, vol. iv., pp. 29, 30, and 225:—

IPSWICH.

+ LEOMAN M-O LIP (reads ÆDILRED on obverse).

LONDON.

+ ÆLFAR M-O LVNDON.

+LEOFHEH M-O LVND.

NORWICH.

+ SPYRTINE M-O NORÐVIC.

SOUTHAMPTON.

+ ÆDELVEARD II-O HANVI.

THETFORD.

+EADLAR M-O ðEOTFORD (W—K on reverse).

YORK.

+ ODA MONETA EFERVI.

+ VLF MONETA EFERVI.

It is somewhat curious that the names of all the moneyers of the Norwich mint, found in this hoard, end in INE, viz.,

BRANTINE,
LIVINE,
MANNINE,
SPYRTINE;

and, with the exception of ODA, in the present list, those of York end in VLF, viz.,

VLF,
FASTVLF,
SVNVLF.

J. H. POLLESSEN.

MEDALS OF HENRY IX.

York, April 25, 1863.

SIR,

A curious subject has arisen in numismatics, which, never having been mentioned before, I think is worth making some inquiry about. In a sale of autographs of the last of the Stuarts, which has just taken place in London, at Messrs. Puttick and Simpson's, and which is mentioned in the *Manchester Examiner* and *Times* of April 21, it is stated, "There are nine letters in the collection, all written by the hand of Henry Benedict Stuart, Cardinal of York, the last of his royal house, and who once coined a little money, now very scarce, as Henry the Ninth of Great Britain, France, and Ireland, D. F." I should be obliged by your placing this in the next number of the *Numismatic Chronicle*, in hopes that some one in Rome or elsewhere would describe the designs of these coins, and if they are in all the metals, and thus add to our knowledge of the series of coins and medals of the latter Stuarts.

I remain, &c.,

H. W. CLARKE.

There were no coins struck of Henry IX.; but medals with his portrait, both as Cardinal of York and with the title of king, are of no great rarity. There is one by Cropanese with the date 1776, and another by Hamerani with the date 1788. Both have the same reverse, with the representation of Faith holding a cross, &c., and the legend NON DESIDERIIS HOMINVM SED VOLVNTATE DEI. A woodcut of the latter variety is given in Hone's "Every-day Book," vol. i. p. 34.

Another has the arms of Great Britain on the obverse, instead of a portrait. A description by Mr. Haggard of all the varieties will be found in the *Num. Chron.* vol. iii., p. 149.

J. E.

VIII.

COINS OF ALEXANDER'S SUCCESSORS IN THE EAST.

(Continued from p. 186.)

MONOGRAMS.

THE monograms on the coins of Greece and Western Asia are of comparatively little importance, as each city is generally distinguished by its particular symbol, and the history of those countries is sufficiently well known from ancient authors. For the West, therefore, the coins are only aids to history; but for the East, from the want of written records, they are history itself. So also from the entire absence of symbols on the Eastern coins, the monograms become one of our chief authorities for the determination of the particular localities over which the different rulers held sway. The find-spots of the coins themselves are likewise specially valuable for the same purpose; but, unfortunately, they are not always known; and in the case of single silver coins which may have been carried from place to place by traders, such data might even perhaps mislead us. But although the actual find-spots of the rarer specimens may be neither traceable nor trustworthy, yet we know that the great mass of these coins, both in silver and in copper, has been found in Afghanistan and the Western Panjâb. We possess also

Masson's detailed record of the annual yield of coins at Begrâm, near Kabul; which is equally valuable for its omissions, as we may conclude with some certainty that the kings whose coins were not found there, and which are yet plentiful about Peshâwur and in the Panjâb, could not have ruled over Kabul. Masson himself remarks that Begrâm, which had furnished him with thousands¹ of the coins of Eukratides, had not yielded a single coin of the Arsakidæ, and only one of the Seleukidæ, from which he justly inferred that neither of those dynasties could have reigned over the Kabul valley.

In attempting an explanation of some of the monograms of the coins of Alexander's successors in the East, I have used the known find-spots of the coins as the chief guide to the localities over which the different princes reigned. Thus we learn from Masson² that he found no coins either of Moas or of Azas at Begrâm; and we know, from the experience of many collectors for the past twenty years, that the coins of both these princes are found in considerable numbers throughout the north-western Panjâb, and more sparingly towards Peshawur on the west, and the Satlej on the east. From these known find-spots it may be inferred, with some certainty, that both kings must have reigned over the Panjâb, and that the chief seat of their power was the country lying between the Indus and the Chenâb. Now, the principal cities of this district were *Taxila* and *Nikaia*, the former being the ancient native capital, and the latter a new city founded by Alexander on the battle-field of the Hydaspes, where he gained his victory over Porus. Accordingly, on the

¹ Journal Bengal Asiatic Society, 1886, pp. 537—539.

² Journal Bengal Asiatic Society, 1886, p. 547, note.

coins of these two princes we find the names of both *Taxila* and *Nikaia* in monogram ; but not a single specimen of their coins has yet been discovered with the monograms of Kabul, Alexandria Opiane, Kartana, or Dionysopolis, which are of such common occurrence on the coins of the pure Greek kings.

As the Seleukidæ possessed Parthia and Bactriana for upwards of seventy years, we might expect to find some of their mint monograms repeated on the coins of the earlier princes of those countries after they became independent. Such monograms, therefore, as are common to the coins of the Seleukidæ and earlier Bactrian princes I would assign to Bactriana and Ariana ; and such as are common to the Seleukidæ and earlier Arsakidæ I would assign to Parthia. For the purpose of making this comparison, I have introduced, at the head of the accompanying Plate, a number of monograms taken from the coins of the earlier Seleukidæ and Arsakidæ. Amongst them I have included several of the commoner and better defined monograms of Western Asia for the express purpose of showing that the system of explanation which I have followed is equally applicable to the monograms on the coins of those countries as to those of Bactriana and Ariana.

It is now just a quarter of a century since I made my first attempt to explain the monograms on the Bactrian coins. The subject was then almost new, as previous writers on Greek coins had generally left them unnoticed. Since my first attempt, however, as Mr. Thomas has remarked, "the question of the interpretation of mint monograms has received more attention and illustration from the learned of Europe." Müller, especially, has illustrated the coinage of Alexander the Great in a com-

plete and masterly manner, partly from the symbols and monograms combined, and partly from the monograms alone.³ But the reading of the Western monograms is rendered comparatively easy by the frequent accompaniment of well-known symbols, as a club, a lion, a trident, and a palm, on the coins of Herakleia, Miletus, Mylasa, and Aradus. The Western geography, also, is tolerably well known. With the Eastern monograms, however, the case is exactly reversed, as they are quite unaccompanied by symbols, and our knowledge of the ancient geography of Bactriana and Ariana during the Greek domination is very imperfect.

M. Chabouillet, in his notice of the twenty-stater gold piece of Eukratides,⁴ objects to my early attempt to explain these monograms, because my readings do not give the name of any one of the seventeen towns of Bactria recorded by Ptolemy. But this objection is scarcely valid, as Ptolemy lived upwards of three hundred years after the Greek dominion in Bactria had passed away. Now, little more than three centuries have elapsed since the death of Jehangir, the son of Akbar, but we may examine the coins of both father and son in vain for the names of the famous cities of Akbarabad, Shahjahanabad, Muhammadabad, Azimabad, Ghâzipur, Farokhabad, Muradabad, Amritsar, Caunpore, Mirzapur, Murshidabad, or Calcûtta. The first four, we know, are the new Muhammadan names of Agra, Dehli, Benares, and Patna, all of which appear on their coins: but who now can point out the ancient names of the seventeen Bactrian cities of Ptolemy?

³ Numismatique d'Alexandre le Grand, par L. Müller. 1855.

⁴ Revue Numismatique, 1867, p. 403.

Doubtless many of these cities must have existed during the period of Greek dominion ; but it is beyond our power to say whether any of Ptolemy's names, besides Zariaspa and Eukratidia, were in use in the times of Euthydemus and Eukratides. Again, the coins of Akbar and his successors do not show the name of Balkh, or Ghazni, or Jalalabad, or Peshawur ; and of all the cities to the west of the Indus mentioned by Abul Fazl, the name of Kabul alone is found on the coins of Akbar. I am, however, quite ready to admit that the fact of my early readings not giving any one of the Bactrian names mentioned by Ptolemy was rather unfavourable to my proposed explanations. But, after the experience of a quarter of a century, during which the subject of mint monograms has received so much illustration from Müller and others, I am now firmly convinced that I was quite right in my original conclusion that all the mint monograms which are common to a number of different princes can only be the names of cities, and cannot possibly be the names either of magistrates or of mint-masters, or of any other functionaries.

It has been conclusively shown by Müller that the monograms of cities were already in use in the time of Alexander, on whose coins we see the well-known symbols of many famous cities, accompanied sometimes by the first two or three letters of the name, and sometimes by a monogram forming the same letters. We may therefore confidently expect to find the names of the mint cities of his successors, the Greek princes of Syria, Bactriana, and Ariana, expressed on their coins in a similar manner. It is unfortunate that the coins of the two Diodoti furnish but two monograms, and that only one of these, No. 1, is found repeated on a single gold

piece of Euthydemus. It is, indeed, possible that this monogram may be the name either of a mint-master or of a magistrate; but as it does not occur on the coins of the second Diodotus, I am inclined to look upon it as the name of a city rather than that of a man. According to my reading, it forms *Nautaka*, which would appear to have been the chief city of Sogdiana after the destruction of Marakanda by Alexander.

No. 2 monogram, which is found on most of the coins of Diodotus II., I read as *Zariaspe*, the well-known capital of Bactria. No. 10 monogram, which is found on the coins of Pantaleon and Agathokles, as well as on those of Euthydemus and Demetrius, I read as *Arachotus*, the capital of Arachosia. No. 3 monogram, which is found on the coins of the same four princes, I read as *Ophiane*, which was the true name of the Caucasian Alexandria, the capital of the Paropamisadæ. No. 31 monogram, which is found on the coins of Antiochus II. and Euthydemus, both with the seated Herakles reverse, I read as *Iotale*, the name of the fertile district of Margiana, in which stood the Greek city of *Antiocheia*, and which, therefore, would have been named *Iotale*, to distinguish it from other cities of the same name. Lastly, No. 28 monogram, which is found on the coins of Euthydemus alone, I read as *Herakleia*, which, as it is placed by Pliny either near or amongst the Derbikkæ, must be either at or near the old town of Sarakhs on the lower Arius River.

If my readings are correct, I have thus been able to identify, amongst the few monograms of these earlier princes, the name of the chief cities of Sogdiana, Bactria, and Margiana to the north, and of Arachosia and the Paropamisadæ to the south of the Caucasus. I have followed the same system in reading the monograms on

the Syrian and Parthian coins; and I believe that I have been successful in the decipherment of several names that have hitherto baffled our best numismatists. I refer specially to the following readings of the Syrian monograms:—No. 2, as Atropatene; No. 3, as Stratonikeia; Nos. 6 to 11, as Samosata; Nos. 12 to 15, as Seleukeia; No. 22, as Soteira: and to the following readings of Parthian monograms:—Nos. 4 and 6, as Arsakeia; No. 7, as Kharax; and Nos. 5, 8, 12, and 13, as Soteira. I would also refer to my readings of the four monograms on the coins of Kamnaskires, namely, Babylon, Kirkesium, Soteira, and Edessa,⁵ as another decisive testimony in favour of my opinion that many of the monograms on the coins of the Eastern Greek princes are the names of their mint cities.

In my readings of all these monograms I have followed the same system of decipherment which I adopted in my first attempt in 1842, and which has since been so successfully employed by Müller in reading the monograms of Alexander's coins. In some few cases the letters have been read sideways or reversed, as in the well-ascertained examples of Samê, Larissa, Demetrius, Marathus, Herakleia, and others. In many cases the same letter has been read twice, or even thrice, as in Samosata. In no case whatever has any letter of a name been neglected, but every separate line of each monogram has been accounted for.

I do not suppose that all, or even one-half, of the mono-

⁵ The first, forming BABYΛωνος, will be found in Longpérier's Plates of Parthian coins. The second is the same as No. 16 of the present Bactrian series, and forms KIPKησιον. The third I read as CΩTEIPas, and the fourth as ΕΔΕCCAC. The last is also in Longpérier's Parthian Plates.

grams that occur on the coins of the Bactrian and Arian Greeks are the names of mint cities. But I fully believe that many of them are so; and further, from their occurrence on the coins of several consecutive princes of different ages, I contend that they cannot be anything else but the names of places. I would draw especial attention to Nos. 17 and 58, each of which is found on the coins of no less than twelve different princes. I freely admit the difficulty of satisfactorily deciphering some of the monograms, in consequence of the variety of readings of which they are susceptible. But this difficulty is much lessened where, as in the present case, the dominions of the princes are limited to a comparatively small area.

Thus we may be puzzled whether to assign No. 1 monogram of the Syrian series to Apameia in Asia Minor, or to Apameia in Media, or to Pasargadæ in Persia, all of which places belonged to the wide dominions of Selenkus. But with the monogram No. 10 of the Bactrian series, which is found on the coins of Pantaleon, Agathokles, Euthydemus, and Demetrius, we are certain that it must represent some place either in Arachosia, or among the Paropamisadæ, where alone the coins of the first two princes have been found. I therefore read this monogram as Arachotus, the capital of Arachosia. This reading is confirmed by the fact that the same monogram is found on the coins of Seleukus I. and Antiochus II. (No. 30 of Syrian monograms), and not on the money of any of their successors. For, as the country of the Paropamisadæ was yielded to the Indian prince Chandra Gupta by Seleukus I., the position of the mint city indicated by the monogram is certainly restricted to Arachosia.

In suggesting some of the following readings, I have been guided partly by the absence of several well-known

names, and partly by the probable vicinity of the few places found on the coins on some of the princes whose money is rare, and whose dominions, therefore, may fairly be presumed to have been confined to narrow limits. Thus none of the early monograms give the names of Ortospāna or Peukelaotis, although we know that these were two of the most ancient cities of the Kabul valley. The first place, called Kabura or Ortospāna by Ptolemy, I am inclined to identify with the Nikaia of Arrian, which was the first city visited by Alexander immediately after leaving Alexandria, and just before commencing his Indian campaign. As the name is a pure Greek one, it must have been imposed on some previously existing native city, and as the indicated position of Nikaia points to Kabul, I infer that Kabura or Ortospāna was most probably the actual place so renamed by the conqueror. Similarly the find-spots of many of the coins bearing the monogram No. 58 lead me to infer that this city must have been situated not far from the Indus. I think, therefore, that it may represent the new Greek name either of Peukelaotis itself, or perhaps of Taxila. The reading of this monogram will be fully discussed in its proper place.

This practice of the Macedonian princes of renaming many of the chief cities of their dominions after themselves or their queens offers little difficulty in the case of the Syrian towns, as most of their positions are well known. Thus, amongst the Syrian places we have Seleukeia, Antiocheia, Achaïs, Soteira, Apameia, Stratonikeia, Laodikeia, &c., all named after members of the royal family of the Seleukidæ. It seems almost certain, therefore, that the Greek princes of Bactriana, Ariana, and India must have followed the example of the Syrian kings.

The only names, however, that have been recorded are Euthydemia, Demetrias, and Eukratidia; but I conclude that several other names must have been imposed by some of the more powerful kings, such as Diodoteia, Agathokleia, and Menandreia, which will be noticed hereafter. I infer also that, like the Syrian kings, they must have renamed some of their towns after their favourite deities. Indeed, one of these is recorded by Ptolemy, as Nagara or Dionysopolis, of which No. 18 is the probable monogram. But there are also monograms which seem to point to the names of other deities. Thus Nos. 52 and 56, on coins of Eukratides, who was a worshipper of Apollo, may be read as ΑΠΟΛΛΟΝΕΙΑΣ and ΑΠΟΛΛΩΝΙΑΣ, and No. 120, on a coin of Artemidorus, who was a worshipper of Artemis, may be read as ΑΡΤΕΜΙΣΙΑΣ. No. 90 is perhaps intended for ΗΑΙΟΗΟΛΕΩΣ, and No. 28 for ΗΡΑΚΛΕΙΑΣ. The positions of the Syrian towns are mostly well known; but, with the exceptions of Euthydemia, Demetrias, and Eukratidia, we have no clue but our own sagacity to guide us in determining the positions of any of these renamed cities of the Eastern Greeks.

In conclusion, I may point to the consistent and satisfactory results which several of my readings afford as to the precise localities possessed by several of these Eastern Greek kings, whether their history is partly known, as in the case of Euthydemus, or altogether unknown, as in the cases of Pantaleon, Agathokles, and Archebius. From Strabo we learn that Euthydemus occasioned the revolt of the provinces adjacent to Bactriana,⁶ and from Polybius,⁷ that he opposed Antiochus the Great on the banks

⁶ Geograph. xi. 9, 2.

⁷ Hist. xi. 8.

of the Arius River, and that after being defeated he retired to Zariaspe. He must, therefore, have possessed not only Aria and Bactriana, but also the intervening district of Margiana; and as his coins have been found both in Begrâm and in Kandahar, he must have held Arachosia as well as the country of the Paropamisadæ. In accordance with these facts my readings of the principal monograms of Euthydemus give the names of Herakleia in Aria, Iotale or Antiocheia in Margiana, Nautaka in Sogdiana, Euoumou-Anassa⁸ in Bactria, Arachotus in Arachosia, and Ophiane, Kartana, and Kapisa, amongst the Paropamisadæ. Similarly the coins of Pantaleon and Agathokles, which have been found at Begrâm, and about Ghazni and Kandahar, give the monograms of Ophiane and Arachotus, while the coins of Archebius, which have been found chiefly at Begrâm and Kabul, give the monograms of Nikaia or Kabul, Ophiane or Alexandria, and Kartana, all situated in the Upper Kabul valley.

I offer the following readings of the monograms on the coins of the Eastern Greek princes with much diffidence. The subject is confessedly a difficult one, and although I feel quite satisfied myself as to the correctness of some of the readings, yet I only venture to publish them with the reservation that they are but another attempt to explain these mysterious symbols, which could not well be left unnoticed in this account of the coins of "Alexander's Successors in the East."

MONOGRAMS ON SYRIAN COINS.

No. 1, on Seleukus I. and Antiochus I., forms

⁸ EYOYΣMOY or TOYΣMOY is perhaps only a misreading for EYΘYΔHMOY.

ΑΠΑΜΕΙΑΣ, or *Apameia*. It might also be read as *Pasargadæ*, but as it occurs on the Parthian coins of the Arsakidæ, it probably refers to the Median *Apameia* near Rhagæ.

No. 2, on Antiochus I., forms ΑΚΒΑΥΑΥΑΥ, or *Akbatana* of Media. The Ekbatana of Atropatene is perhaps represented by the lower monogram, No. 2, which is found on coins of Alexander the Great (see Leake, No. 36), and which may be read as ΑΤΡΟΙΑΤΗΥΥΥ.

No. 3, on Seleukus I., forms ΣΤΡΑΤΟΝΙΚΕΙΑΣ in full. Leake reads ΣΥΡΑ without offering any explanation. Gough proposes *Seleukeia*, but this reading omits the letter P. Stratonikeia in Caria was built by Seleukus I. in honour of his wife Stratonike. Two similar monograms, but with the letters differently and less neatly arranged, occur on some of the later Syrian coins. (See M. Borrell in Num. Chron. XV., monograms Nos. 33 and 34.)

No. 4, on Alexander the Great, and No. 5, on Antiochus I., form ΒΑΒΥΛΩΥΥΥ. It is also found on one of the tetradrachms of Kamnaskires and Anzaze. A similar monogram, but with the letters differently arranged, is found on some of the later Syrian coins. (See Borrell in Num. Chron. XV., No. 23.)

No. 6, on Seleukus I.; No. 7, on Alexander the Great; No. 8, on Seleukus I.; Nos. 9, 10, and 11, on Antiochus I., all form ΣΑΜΟΣΑΤΑΣ in full. Samosata was a famous fortified city of Kommagene on the Upper Euphrates, and one of the most important places in the Syrian dominions.

Nos. 12 and 13, on Seleukus I. and Antiochus I., form ΣΕΑΕΥΚΕΙΑΥ; and No. 15, on Antiochus I., gives the same name in full. The city of *Seleukeia* on the Tigris was

founded by Seleukus I., who made it his capital in preference to Babylon.

No. 16, on Alexander the Great, gives the name of Pasargada in full. Leake reads ΣΑΡ for Sardis; but as No. 17 on Selenkus I. and Antiochus III., No. 18 on Antiochus I., Antiochus II., and Seleukus III., and No. 19 on Antiochus I., all form the same name of ΠΑΣΑΡΓΑΔΑΣ in full, I prefer my own reading of No. 16.

No. 20, on Antiochus I., may be read either as ΤΑΡσεων, *Tarsus*, or ΑΡΑΔΙων, *Aradus*.

No. 21 is found on coins of Antiochus II. with the seated Herakles reverse, which was afterwards adopted by Euthydemus. I read it as ΗΡακλειας, or *Herakleia*, also named Achaïs, which was most probably Sarakhs.

No. 22, on Antiochus II., forms ΣΩΤειρας, or *Sôteira*, a city in Ariana mentioned by Ptolemy, Ammianus, and Stephanus Byzantinus. Its position is uncertain, but it was, perhaps, only a new name for the Arian Alexandria.

No. 23, on Antiochus II., forms ΜΑΡΤΙΑΝης, or *Margiane*, which I would identify with the celebrated old city of Meru.

No. 24, on Alexander the Great and Seleukus I., is doubtful; but both may be read as Margiane.

The following monograms (Nos. 25 to 30, together with No. 21 already noticed) are found on the coins of Antiochus II., with the types of the seated Herakles and the thundering Zeus, both of which were adopted by the early Bactrian kings. All of these monograms also, except Nos. 27 and 28, are found on the coins of the Bactrian kings.

No. 25, on Antiochus II., reverse Herakles, and No. 26, Antiochus II., reverse Zeus, may both be read as ΣΑΜΑΙΤΑΝΑΣ, or *Samangân*, a very ancient town to the

south of Khulm, and to the south-east of Balkh, which I have identified with the *Bactra Regia* of Ptolemy, and with the Aornos of Alexander's historians.

No. 27, on Antiochus II., reverse Herakles, forms ΣΕΛΕΥΚΕΙΑΣ, or *Seleukeia*, on the Tigris.

No. 28, on Antiochus II., reverse Zeus, forms ΔΙΤ or ΔΙΚΤ, for which I am unable to offer any equivalent.

No. 29, on Antiochus II., reverse Zeus, forms ΙΩΤαλης, that is, Antiocheia, in the fertile district of *Iotale*, or *Itale*, or *Zotale* in Margiana, which was irrigated by canals drawn from the Margus River. Here Alexander founded a city, which, having been destroyed by the barbarians, was rebuilt by Antiochus I., who admired the great fertility of the district.⁹ The position of this place has been already discussed in my notice of the geography.

No. 30, on Seleukus I. and Antiochus II., forms ΑΡΑΧΩΤΩΝ, or *Arachotus*, the capital of Arachosia.

No. 31, the letter Ν, on Antiochus II., is perhaps intended for *Nautaka* in Sogdiana, as it is found on a coin with the type of the thundering Zeus, which was, therefore, most probably, struck by Diodotus, the satrap of Bactriana.

No. 32, the letter Ξ inside a circle, on Antiochus II. is perhaps intended for ΟΞΙΑΝΗΣ, or *Alexandreia Oxiane* on the Oxus, which was probably the modern Termed. A similar monogram is found on the coins of the Bactrian Demetrius. (See No. 34 of Bactrian monograms.)

MONOGRAMS ON PARTHIAN COINS.

No. 1 first appears on coins of Arsakes IV., and is

⁹ Strabo, xi. 10, 2; Pliny, vi. 18.

used by most of his successors. On some of the smaller copper coins it is the sole type of the reverse. It forms the letters TAM, and is almost certainly intended for ΤΑΜΒρακης, or *Tambrake* in Hyrkania, as there are coins of Arsakes IV. in the British Museum with the legends TAM and TAMB on the obverse behind the head.

No. 2, on Arsakes VI., forms ΤΑΜΒΡΑΚΙΣ in full.

No. 3, on Arsakes VI., forms ΤΑΜΒΡΑΚΗΣ.

No. 4, on Arsakes VI., forms ΑΡΣΑΚΕΙΑΣ, or *Arsakeia*, which was the new name of *Rhayæ* in Media; but there would appear to have been a city of the same name either in Parthia or in Hyrkania. (See also No. 6.)

No. 5, on Arsakes IV., forms ΡΑΤΩΝ, or *Rhayæ* in Media.

No. 6, on Arsakes IV. and VI., forms ΑΡΣΑΚΕΙΑΣ, or *Arsakeia*. (See No. 4.) It is apparently this monogram which Lindsay reads as Drangiana. But that country, with its capital of Zarang or Darang, was not acquired by Parthia until the reign of Arsakes VI. or Mithradates the Great. I have, however, seen two copper coins with a similar monogram, which I read as ΔΟ, and which is perhaps intended for ΛΑΟΔΙΚΕΙΑΣ, or *Laodikeia*. MM. Rollin and Feuardent also read ΟΔ in their priced catalogue.

No. 7, on Arsakes VI., forms ΧΑΡΑΚΙΣ, or *Kharax*, a town in Parthia.

No. 8, on Arsakes X., XI., and XIV., forms ΣΟΤΕΙΡΑΣ, or *Soteira*, a town in Ariana. In the catalogue of MM. Rollin and Feuardent it is read as ΣΤΟ. On most of the specimens that I have seen the left-hand stroke is bent in the middle, and on one coin the Σ is perfectly formed. As given by Lindsay this monogram would form ΓΕΡΤΑΣ, which might be taken as a variant reading of *Kerta* or

Karta, or *Zadrukarta*, the capital of Hyrkania. Strabo calls it simply *Karta*.

No. 9, on Arsakes X., XIII., and XV., and No. 10, on Arsakes X., XII., and XIV., form ΤΙΓΓΑΡΟΚΕΡΑΣ, or *Tigranokerta*, the capital of Armenia.

No. 11, on Arsakes X., XII., and XIV., and No. 12, on Arsakes X., XII., XIV., and XV., form ΣΟΤΕΙΡΑΣ, or *Soteira*, a town of Ariana, already noticed under No. 8. No. 13, on Arsakes XI., forms ΣΟ, and is most probably intended for the same place.

No. 14, on Arsakes XIV., forms ΑΠΛΑΜΕΙΑΣ, or *Apameia*, a town of Media near Rhagæ.

No. 15, on Arsakes XII., forms ΑΠΟΛΛΟΝΕΙΑΣ or ΑΠΟΛΛΩΝΙΑΣ, for *Apollonia* in Assyria.

MONOGRAMS ON BACTRIAN COINS.

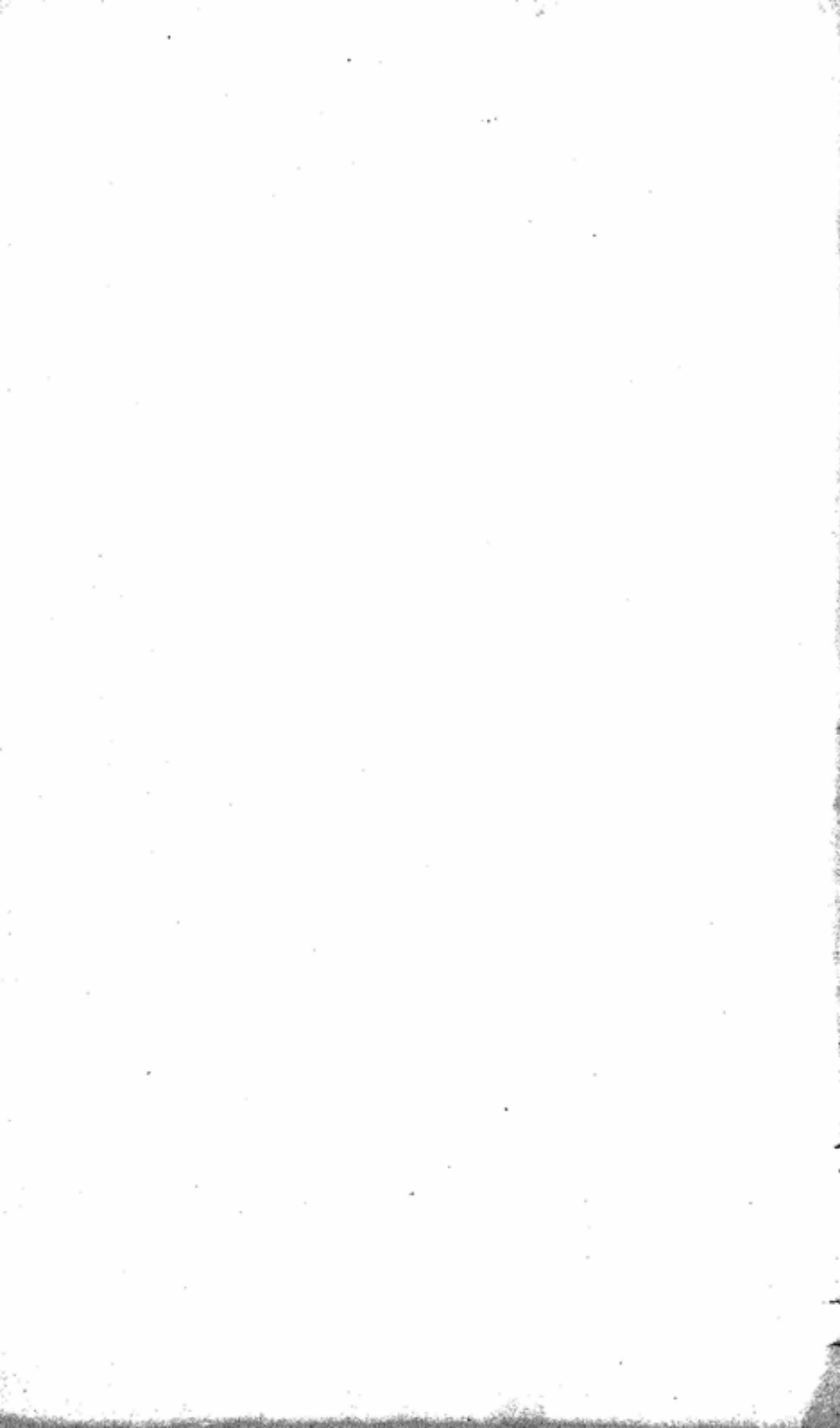
No. 1, on Diodotus I. and Euthydemus, forms ΝΑΥΤΑΚΑΣ, or *Nautaka*, a large town in Sogdiana where Alexander wintered. It is probably *Kesh*, to the south of Samarkand. The summary heading of Chap. XVII. of Diodorus mentions Alexander's expedition against the Nautakæ, but the account itself is lost. According to Strabo the old capital of Samarkand was destroyed by Alexander.

No. 2, on Diodotus II. and Seleukus I., forms ΖΑΡΙΑΣΙΗΗΣ in full. *Zariaspa* was the capital of Euthydemus, to which he retreated after his defeat by Antiochus III. on the Arius River.

No. 3, on Pantaleon, Agathokles, Euthydemus, Demetrius, and Eukratides; No. 4, on Eukratides; Nos. 5 and 6, on Euthydemus; and No. 7, on Agathokles, may all be read as ΑΦΙΛΑΝΗΣ or ΟΦΙΛΑΝΗΣ, for *Alexandreia Opiane*,

SYRIAN COINS.														
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
PARTHIAN COINS.														
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
BACTRIAN COINS.														
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
31	32	33	34	35	36	37	38	39	40	41	42	43	44	45
46	47	48	49	50	51	52	53	54	55	56	57	58	59	60
61	62	63	64	65	66	67	68	69	70	71	72	73	74	75
76	77	78	79	80	81	82	83	84	85	86	87	88	89	90
91	92	93	94	95	96	97	98	99	100	101	102	103	104	105
106	107	108	109	110	111	112	113	114	115	116	117	118	119	120
121	122	123	124	125	126	127	128	129	130	131	132	133	134	135
136	137	138	139	140	141	142	143	144	145	146	147	148	149	150

Stylus Delt.



or the Caucasian Alexandria, which was situated at the *τριοδον*, or meeting of the three roads from Bactriana, Ariana, and India. *Hupian* or *Opian* still exists near Chârikâr, about thirty-six miles to the north of Kabul. The non-occurrence of this monogram on the coins of Antiochus II. and Diodotus confirms its identification as the name of an Indian town, as neither of these princes possessed the country of the Paropamisadæ, which was first acquired by Pantaleon and Agathokles, whose coins are found in considerable numbers at Begrâm. The *Opia* *᾽Ωριαί*, are mentioned by Hekataeus,¹⁰ which proves the antiquity and importance of the name.

Nos. 8 and 9, on Heliokles, I read doubtfully as *ΟΗΛΑΡΗΣ*. It is in favour of this reading that the use of monogram No. 3 ceases with Eukratides.

No. 10, on Pantaleon, Agathokles, Euthydemus, Demetrius, Heliokles, and Apollodotus, I read as *ΑΡΑΧΩΡΟΥ*, or *Arachotus*, the capital of Arachosia. It is found also on the coins of Seleukus I. and of Antiochus II. with the seated Herakles type, which was adopted by Euthydemus.

No. 11 occurs on coins of Agathokles, with the names of Diodotus and Antiochus on the obverse. Mr. Thomas has suggested *Diodotopolis*,¹¹ which agrees with my own reading of *ΔΙΟΔΟΤΕΙΑΣ*, or *Diodoteia*, in referring the name of the city to Diodotus. I am inclined to think that Diodoteia was a new name of Alexandreia Opiane, imposed by Agathokles in honour of Diodotus, when he acknowledged his suzerainty, as I find that the old monogram No. 3, or *Ophiane*, is reverted to by

¹⁰ Stephanus Byzantinus, in v. *᾽Ωριαί*, *ἔθνος ᾽Ινδικόν*.

¹¹ "Royal Asiatic Society Journal," xx. 182.

Agathokles on the coin on which he acknowledges the supremacy of Euthydemus. This conclusion is based upon the belief that the coins which bear the joint names of Agathokles and his three successive suzerain princes must have been struck by Agathokles himself, in acknowledgement of their supremacy.

Nos. 12 and 13 occur on Antimachus Theos, and No. 14 on coins of Antiochus, with the name of Diodotus on the obverse. The last monogram is probably intended for ΝΑΓΑΡΑΣ, or *Nagara*, which, according to Ptolemy, was also called Dionysopolis. This city I have identified with Begrâm, near Jalâlabad, in the middle of the Kabul valley. As Antimachus likewise uses the monogram of Dionysopolis itself, No. 18, my interpretation may not be correct. But I am unable to suggest any other reading, and it is possible that Antimachus himself may have imposed the new name.

No. 15, on Antimachus Theos and Eukratides, forms both ΚΑΠΙΣΣΑΣ and ΜΑΣΣΑΡΑΣ. The former is much the more probable reading, as *Kapisa* and *Capissa* are mentioned by Ptolemy and Pliny. I have identified *Kapisa* with the town of Kafshân or Kushân of the present day, which gives its name to the Kushân Pass of the Hindu Kush.

Nos. 16 and 17 occur on the coins of no less than twelve different princes from Antimachus Theos to Menander and Zoïlus. I read this monogram as ΚΑΡΡΑΣ, or *Kartana*, which I have identified with the extensive ruins of Begrâm, to the north of Kabul. The continuous use of this monogram shows that it must be the name of some great city, which was almost certainly the capital of the Upper Kabul valley. The ruins of Begrâm answer this description exactly; and as the most prominent mass

of ruin, according to Masson, forms an accurate square,¹² there is a very strong presumption in favour of its identification with the ancient Kartana, which Pliny says was also called *Tetragonis*, or "The Square."¹³ It is significant that with the adoption of this monogram that of *Alexandreia Opiane* falls into disuse. The two places are only a few miles apart, and it is probable that in ancient times they were actually connected together, like the two towns of Dehli and Shâhjahâbad. A single coin of Eukratides bears the separate letters KI, without any monogram, which might be thought to refer to No. 16; but this seems very improbable, as I find No. 17 on a coin of Straton, accompanied by the compound Arian letter *kra*, which might even more plausibly be taken for the Arian equivalent of the Greek monogram.

No. 18 is found on the coins of Antimachus Theos, Eukratides, Straton, Menander, and Antimachus Nikephoros. It forms ΔΙΟΝΥΣΟΠΟΛΕΩΣ, or *Dionysopolis*, which I have identified with Begrâm, near Jalâlâbad. The Sanskrit name is *Nagarahâra*,¹⁴ which has been corrupted into *Nangnehar* of the present day. (See No. 12.)

No. 19 is found only on some barbarous tetradrachms of Demetrius, and its true reading is therefore doubtful. I can only suggest that the two letters may be ΣΑ; and if so, I would identify them with the monograms Nos. 29 and 30, which I read as ΣΑΜΑΤΤΑΝΑΣ, or *Samangân*, the old name of an important town between Balkh and Bamian, which is now called Haibak.

¹² "Travels in Biluchistan," iii. 155.

¹³ "Nat. Hist." vi. 25—"Quod postea Tetragonis dictum."

¹⁴ See an inscription in the "Bengal Asiatic Society Journal," 1848, p. 494.

No. 20 is found on Euthydemus and Menander, No. 21 on Euthydemus, and No. 22 on Straton, Zoilus, Apollophanes, and the Satrap Rajubul. It is difficult to determine what place is intended by the first two of these monograms. Ptolemy mentions a town in Bactria which he calls *Εουσμὸν Ἀρασσα*, and places on the Ochus river. Its position corresponds with that of the town of Maimuma on the Yukh-Darâ. Its title of *Ἀρασσα* shows that it was one of the principal places of the country; but the name is doubtful, as a various reading gives *Τουσμὸν*. It is possible, therefore, that the true reading should be *Ευθυδημιον*. A single copper coin of Eukratides has the separate letters ΕΥ, which are probably intended for the same name as monograms 20 and 21. No. 22 I read as ΕΥΞΥδημίας, or *Euthudemia*, which Ptolemy gives as the Greek name of *Sangala*.

No. 20, on the coins of Menander, must be intended for the same place, as none of his coins have been found to the north of the Hindu Kush, while we know that he made extensive conquests in India, beyond the limits of Alexander's farthest point. *Sangala*, or *Sâkaia*, as it is named in the old Brahmanical and Buddhist books, was the capital of the Eastern Panjâb: and the inferior execution of the coins of Straton and Zoilus with this monogram proves that the city where they were minted was on the extreme verge of Greek civilisation. The early extinction of the Greek power in this direction is shown by the coins of the native Satrap Râjubul, which bear exactly the same types with the same monogram (see Nos. 146 and 149) as are found on the coins of Straton and Zoilus. (See also No. 27 for another form of the monogram of *Euthudemia* and *Sangala*.)

No. 23 is found on a single tetradrachm of Eukratides

in the British Museum. No. 24 occurs also on Eukratides with the type of Apollo standing. Both monograms may be read as ΣΗΑΗ, which would stand for *Selenopolis*, if such place had existed in Bactria. Its modern representative might be *Siripul*, which is mentioned by some of the early geographers.

No. 25, on Demetrius, and No. 26 on Eukratides, form ΚΑΠΗΣΑΣ, or *Kapisa*, which has already been noticed under No. 15.

No. 27 occurs on Eukratides, and a nearly similar monogram is found on the coins of Azas. I read it as ΣΑΤΤΑΑΑΣ, or *Sangala*, and the lower monogram which accompanies it on the coin as ΕΥΘΥΔΗΜΙΑΣ, or *Euthydemia*, which, according to Ptolemy, was the new Greek name for Sangala.

No. 25 is found only on some tetradrachms of Euthydemus with the type of the seated Herakles resting his club on a rock in front. It forms ΗΡΑΚΛΕΙΑΣ, or *Herakleia*, which Pliny mentions as a city founded by Alexander, either near to, or amongst the Derbices or Derbikkæ. I think that it was probably Sarakhs, on the lower Arius river. It is curious that this monogram may also be read as ΣΑΡΑΓΚΗΣ in full,¹⁵ but I prefer the reading of *Herakleia*, as the monogram is always found along with the type of Herakles.

Nos. 29 and 30 are found only on the coins of Eukratides and Heliokles. Referring to the well-ascertained monograms of Samè, in Kephalenia, I am inclined to read both of these as ΣΑΜΑγγανας, or *Samangân*, an

¹⁵ Polyænus, in "Stratagematis," i. 1, mentions the mountains on the river *Sarankes*, where the natives opposed Dionysius, on his invasion of Bactria.

old city of Bactria, which I have already noticed under No. 19.

No. 31, on Antiochus II. and Euthydemus, forms ΙΩΤαλης , for *Iotale*, in Margiana, which I have already noticed, under No. 29 of Syrian monograms, as the probable name of the Margian Alexandria, which was afterwards rebuilt by Antiochus Soter, and named Antiocheia. I conclude that it was generally called *Iotale*, to distinguish it from other Antiocheias.

Nos. 32 and 33, on Demetrius, may be read as ΤΑΞΙΑΑς ; but these readings are doubtful. I am not able, however, to offer any better explanation.

No. 34, on Demetrius, forms ΟΞΙανης , for *Alexandreia Oxiane*, which being situated on the Oxus, near Zariaspa, may be identified with the modern Termed.

No. 35, on Demetrius, is doubtful.

No. 36, on Demetrius, forms ΔΡεψας , or *Drepsa*, the metropolis of Sagdiana.

No. 37, on Demetrius and Menander, is doubtful.

No. 38, on oboli of Eukratides of late fabric, may be read as ΑΝΤΙΓ or ΗΑΝΤΑ ; but neither of these combinations offers an approach to any of the known names of cities in Arachosia or amongst the Paropamisadæ, where these coins are chiefly found. The monogram might perhaps stand either for *Antimacheia* or *Pantaleonopolis*.

No. 39, on Eukratides, is doubtful.

No. 40, on Eukratides, I read as ΝΙΚΑΙΑΣ in full; but it is doubtful which of the two cities of this name is intended. *Nikaia*, of the Paropamisadæ, was near the Caucasian Alexandria, and was most probably Kabul itself; while the Indian *Nikaia* was opposite Bukephala, on the Hydaspes. I prefer Kabul as the more important place.

Nos. 41 and 42, on Eukratides and Hermæus, may, perhaps, be intended for the same place. The first I read as ΦΑΡσαγας, or *Pharsaga*, a city of Arachosia, according to Isodorus of Kharax. I possess a drachma of Demetrius with the separate letters ΦΑΡ forming part of a countermark, which is probably as old as the time of Eukratides, and which, I think, serve to explain this monogram. Pharsaga I have identified with Kandahar.

Nos. 43, 44, 45, and 46, on Eukratides and Hermæus, may be read as □PT□ΣΠΑΝΑΣ, or *Ortospana*, which was another name for Kabul. The coins of Hermæus are mostly found about Kabul, and rarely to the eastward.

No. 47, and No. 48 joined with No. 49, are found on the coins of Apollodotus; and without 49 they are both found on the money of Hippostratus and Moas. As the coins of the two latter princes have not been discovered to the westward of Peshawur, we must look for the city intended either along the line of the Indus or in the western Panjâb. I read the monogram as ΚΑΣΠΕΙΡΑΣ, or *Kaspeira*, which Ptolemy places on the bank of the Hydraotes, in the lower Panjâb; and which, therefore, corresponds exactly, both in name and in position, with the famous city of *Kasyapapura*, or Multân.

No. 50, on Eukratides, may be read as ΣΑΜΑγγαυας, or *Samangân*, corresponding with Nos. 29 and 30, which are found on coins of the same king.

No. 51, on Eukratides and Apollodotus, is doubtful. It is, perhaps, intended for ΑΡ, and would therefore correspond with No. 10, or *Arachotus*, which is also found on the coins of both princes.

No. 52, on Eukratides, forms ΑΠ□ΛΛ□ΝΕΙΑΣ, or *Apolloneia*. (See No. 56.)

No. 53, on Eukratides, Apollodotus, Hippostratus, and

Hermæus, and Nos. 54 and 55 on Hermæus, are doubtful. No. 54 on Hermæus may, perhaps, be intended for $\square Y \Phi IANH\Sigma$, or *Ophiane*, in accordance with the spelling of *Hupidn*, which was adopted by the Emperor Baber.

No. 56, on Eukratides, forms $\Delta \Pi O \Delta \Lambda \omega \rho \iota \alpha \varsigma$, or *Apollonia*. (See No. 52.) No place of this name is recorded in the lists of the geographers; but the reading is so obvious that I am tempted to suggest the probable foundation of a city of this name by Eukratides, who was a worshipper of Apollo.

No. 57, on Eukratides, forms $O \Pi \Pi$ or ΠO ; but I am unable to refer the monogram to any known name.

No. 58 is found on the coins of no less than twelve different princes. It occurs first on the coins of Eukratides, but is not used at all by Apollodotus, his presumed son and successor. It is the commonest monogram on the coins of Antimachus II., Philoxenes, Lysias, Antialkidas, and Menander; and, as the coins of Antimachus and Straton were not discovered at Begrâm by Masson, I presume that it must represent some city either in the lower Kabul valley or in the Panjâb. I read it as $\Delta H M H T \rho \iota \omega \nu$, or *Demetrias*. There was a city of this name in Arachosia noted by Isidorus of Kharax; but it seems quite impossible that this can be the place intended, as the coins of only one of the twelve kings who use the monogram—namely, Eukratides—are found in Arachosia. Colonel Stacy, for instance, did not obtain a single coin of Menander during his long residence at Kandahar. I am quite satisfied, therefore, that we must look to the eastward for the place represented by this monogram; and I think that the famous old city of Peukelaotis, or Hashtnagar, to the north of Peshawur, which is otherwise unrepresented, has a fair claim to be identified with

this unrecorded city of *Demetrias*. We learn from Strabo¹⁶ that Demetrius, the son of Euthydemus, made conquests in India; and, as we find the name of *Euthydemia* imposed on Sangala in honour of his father, it is, I think, only fair to infer that he must have given his own name to some other city. M. Chabouillet¹⁷ objects to my reading of this monogram, not only that its component parts do not comprise the letter M, but also that they unmistakably present either a Φ , or an Ω , neither of which letters is found in *Demetrias*. Now, both of these assertions I am prepared to contest; and I cannot, perhaps, refer to any more satisfactory refutation of his opinion than to M. Dardel's drawing of the monogram on the gold 20-stater piece of Eukratides that accompanies M. Chabouillet's essay, in which the letter M is most clearly defined. I may add, however, that I have examined no less than three hundred and fifty examples of this monogram, and that, though the sloping strokes of the M are not always brought downwards to the foot of the T, yet in no single instance have I seen them forming a curve which could be mistaken for the lower portion of a flat-headed and abnormal Φ . I therefore adhere to my reading of the monogram as composed of the letters $\Delta H M H T$; but I do not presume to offer more than a suggestion that the combination may be intended for *Demetrias*.

No. 59, on Eukratides, is only a new form of the last, as it reads $\Delta H M H$.

No. 60, on Eukratides, is doubtful.

No. 61 is found on Heliokles only. It forms $K H \Delta P$.

¹⁶ "Geograph." xi. ii. i.

¹⁷ *Revue Numismatique*, 1867, p. 404.

ovrias, which is the *Cadrusi* of Pliny,¹⁸ and the *Cadrusia* of Solinus.¹⁹ This town was built by Alexander, and as it was at the foot of the Caucasus, and near Alexandria, I think that it may possibly be the *Koratds* of Masson,²⁰ which he describes as a large ruined city to the north of the Kabul River, and six miles to the north-east of Begrâm.

Nos. 62, 63, and 64, on Heliokles, may, perhaps, be read as dates; namely, 81 and 83 of the Bactrian æra, which, deducted from 246 B.C., the date of Bactrian independence according to my reckoning, give B.C. 165 and 163, in perfect accordance with all that we know of the probable date of Heliokles.

No. 65 is found on Heliokles, Archebius, Straton, Menander, and the Indo-Scythian king Moas. I read it as ΝΙΚΑΙΑΣ in full. On the coins of Heliokles and Archebius I believe that the monogram is intended for the *Nikaia* of Arrian,²¹ which, as it stood between Alexandria and the Kophes river, I have identified with Kabul. But this cannot be the place intended on the coins of the Indo-Scythian king, which are found chiefly in the Panjâb. I would therefore refer his monogram to *Nikaia* on the Hydaspes, which I have identified with the old town of Mong, on the eastern bank of the Jhelam, opposite Jalâlpur. The same monogram, on the coins of Straton and Menander, I am inclined to refer to this Indian *Nikaia*.

¹⁸ "Nat. Hist." vi. 25. Ad Caucasum Cadrusi, oppidum ab Alexandro conditum.

¹⁹ Solin, c. 57. Cadrusia oppidum ad Caucasum constitutum est; ubi et Alexandria.

²⁰ "Travels," iii. 166.

²¹ Anabasis, iv. 22. Ἀφικόμενος δ' ἐς Νίκαιαν πόλιν . . . προῦχώρει ὡς ἐπὶ τὸν Κωφῆνα.

No. 66, on Heliokles and Apollodotus, is doubtful. It forms ΜΟΞ.

No. 67, on a single bilingual silver coin of Heliokles, may be read as □PT□ΣΠΑΝΑΣ, or *Ortospana*, another name for Kabul: but this reading is extremely doubtful.

Nos. 68, 69, and 70, are found on the Philopator coins of Apollodotus and on Moas. I read the combination as ΑΝΔΡΑΠΑΝΑΣ, or *Andrapana* of Ptolemy, a city to the west of the Indus, and to the south of Dionysopolis, which I have identified with *Dráband*. On a large copper coin of Apollodotus found in the Banu valley this monogram is accompanied by two Arian letters, *Ada* or *Andra*, which would thus appear to confirm the accuracy of my reading.

No. 71, on Apollodotus, forms KIB.

No. 72, on Hermæus, forms KABoupas, or *Kabura*, of Ptolemy, the modern Kabul.

No. 73, and No. 74 joined with 75, on Apollodotus, Zoilus, and Dionysius, form ΔΙΟΔΟΤΕΙΑΣ, or *Diodoteia*, which is partly repeated in the Arian letters of No. 75 as *Diu*. I have identified *Diodoteia* conjecturally with Ophiane, which name is not found on the coins of Apollodotus, although he must certainly have possessed that city. It is also possible that he may have claimed descent from Diodotus, which would account for his revival of the name.

No. 76 is found on the Philopator coins of Apollodotus, and on those of the Indo-Scythian princes Moas and Azas. It forms ΑΝΔΡΑΠΑΝΑΣ, or *Andrapana*, which has already been noticed under No. 68. It may, however, also be read as ΒΑΝΑΓΑΡΑΣ, or *Banagara* of Ptolemy, which is, perhaps, the modern town of Banu, to the west of the Indus.

No. 77, on Apollodotus, forms ΓΑΖΑΚΑΣ, or *Gazaka*, which I have identified with *Ghazni*. It is the *Gazos* of Dionysius.

No. 78, on Apollodotus, forms ΝΙΚΑΙΑΣ, or *Nikaia*, which may be either Kabul, or Mong on the Jhelam. The former, I think, is the more probable.

No. 79, on Apollodotus, forms ΑΛΕΞΑΝΔΡΕΙΑΣ, or *Alexandria*; but this reading is perhaps doubtful, as I believe that each separate city of this name was distinguished by its original native appellation. But I am unable to suggest any other probable reading. The combination may also be resolved into ΑΔΕΛ, or ΞΕΛΙ or ΓΑΔΕΛ, but none of these offer an approach to any recorded name.

No. 80, on Apollodotus, forms ΔΙΚ.

Nos. 81, 82, 83, and 84, are the most common monograms on the square copper coins of Apollodotus. I read No. 81 as MIT, and the other three as MITP, but I am unable to apply either of these combinations to any recorded name. No. 84 may be read as ΜΙΤΡΑΙΑΣ, or ΜΙΤΡΑΝΑΣ, in full; and this reading suggests a guess that either Eukratides or Apollodotus, both worshippers of Apollo, after exhausting the Greek names of Apollonia and Heliopolis, may have designated some other city by the Persian name of the sun, as *Mitraia* or *Mitrana*. We know, at least, that the ruins of a large city, eight miles to the north-west of Begrâm, are still called *Merwân* by the Muhammadans and *Mihwân* by the Hindus,²¹ both of which names seem to preserve a trace of the Persian *Mithra* or *Mihr*.

No. 85, on Apollodotus, is found only on a few rare

²¹ "Masson's Travels," iii. 166.

coins with No. 10, or *Arachotus*, and cannot therefore be the name of a place. It forms ANTI or ANTANA.

No. 86, on Menander, forms MIT, for which see No. 81.

Nos. 87 and 88, on Menander, form MENανδρειας, or *Menandreia*, of which name we have no record. But as Menander had a long reign, it is most possible that he followed the example of his predecessors in naming some city after himself.

No. 89, on Menander, is doubtful.

No. 90, on Menander, may be read as ΗΑΙΟΗΟΑεως, or *Heliopolis*, which possibly may have been the Greek name of Taxila, where, according to Apollonius, there existed a famous temple of the sun. See No. 98.

No. 91, on Menander and Moas, is doubtful. It forms AMY or AYM.

Nos. 92 and 93, on Menander, form EZ; and Nos. 94 and 95, on Menander, form ΕΔ or ΕΑ.

No. 96 joined with 97, the Arian compound letter *San*, is found on Menander.

No. 98, on Menander, is doubtful; but by reading M upside down, as in the monograms on the Macedonian coins of Demetrius, the combination will form ΔΗΜΗΤ, like No. 58.

No. 99, on Menander, I read doubtfully as ΗΑΙΟΗΟΑεως, or *Heliopolis*.

No. 100, on Heliokles, is similar to No. 101, which is also found on Heliokles as well as on Agathokleia and Hermæus. It is perhaps intended for ΔΗΜΗΤ by reading the T sideways; but without that letter it will still represent ΔΗΜΗ for Demetrias.

No. 102, on Menander, is doubtful.

No. 103, on Menander, is similar to No. 101, and is probably intended for ΔΗΜΗΤριας.

No. 104, on Apollodotus, is doubtful.

No. 105, on Amyntas, forms MY.

No. 106, on Epander, is doubtful. It forms EIK or KEZI.

No. 107 joined with Σ, on Philoxenes, appears to be an incomplete form of No. 150, on Philoxenes, Diomedes, and Theophilus, which I read as ΑΛΕΞΑΝΔΡΕΙΑΣ Σωριανης. No. 108, which is invariably joined with Σ, I take to be another form of the same monogram. It is found on the coins of Straton, Antialkidas, Lysias, and Philoxenes. The occurrence of these monograms on the coins of Philoxenes, which were not found by Masson at Begrâm, points to an eastern position, and the invariable addition of the letter Σ to the right of the monogram would seem to indicate a second name. Both of these requirements are fulfilled by my reading of *Alexandreia Soriane*, which, according to Stephanus Byzantinus,²² was situated in India, and which I have already identified with the large ruined town of *Shorkot* in the Western Panjâb.

No. 110, on Hippostratus, is accompanied by the Arian letters No. 111, forming *lo* and *cha*; by No. 112 forming *pri* and *cha*; by No. 113, forming *na* and *lo*; and by No. 114, forming *tsa*. These Arian letters are not found together, but in separate places on the coins. Thus *cha* is always found in the opposite half of the field to the Greek monogram, while some one of the other letters occupies the exergue. I infer, therefore, that *cha*, or its equivalent *tsa*, as it is pronounced in the Western Panjâb, is most probably the first letter of the Greek monogram, which I would read as beginning with ΣΑΤ or ΣΤΑ. The

²² In voce *Alexandreia*: No. 14—παρὰ Σωριανῶς Ἰνδῶν ἐθνει.

Arian reading of *Chhatrapa* for the Greek *Σατραπης* is in favour of this interpretation; but I am unable to apply it to any recorded name. I am, however, inclined to think that there may be no connection with the Arian letter *cha*, and I would, therefore, prefer reading the Greek monogram as ΤΑΞΙΑΑΣ in full, as nearly all the coins of Hippostratus have been found in the districts of Hazâra and Râwal Pindi, which formed the ancient province of *Taxila*.

No. 115 is always joined with No. 116, or the Arian letter *a*, on the coins of Hippostratus. It may be read as APT, and might perhaps be intended for ΑPTοαpra, a city noted by Ptolemy to the west of the Indus.

No. 117, on Straton, and No. 118, on Agathokleia, may be read as ΔΗΜΗΤΡΙΟΥ, or *Demetrias*, for which name see Nos. 58 and 103.

No. 119, on Artemidorus, is doubtful.

No. 120, on Artemidorus, forms ΑΡΤΕΜΙ, and may be intended for *Artemisias*, in honour of the goddess whose name is borne by the king. Similar monograms, Nos. 124 and 130, are found on Hermæus. All of them, however, may be read as ΜΙΤΡΑ (See No. 82), and this is perhaps the name intended.

No. 121, on Hermæus, is doubtful.

No. 122 and 123, on Hermæus, form ΓΑΖΑΚΑΣ, or *Gazaka*, which is probably the modern Ghazni.

No. 124, on Hermæus. (See No. 120).

No. 125, on Hermæus, forms ΑΝΔΡΑΠΙΑΝΑΣ, or *Andrapana*, for which see No. 67.

No. 126, on Hermæus, forms □PT□ΣΠΙΑΝΑΣ in full. (See Nos. 43 and 45.) As No. 127 is joined with this monogram it cannot be taken as the name of a city. It forms X□Υ.

Nos. 128 and 129, on Hermæus, form MOY.

No. 130, on Hermæus, has already been noticed under No. 120.

Nos. 131 to 135, on Hermæus, are doubtful.

Nos. 136 and 137, on Hermæus, form KAPTA ν ac, or Kartana. (See No. 16.)

No. 138, on Antialkidas, is perhaps a blunder for No. 58. But as it now appears it is quite distinct, and may be read as KΑΣ π e ν ac, or *Kaspeira*, which I have identified with *Kasyapapura*, or Multan.

No. 139, on Hermæus, forms □ϞI α ν ac, or *Alexandreia Ophiane*. (See No. 3.)

Nos. 140 and 141, on Hermæus, are doubtful. Both of them may be read as □ϞI; but the first has another stroke, and may have been intended for the same monogram as No. 139.

Nos. 142 to 149 are found on coins of different princes, but of the same types. The Greek monogram I read as EY Ξ Y δ η μ ac, or *Euthydemia*, which was the Greek name of *Sangala*, the capital of the Eastern Panjâb. On No. 142 of Straton the Arian letters read *Ara* or *Ada*; on No. 143 of Straton they are doubtful, but seem to read *Viraha*; on No. 144 of Straton they read *Abhi*; on another of his coins there is the single letter *Sa*; and on his *priyapati* coins there is the compound letter *Bo*. On No. 145 of Zoilus the monogram is accompanied by the Greek letters BO, and the Arian compound *Bo*; on No. 146 of Zoilus and of the Satrap Râjubul the Arian letters read *Hasti*; and on No. 147 of Zoilus they read *Indra*. On No. 148 of Apollophanes the Arian letters read *Mahi*; and on No. 149 of Râjubul they read *Aga*. As *Abhi*, *Hasti*, *Indra*, and *Mahi*, are all Hindu men's names, I presume that the others are the same. *Hasti* and *Bo* are

the only combinations that appear on the coins of different princes. The first most probably refers to two separate individuals ; but the second, which is found on the coins of Straton and Zoilus is, I think, intended for the same person. Altogether there are nine distinct names, or portions of names, represented in these Arian characters, all of which I am inclined to accept as belonging to the native Indian Governors of Buthydemia or Sangala under the Greek princes Straton, Zoilus, and Apollophanes, and afterwards under the Indian Satrap Rájubul.

On the base silver coins of Rájubul already published by me he takes the titles of *Chhatrapa* and *Maha Chhatrapa* in Arian characters. These coins were obtained at Mathura ; but I have since procured more of the same kind in the Panjáb, and others with old Indian characters at Mathura. As his son *Saudása*, of whom I possess several coins and one inscription, takes the same lofty title of *Maha Kshatrapa*, I conclude that both father and son were the rulers of North-west India and of the Eastern Panjáb shortly after the decline of the Greek power.

No. 150, on Philoxenes, Diomedes, and Theophilus, has already been noticed under No. 107, as being probably intended for *Alexandreia Soriane*, or *Shorkot* in the Western Panjáb.

IX.

ARMENIAN COINS.

(Continued from p. 244, vol. vii., N.S.)

I CONCLUDED my last notice on Armenian coins with a description of the more important pieces of Artaxias in the British Museum, together with an illustration of a remarkable specimen of his coinage that had been communicated to me by General Cunningham. After the completion of the article in question, my attention was called by Dr. Levy to the extended series of new examples of this currency, accumulated by the Duc de Luynes, which has recently passed, with his other munificent gifts, into the custody of the Imperial authorities in Paris. Dr. Levy, in a critical review of the legends of this issue, while doing frank justice to my interpretations, as derived from the limited number of specimens I had at my disposal, suggested that had I seen the more ample array of coins on which he based his readings, my own transliterations might have taken a different form.¹ I have

¹ M. Levy seems to have been occupied, for some time previously, in the study of these coinages. My notices on the subject in the *Num. Chron.* of October, 1866 (vol. vi. p. 245), and in the *Athenæum* of September 29, 1866, would appear to have come to the author's knowledge after the preparation of the greater part of the materials for his paper in the "*Zeitschrift*" for 1867 (p. 421). M. Levy had no opportunity of forming an opinion of my later article on Armenian coins in the *Num. Chron.* for 1867 (vol. vii. p. 216).

now carefully examined the Paris collection, and though the additional coins (usually of later fabric) have contributed many variants in the conventional legends, they clearly demonstrate how little we must expect to find fixed and authoritative renderings of Aryan names in a Semitic garb, the transcription of which, moreover, was intrusted to foreign interpreters, and whose ultimate reduction was dependent upon a succession of purely Hellenic or Greek-taught artists, whose ignorance of the alphabet itself is manifested alike by the imperfection of the forms of the letters, the irregular omission of certain essential characters, and the disfigurement or complete reversal of others. I had, as Dr. Levy confesses, exercised sufficient reserve in pronouncing on the validity of the identification of the name of Artaxias, as I had before me the parallel difficulties attending the transcription of the Persian names of Xerxes and Artaxerxes into Hebrew and other tongues.

Dr. Levy desires to reduce the letters, which I have held to constitute the Semitic version of the Perso-Armenian name of *Artaxias*, into the words פֶּרַח־בַּר אֱלֹהִים, "*Figure (or image) of God.*" Apart from the self-evident objections to any such an interpretation, where the enthroned king, in the one case, must needs be *the* God (No. 3, Num. Chron. vol. vii. 238), or the Fire Temple and its mixed and varied accessories the representative of *the* Deity in all other instances; there are typical objections to any such an assignment. The position occupied, at the foot of the reverse, by the legend in question is devoted, on all the later and more freely-legible coins, to the reception of the king's name; so that, *primâ facie*, there would be reason to expect that the letters so disposed in the initial coinage would, in like manner, convey the designation or the title of the founder of the dynasty.

Dr. Levy and myself differ in our very bases of decipherment, inasmuch as he adheres to the recognised values attaching to the archaic forms of the Phœnician palæography of the West, while I claim, for a conterminous soil, the more direct action of Persian influences in the formation and development of the local alphabet; and, as a consequence, hold that the Semitic writing in Armenia was largely affected by the approximate systems in force among the neighbouring nationalities to the southward and eastward, with whom its people had so much in common. This position has since been greatly strengthened by the discovery of the extended range of kindred schemes of literal definition on the Parthian coins of localities verging upon Central Asia, dating towards the commencement of our era (A.D. 2—4),² as well as by the determination of the place of issue of the coins of Darius and Artaxerxes, the local kings of Media Atropatène, between B.C. 69 and 36—20.³

Dr. Levy and myself assign different powers to five leading alphabetical symbols. My γ , g , is converted into γ , i , in his scheme, though in his own table, No. iii., he concedes the value of g to an identical letter under the head of "*Aramäisch Ägyptisch*." The learned professor does not recognise the close similarity of the independent signs for γ , i , and γ , z , which are fully established by the Sassanian inscriptions.⁴ My ν , s , is rendered by π , h , and the indubitable Ψ , ν , k (the final letter on my coin No. 3,

² Longpérier, "*Arsacides*," Paris, 1857, p. 84; "*Early Sassanian Inscriptions, Seals, and Coins*" (Trübner, 1868), p. 121; *Revue de la Num. Belge*, 4 series, iv. p. 369.

³ See my "*Early Sassanian Inscriptions*," p. 129.

⁴ *Num. Chron.*, N.S., vii. (1867) p. 229; *Journal R. Asiatic Society*, vol. iii. (1867) pp. 252—265.

and the constantly recurring form in subsequent titles of מלכא, *Malká*,⁶ is, in this instance, reproduced as א, *a*, and elsewhere as צ, *ts*. But it is in regard to the א, *a*'s, that we chiefly disagree. I draw a distinction between the א, *a*, or its too often imperfect renderings, and the מ, *w*, *sh*, while Dr. Levy converts each of the *three* very varying characters on coin 3 into *a*; indeed, he has to proceed in his decipherments till he reaches his coin No. 14 before he discovers any מ, *sh*, at all, and then it is forced upon him by the demands of the name of Artahshatr, "ארחדשטר." Another great divergence between us consists in our reading of the letter, which I define as ו, *w*, and which he assumes to be פ, *p*; but singular to say, though in the preliminary stages he perseveringly renders the character by פ, *p*, he educates himself up to my standard, so early as his own coin No. 3, where, in defiance of his previous interpretations, he makes a ו, *w*, of the third letter in the word to the right of the altar (No. 5, p. 242, Num. Chron.), and continues in subsequent legends (his No. 7, 9a, 9b, 10, and 11), this conversion of his own accepted symbol for פ, *p*, into the more appropriate eastern ו, *w*. There are many other minor items upon which we hold opposite views, but as we have as yet had no opportunity of comparing notes in respect to our later readings, it will be useless to follow these divergencies into detail.

I therefore pass on to a description of the new specimens, and hope eventually to present a full *résumé* of the various legends of all the better-preserved coins.

⁶ Gesenius, p. 88, Caph. form No. 18, &c; Judas, "La Langue phénicienne" (Paris, 1847), pl. i., the 9th example. See also "Antiquités babyloniennes."—J. Fresnel, Journal Asiatique, 1853, p. 520.



No. 7.—Silver. M. de Luynes. Paris collection (c. vi. 3)⁶

Obv.—Head of the king to the right, with a reduced and more compact form of the Mosynæcian helmet, having the usual projecting chin-protector, the supporting band of which is seen to pass in front of the neck below the *beaver*, and to fold within the bonnet.

Rev.—Fire-altar, with Ormazd issuing from the flames; king in the act of adoration to the left, with the Cuneiform altar-standard to the right.

Side.	Foot.	Side.
Legend . . .	ותורשיני	רתורר



No. 8.—Silver. M. de Luynes. Paris collection (c. v. 3).

Obv.—King's head as in No. 7.

⁶ The drawings for the wood-cuts Nos. 7 and 8 were executed by M. Dardel in Paris, and engraved by Mr. Williams in London; unfortunately there have been no means of correcting-up the finished designs from the original coins. Mr. Williams has desired me to mention that the supposed wood-cut of No. 6 is,

Rev.—Fire-altar varied from previous examples into a less ornate form, and narrowed so as to give more room in the field; Ormazd above the flames. To the right the usual standard; to the left the king in a position of supplication, with the novelty of the introduction of a winged figure of Victory at the back, placing a chaplet on the monarch's head.

Legend. . . . רחור . . . רחורש

No. 9.—Silver. M. de Luynes. Paris collection (c. iv. 1).

A second coin, with the exceptional reverse device of No. 8.


Legends . . . רחור . . . דרש . . . רחור ☒

No. 10.—Silver. M. de Luynes. Paris collection (c. vi. 2).

This is a remarkable coin in many respects, as, although it has been double struck, so that the obverse head has been considerably damaged, and the reverse device repeated, at a twist of about one-third of the circumference, *over* the first impression, yet the legend of the original and first striking remains singularly clear and well-preserved. Supplying the obscured ח, which there can be little contest about, the letters read consecutively רחורשי שיך, or, as M. Levy transcribes them, as פרחורשי אלהי. The word בדי, which, though plainly defined, is now isolated above the altar, seems to have formed a portion of the legend in the first impression, belonging to the section at the back of the king, to the left of the altar, which may now be restored in its entirety from other specimens as רחורבי. There is but little legible of the

in effect, an electro-cast from an original *incised* drawing of his, produced by Hancock's process (Patent of 1867). The effect in proof was admirable, but the lines seem to have been too delicate for ordinary printing.

second impression, except a faint repetition of the concluding שׁיך , or איך , above transcribed.

No. 11 does not require much comment, further than to mark the difference between the reading adopted by M. Levy and by myself. The professor transcribes the side legend as פִּתְחוֹרִי , and the foot line as פִּתְחוֹרִי . There are some letters in M. Levy's engraving, behind the king, which, however, he does not attempt to explain, nor am I able to trace their likeness on the coin itself. My own copy of the original limits the perceptible fragments to י , or something similar, and the entire legend seems to run $\text{פִּתְחוֹרִי וְתַחְתָּיו י}$ 

No. 12, which constitutes one of the choicest specimens of the old Bibliothèque Impériale collection, is alike the best in point of preservation and the most finished in execution of the whole series of Armenian coins. The treatment of the obverse is formal, and wanting in the effect of Greek art. The legends are singularly full and complete; but though many of the characters are well and clearly defined, others are cramped and imperfectly outlined. Here the debateable w is fully expressed, and is marked in its contrast to the well-formed Chaldæo-Pehlvi s , which follows at a brief interval. It would seem that in this instance, as in so many parallel cases, as the Greek art fell off in the leading design, the local engravers gave their own deteriorated impress to the bust and costume, while they improved visibly upon the native characters, with which they were freely conversant. In the coin under review, they seem to have aimed at getting too long a legend into the given space, and hence has arisen the confusion and want of definition in the epigraph.

Obv.—Head of king, as usual.

Rev.—The old style of fire-altar, similar to No. 2, the king in the act of supplication, with *both* hands up-raised. The bow of the later examples is altogether wanting, but the space between the king and the altar is occupied by the letter γ , ω , (or γ , r).

Legend . . . $\overline{\text{והדרשׁיג אגס רחובדי}}$ $\overline{\text{והדר}}$ \boxtimes



No. 13.—Silver. Weight, 43 grains (worn). B. M.

Obv.—Head of the king, with the ordinary Mosyncecian head-dress.

Rev.—The early style of fire-temple, *without* the ascending figure of Ormazd. King in the attitude of prayer, &c.

Legend . . . $\overline{\text{והדרשׁיג אגס רחובדי}}$ $\overline{\text{והדר}}$ \boxtimes

Dr. Levy reads this as פכר הרוחשחר, or optionally פכר הרוחשחר. The coin is figured as No. 14 of his Plate.

No. 14.⁷—Silver. Weight, 60.5 grains. B. M.

Obv.—The king's head as usual.

Rev.—The old style of fire-temple.

Legend . . . $\overline{\text{והדרשׁיג אגס רחובדי}}$ $\overline{\text{והדר}}$ \boxtimes

Dr. Levy reads these inscriptions as “פכר הרוחשחר וי פחובדי”

I suppose the ורבר to be merely the conventional

⁷ Figured as No. 5 in Dr. Levy's Plate.

Zoroastrian *Hirbad* (Fire-priest). *חרברי* or *ידרברי* is perhaps a mere synonym from *Ader*, *Azar*, &c.

No. 15.^a—Silver. Weight, 61 grains. B. M.

Obv.—King's head as usual.

Rev.—The old form of fire-temple.

Legend.—To the left of the altar (behind the king), reading from the top of the coin, with the foot lines turned inwards, may be traced the leading elements of the name of *ארתחשטר*, *Artahshatr*. At the foot of the altar, following the usual direction of the writing, may be seen many of the letters constituting the ordinary *מלך*, with three letters succeeding it, which may be conjecturally rendered as *מלך*, *Malik*.

(To be continued.)

^a No. 12 of Dr. Levy's Plate; his reading is *פרחברא וי אלה* and *עידחצתר*.

X.

ON SOME RARE OR UNPUBLISHED ROMAN GOLD COINS.

IN some of the recent numbers of the Numismatic Chronicle, Mr. Madden has favoured its readers with notices of the Roman gold coins belonging to the late Duke de Blacas, and purchased for the national collection in the British Museum; and in the same manner, in 1865, he gave an account of the Roman gold coins so munificently presented to the nation by Mr. Edward Wigan; so that the Roman gold series has received, of late years, its fair share of attention in these pages.

Still, as I happen to possess a few coins of that series, some of which present varieties apparently not hitherto published, and others of which are of considerable rarity, I have ventured to have a selection, including one coin not my own, engraved in Plate IX., of which I append a description with a few explanatory remarks.

No. 1.—CALIGULA AND GERMANICUS.

Obv.—C. CAESAR AVG. PON. M. TR. POT. $\overline{\text{III}}$. COS. $\overline{\text{III}}$.
Laureate head of Caligula to right.

Rev.—GERMANICVS CAES. P. C. CAES. AVG. GERM.
Bare head of Germanicus to right.

N. Weight $118\frac{1}{2}$ grains.

This coin differs from that described and engraved by Cohen (No. 1) in bearing the TR. POT. III. COS. III. like the silver coin Cohen, No. 3. Though not published by Cohen, the type is described by Mezzabarba, from the Nummi Arschorani, tab. 18, No. 8. Another variety, with PONT. MAX. TR. POT. III. COS. III. and the head of Caligula to the left, is engraved in Vaillant's Numismata Præstantiora, tom. ii, p. 47.

The corresponding gold coin with the head of Agrippina I. instead of that of Germanicus, and struck in the third year of the Tribunitian power of Caligula, has just been published in Cohen's Supplemental Volume (No. 3). The piety towards his parents and ancestors exhibited by the coinage of Caligula has already been commented upon by Eckhel.

No. 2.—GALBA.

Obv.—IMP. SER. GALBA CAESAR AVG. Laureate head to right.

Rev.—ROMA RENASC. Rome standing in military costume, holding a Victory in her right, and in her left a slanting spear.

N. Weight, 118½ grains.

This coin differs in the legend on the obverse from that with the same reverse described and engraved by Cohen (No. 55, Pl. XIV., Vol. I.), the latter reading simply GALBA IMPERATOR. The legend on the reverse, when unabbreviated, is ROMA RENASCENS. The same legend occurs on bronze coins of Galba and Vitellius, and was revived under Nerva, when indeed it was of better augury. Under Vespasian we have the form ROMA RESVRGES (possibly, as Eckhel points out, for RESVRGENS), but with another type. The proper reading

may, however, be RESVRGES, and be an allusion to the verse of Propertius,—

“Dicam, Troja, cades, et Troia Roma resurges.”¹

No. 3.—TITUS.

Obv.—IMP. TITVS CAES. VESPASIAN. AVG. P. M.
Laureate head to left.

Rev.—TR. P. IX. IMP. XV. COS. VIII. P. P. An anchor,
around which a dolphin is entwined.

N. Weight, 118 grains.

This coin differs from Cohen, No. 89, in having the head of Titus to the left instead of to the right.

The device is well known, and is considered to have been used by Augustus as a symbol of his favourite motto, “Σπεῦδε βραδέως,” or “Festina lente.” Certainly it would appear to have been adopted by Titus as an emblem of rapid action on mature thought. In later days it has been, as is well known, the device of Aldus Manutius, the great Venetian printer, to whom one of these coins of Titus was given by Pietro Bembo. Erizzo and other early numismatic writers mention a coin of Augustus with this device, and with the legend FESTINA LENTE. It was no doubt an early forgery founded on the passage in Suetonius which mentions the motto.

No. 4.—SEPTIMIUS SEVERUS.

Obv.—IMP. CAE. L. SEP. SEV. PERT. AVG. Laureate
head to right.

Rev.—VICT. AVG. TR. P. COS. Victory marching to
the left, holding a wreath and palm-branch.

N. Weight, 111½ grains.

A coin with precisely the same legends, but with the

¹ Lib. iv., El. i., v. 71.

Victory seated to the left, is described by Cohen, No. 394. He does not, however, give any coin, either in gold or silver, with the marching Victory and these legends. Eckhel (vol. vii. p. 169) describes a similar coin to mine, and remarks that though Severus must have gained a victory in this his first year (A.D. 193), yet that it is uncertain whether it was over Pescennius Niger, or over some barbarous nation, by one of his generals.

No. 5.—SEVERUS AND CARACALLA.

Obv.—IMPP. INVICTI. PII. AVGG. Laureate heads of Severus and Caracalla, side by side to the right, both in the paludamentum. Severus also in a cuirass.

Rev.—VICTORIA PARTHICA MAXIMA. Victory, as on No 4.

N. Weight, 118½ grains.

This coin has been published by Cohen, No. 6, and also by other authors, from the days of Agostini, downwards; but I have inserted it here on account of its rarity and interest. It is remarkable as affording the first instance on Roman coins of a legend on the obverse mentioning the reigning emperors, but without giving their names, though such a practice became more common in later days. The medallion with the legend CONCORDIA AVGVSTORVM, published in the Num. Chron., n.s., vol. vii. p. 6, affords an instance of this custom. The coin now under consideration is of beautiful work, and was struck A.D. 201 or 202, when Caracalla was thirteen or fourteen years old. The great Parthian victory, from which Severus derived his title of PARTHICVS MAXIMVS, was gained in A.D. 198, when Ctesiphon was taken, and 100,000 prisoners carried off. Herodian remarks, however, that

"Fortunâ magis quam consilio, Parthicam victoriam adeptus est."

No. 6.—GETA.

Obv—P. SEPT. GETA CAES. PONT. Bare bust in paludamentum to the right.

Rev.—NOBILITAS. Draped female figure, standing holding a sceptre and the Palladium.

N. Weight, 110½ grains.

This interesting type is well known in silver, in which metal it occurs of two sizes (Cohen, Nos. 48, 49, 50), but has not been, so far as I know, published in gold, though a quinarius in gold has lately been acquired by the British Museum. The same legend and type occurs on coins of Severus, Julia Domna, and Caracalla, and no doubt alludes to the nobility of descent, which, after reigning a few years, was claimed by Severus. Though his parentage was well known, he having been born to Marcus Septimius Geta and Fulvia Pia, at Leptis, in Africa, in A.D. 146, yet both on coins and inscriptions he claims the title of the son of Marcus Aurelius.² Dio, who was his contemporary, says that the Senate was struck with awe when Severus proclaimed himself the son of Marcus and brother of Commodus, and decreed heroic honours to the latter, whom he had formerly treated with contempt. Severus, however, understood how to make his wishes law, and if he had proclaimed himself the direct descendant of every emperor who had gone before him, the obedient Senate would have felt bound to believe him. The type was no doubt derived from the coins of Commodus, with the same legend, which that emperor could adopt with far better right. Eckhel describes the small image in the

² Lib. lxxv., sect. 7. See Eckhel, Doct. Num., vii. p. 173.

hand of the female figure on the reverse as holding (on the coins of Commodus) a patera and hasta; while, in the case of the coins of Geta, he calls the figure a Victory. Cohen describes it, and I think rightly, as the Palladium. On some silver coins the figure appears to be helmeted, and in all cases that I have seen there is a hasta in the one hand and a round object in the other. The original Palladium is said to have had a spear in its right hand and in its left a spindle and a distaff.

The reason why Nobilitas is represented as bearing the Palladium in her hand is well explained by old Archbishop Agostini;³ for the Palladium having been carried off at the destruction of Troy and brought by Æneas to Alba, from whence it was subsequently removed to Rome, and it being the principal pride of the Roman nobility to be descended from the Trojans who founded Alba, such an origin is well typified by the Palladium.

The gold coins of Geta have always been, as Vaillant says, "*inter rariores collocandi*;" but at the present moment they seem to be even more than usually rare. Cohen, in the Preface to his Supplemental volume, makes the remark, "*Souvent une tête se rencontre assez fréquemment à un moment, puis disparaît complètement du commerce, pendant une assez longue suite d'années. Dans ces conditions-là se trouve Géta en or, qu'on ne peut plus se procurer.*"

This coin differs from Cohen, No. 50, merely in the

No. 7.—TRAJANUS DECIUS.

Obv.—IMP. TRAIANVS DECIVS AVG. Laureate bust to right in the paludamentum.

Rev.—VICTORIA AVG. Victory, as on No. 4.

N. Weight, 81½ grains.

³ Dialogo, ii.

legend of the obverse. The reverse is mentioned by Banduri, who speaks of the coin as a "nummus singularis." He considers the victory referred to to be one of those first gained over the Goths as recorded by Zosimus. In a later encounter Decius perished miserably in a marsh, not even his body having been found for burial. His son, Herennius, had been previously slain by an arrow, in his father's sight.

There is a calm grandeur of expression about the portrait on this coin which is quite in accordance with the character of Decius, who, whatever may have been his mistaken persecution of the Christian Church, was "an accomplished prince, active in war, and affable in peace; who, together with his son, has deserved to be compared, both in life and death, with the brightest examples of ancient virtue."⁴

No. 8.—POSTUMUS.

Obv.—POSTVMVS PIVS FELIX AVG. Laureate busts of Postumus and Hercules, side by side, to the right.

Rev.—FELICITAS AVG. Two laureate female busts, side by side, to the right, the upper one winged and holding a wreath and palm-branch, the lower holding an olive-branch.

N. Weight, 103 grains.

This interesting coin has been already described by Cohen, No. 29; but I need hardly apologize for giving a representation of it here. The obverse is similar to that of the coin from the Wigan collection engraved in the Num. Chron., n.s., vol. v., Pl. VI., No. 4, and there can be little doubt that the bust which is yoked with that of Postumus is rightly regarded as that of Hercules, a deity

⁴ Gibbon, "Dec. and Fall," chap. x.

for whom the devotion of that emperor is well known. Some remarks upon this subject by Mr. Madden will be found in the description of the coin just cited. Gold coins with this obverse occur with several reverses, in some cases with two heads yoked as on the present coin. That of Mr. Wigan bears the heads of Mars and Victory, with the legend *CONSERVATORES AVG.* Another, with the same legend, bears the busts of Apollo and Diana. A third has the heads of the Sun and the Moon and the legend *CLARITAS AVG.* A fourth has the same busts as on the obverse, with *COMITI AVG.*; and a fifth those of Postumus and Mars, with *VIRTVTI AVG.* The busts on the present coin are regarded by Mr. Cohen as those of Victory and Felicitas. If, however, the bust were intended for that of Felicitas, it seems strange that she should hold an olive-branch instead of her almost universal attribute the *caduceus*. Banduri and Eckhel both regard the lower figure as that of Peace. Tristan considered the reverse to refer to the good fortune of Postumus, both in war and peace, and quotes Pollio, "*Fuit Postumus in bello fortissimus, in pace constantissimus.*" The presence of the olive-branch is, I think, sufficient to sustain the appropriation to Peace. The most successful result of Victory—Peace—and the ensuing Felicity, would seem to be typified in this reverse.⁵

M. Eichhoff finds in this device a delicate allusion to the Empress Victoria or Victorina.

A gold medallion of similar types, but half as large again, formerly existed in the French cabinet.

No. 9.—CARINUS.

Obv.—IMP. CARINVS P. AVG. Laureate bust to left in a cuirass, holding in the right hand a spear or

⁵ Ann. de la Soc. Franç. de Num., vol. ii, p. 275.

sceptre, on the left shoulder a buckler on which is the head of Medusa.

Rev.—VICTORIA AVGG. Victory to the left, marching on a small globe, and holding a wreath and palm-branch.

N. Weight, 75 grains.

This coin, though differing from any described by Cohen, has already been published and engraved by Mr. C. Roach Smith in his *Antiquities of Richborough, Reculver, and Lymne*. It was found at Richborough, and was formerly in the collection of the late Mr. W. H. Rolfe, of Sandwich.

Nothing can exceed the beauty of its condition. As Mr. C. Roach Smith remarks, the reverse refers to the successes of Carinus in Gaul, and to those of his brother Numerianus in Persia. The globe bears upon it two lines crossing each other, and apparently intended for the Equator and Ecliptic. The absence of F(elix) after the P(ius) on the obverse is noteworthy.

No. 10.—ALLECTUS.

Obv.—IMP. C. ALLECTVS P. F. AVG. Laureate bust to the right in a cuirass.

Rev.—COMES AVG. Minerva standing to the right, holding an olive-branch in her right hand, her left resting on a shield, and holding a spear. In exergue, M.L.

N. Weight, 67 grains.

Like the last, this coin was formerly in the collection of the late Mr. W. H. Rolfe, of Sandwich. It was found at Chittenden, Kent. Though in all respects similar to the coin in the Hunter Collection at Glasgow, which is engraved in the *Monumenta Historica Britannica*, Pl. XV., No. 1, and which is, I believe, the only other specimen

known, I have thought it worthy, on account of its beauty and rarity, of having a place in this Plate. The legend COMES AVG., with the device of Pallas standing as on this coin, first appears under Diocletian and Carausius, but on the brass coinage and not on the gold. The word COMES would seem to suggest a sort of association of the divinities represented on the coins with the emperors, though the title rather implied that the emperor held the higher rank. A little later the title Comes was bestowed on some of the higher officers of state, and of this the modern title of Count is the direct descendant.

The exergual letters M.L. show that this coin was struck in the London mint, as seems to be the case with all the gold coins of Allectus at present known.

No. 11.—ALLECTUS.

Obv.—IMP. C. ALLECTVS P. F. AVG. Laureate bust to the right, with the paludamentum over a cuirass.

Rev.—ORIENS AVG.—Radiated figure standing to the right, but looking to the left, with drapery over the shoulders; the right hand elevated, in the left a globe. In exergue, M.L.

N. Weight, 71 grains.

This coin (which belongs to Mr. J. Kermack Ford, of Southsea, who has kindly permitted me to engrave it,) presents us with a new variety of the gold mintage of Allectus; for though a coin, with the same legend on the reverse, was among those so liberally presented to the British Museum by Mr. Wigan (see *Num. Chron.*, n.s., vol. v., Pl. VIII., No. 11), yet in that instance there are two seated captives, one on each side of the central figure of the Sun. The type is usually considered as referring

to the extension of the Roman empire in the East, but if this be its true interpretation it seems strange that we should find it on the coins of so purely western a ruler as Allectus. The reverse might possibly be intended to convey the impression that his dominions were not confined to the west, or it might imply a religious devotion to Apollo as the rising sun, who was to shed a glory over the future reign of the usurper.

This coin is unfortunately injured by having been pierced, but enough remains of the exergual letters to show that it was struck in London. The bust is taller and less broad than that on the preceding coin

No. 12.—CONSTANTINE THE GREAT.

Obv.—CONSTANTINVS P. F. AVG. Laureate head to the right.

Rev.—SOLI COMITI AVGG. NN. Radiated figure to the right, with drapery on the shoulders, the right hand elevated, in the left a globe. In the field, N. In exergue, 'SER'

N. Weight, 81 grains.

This rare coin, of which specimens exist in the British Museum and in the French Collection, is described in Cohen's Supplemental Volume, No. 12. It was, as the exergual letters show, struck at Serdica, in Upper Mœsia, and in fabric it is widely different from the coins issued from the Gallic mints, such as are more commonly found in this country. "In A.D. 314," says Mr. Madden, "the town of Serdica, at which there was a mint, was given up to Constantine, who transferred the mint to Sirmium."⁶ His reason for making

⁶ Num. Chron., N.S., vol. ii. p. 57.

this assertion appears to be that he had seen no coin later than the time of Licinius I. struck at this mint, and of him but one coin in gold appears to be known with the exergual letters SER. The present coin, however, proves that the mint at Serdica was not immediately suppressed on the town passing under the dominion of Constantine. If the two Augusti mentioned on the reverse are Licinius and Constantine, it seems probable that this coin may have been struck in A.D. 315, when the two emperors were consuls together. The only brass coins of Constantine with the reverse of SOLI INVICTO COMITI that bear a date, have that of this consulate, COS IIII. Mr. de Salis agrees with me in thinking that it was struck immediately after the first war with Licinius in A.D. 314, when Illyrium, Mœsia, Macedonia, and Greece were made over to Constantine. He regards it as probable that it was because Serdica had become a frontier place, close to the dominions of Licinius, whom the treaty of A.D. 314 had left in possession of Thrace, that Constantine removed its mint to Sirmium. The reverse of SOLI COM(ITI) AVG first makes its appearance under Gallienus, but in that case with a Pegasus as the type; but the type of Apollo, as on the present coin, occurs on coins of that emperor, with the legend SOLI INVICTO. I am unable to offer an explanation of the letter N in the field. It occurs also on the gold coin of Licinius struck at Serdica, with the reverse IOVI CONSERVATORI AVGG. The earlier gold coins from the same mint bear the letter Ξ , signifying that they were struck 60 to the pound of gold. Mr. de Salis doubtfully suggests the possibility of the N being a blundered and inverted imitation of Ξ .

JOHN EVANS.

XI.

NOTE ON TWO GOLD PENNIES OF HENRY III.

ON looking through the index of the Numismatic Chronicle, I was rather surprised to find that no special mention had been made of the first English gold coins circulated in this country. There is, however, an article in the third volume of the old series, where one of them is very badly figured in the plate of a paper entitled "On a New Method of obtaining Representations of Coins." These coins, which were ordered to be struck by Henry III. in the forty-first year of his reign, A.D. 1257, must always be interesting, not only in a numismatic point of view, but also as historical records. Maitland, in his "History of London," published in the year 1739, has thus transcribed the following passage from a manuscript chronicle of the city of London:—"Hoc anno creavit rex moneta aurea denar. pond. duos sterlingos de auro purissimo et voluit ut illo auro curreret in pond. viginti." Snelling adds, "Here seems by some means to be a mistake of the word pond. for denar. in the value." Coins of this metal and value do not seem to have been popular, as on the 4th of November in the same year we read in Carte's "History of England" that "the King issued another proclamation declaring that nobody was obliged to take it (this piece), and whoever did might bring it to

¹ See Snelling's Gold Coinage, p. i.

his exchange, and receive there the value at which it had been made current, an halfpenny only being deducted, probably for the coinage." Further on Snelling, however, mentions proclamations addressed to William, the son of Richard, Warden of the Exchange in the forty-ninth year of his reign, and another to Bartholomew de Castello, also Warden of the Exchange in the fifty-fourth year of his reign, in which the value of these gold pennies is raised from twenty pence to twenty-four.

I now proceed to describe the two specimens in the cabinet of the British Museum.

1. *Obv.*—King crowned, and in his robes, seated on a throne, holding in his right hand an ornamented sceptre; in his left, an orb adorned with cross formed by pellets. Legend, h)ENRIC REX·I·I·I. The h is separated from the rest of the legend by the cross of the orb intervening.

Rev.—A cross voided throughout to the edge; in each angle of the cross a rose surrounded by three pellets. Legend, WIL LEM ONL VND. Weight $45\frac{1}{2}$ grains. This coin was privately purchased from Mr. Tyssen's executors for £41 10s.

2. *Obv.*—King crowned and robed, seated on a throne, holding sceptre and orb. The arms and legs of the throne are formed by pellets instead of straight lines. Legend, h)ENRIC REX·I·I·I.

Rev.—Same as No. 1. Legend, WILL EM : O NLV NDÆ. Same weight, $45\frac{1}{2}$.

The workmanship of these coins is very superior. The king's feet rest on a carpet cleverly represented by diaper work; the care taken to represent the features seems to indicate the wish of portraiture, and the work is in every way much superior to that of the silver coins generally ascribed to this monarch.

S. F. CORKRAN.



XII.

ON TWO NEW SCOTTISH PENNIES OF JAMES VI.
AND CHARLES I.;

WITH SOME REMARKS ON THE HALF-GROATS OF THE SAME REIGNS;
AND ALSO ON THE GOLD THISTLE CROWN OF JAMES.

SOME of the readers of the Numismatic Chronicle may perhaps be surprised to see the woodcuts at the head of this article, and still more so to find that the coins figured should be considered new; but their surprise may possibly cease when they are informed that, common though the type of these coins be, no author on Scottish coins alludes to either of them, and that this penny of James, *with the thistle M.M.*, is not mentioned by Hawkins, Ruding, nor (I believe) any other author; while the penny of Charles, figured above, is virtually unpublished. I did, indeed, exhibit the latter coin at a meeting of the Numismatic Society on the 19th November, 1863, and there is a short and imperfect account of it in the Proceedings of the Society under that date; but no other person has noticed it, and having since that time obtained the penny of

James, and as my investigations to determine their nationality have brought out several points of interest, I have thought it right to trouble the readers of the Chronicle with a few observations on these coins and on the half-groats of the same type and with the same M.M. belonging to both reigns.

The first of these pennies is of the ordinary English type of those of James, viz.:—On the obverse a rose, with the legend "I. D. G. Rosa Sine Spina." Reverse, a thistle, with "Tueatur Unita Deus." The penny of Charles differs from that of James, simply in having C. instead of I. In both cases they have for M.M. a thistle head on either side.

The half-groats, as is well-known, differ from the pennies only in having the rose and thistle crowned.

The question at issue is, are these half-groats and pennies with the thistle M.M. Scotch or English? I will begin with those of James; and I at once admit that if the question rested solely on the evidence which they afford it would be difficult, perhaps impossible, of proof. Still, even in these coins of James, when considered by themselves, I think the probability is that those with the thistle M.M. were struck in Scotland. There is, indeed, very high authority against this view. Mr. Hawkins includes the half-groat with the thistle M.M. amongst the English coins; and Mr. Lindsay, while he places it in his "Descriptive Catalogue of the Silver Coins of Scotland," says (p. 60):—"The two-pence with the thistle M.M. can scarcely be considered as a Scottish coin, being struck for currency both in England and Scotland."

Now, with all respect for the deliberate opinion of two such distinguished authorities, I would venture to ask,—

"Is there any *proof* for this assertion?" That the half-groats were current both in England and Scotland is undoubted; but the question to be decided is, "Were the half-groats with the thistle M.M. *minted* in England or in Scotland?" I feel persuaded they were struck in Scotland. What was the object of the M.M. but to indicate the place and time at which the coin bearing it was struck? The thistle was the M.M. for Scotland, and, although it was certainly introduced into England by James, I think it is highly improbable that it was there used in the case of those coins which were not and could not be otherwise indicated as struck for one country or the other. Of the larger coins, the crowns, half-crowns, shillings, and sixpences, which were struck in both countries with the thistle M.M., the English and Scottish shields respectively pointed out the country in which each was minted; but in the half-groats and pennies there were no means of ascertaining where they were struck, except by the M.M. If, therefore, these smaller coins had been struck with the same M.M. in both countries, it must have led to confusion; and as the thistle was especially the Scottish M.M., I conclude that it indicates their Scottish and not their English origin.

But the case becomes stronger when we consider the half-groats and this penny of Charles. It is true that the authorities on the other side are equally weighty, nay, even more decided than before. Mr. Hawkins, in speaking of what he terms "the first coinage" of Charles, says (p. 194), "This coinage is given to Scotland by Cardonnel, but as within one week of the death of James I. a commission was granted to continue the coinage according to the last indentures made by that king, and as the above coin exactly resembles his half-groats, we consider it as

belonging to the first English coinage of Charles I., and not merely a Scottish coin, as hitherto supposed." And Mr. Lindsay (p. 61) remarks "the two-pence, like that of his father, was struck for circulation in both countries."

The exact resemblance of these half-groats to those of his father, which Mr. Hawkins alludes to, tends rather (as will shortly be seen) to prove that they were Scottish, and not English; and surely the universal impression for a period of upwards of two hundred years—indeed, up to the very time of Mr. Hawkins's appropriation of them to England, that they were "merely Scottish coins,"—ought not to be set aside without sufficient proof to the contrary; and I must be permitted to say that I am unable to discover the existence of such proof. Mr. Hawkins's whole argument for the transference of these half-groats from Scotland to England rests upon the issuing of the Commission referred to above, and on the resemblance of the coins to those of his father. Let us examine these points.

Ruding (vol. i. p. 380, third edit.) alludes to the Commission in the following terms. After mentioning that James died on the 27th of March, 1625, he says:—"On the 1st of April following, a Special Commission was directed to Sir Edward Villiers" and others, Wardens of the Mint in London, "to authorize them to continue the Mint in work, which had been stopped upon the death of the late king, and to use the dies of the late king until others should be provided. The money to be made according to the indenture with Sir Randall Cranfield, dated July 17, the 21st of James, which had determined upon the death of the late king."

The authority here given, be it observed, is "to continue the Mint in work," and "to use the dies of the late king until others should be provided." The inference clearly

is, that all the dies were to be used—those for the larger as well as those for the smaller coins. But the only coins given by Mr. Hawkins as having been struck under this Commission are these half-groats with the thistle M.M. from the dies of James, but with the I changed into C. Now I think it might be fairly asked whether the striking of a few half-groats could properly be regarded as carrying out the terms of this Commission? I cannot myself think so. The Commission, in my opinion, could only be carried out adequately by striking the larger as well as the smaller coins; and my belief is, that if this Commission were put in force at all, it was done by striking from the *unaltered* dies of James; in which case the coins could not now be distinguished from those minted during his reign; and if the larger coins were minted, as I incline to think, without alteration of name, it is in the highest degree improbable that any change whatever would have been made in the half-groats.

But what seems to me very conclusive is, that the thistle was *not* the M.M. at the Tower at the time of James's death. It appears from the list of mint marks given by Hawkins, as taken from Snelling, that this particular coinage was introduced in 1604, but the thistle did not appear on it in England till 1621, continuing till 1623, when the lis was adopted, which again (in 1624) was succeeded by the trefoil—the M. M. in use when James died. It does not appear that any preparation had been made for striking coins with the date 1625. Certainly none of James's coins of that year are known, nor is that surprising, seeing that the year did not then commence till the 25th of March, *i.e.*, only two days before the king's death, so that no time had been afforded for a new coinage. Had it been intended to alter the M.M.

it is most unlikely that the thistle would have been adopted again so soon; for, as I have shown above, this current coinage had been in circulation for seventeen years before the thistle was used, and it can therefore scarcely be supposed that it would have been resumed again within two years of the substitution of another M.M. for it, and when the trefoil had been in use for only nine months; and if it be unlikely that the thistle was restored again so soon during James's reign, it seems still more improbable that it would be thus specially introduced at the very commencement of the reign of Charles, for it is remarkable that, in the long list of mint marks used on English coins during this monarch's reign, as given by Mr. Hawkins, the thistle does not once occur. Of course I except this coin, the place of mintage of which is the matter in dispute.

All evidence, it seems to me, goes to favour the opinion that none of the English dies of James had the name altered to that of his son. Not a single large English coin with this alteration has ever been seen, and I cannot imagine that an exception was made in favour of the half-groats.

The issuing of the Commission leads undoubtedly to the conclusion that money was required, and that a stoppage of the Mint would lead to inconvenience; but although it is tacitly alleged by Mr. Hawkins that half-groats were the only coins minted under this Commission, there is no evidence to show that they were the only coins needed; indeed, we have the most direct evidence to the contrary, "for on the 4th of September"—I quote from Ruding—"a Proclamation was issued which stated that his Majesty had lately received, for the portion of his dear consort the queen, some good sums of money of the coin

of France, which he had ordered to be new coined in his mint within the Tower of London; but that by reason of the plague, which had taken hold of many of the workmen in the mint, this could not be performed so speedily as his Majesty's necessities required, and therefore he had found it expedient to use the said coin in specie as he had received it. To that end, it was ordered that the French coin called Cardecue should from that time be current within his Majesty's dominions, at the value of nineteen-pence-halfpenny, such being its current value in France." We thus see that pieces larger than the half-groat were necessary, and it is reasonable to suppose that the coins which were being newly struck at the mint from the French silver, and the coinage of which was interrupted by the plague, were of larger dimensions; and if, under the circumstances, there was no scruple about making French money current in England, there would be still less in striking, for a limited period, English money from James's dies and with James's name, under the Commission before alluded to. If we may form any judgment by the frequency of the occurrence, at the present day, of half-groats of James with other mint marks than the thistle, we should say that there must have been less scarcity of that coin in England when James died than there was of pieces of greater value. The very terms of the Commission, also, seem rather to prove that the dies were to be used just as they were, without alteration of name or M.M., and only until others could be provided; and Mr. Hawkins himself informs us that an entirely new coinage, quite distinct from that of James, was introduced into England in 1625—the very year of Charles's accession—when both half-groats and pence, as well as larger silver money, were minted.

But when we come to Scotland, and ascertain what actually took place there, all doubt on the subject will, I think, at once disappear. It will be seen that all the dies in use in that country when James died were altered and used for the first coinage of his son. The dies for the gold coinage, as well as the silver (and, I believe, also the copper), were thus utilised. In the gold, we have the unit, the double-crown, and the crown of both monarchs from the same dies; and I think it not improbable that the gold half-crown of Charles, from his father's die, will yet be discovered, and, possibly, also the gold thistle-crown with thistle M.M. In silver, we have the crown, half-crown, shilling, sixpence, half-groat, and, now for the first time, the penny, all from James's dies; and in copper, we have the hardhead, or bodle, and half-hardhead of Charles, differing from those of his father only in the name in the legend. It is remarkable that this penny of Charles bears evidence of having been struck from an altered die. The coin itself has not been tampered with, but the trace of the I, as altered in the die, may be seen through the C. This was observed before the penny of James with the thistle M.M. was known, and I was quite certain that such a coin had existed, and it satisfied me also that it was Scotch, for it was in that country alone, I was convinced, that any of the dies of James had been altered. The fact, too, that this penny of Charles was procured by me in Scotland, and, as I had reason to believe, was found there, helped to confirm me in my convictions of its Scottish origin.

Nor was this alteration of the dies in Scotland a mere accidental or temporary measure. It seems to have been adopted at once, and to have been continued for many years. The evidence on this point is procured from the

sixpences, the only coin in the whole series with a date. In my own cabinet I have a sixpence of Charles, from his father's die, with the date 1625—the very year of James's death. I have another, with the date 1632, and Mr. Lindsay mentions one with the date 1633—the year that Charles was crowned in Edinburgh—when Briot, who had been appointed chief engraver at the English Mint in the month of January preceding, accompanied him into Scotland, and introduced his new and beautiful coinage into that kingdom. We have thus the most indubitable evidence, from the coins themselves, of almost the whole series of James's Scottish dies, in use at the time of his death, having been altered for the first coinage of Charles, and that these altered dies were the only ones used in Scotland for a period of eight years; but there is no proof whatever that any single English die of James was altered, while an entirely new coinage was adopted in England in the very year of Charles's accession to the throne. And surely, if the larger Scottish coins, which bear evidence in themselves of their place of mintage, were altered, we need not hesitate to conclude that the smaller Scottish coins also were altered; more especially as the proof afforded by the M.M. of their being Scotch is sufficiently strong, though not, perhaps, quite so apparent as in the case of the larger coins; and the absence of any alteration in the larger English dies, or of any proof of alteration in the smaller ones, leads to the conclusion that Mr. Hawkins was mistaken in attributing these half-groats of Charles to the coinage of England, and that Cardonnell was right in regarding them as Scotch.

The main points in my argument in favour of these coins of Charles being Scotch may be shortly recapitulated thus:—

1. The universal and uninterrupted impression for upwards of 200 years that they were Scotch.

2. The improbability of half-groats only and no other coins being struck from his father's dies.

3. At the time these coins were struck the thistle was *not* the M.M. in England, but it was in Scotland.

4. The thistle was not once used as a M.M. in England during Charles's reign, but it continued throughout the whole period to be used in Scotland.

5. The discovery of this unique penny of Charles in Scotland tends to confirm the opinion that it was struck in that country.

6. These coins are admitted to be from altered dies ; but none of the larger English dies of James were ever altered, whereas all his larger Scottish dies in use at the period of his death, were altered and minted from during several years of Charles's reign. We may, therefore, confidently conclude that these smaller coins of Charles, admitted to be struck from altered dies, are also Scottish.

And now to return to these coins of James, and, arguing backwards, if these altered dies of Charles are Scottish, and not English—and this, I think, is now sufficiently established—it necessarily follows that those dies from which they were altered, viz., those of James, were Scottish also ; and thus we have proof, as well as probability, that the half-groats with the thistle M.M. and this penny of James are undoubtedly Scotch.

It has been suggested to me, since the above was written, by one whose opinion on Scottish coins is always entitled to the highest respect, that, while admitting these coins of Charles to be Scottish and not English, it did not necessarily follow that the altered dies of James from which

these were struck were originally Scottish, for they may have been struck from altered English dies.

There are certainly instances in this very reign where a Scotch coin has been struck with an English obverse, or an English coin with a Scotch obverse; and, therefore, it is just possible that the suggestion I have now mentioned may be correct; but I think that in the present instance it is extremely improbable. I need not repeat the arguments I have already used as to the probability of *all* the half-groats of James with thistle M.M. being Scotch. But even assuming the correctness of the statement of those who think differently, viz., that "these coins were struck for currency both in England and Scotland," the natural inference would be that they were minted in Scotland as well as in England, in which case no English dies would be required in Scotland for alteration when Charles came to the throne; and the fact that the penny of James with thistle M.M. was until now unknown to any writer on the coinage of England, makes the argument in favour of its being Scotch even stronger than in the case of the half-groats. Besides, all the evidence we have goes to prove that, in the first coinage of Charles, the coins which were struck in Scotland were identical in value and description with those minted in that kingdom at the time of James's death, and that none other were struck during the first eight years of Charles's reign. If this be correct (and I believe it is) the point is established.

I have, in the course of my previous remarks, hazarded a conjecture that possibly at some future period the gold thistle crown with thistle M.M., as well as the gold half-crown of Charles, from the dies of his father—though both at present unknown—may be discovered. My reason for thinking so is that, as the representatives of all the

other coins of James, which were being minted at the time of his death, have appeared with the name of Charles, it is not improbable that these also may turn up. I have, however, in the case of the gold thistle crown, limited my expectation to that with the thistle M.M., because, though several with other mint-marks are included amongst the list of Scottish coins, I believe that that one alone has a right to be placed there. The coin was issued in both countries, and it is only by the M.M. we can determine to which country it belongs. In the majority of instances, the presence of the English or Scottish M.M. respectively would be sufficient to settle the question; but there is one coin given by Cardonnel as Scotch without any M.M. which, of course, cannot be thus determined. I very much question whether it be figured accurately; but if so, my conviction is that it is not Scotch. On the gold thistle crowns which I consider undoubtedly English with the various English mint-marks, we have on the obverse the legend, IA. D.G. MAG. BR. F. ET. H. REX; but on the Scotch with the thistle M. M. we have the contraction "&" instead of "ET." And this will be found to be a characteristic distinction between the English and Scottish coins of this period. There are, indeed, apparent exceptions; but, when narrowly examined, these go rather to prove the rule. For example, Mr. Hawkins gives a crown and half-crown, both English, with a thistle M.M., with a thistle instead of a rose on the housings of the horse, and with "&" instead of "ET"; but he mentions, what is indeed quite apparent, that the obverse of that coin is struck from the same dies as the Scotch, while the shield on the reverse proclaims it to be an English coin. There is also in the British Museum an English unit of James with the thistle M.M., and with the

obverse evidently struck from a Scottish die. The profile is quite different from that on the other English units of James, and exactly resembles that on the Scottish units, and the legend is also in the Scottish form with "&." Again, on the other hand, I have a specimen of the Scotch double-crown, and another of the gold crown, both of James, with the thistle M.M., but with the "ET" instead of "&," and similar coins are mentioned by Mr. Lindsay; but I am strongly inclined to think that, although with the thistle M.M. (which was by no means uncommon on the English gold coinage of James) the obverses of these coins were really struck from English dies, while the Scottish shield shows that they were issued in Scotland. These, therefore, I am disposed to regard as the exceptions to the general rule, that those coins with "ET" are English, and those with "&" are Scotch. This rule will help us to determine the nationality of such a coin as that figured by Cardonnel, which has no M.M. and the type of which is identical, whether it be minted in England or Scotland.

It is remarkable that in the gold double-crown and crown of the first coinage of Charles, from the altered dies, the contracted form "&" is used, and I believe the other form is not to be met with in any of the altered coins with Charles's name; thus proving the existence of the contracted Scottish form in some, at least, even of these gold double-crowns and crowns of James, and also the fact that Scottish dies alone were altered.

JOHN H. POLLEXFEN.

NOTICE OF RECENT NUMISMATIC PUBLICATIONS.

In the *troisième livraison* of the *Revue Numismatique Belge* for 1868 there are the following articles :—

1. "Catalogue of Obsidional Coins and pieces of Necessity" (tenth article), by M. le Lieut.-Col. P. Maillet.
2. "The Worship of Cybele and Atys, from coins and monuments," by M. Edmond Labatut, Doctor of Law.
3. "Supplement to the 'Jetons D'Artois,'" by M. L. Deschamps de Pas.

In the *Correspondance* is a letter from M. D. Pierrugues to M. R. Chalon.

In the *Mélanges* are notices of several finds of coins and of various Numismatic publications, also some remarks by M. R. Chalon on M. Chabouillet's dissertation on the great gold coin of Eucratides.

In the *quatrième livraison* of the *Revue Numismatique Belge* for 1868, there are the following articles :—

1. "Catalogue of Obsidional Coins and Pieces of Necessity" (eleventh article), by M. le Lieut.-Col. P. Maillet.
2. "Funerals among the Romans," by M. J. Sabatier; illustrated by a Plate of Coins, with the various types and symbols of Consecration and Apotheosis,
3. "The Republic of San Marino," by M. Renier Chalon.
4. "Deed of the year 1494, to which are attached two coins as patterns," by M. le Comte Maurin Nahuys.

As an official document, is given a Proclamation of the 26th July, 1868, calling in certain Belgian coins.

In the *Mélanges* are notices of various numismatic publications, and the part concludes with the proceedings of the Royal Numismatic Society of Belgium.

The second and third parts of the fourth volume of the *Berliner Blätter für Münz-Siegel-und-Wappenkunde* contain the following papers :—

1. "The Seventh Egyptian Regnal-Year of Aurelian," by Dr. Alfred von Sallet.
2. "On the supposed Phœnician Coins of Neapolis, in Campania, and some lately-discovered Coins, chiefly of Italy," by Dr. Julius Friedlaender.

3. "A Daughter of Niobe upon a Boeotian Coin," by the same.

4. "On Ancient Numismatics," by the same.

Among the coins described in this article is a magnificent gold medallion of Constans, of the weight of nine *solidi*, or the eighth part of a Roman pound. Of this piece a photo-lithographic representation is given, which, though slightly wanting in sharpness, admirably reproduces the medal. The bust on the obverse holds a globe surmounted by a Victory. On the reverse is the Emperor, in military costume, marching with spear and shield between a male and female captive. The legend is VICTORIA AVGVSTI NOSTRI, and the place of mintage Aquileia.

5. "The Comneni of Trebizond," by G. Blau.

6. "Inedited Mediæval Coins," by H. Dannenberg.

7. "Fragments to the Numismatic History of Prussia," by Vossberg.

8. "A Coin of Radu III., Vayvode of Wallachia," by J. Iversen.

9. "Cesare Fiore and his Medals," by Dr. Von Duisberg.

10. "The Works of Friedrich Hayenauen," by the same.

11. "On the Coins attributed in the Wellenheim Catalogue to Misocco," by C. F. Trachsel.

12. "The Three Pölchen Pieces of John Casimir, of Poland," by J. Iversen.

13. "Medals for Merit, struck by Peter the Great," by the Baron B. v. Koehne.

14. "The Hungarian Coronation Medals of 1867," by Jos. Ritter von Bergmann.

15. "Inedited Gold Coin of the Teutonic Order in Livland," by Dr. Julius Friedlaender.

16. "Numismatics at the Paris Exhibition," by the Baron B. v. Koehne.

17. "Seals of René d'Anjou, Seigneur de Mézières," by the same.

18. "Seals of the Gardes Suisses in the French Service," by the same.

19. "Pieces of Necessity of Münster and Erfurt," by Schlickeysen.

The part concludes with notices of all the latest medals and numismatic publications.

"Periodico di Numismatica e Sfragistica per la Storia d'Italia—diretto dal March. Carlo Strozzi.—Fasc. 1, 1868.

This is the first part of a new Numismatic periodical destined to appear every two months. It contains Papers on a "New Coin with an Etruscan Inscription," by Sig. G. F. Gamurrini; on "Imperial Coins in the Royal Galleries at Florence, not described by Cohen," Part 1, by the March. C. Strozzi; on "Coins and Medals of Benvenuto Cellini," by Sig. D. C. Ciabatti; and other Papers on Coins and Seals. It is illustrated by three well-executed plates.

"Description Historique des Monnaies Frappées sous l'Empire Romain, communément appelées Médailles Impériales," par Henry Cohen. Tome septième. Supplément, 1868. (Rollin and Fenardent, Paris and London.) Pp. 500, and 8 plates.

We have here a goodly volume, equalling in size some of the earlier volumes of the same work, but consisting exclusively of corrections of errors in the earlier part of the work, and of descriptions of new varieties which have come under the author's notice since the first publication of the lists of the coins of the various emperors. As might well have been expected in a work of such a kind, embracing so many minutiae, the corrections are numerous; but, judging from the careful manner in which M. Cohen has revised his work, one would have been surprised that they are so few, had it not been evident that so much care and labour had been bestowed on the original work. Those only who have had experience of the numerous sources of error which arise in making any extensive catalogue of coins, and of the difficulties there are in the way of discovering the errors, will be able to appreciate M. Cohen's labours—first, in compiling his work, and, secondly, in rectifying its errors. The most important part of the present volume, however, consists in the addition to the lists of the coins of the Imperial series, most of which are, from the circumstances of the case, rare and important coins, as a glance at the selection exhibited in the plates will show. In number the new pieces described amount to about 2,500. As the volume must of necessity be purchased by the possessors of the first six volumes of the work, and as no collector or student of Roman Imperial coins can well proceed without having the entire work in his hands, it is needless to do more than by this short notice to call attention to the fact of this supplemental volume having been published. There are, however, two remarks in the Introduction against which, like the *Revue Numismatique Belge*, we wish to enter a protest. M. Cohen speaks of "deux fléaux"

that threaten to destroy numismatics—"la mode, ou plutôt la manie, du pesage des monnaies, et l'idée fixe de vouloir tout expliquer." As to the first we cannot see, how without paying attention to the weight of coins, any thorough knowledge can be obtained of the ancient monetary systems; and the weight, moreover, is in many cases a safe test as to authenticity. As to the second, it has only been by the desire of explaining the legends on coins that the science of numismatics has attained its present position. One of its proudest boasts is the aid it affords to history, and yet it is its becoming a mere accessory of history that M. Cohen dreads. He may rest assured, however, that there is a sort of personal interest attaching to coins which will always secure there being a certain number of collectors for the sake of the coins themselves, apart from history. Useful as such persons are, we must, however, on our own part, protest against the science of numismatics degenerating into a mere collector's hobby, the highest proficiency in which would consist in a knowledge of prices.

MISCELLANEA.

GOLD COINS OF VITELLIUS.

In my account of the gold coins of the late Duke de Blacas, purchased for the British Museum, I published a very rare specimen of Vitellius and his father (*Num. Chron.*, N.S., Vol. vii., p. 280; Pl. ii., No. 2). Since then a slight variety of the piece has passed into the hands of Messrs. Rollin and Feuardent, of which the following is a description:—

Obv.—A. VITELLIVS GERM. IMP. AVG. TR. P. Head of A. Vitellius to the right, laureated.

Rev.—L. VITELLIVS COS. III. CENSOR. Bust of L. Vitellius to the right, laureated, and with *paludamentum*; in front, a standard with Roman eagle. *N.*

This coin is identical in legend and type with the silver one, published by M. Cohen (*Méd. Imp.* No. 2; engraved Pl. xiv.).

The same remarks apply to the new gold coin, as I have already given in my description of the Blacas specimen.

F. W. MADDEN.

SALES OF COINS AND MEDALS.—The following important collections have been dispersed by Sotheby, Wilkinson, and Hodge this season, and from them are selected the most noteworthy pieces:—

THE SALT CABINET, *April* 21, contained Greek, Early British, Anglo-Saxon, English, Scotch, Irish, and Staffordshire Tokens, realised £379 13s. Lot 4. Offa Hks 66; rev. + : IBBK in the angles of a lozenge-shaped ornament with foliated ends—£5 5s. Lot 8. Beornwulf, Rud., pl. 7; rev. + DONN P.; cross crosslet within a circle; from the Cuff sale—£25 10s. Lot 82. Elizabeth Noble or Rial, *n. m.* T—£7 10s. Lot 180. Macedon, R 9; rev. LEG . MAKEΔONON; club across the field; above, a hand holding a branch—£12. Lot 184. Antiochus II., R 9; Apollo, seated; an owl in the field—£5 2s. 6d.

THE FORSTER CABINET, *May* 28—30, contained valuable English and Scotch coins, in gold and silver, realised £1,784 8s. Lot 18. Edward III. Florin; wt. 107 grs. A variety of that in the British Museum, and much the finer of the two; they were both found together in the Tyne—£118. Lot 19. Edward III. Quarter Noble, 18th year; wt. 84 grs.—£9. Lot 25. Henry IV. Noble, before his 18th year; wt. 119½ grs.—£12. Lot 26. Henry IV. Noble, 18th year; wt. 108½ grs.—£11. Lot 38. Richard III. Angel; *m.m.* Boar's head on both sides—£10 5s. Lot 40. Henry VII. Shilling; *m.m.* Lis—£7 10. Lot 41. Henry VII. Sovereign; *m.m.* Lis, usual type; rev., *m.m.* Dragon; royal arms on the centre of the Tudor rose—£27. Lot 42. Henry VII. Sovereign; *m.m.* Cinquefoil; the king seated on a throne without canopy, and the field without ornamentation; rev., royal arms on the centre of the Tudor rose, without the usual tressure—£30 10s. Lot 49. Henry VIII. Half-Sovereign, 36th year; wt. 96 grs. Of the usual type, but presumed to be the finest known—£25. Lot 51. Henry VIII. George Noble—£17 17s. Lot 65. Edward VI. Angel; *m.m.* Dragon's head. From the Martin sale—£41 10s. Lot 66. Edward VI., fine Sovereign, 4th year; wt. 286 grs.; *m.m.* Dragon's head; royal arms on the centre of the Tudor rose, within a double tressure of ten curves—£21 5s. Lot 81. Elizabeth Noble or Rial—£30 10s. Lot 83. Elizabeth milled Crown; *m.m.* Lis; edge grained—£15 15s. Lot 87. James I. Exurgat Half-crown, from the cabinets of Hodsoll, Tyssen, Durrant, and Dymock—£50. Lot 98. James I. Noble or Rial, of the usual type, and presumed to be the finest known—£32. Lot 99. James I. Fifteen-Shilling Piece—£16 10s. Lot 126. Commonwealth Pattern Sixpence, by Ramage—

£11. Lot 136. Cromwell Half-Broad, 1656. Brilliant—£20 10s. Lot 137. Cromwell Fifty-Shilling Piece, 1656. Presumed to be the finest known—£51. Lot 163. Charles II. Broad. A brilliant pattern, by Simon; rev. *MAGNALIA DEI*. 1660—£12. Lot 196. Anne Guinea, 1702, with A. R. *mon.* in centre of reverse. A brilliant pattern—£22 10s. Lot 198. Anne Five-Guinea, 1703. *SECUNDO*, with *vigo* under the neck—£18 5s. Lot 261. George III. Five-Guinea, 1777. A brilliant pattern, by Tanner—£21 10s. Lot 264. George III. Five-Sovereign, 1820. A brilliant pattern, by Pistrucci—£24 10s. Lot 265. George III. Crown, 1818. A brilliant pattern, in gold, by Pistrucci—£20. Lot 270. George IV. Crown, 1820. A brilliant pattern, by Pistrucci—£14 5s. Lot 295. William IV. Crown, 1831. A brilliant proof, in gold, by W. Wyon—£26. Lot 320. Victoria Five-Pound Piece, 1839; rev., *DIRIGIT, &c.*—£16 5s. Lot 321. Victoria, as before—£15 10s. Lot 324. Victoria Gothic Crown, 1847. A brilliant proof, in gold—£12 5s. Lot 333. Mary Half-Testoon, 1561. With portrait—£13. Lot 343. James VI. Half Thistle Dollar, 1581; wt. 170 grs. Type slightly varied from Dollar—£10. Lot 365. Mary Ryal, 1555. With portrait—£10 10s. Lot 366. Mary Half-Ryal, 1555. With portrait—£15. Lot 370. James VI. Twenty-Pound Piece, 1576. Extra fine—£17 17s. 6d.

THE NORRIS CABINET, July 6—10, contained Greek, Roman, Anglo-Saxon, English coins, and English and Foreign medals. Lot 180. Alfred Penny; rev., + *BVRENOD*. Cf. *Num. Chron.*, vol. v. pl. 1, No. 4—£15. Lot 181. Alfred Penny. With *LONDONI, mon.*, *Num. Chron.*, vol. v. pl. 2, No. 19—£6 2s. 6d. Lot 184. Alfred Exeter Penny, *Num. Chron.*, vol. v. pl. 1, No. 9—£21. Lot 197. Harthacnut Penny. Bedford Mint—£6 2s. 6d. Lot 253. Henry VIII. George Noble; *m.m.* Rose; *TALLICA, &c.*—£13. Lot 263. Edward VI. Sovereign, 3rd year—£8 2s. 6d. Lot 282. Elizabeth Portcullis Crown, or Piece of Eight Reales. Coined for East India—£6 17s. 6d. Lot 283. Elizabeth Portcullis Half-Crown, or Piece of Four Reales—£8 5s. Lot 303. James I. Fifteen-Shilling Piece—£11. Lot 328. Charles I. Oxford Pound, 1643. Of fine work—£8. Lot 623. William IV. Crown, 1831. A brilliant proof, in gold—£19.

THE HAWKINS CABINET, July 31—August 1, contained patterns and proofs of English coins, in copper, silver, and gold, and a few rare colonial coins. Lot 7. Elizabeth Pattern milled Half-crown; wt. 211 grs. Snelling, pl. 7, note 21; and vignette to title-page of the "Silver Coins of England," by

Edward Hawkins. The only other known specimen is in the British Museum, and was formerly in the cabinet of King George III.—£18. Lot 83. Commonwealth Pattern Half-crown, 1651, by Blondeau. Edge inscribed IN THE THIRD YEARE OF FREEDOME, &c.—£8. Lot 84. Cromwell Farthing, Sn., pl. 6, *note* 10; rev., CHARITIE AND CHANGE—£10. Lot 85. Cromwell Farthing, Sn., pl. 6, *note* 8; rev., THUS UNITED, &c.; three pillars—£10. Lot 52. Charles II. Proof Half-crown, 1663. REGNI. XV. with head and bust of the king frosted. Brilliant—£5 7s. 6d. Lot 53. Charles II. Proof Crown, 1662. Plain edge; head and bust, frosted, of the king—£10 2s. 6d. Lot 76. Anne Pattern Halfpenny. With head on each side; edge inscribed, DECUS ET TUTAMEN, &c.—£6. Lot 93. George I. Pattern Halfcrown, 1715. Plain between the shields, and with plain edge—£9 10s. Lot 94. George I. Pattern Guinea, 1727. Head, laureated, and in high relief, to right—£5 2s. 6d. Lot 186. George III. Pattern Five-Sovereign, 1820; by Pistrucci—£20 5s. Lot 242. Victoria Five-Pound Piece, 1839. DIRIGIT DEUS, &c.—£6 15s. Lot 243. Victoria Five-Pound, 1839. DIRIGE DEUS, &c.—£6 15s. Lot 268. George II. Pattern Rosa Americana Twopence; rev., ROSA AMERICANA, 1733. Full-blown rose and bud on stem under a crown; below, on a scroll, UTILE . DULCI—£79.

THE WILKIN CABINET, August 20—22, contained the following important pieces:—Lot 18. Xanthus, \mathcal{A} 3; rev., $\Lambda\Upsilon\text{K}\text{I}\text{O}\text{N}$. $\Xi\mathcal{A}$ and lyre in a sunk square—£18. Lot 24. Germanicopolis Paphlagoniae of Severus, \mathcal{A} 7½; rev., $\text{APX. IIA}\Phi. \Gamma\text{EPMANEL-}\text{KOIIOAIC. ECTIA. O}\Theta\text{O}\text{N}$. Venus Pudica in a crouching attitude—£11. Lot 37. Ocoeleia of Gordian, \mathcal{A} 7; rev., OKOKAIEON ; two figures joining hands over an altar—£4 4s. Lot 383. Phrygia, Sibidonda of Gordian III., \mathcal{A} 4; rev., $\text{CIBI-}\Delta\text{OYNAEON}$.; male figure drawing a bow—£9 5s. Lot 386. Mithradates VI., \mathcal{A} 9½; wt. 250 grs.; rev., $\text{BΑΣΙΛΕΩΣ. ΜΙΘ-}\text{ΠΑΔΑΤΟΥ. ΕΥΗΑΤΟΡΟΣ}$; Pegasus, grazing, to left—£20 10s. Lot 387. Mithradates, \mathcal{A} 9½; wt. 247½ grs. Type as before—£8 8s.

XIII.

COINS OF ALEXANDER'S SUCCESSORS IN THE EAST.

PART I.—GREEKS OF BACTRIANA, ARIANA, AND INDIA.

(Continued from p. 213.)

BY MAJOR-GENERAL A. CUNNINGHAM.

DATE OF BACTRIAN INDEPENDENCE.

THE rise of the independent kingdoms of Parthia and Bactria took place about the same time. According to Justin, the Parthians revolted in the reign of Seleukus, the great-grandson of Nikator, during the first Punic war, when L. Manlius Vulso and M. Atilius Regulus were consuls.¹ In this passage, however, two distinct dates are mentioned; and as each is supported by other ancient authorities, it has been suggested by St. Martin that two distinct events have probably been confounded together. The accession of Seleukus II. Kallinikos, the great-grandson of Nikator, is fixed by Clinton in January, 246 B.C., while the consuls named by Justin are those of the year 250 B.C. In favour of the latter date we have

¹ xli. 4: "A cujus pronepote Seleuco primum defecere primo Punico bello, L. Manlio Vulsone, M. Atilio Regulo, consulibus."

the Armenian translation of Eusebius, which gives Olymp. 132—3, or B.C. 250, as the date of the Parthian revolt; also Samuel, the Armenian presbyter, and Moses of Khorene, who assign it to the eleventh year of Antiochus Theos, and the Persian Mirkhond, who mentions seventy-two years after Alexander. Other authorities, perhaps, refer to the same early date, as the Armenian Johannes Katholikos, who gives the sixtieth year of the Selenkidan æra, or B.C. 252, and Jerome's Latin translation of Eusebius, and the Greek chronologist of Scaliger, both of whom assign it to Olymp. 133—1, or B.C. 248.

The actual names of the consuls given by Justin belong to the year 256 B.C.; but as M. Atilius Regulus was only *consul subrogatus*, the year would have been named after the two consuls elect, or *suffecti*, who, according to the fragments of the "Capitoline Fasti," published by Pighius, were A. Manlius Vulso and Q. Cædicius. St. Martin and Dr. Scott² have therefore adopted the year 250 B.C., when the consuls-elect were L. Manlius Vulso and C. Atilius Regulus. There is a disagreement in the præ-nomen of Regulus; but if the fragments of the "Capitoline Fasti" are correct, there is a similar discrepancy in the præ-nomen of Manlius Vulso of 256 B.C., which should be A. and not L., as given by Justin. I agree, therefore, with St. Martin and Dr. Scott in adopting 250 B.C. as the date intended by Justin for the revolt of the Parthians, which is confirmed by Eusebius, and the other authorities already quoted.

The two distinct events to which St. Martin refers these

² See Numismatic Chronicle, xvii. 131, "On Parthian coins," by W. H. Scott, where the question is ably discussed. St. Martin's arguments are given in his posthumous "Fragments d'une Histoire des Arsacides," which I have not seen.

two different dates of Justin are the revolt of Arsakes in B.C. 250, and the actual foundation of the Parthian monarchy by his brother Tiridates some years later.

The revolt of Arsakes was related in the "Parthica" of Arrian, of which we now possess only some apparently discrepant fragments preserved by Photius and Syncellus. According to the former, the brothers Arsakes and Tiridates, descendants of Phriapites the son of Arsakes, were petty chiefs under *Pherekles*, the satrap of Parthyene, appointed by Antiochus Theos. According to the latter, the brothers, descended from Artaxerxes, were petty chiefs in Bactria under the Macedonian Agathokles, the Eparch of Persia. By Persia we must understand Parthia, as the Parthians were become the actual rulers of Persia, and the two names are used indifferently by later writers, including Syncellus himself, who records that Arsakes ruled for two years over the Persians.³ The discrepancy in the name of the progenitor is accounted for by the statement of Ktesias that *Artaxerxes* Mnemon, before his accession to the throne, bore the name of *Arsika*. The disagreement in the name of the Macedonian governor is more difficult to explain; but as *Pherekles* is the Macedonian form of *Periklēs*, it is possible that *φερεκλης*, or "wide-fame," may have been used either intentionally or accidentally as a synonyme for *Αγαθοκλης*, or "good-fame."

From these explanations it appears that the brothers Arsakes and Tiridates were petty chiefs subject to Pherekles, or Agathokles, the Macedonian governor of Parthia under Antiochus Theos. Strabo mentions that some authors called Arsakes a Scythian of the Dahæ

³ βασιλεύει Περσῶν Ἀρσάκης—ἐτη β', καὶ ἀναυρεῖται.

Parni, and others a Bactrian. Now, the Parni were seated on the banks of the Ochus, a southern tributary of the Oxus, and therefore Arsakes might with equal accuracy be described either as a Bactrian or as a Scythian. The limits of the different satrapies are unknown; but as Margiana lay between Parthia and Bactriana, it may have belonged to either; and, as Arsakes is said to have been subject to the governor of Parthiene, I conclude that Margiana must have formed part of the satrapy of Agathokles.

Both Photius and Syncellus agree that the Macedonian satrap, having offered an insult to the young Tiridates, was slain by the brothers, who induced the Parthians to revolt. Arsakes became their king; but having been killed by a lance after a reign of only two years, he was succeeded by his brother Tiridates, who reigned thirty-seven years.

The account of Justin is different, although it clearly refers to the same story.⁴ According to him, Arsakes was a man of uncertain origin, but of tried valour, who lived by plunder. Being freed from his fear of Seleukus after his defeat by the Gauls, Arsakes invaded Parthia with a band of robbers, and having slain the satrap Andragoras, seized the government of the nation. According to this account, the slaughter of the satrap of Parthia did not take place until after the battle of Ankyra in B.C. 243. But it seems probable that Justin has jumbled together two distinct events under this one date, as he had previously given an earlier date for the

⁴ xli. 4: "Arsaces, vir, sicut incertæ originis, ita virtutis expertæ, . . . cum prædonum manu Parthos ingressus, præfectum eorum Andragoram oppressit, sublataque eo, imperium gentis invasit."

Parthian revolt. I would therefore assign the slaughter of Andragoras to his earlier date of B.C. 250, and the invasion of Parthia by Arsakes to the later date. His account would then agree very closely with that of Photius and Syncellus.

The later date for the establishment of the Parthian monarchy is supported by the weighty authority of Strabo, as well as by the independent testimony of Suidas and Appian. Strabo's account is specially important, as it refers to the rise of both kingdoms, of Bactria as well as Parthia. His words are :⁵—"Disturbances having arisen in the countries beyond Mount Taurus, in consequence of the kings of Syria and Media, who possessed the tract of which we are speaking, being engaged with each other, those who were entrusted with the government of it occasioned first the revolt of Bactriana; then Euthydemus and his party the revolt of all the country near that province. Afterwards Arsakes, a Scythian, invaded Parthia, and made himself master of it." Before discussing the several facts stated in this important passage, it is necessary to note that Appian places the revolt of the Parthians at the death of Antiochus Theos, or in B.C. 246, and Suidas at 293 years after the beginning of the reign of Cyrus, or in B.C. 539--293=246.⁶

The kings of Syria and Media mentioned by Strabo

⁵ Geogr., xi. 9, 2: "Νεωτερισθίντων, δὲ τῶν ἔξω τοῦ Ταύρου διὰ τὸ πρὸς ἀλλήλοις εἶναι τοὺς τῆς Συρίας καὶ τῆς Μηδίας βασιλείας, τοὺς ἔχοντας καὶ ταῦτα, πρῶτον μὲν τὴν Βακτριανὴν ἀπίστησαν οἱ πεπιστευμένοι, καὶ τὴν ἑγγὺς αὐτῆς πᾶσαν (χώραν) οἱ περὶ Εὐθύδημον. Ἐπειτα Ἀρσάκης ἀνὴρ Σκύθης τῶν Δάων τινὰς ἔχων τοὺς Πάρους καλουμένους Νομάδας, παροικοῦντας τὸν Ὄχον ἐπὶ τὴν Παρθυαίαν καὶ ἐκράτησεν αὐτῆς." I have adopted Bayer's reading of *πρὸς ἀλλήλοις*, instead of the usual modern reading of *πρὸς ἄλλοις*, as I understand Strabo to say that the kings of Syria and Media were engaged *with each other*, and not *with other affairs*.

⁶ Clinton, "Fasti Hellenici," iii. 20.

are generally supposed to be Seleukus Kallinikos and his brother Antiochus Hierax. But there is a grave objection to this identification in the fact that Hierax never obtained possession of any part either of Syria or of Media. There was also no difference between the brothers until after the defeat of Seleukus by Ptolemy, in B.C. 244, when Hierax refused his aid, and openly aspired to the sovereignty of the whole kingdom.⁷ If Strabo alluded to these disturbances between the brothers, then the revolt of Bactria must be fixed about B.C. 240, and the invasion of Parthia by Arsakes somewhat later, or about B.C. 238, the very year in which Arsakes himself is said to have been attacked by Seleukus. It seems to me, therefore, much more probable that the king of Syria alluded to by Strabo is Ptolemy Evergetes, who took possession of *Seleukeia* and the whole of Syria shortly after the death of Antiochus Theos in B.C. 246. Seleukus retired across Mount Taurus, while Ptolemy pursued his conquest beyond the Euphrates, where he received the submission of Mesopotamia, Babylonia, Susiana, Persis, and Media, and of all the provinces of Upper Asia as far as Bactria.⁸ Ptolemy was then compelled to return to Egypt by domestic disturbances, and Seleukus rapidly

⁷ *Hierax* is said to have been so named from his grasping disposition, as shown in this attempt to supplant his brother. But I am inclined to assign to him the coins with the winged diadem, all of which, from their monograms, would appear to have been struck in Asia Minor, and to refer his title to the wings of the *Hawk*, "Ἱεραξ, as represented on the coins. We know that the title of *Dhul-Karnain*, or "Lord of the Horns," was applied to Alexander the Great from his portrait on the coins being represented with the Horns of Ammon.

⁸ See Ptolemy's inscription from Adulis: "διεβην τον Ευφρατην ποταμον. . . και την λοιπην πασαν εως Βακτριανης υφ' εαυτω ποιησάμενος." See also Polyænus, l. 8: "a Tauro ad Indiam usque Evergeten omnia obtinuisse."

recovered the eastern provinces of his kingdom, and in B.C. 242 founded *Kallinikon* on the Euphrates. But Ptolemy still held Syria for himself; and so firm was his grasp that the strongly-fortified capital of Seleukeia, on the Orontes, remained in the possession of the Egyptian kings for a quarter of a century, until it was recaptured by Antiochus the Great,⁹ about B.C. 220.

From this discussion it would appear that Strabo referred the rise of the Greek kingdom of Bactria to the period immediately succeeding the death of Antiochus Theos, in January, 246, when Ptolemy Evergetes invaded Syria to avenge the murder of his sister Berenike. As the authority of Strabo is of great weight, and as his date is confirmed by both Appian and Suidas, I have no hesitation in adopting the year B.C. 246 as the true period of the foundation of the Bactrian monarchy. This date is not inconsistent with the statement of Justin in the passage already quoted, in which, after noting that the Parthians first revolted in 250 B.C., and that the differences between the two brothers, kings Seleukus and Antiochus, gave them impunity, he adds, "*at the same time* also Theodotus, governor of the thousand cities of Bactria, rebelled."¹⁰ This statement has usually been accepted as referring to the earlier date of B.C. 250; but it appears to me that Justin's expression, *eodem tempore*, refers rather to the whole period between B.C. 250 and the termination of the war betwixt the brothers. Under this view, the statement of Justin is consistent with the accounts of Strabo, Appian, and Suidas, who assign the

⁹ Polybius, Hist., v. 5.

¹⁰ xli. 4: "*Eodem tempore etiam Theodotus mille urbium Bactrianarum præfectus defecit, regemque se appellari jussit.*"

Bactrian revolt under Diodotus to the year 246 B.C., immediately following the death of Antiochus Theos.

The same date is perhaps intended by the Eastern authors, according to whom Sansârchaud, or Sandro-kottus, assumed the imperial dignity after the death of Phûr, or Porus, and with his son possessed the empire of India for seventy years.¹¹ They were succeeded by *Yona*, that is, by the *Yauanas*, or Greeks. Now Porus was assassinated by Eudemus in B.C. 316,¹² from which, deducting seventy years, we obtain the year B.C. 246 for the accession of the *Yona* to sovereignty; that is, as I understand, for the Greek occupation of the Kabul Valley, which had been previously ceded to the Indians by Seleukus Nikator.

One other source of information still remains to be noticed—namely, the rock inscriptions of the Indian king Asoka, which mention the names of no less than five contemporary Greek princes. Asoka began to reign in B.C. 263, but was not inaugurated until four years later; and as some of these inscriptions refer to the tenth and twelfth years after his inauguration, it is certain that these particular edicts could not have been published before B.C. 249 and 247. It is equally certain that those edicts which mention the name of Antiochus must have

¹¹ *Ferishta*, Introduction. Briggs has omitted the period in his translation (i. lxxiv.); but it is given by Dow, i. 9; and it is found in most copies of the original as *haftâd sâl*, or 70 years. See "Bengal Asiatic Society Journal," 1838, p. 163.

¹² Diodorus, xix. 6, fixes the last campaign of Eumenes during the archonship of Demokleides, in B.C. 316, and in the consulship of M. Junius (Brutus) and Q. Aemilius (Barbula), in B.C. 317. The former date is adopted by Clinton (*Fasti Hellenici*, i. 170), who fixes the death of Eumenes early in 315. The murder of Porus, and the march of Eudemus with the elephants from Taxila to join Eumenes, must therefore have taken place early in 316, B.C.

been drawn up before B.C. 246, when he was succeeded by his son Seleukus Kallinikos. The Greek princes named in these inscriptions are Antiochus, Ptolemy, Antigonus, Magas, and Alexander.¹³ In a second place, where Asoka mentions by name Antiochus only, he seems to refer to the Greek satraps of Antiochus in the following words, *sāmantaṁ lājāne savata*, which Wilson renders, "and those who are near to Antiochus everywhere;"¹⁴ but which, I think, may be more simply translated by "his military governors everywhere." I conclude, therefore, with some confidence, that if the Bactrian revolt had taken place as early as the usually accepted date of B.C. 250, the names of Diodotus and Pantaleon would certainly have appeared in these edicts of Asoka. It is admitted that the edicts were not all inscribed on the rock at the same time; but as the particular edict which contains the names of the five Greek princes was certainly engraved subsequent to those which contain the dates of the tenth and twelfth years after Asoka's inauguration, I conclude that no fresh treaties had been made with other kings down to B.C. 247. The testimony derived from these Indian records is therefore strongly in favour of the later date of B.C. 246, which I have adopted, on the authority of Strabo, as the true period of the rise of the Greek kingdom of Bactria.

The Indian date of Asoka depends on the date of Buddha, as his inauguration is stated to have taken place 218 years after the death of the Indian reformer. If we adopt the Ceylonese date of the *Nirvāṇa* in B.C. 543, the inauguration of Asoka will fall in B.C. 325, and the accession of his grandfather, Chandra-Gupta, in B.C. 381; both

¹³ Royal Asiatic Soc. Journal, xii. 225, 19th edict.

¹⁴ Ibid., xii. 165, 2nd edict.

of which dates we know to be about sixty-six years in error,¹⁵ as *Sandrokoptos* or Chandra-Gupta was a contemporary of Seleukus Nikator, and his grandson Asoka, was a contemporary of *Magas*, King of Cyrene. But the true date of Buddha's death, according to my view, was B.C. 477, and, consequently, the accession of Chandra-Gupta took place in B.C. 315, and the inauguration of Asoka in B.C. 259. The amount of error is exactly sixty-six years, which may, perhaps, have originated in the following manner. I suppose that the Buddhist annals of the Panjâb and Afghânistan were dated in the æra of the Greeks of Bactriana and Ariana, beginning in B.C. 246, and that after the Greek dominion had passed into the hands of the Indo-Scythian Sakas, who were half Parthians, the Bactrian æra fell into disuse, and was superseded by that of the Seleukidæ, which we know had been adopted by the Parthians. At a later date, when the Buddhists of Western India began to compile the annals of their religion, and when the Bactrian æra had become obsolete and unknown, they referred all the dates in the ancient records to the well-known Parthian æra of the Seleukidæ, and thus raised the death of Asoka, which would have appeared under the year 20, or B.C. 226, to 292 B.C. (or 312—20), which is just sixty-six years too early. As he reigned thirty-seven years, his accession would have been placed in $292 + 37 = 329$, instead of $226 + 37 = 263$ B.C.; and, similarly, the death of Buddha, which occurred 216 years prior to Asoka's accession, was

¹⁵ Chandra-Gupta succeeded to power at the same time as Seleukus I., or about B.C. 315, which, deducted from 381, leaves 66 years; and Asoka was a contemporary of Magas in 259 B.C., which, deducted from 325, leaves also 66 years as the amount of error.

referred to $329 + 214 = 543$ B.C., instead of $263 + 214 = 477$ B.C.

A similar mistake was of very frequent occurrence between the date of Alexander's death, in B.C. 323, and the initial point of the Seleukidan æra in B.C. 312. Thus Philostratus states that the natives of India computed 350 years,¹⁶ from the battle with Porus to the date of the visit of Apollonius, in the reign of the Parthian Bardanes, A.D. 42 to 45. As the battle was fought in 326 B.C., this would make the date of Bardanes $350 - 325 = 25$ A.D.; but if referred to the æra of the Seleukidæ, the date will be $350 - 311 = 39$ A.D., or close to the true time. Similarly, Moses of Khorene states that Arsakes I. of Parthia began to reign sixty years after Alexander, or $323 - 60 = 263$ B.C. instead of $312 - 60 = 252$ B.C.

The corrected date of B.C. 477 was first proposed by me in 1854,¹⁷ when I suggested its probable identity with the æra of *Sri Harsha*, which was in use at Mathura and Kanauj in the time of Abu Rihân, and which, he was informed, dated as early as 400 years before Vikramaditya, or B.C. 457. But when a round number of centuries is thus given on hearsay evidence¹⁸ as the commencement of an æra, it appears to me that it can be accepted only as an approximation, and as the proposed date of the *Nirvâna* of Buddha in B.C. 477 is only twenty years in excess, I think it highly probable that the period of 400 years was simply the nearest round number of centuries from the actual time intended. This date of B.C. 477 for the *Nirvâna* of Buddha has since been adopted by Dr. Max Müller, in his "*History of Sanskrit Literature*,"

¹⁶ Vit. Apollonii, ii. 12.

¹⁷ Bhilsa Topes, p. 74; and Bengal Asiatic Soc. Journal, 1854, p. 704.

¹⁸ Reinaud, "Fragments Arabes," Abu Rihân, p. 189.

published in 1859.¹⁹ Professor Goldstücker, however, contests the necessity for this correction, and adheres to the Ceylonese date of Buddha,²⁰ although he adopts the correction of sixty-six years for the dates of Chandra-Gupta and Asoka, thus creating a gap in the previous history, which is left unfilled. But an examination of the *Ceylonese history* shows that a correction of sixty or seventy years is absolutely necessary in the very period contemporary with *Asoka*. Thus, to Mutasiwa and his five sons is assigned the period from B.C. 367 to 205, or 162 years, which, for two generations, is simply impossible. By applying the correction of sixty-six years, which I have shown to be necessary in the history of Asoka himself, the joint reigns of Mutasiwa and his five sons will amount to ninety-six years, which is the extreme period hitherto attained by two generations either in India or in Europe.²¹ By this correction Deveniapiatissa of Ceylon becomes a contemporary of Asoka, as is stated in the Mahawanso.

HISTORY.

After the death of Antiochus Theos, when Syria was invaded by Ptolemy Evergetes, the satraps of Bactria and other provinces of the East, taking advantage of the disturbed state of the empire, rebelled against Seleukus Kallinikos and established independent kingdoms. As

¹⁹ "History of Ancient Sanskrit Literature," p. 298.

²⁰ *Pāṇini*, p. 281.

²¹ Henry III. and Edward I. reigned 91 years; Louis XIII. and XIV. reigned 105 years; two Chālukya Rajas reigned 102 years; two Rajas of Bikaner, 100 years; two Rajas of Handur, 96 years; and two Rajas of Kashmir, 86 years. Altogether, six pairs of kings, fathers and sons, reigned 580 years; which gives an average of 96½ years for the extreme duration of the reigns of two generations.

similar causes usually produce similar results, it will be instructive to compare the state of the great Syrian empire after the death of Antiochus II., with that of Northern India shortly after the death of Firuz Tughlak. In A.D. 1400, when the kingdom of Delhi was invaded by Timur, the governors of Jonpur, Malwa, Gujarât, Multân, Samâna, Biâna, and Mahoba, taking advantage of the weakness of their suzerain, openly rebelled, and became independent sovereigns. The last three rebels were soon reduced; but the ruler of Multân eventually became King of Delhi; and the rulers of Jonpur, Malwa, and Gujarât transmitted their crowns to their descendants. And, like as the petty Greek states of Ariana and India were all conquered by the Indo-Scythians about 120 years after the death of Antiochus, in the same manner were the different Muhammadan kingdoms of Northern India overthrown by the Moguls under Baber just 126 years after the invasion of Timur. During this period no less than eleven princes, of four different families, reigned in Delhi; eight princes, of three different families, in Jonpur; twelve princes, of two different families, in Malwa; nine princes, of a single family, in Gujarât; and three princes, of three different families, in Samâna, Biâna, and Mahoba; or, altogether, forty-three princes, of thirteen different families. As we possess the coins of no less than twenty-nine princes with pure Greek names, who must have reigned in Bactriana, Ariana, and India, within a similar short space of 120 years, the state of the kingdom of Delhi, after the death of Firuz and the invasion of Timur, appears to me to offer a very fair and useful comparison with that of the ancient Syrian monarchy after the death of Antiochus II., and the invasion of Ptolemy Evergetes.

From the revolt of Diodotus in B.C. 246 to the Indo-Scythian conquest of Kabul and Western India in B.C. 126, or in the short space of 120 years, we have to arrange the names of these twenty-nine pure Greek princes. It is admitted by all inquirers that they could not possibly have reigned in succession over one kingdom, as the average length of reign would be only four years. It is certain also that there could not have been more than five or six generations of any one family during that period; and even allowing the possibility that two brothers might have succeeded to the throne in each generation, there would still remain some eighteen or twenty princes to be accounted for, who might be assigned to two or more contemporary kingdoms. But as it is barely possible that these twenty-nine princes were confined to only three or four families in successive generations, I conclude that they must have belonged to several different families, as we have seen was actually the case in the analogous circumstances of the Delhi kingdom. Sometimes the members of one family might dispute amongst themselves for the throne of a single petty state, whilst at other times the members of different families might contend for supremacy. Thus at one time the sovereignty may have been in the hands of a single powerful king like Euthydemus, or Eukratides, or Menander; whilst at another time it may have been divided between several contemporary princes, who held a precarious sway over the several petty kingdoms of Alexandria, Nysa, and Taxila; and perhaps other places, such as Ortospana and Sangala.

We know from their coins that Antimachus was a contemporary of Diodotus, and that Agathokles was a contemporary of Diodotus, Euthydemus, and Antiochus

Nikator. We learn from history that Diodotus was succeeded by his son, who was supplanted by Euthydemus; and that Demetrius, the son of Euthydemus, was supplanted by Eukratides, who was himself murdered and succeeded by his own son, of name unknown. We can see, from their portraits as well as from the actual identity of their coin types, that Pantaleon and Agathokles must have belonged to the same family; and, from the want of similar affinities, we may infer that Antimachus Theos belonged to a different family from Euthydemus or Eukratides, and was not succeeded by his son. Here, then, we have no less than five distinct families, of which some one at least may fairly be presumed to have continued down to the final extinction of the Greek power. But, unfortunately, we have nothing but coins to guide us in this part of our inquiry; and as it is almost entirely from similarity of type and fabric that any connexion can be inferred, we are often left in doubt whether the connexion is a family one, or only that of immediate succession of one king by another. The former connexion is certain in the case of Lysias with Antialkidas, as their names are found together on the same coin;—and it is highly probable in that of Antimachus II. with Philoxenes, Nikias, Hipposstratus, and Queen Kalliope, all of whose coins exhibit the same type of a king on horseback, which is probably that of Antimachus himself, the founder of the family. A similar connexion is perhaps indicated by the religious type of Herakles, which is found on the coins of Euthydemus and his son Demetrius, amongst the Bactrian kings, and on those of Straton, Lysias, Theophilus, and Zoilus, amongst the Indian kings. But as Antialkidas, the son of Lysias, wears a *Macedonian* helmet, he must have

claimed Macedonian descent through his mother, as Euthydemus was a *Magnesian*. Where so little is actually known, we may hazard a guess that Straton himself was the son of Eukratides, and the son-in-law of Demetrius, through his wife Agthokleia. Through Eukratides he would have claimed descent from Laodike, who, from the appearance of her name upon the coins, was almost certainly of royal extraction, and perhaps, therefore, a daughter of Agathokles. This conjectural connexion with the families of Agathokles and Euthydemus is the more probable from the name of Agathokleia, and from the fact that the coins bearing the joint names of Straton and Agathokleia have the seated Herakles of Euthydemus; while the copper coins of Straton himself bear the head and club of Herakles, which are found on those of both Euthydemus and Demetrius. As the same head occurs on the coins of Theophilus and Lysias, I infer that they must have been his contemporaries, and very probably his near connexions. His own name was perhaps derived through his grandmother, who, as the daughter of Antiochus the Great,²² may have been called Stratonike, which was a favourite Macedonian name in the family of the Seleukidæ. The last members of this group are Amyntas and his successor Hermæus, whose queen, Kalliope, would appear, from the royal horseman on her coins, to have been a descendant of the Macedonian Antimachus.

A third group of princes is distinguished by the worship of Athene Promachos, as well as by the use of the Indian

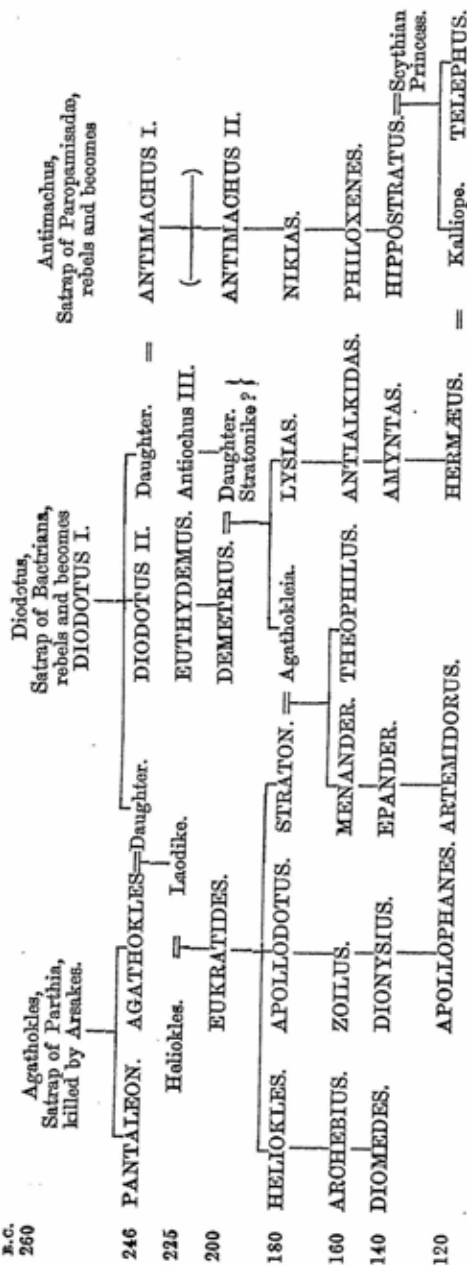
²² The name of the daughter who was betrothed to Demetrius is not mentioned; but as his three other daughters were called Laodike, Kleopatra, and Antiochis, it is highly probable that the fourth was named either Stratonike or Apame.

types of the elephant and humped bull. The figure of the goddess is first found on the coins of Straton and Apollodotus, and is afterwards continued on those of Menander, Epander, Dionysius, Zoilus, and Apollophanes. Both the elephant and the bull are found on coins of Heliokles and Apollodotus; the elephant alone on the coins of Menander, Archebius, and Zoilus, and the bull alone on those of Diomedes, Epander, and Artemidorus. It seems probable that there was some family connexion between all these princes; and I am inclined to consider Menander as the son and successor of Straton; and Dionysius, Zoilus, and Apollophanes as the descendants of Apollodotus. Archebius is connected with Heliokles by the types of the thundering Zeus and elephant, and I think also by similarity of features.

All these various connexions, whether certain, probable, or merely conjectural, are shown in a compendious form in the annexed table, which includes all the names that are at present known of the Greek princes of Bactriana, Ariana, and India.

CONJECTURAL FAMILY CONNEXION OF THE GREEK PRINCES OF BACTRIANA, ARIANA, AND INDIA.

B.C.
260



DESCRIPTION OF THE COINS.

In the following description of the Greek coins of Bactriana and Ariana, I have adopted a compendious form to avoid the continued repetition of the same terms. The shape of each coin is distinguished either by a square, \square , or by a circle, \bigcirc ; its metal by the usual monograms, \mathcal{N} , \mathcal{R} , and \mathcal{AE} , for gold, silver, and copper, and by \mathcal{NK} for the few rare specimens composed of nickel and copper; and its size is noted in tenths of English inches. Thus $\bigcirc \mathcal{N} 22$ is a description of the 20-stater piece of Eukratides, which is a "round gold coin, two inches and two-tenths in diameter;" and $\square \mathcal{AE} 8$ is a description of the square copper coins of Agathokles, eight-tenths of an inch in breadth. I have purposely rejected the scale of Mionnet, because it is not founded on any rational basis, but is a purely arbitrary series of unequal divisions, which has no reference to any known measure. Some common scale of measurement for all numismatic writers is highly desirable; but the scale should be uniform in its divisions, and should be founded on some actual unit of known value, as the English inch, or the French mètre.

I propose to describe the coins in separate groups, with reference to the rise, growth, and decline of the Grecian dominion in the East. The present description accordingly will be confined to the founders of the Greek power in Bactriana, Ariana, and India.

In most cases I have had access to the original coins, either in my own cabinet or in the collections of the British Museum, the East India Office, General James Abbott, and Mr. E. C. Bayley. A few illustrations have been copied from the plates of Raoul Rochette and

Mr. E. Thomas. To the latter gentleman, also, I am much indebted for the liberal communication of his MS. notes on the various collections which he has inspected. The elaborate dissertations of the learned French Academician, Raoul Rochette,²³ have been of great service to me; but I am more specially indebted to the full and detailed catalogue of Mr. Thomas,²⁴ which is by far the most ample and satisfactory notice that has yet been published of the coins of Alexander's successors in the East.

DIODOTUS I.

1. O $\overline{\text{R}}$ 10. *Tetradrachma*. Pl. i., fig. 1, Mr. Sim; fig. 2, author, 252.5 grs.

Obv.—Bare diademed head of king to right.

Rev.—Zeus naked and helmeted, moving to left, with ægis on left arm, and thunderbolt in upraised right hand. In the field to left an eagle, and to right No. 1 monogram, with the letter Ξ , or 8, perhaps for the year of the reign, or B.C. 247—8=289.

Legend in two lines, ΒΑΣΙΛΕΥΣ ΔΙΟΔΟΤΟΥ.

Mr. Gibbs's specimen, 255 grs., now in the cabinet of Mr. Wigan, has a monogram forming the letters MY. My own coin is much rubbed on the reverse, and offers no monogram. Another specimen in the British Museum, 235.4 grs., is in much the same condition; and a fifth specimen, sold by auction last year, was even worse. See also *Jour. Royal Asiat. Soc.*, xx. Pl. ii., fig. 1.

1 a. O $\overline{\text{R}}$ 7. *Drachma*. British Museum, from Sir Herbert Edwardes, a very fine specimen; duplicate, author, 60.5 grs. See also *Num. Chron.*, xiii. p. 70, and fig. 5 of *Bactrian Coins*.

²³ *Journal des Savants*, 1834, 1835, 1836, 1838, and 1834.

²⁴ *Num. Chron.*, vol. xix.; and Prinsep's "Indian Antiquities," vol. ii., p. 178.

DIODOTUS. I.



DIODOTUS. II. Soter.

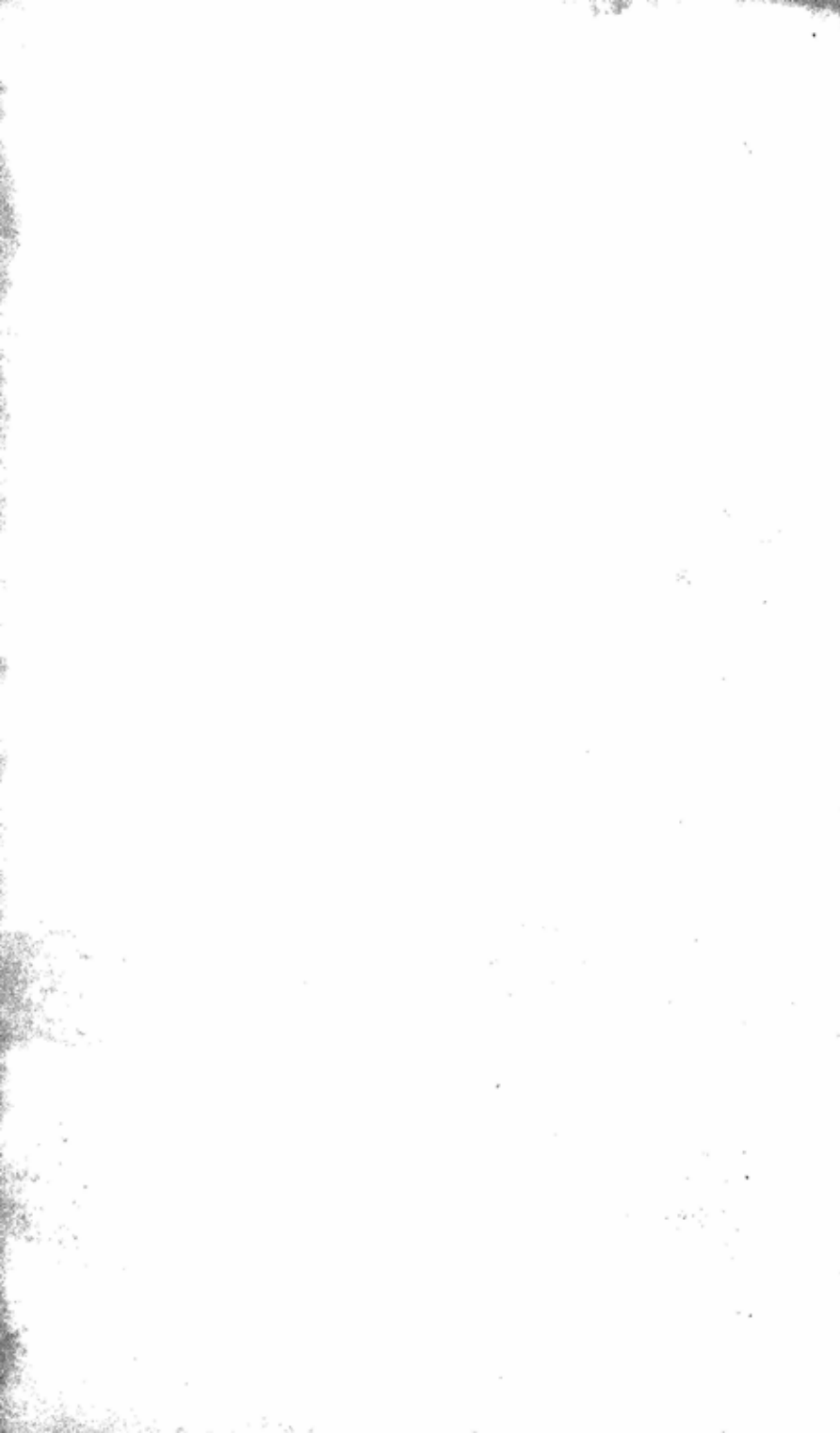


ANTIMACHUS. I. Theos.



PANTALEON.







A/
1



A/
2



A/
3



A/
4



A/
5



A/
6



A/
7



A/
8



A/
9



A/
10



A/
11



A/
12



J. J. Lee, Del.

ROMAN GOLD COINS.



Types the same as those of the tetradrachms. The monogram on the two specimens noted above, is the same as on Mr. Wigram's tetradrachm, which forms the letters MY. On the specimen engraved in the Num. Chron. the monogram appears to be No. 1.

DIODOTUS II. SOTER.

1. \circ *N* 7. *Stater*. Pl. i. fig. 8. British Museum. Duplicates, Gen. Fox and author, 182 grs.; and three or four others.

Obv.—Bare diademed head of king to right.

Rev.—Zeus hurling the thunderbolt, as on the coins of Diodotus I. In the field to left an eagle and a wreath, and to right a spear-head.

Legend, ΒΑΣΙΛΕΥΣ ΔΙΟΔΟΤΟΥ.

I have seen five specimens of these gold staters, all of which have the same peculiarity in the want of the cross stroke to the letter A of ΒΑΣΙΛΕΥΣ. I notice the same deficiency in the two specimens published by Mr. Thomas. See Num. Chron., N.S., ii., Pl. iv., figs. 2 and 3.

2. \circ *R* 7. *Drachma*. Pl. i. fig. 4. Author, 61·5 grs.

Obv.—Bare diademed head of king to right.

Rev.—Zeus hurling thunderbolt, as on the coins of Diodotus I. In field to left eagle and wreath, and below and to right the monograms given under No. 2.

In assigning some of these coins to Diodotus I., and others to his son and successor, Diodotus II., I have been guided chiefly by the presence or absence of the wreath, which I take to be the distinguishing feature of the coins of Diodotus II. On the Bactrian silver money of Antiochus II., Theos with the Thundering Zeus, there

is no wreath,²⁵ and, consequently, I infer that the coins of Diodotus, which are without the wreath, must belong to the first king of that name, who rebelled on the death of Antiochus. On the other hand, I assign those with the wreath to Diodotus II., because I find the same wreath on the coins of Agathokles and Antimachus, which present the head of Diodotus Soter on the obverse.²⁶ These differences, alone, appear to me to be quite conclusive, as Agathokles is known to have been also a contemporary of Euthydemus, the supplanter of the family of Diodotus.²⁷

ANTIMACHUS I. THEOS.

1. O R 13. *Tetradrachma*. Pl. i. fig. 5. Mr. E. C. Bayley. Duplicate, Dr. Mackinnon.

Obv.—Diademed head of king to right.

Legend in two lines, ΔΙΟΔΟΤΟΥ ΣΩΤΗΡΟΣ.

Rev.—Zeus thundering, with eagle and wreath, as on the coins of Diodotus. In the field to right No. 14. monogram.

Legend in three lines, ΒΑΣΙΛΕΥΟΝΤΟΣ ΘΕΟΥ
ΑΝΤΙΜΑΧΟΥ.

2. O R 12. *Tetradrachma*. Pl. i. fig. 6., British Museum, 260 grs. Duplicates, Lady Sale, Mr. Bayley; British Museum, Mr. Wigan, from Mr. Gibbs, 261 grs.

Obv.—Diademed head of king to right, covered with the Macedonian *kausia*, or flat hat.

Rev.—Poseidôn standing to the front, with trident in right hand and palm branch in left. In field to right No. 18 monogram.

Legend in two lines, ΒΑΣΙΛΕΥΣ ΘΕΟΥ ΑΝΤΙΜΑΧΟΥ.

²⁵ See Num. Chron., N.S., vol. ii., Pl. iv., fig. 1, for a tetradrachm of this type of Antiochus.

²⁶ See Pl. i., fig. 5, and Pl. ii., fig. 1.

²⁷ See Pl. ii., fig. 2.

2 a. O R 7. *Drachma*. Author, 65·5 grs. Duplicate, British Museum.

Of same types as the tetradrachma, and with the same monogram.

2 b. O R 6. *Hemidrachma*. British Museum, 31·7 grs.

Of same types as the tetradrachma, but with No. 15 monogram.

2 c. O R 5. *Obolus*. Author, 6 grs.; duplicate, East India Office. See *Ariana Ant.*, Pl. xxi. fig. 12.

Of same types as the tetradrachma. In the field to right the letter Δ.

3. O Æ 9. *Di-chalkous?* Pl. i. fig. 7; author.

Obv.—Indian elephant moving to right.

Rev.—Winged figure of Victory standing to front on the prow of a ship, with wreath in right hand and palm in left.

Legend in two lines, as on the tetradrachma.

This coin was stolen from me in 1844, and the engraving has been taken from a pencil sketch made by myself in 1841.

PANTALEON.

1. O R 13. *Tetradrachma*. Pl. i. fig. 8. Author, unique, 232 grs., much rubbed. Before a rough cleaning to which it was subjected, this coin weighed 248 grs.

Obv.—Diademed head of king to right.

Rev.—Zeus, clad in the pallium, sitting on a high-backed throne, holding a sceptre in his right hand, and a small figure of the three-headed Artemis Hekate in his left hand. In the field to left No. 3 monogram.

Legend in two lines, ΒΑΣΙΛΕΩΣ ΠΑΝΤΑΛΕΟΝΤΟΣ.

2. O NK 9. *Obolus?* British Museum; unique.

Obv.—Head of king as Bacchus to right, crowned with a wreath of vine leaves. A thyrsus behind.

Rev.—Panther moving to right, with left fore leg raised.

Legend in two horizontal lines, as on the tetradrachma.

2 a. O Æ 9. *Di-chalkous?* Pl. i. fig. 9. Author, unique, 121 grs.

Of same types as the preceding, but with No. 10 monogram in field to left.

8. □ Æ 9. *Di-chalkous?* Pl. i. fig. 10. British Museum. Average of seven coins, 186.8 grs.

Obv.—Panther standing to right.

Legend in two horizontal lines, as on the tetradrachm.

Rev.—A Bacchante to left, clad in loose, flowing robes, with full Eastern trousers, holding a flower in her right hand, and apparently dancing.

Legend in two perpendicular lines, in Indian Pali characters, *Rājine Pantalevasa*, "of King Pantaleon."

AGATHOKLES. ΔΙΚΑΙΟΣ.

1. O Æ 13. *Tetradrachma*. Pl. ii. fig. 1. Mr. Wigan, from Mr. Gibbs,²⁸ 261 grs. Duplicate, M. de Bartholomæi.

Obv.—Diademed head of king to the right.

Legend in two lines, ΔΙΟΔΟΤΟΥ ΣΩΤΗΡΟΣ.

Rev.—Zeus thundering, with eagle and wreath, as on the coins of Diodotus II. In the field to right No. 11 monogram.

Legend in three lines, ΒΑΣΙΛΕΥΟΝΤΟΣ ΔΙΚΑΙΟΥ ΑΓΑΘΟΚΛΕΟΥΣ.

2. O Æ 12. *Tetradrachma*. Pl. ii. fig. 2. Mr. Wigan from Mr. Gibbs²⁹ 259.5 grs.; unique.

Obv.—Diademed head of king to the right.

Legend in two lines, ΕΥΘΥΔΗΜΟΥ ΘΕΟΥ.

²⁸ An engraving of this coin was kindly communicated to me by Mr. Gibbs, in India, some years ago; but the illustration in the Plate is taken from Mr. Thomas's plate.

²⁹ The illustration in the plate is taken from Mr. Thomas's engraving, but it had been communicated to me previously by Mr. Gibbs.

AGATHOKLES. Dikaios.



2 A



2 A



3 A



4 A



5 A



6 E



7 NK



8 E





Rev.—Herakles sitting on a rock to left, resting his left hand on the rock behind, and holding in his right hand a club, which stands on his knee. In the field to right No. 3 monogram.

Legend in three lines, ΒΑΣΙΛΕΥΟΝΤΟΣ ΔΙΚΑΙΟΥ
ΑΓΑΘΟΚΛΕΟΥΣ.

3. O R 12. *Tetradrachma*. Pl. ii. fig. 3. Author, 255 grs.; unique.

Obv.—Diademed head of king to right.

Legend in two lines, ANTIOXΟΥ ΝΙΚΑΤΟΡΟΣ.

Rev.—Zeus thundering, with eagle and wreath, as on the coins of Diodotus. In the field to right No. 11 monogram.

Legend in three lines, ΒΑΣΙΛΕΥΟΝΤΟΣ ΔΙΚΑΙΟΥ
ΑΓΑΘΟΚΛΕΟΥΣ.

4. O R 12. *Tetradrachma*. Pl. ii. fig. 4. Author, 259 grs. *Journal des Savants*, 1836, p. 77; duplicates, Mr. Wigan, from Mr. Gibbs, 460 grs.

Obv.—Diademed head of king to right.

Rev.—Zeus, clad in the pallium, standing to the front, grasping a sceptre in his left hand, and holding a figure of Artemis Hekate in his left. In the field to left No. 8 monogram.

Legend in two lines, ΒΑΣΙΛΕΩΣ ΑΓΑΘΟΚΛΕΟΥΣ.

4 a. O R 7. *Drachma*. Author, 65·5 grs.; *Journal des Savants*, 1834, p. 332.

Types the same as those of the tetradrachma.

4 b. O R 6. *Hemidrachma*. Author, 24 grs.; unique, but in poor condition, and very much worn.

Of same types as the tetradrachma.

5. O R 7. *Drachma*. Pl. ii. fig. 5. *Journal des Savants*, 1834, p. 332.

Obv.—Head of the king, as Bacchus, to the right, crowned with vine leaves; a thyrsus behind.

Rev.—Panther to right holding a bunch of grapes in his left fore-paw.

Legend in two horizontal lines, ΒΑΣΙΛΕΩΣ ΑΓΑΘΟΚΛΕΟΥΣ.

I have entered this specimen as a silver coin in accordance with Raoul Rochette's description; but I strongly suspect that the metal is *nickel* bronze, as the types and the arrangement of the legend correspond with those of the nickel coins of Pantaleon and Agathokles, while they differ in both respects from those of the silver coins.

6. O NK 9. *Obolus?* Pl. ii. fig. 7. Author, 128 grs.

Obv.—Head of the king as Bacchus, as on the last coin.

Rev.—Panther to right, with left fore-paw raised towards a vine. In field to left No. 8 monogram. Legend in two lines as on the last. A duplicate in my possession has the letters ΦΙ in the field.

6 a. O NK 6. *Hemiobolus?* East India Office, 57 grs. Types as on the last coin.

6 b. O Æ 9. *Di-chalkous?* East India Office, 128 grs.

Same types as No. 6, with monogram No. 10. A duplicate, formerly in my possession, had the separate letters AP.

7. Δ Æ 7. *Chalkous?* Pl. ii. fig. 6. Author 71.5 grs. Duplicates in British Museum and Bodleian Library, Oxford.

Obv.—Tree in a square railed enclosure.

Legend below, in Arian Pali characters, *Hiduja same*, "lord of the Indians."

Rev.—A peculiar symbol common on Indian Buddhist coins, which is generally supposed to represent a *Chaitya* or Buddhist *Stupa*. The symbol on this coin, which is perhaps the earliest representation that we possess, is almost certainly intended for a Buddhist *Stupa*, as it is surmounted by a

crescent with the horns pointed downwards, which I take for the umbrella that usually crowns the Buddhist edifice.

Legend below, in Arian Pali characters, *Akathukrayasa*, "of Agathokles."

8. □ Æ 9. *Di-chalkous*? Pl. ii. fig. 8. Author: average of 14 coins 181·2 grs.

Obv.—Panther to right.

Legend in two horizontal lines, ΒΑΣΙΛΕΥΣ ΑΓΑΘΟ-
ΚΑΕΟΥΣ.

Rev.—A Bacchante in loose flowing robe and full Eastern trousers, holding a flower in right hand.

Legend in two perpendicular lines of Indian Pali characters, *Rājine Agathuklayesa*, "of King Agathokles."

(*To be continued.*)

XIV.

ARMENIAN COINS.

(Continued from p. 222, vol. viii.)

I HAVE already adverted to the defective power of reproduction of Persian and other Aryan words inherent in Semitic writing, and the influence that the ordinary process of conversion may have exercised in the definition of the name of Artaxias.¹

I will now briefly refer to the parallel instances of the transliteration of some of the Achæmenian royal titles, which directly illustrate the question.

The Persian Cuneiform name of Xerxes, *Khshayárshá*,² is reproduced in the Scythic version of Darius's inscription at Behistun as *Iksirsa*,³ the Assyrian counterpart appears elsewhere as *Khishi'arsha'*.⁴ The true meaning of the *Khshaya* is proved by the Persian context itself⁵ to be "king" or "ruler," as opposed to the ἀρχὴς of Hero-

¹ Numismatic Chronicle, vi., n.s., 246, 247; vii., n.s., 225; viii. 215.

² Rawlinson, J. R. A. S., x. 319—339; xi. 120.

³ Norris, J. R. A. S., xv. 154.

⁴ At Hamadán, Persepolis, and Van, the latter gives *Khishiarshi*.

⁵ "*Adam khsayársá khsáyathiya vazarka khsáyathiya khsáyathiyánám khsáyathiya dahyunám paruvzanánám*," &c. — J. A. (1852), 178.

dotus (vi. 98). The final *arsha* may be derived from the Sanskrit *Ārsha*, "venerable;" or if the true reading of the name be, as M. Oppert supposes, *Khsayarsa*, the Persian (ارز (ارج), *areja*, *areza*, "valor, pretium, dignitas," may better meet the sense. The Egyptian hieroglyphic transcription of the name is *Shsheeursh*,⁶ while the Jewish embodiment of the designation varies from אדשוירש, Ezra iv. 6 (אדשוירש) 'Ασσούρησος LXX., 'Ασούρησος, Tobit xiv. 15, Assuerus, Alasverus, &c.

The Aryan name of Artaxerxes is written in the Cuneiform *Artakhshatrā*⁸ and *Ardakhchashcha*;⁹ in Scythic, *Artaksassa* and *Irtakhsassa*;¹⁰ in Assyrian, *Artaksassu* (in Loftus) and *Arta'hasassu* (Venice vase), and in Egyptian hieroglyphics *Artashshashes*. The Biblical versions are ארתחששתא, *Artakhshashta* (Ezra iv. 7), ארתחששתא, *Artakhshasta* (Nehemiah ii. 1).

There is very little difficulty as to the meaning or derivation of this name, which Herodotus has rightly preserved for us in μέγας ἀρχῆος; an etymology which is sufficiently confirmed by the verbal roots in the Sanskrit, Zend, and Persian languages. There is one point, however, worthy of remark, that as Herodotus mistakingly rendered the first portion of the name of Xerxes, by "warrior" instead of "king," so in the present instance, the term for "warrior" admits of an alternative interpretation as "king;" indeed it is a question whether the entire compound was not used more as a

⁶ R. S. Poole, Encyclopædia Britannica, art. "Hieroglyphics," 416.

⁷ Oppert, J. A., 175.

⁸ Rawlinson, J. R. A. S., x. 341—347; xi. 35.

⁹ M. Oppert reads this as *Ardakhcasda*, J. A., 196.

¹⁰ Norris, T. R. A. S., xv. 158, 162, 204.

kingly title than as a name in its proper sense. Such an inference is weightily supported by the fact that these titles were so often only adopted on the king's accession to the throne, to the suppression of the individual name previously borne in the family.¹¹

The name of Artaxias, in like manner, is composed of the simple elements of the old words for "great king." The same *Arta*, with the terminal *shahiya*, the latter being a close approach to the modern شَاه, *sháh*, which may be traced in the earlier Pehlvi as the شَهِيَا, *shahia* of the Ták-i-Bustán inscriptions,¹² just as the Sassanian شَتْرِي, *shatrí*, of Artaxerxes may be recognised in the independent sense of "king, owner, ruler," in the one version of the Páí Kuli inscriptions of Ardeshtír Babegán, while in the corresponding Chaldæo-Pehlvi the term is rendered with the Semitic aspirate, as ܫܬܪܝ.¹³

My transcription of the name of Artaxias from the coins is ܐܪܬܐܕܪܫܝܐ, *Ortadarsheg*, which if it will not very accurately represent, to our ears, the sound of Artaxias,

¹¹ Cyrus, *Agradates*; Darius (Nothus), *Ochus*; Artaxerxes Mnemon, *Arsaces*. The names both of the Assyrians and Hebrews were intentionally significant; and so we find Darius has its sovereign meaning (Δύναται δὲ κατὰ Ἑλλάδα γλῶσσαν ταῦτα τὰ οὐνόματα Δαρείος ἐπέχεις), the Persian origin of which is clear in the verb داشتن, *Dáshtan*, "to have, to hold, to possess;" imperative دار, *dár*. The name of the celebrated Sargon (*Sar-kinu*) is a case in point, where, if M. Oppert is right in the translation of "Established-king," it is clear that the designation was a regal, and not a family or individual epithet.—Oppert, "Sargonides," p. 8; Jour. Asiatique (1863), 483; Rawlinson's "Ancient Monarchies," ii. 538.

¹² Rawlinson, J. R. A. S., xi. 123; My Sassanian Insc., 103—106.

¹³ Sassanian Insc., 38, 50.

may be accepted conditionally, in the present state of our ignorance of the correct pronunciation of the name in its proper Armenian dialectic form. Singular to say, the versions of the name preserved by Justin (from Trogus Pompeius) present, in the older editions, a very near approach to the orthography to be found on the local currency. We have the optional forms of "Ortoadisti, Artoadisti, Artho-adisti, and Artadisti."¹⁴ These variants have been corrected-up in the later texts, on the authority of Strabo,¹⁵ and Plutarch,¹⁶ into *Artavasdes*; but it may be a question still as to the justification for the change, as many of the Western authors used the term *Artavasdes* with very little knowledge or discrimination, and the name itself, like those now under consideration, is freely susceptible of being interpreted as a reigning title. Its component elements consist of the conventional *Arta* with the addition of the word *Mazd* (the terminal in Ormazd, &c.¹⁷)

¹⁴ Delp. edit., London, 1822, i. 516; ii. 1020. It is not impossible that the name here preserved may have something in common with the ancient designation of *Argisti*, which Mr. Norris finds in the Cuneiform Inscriptions at Van.—(See N.C., n.s., vii. p. 154. Dr. Hincks read the name in 1847 as *Arrasnis*, or *Arrasvis* (J. R. A. S., ix. 417; and Sir H. Rawlinson reduced it, in 1850, into *Artzen* (J. R. A. S., xii. 475.) See also Eusebius' *Armenian* text, i. p. 98, ii. 118, "*Achurardista*" = *Atossa* (Semiramis) ?

¹⁵ Strabo, xi. Ἀρταβάσδης.

¹⁶ Plutarch in Antony, 50: Ἀρταβάσδης ὁ Ἀρμένιος.

¹⁷ I understand this name *Artavasdes* to be the same as *Artabazes*, but to differ from *Artabazu*. Sir H. Rawlinson supposes *Mega bazus* to be a synonym of *Baya bukhsha*, "God-given," J. R. A. S., x., pp. xii., xxiv. Another etymology of *Arta-bazus* is given in Rawlinson's "Herodotus" (iii. 551) as *Atra* = *Adar*, "fire," and the Sanskrit *Bhuj*, "colere." An apt illustration of the interchange of M and B is seen in the Assyrian Cuneiform form *Hagmatana* (חַמְמַתָּנָה, Ezra vi. 2); and Ἀγβάρα, as well as in the Biblical *Elishua* (2 Samuel v. 15), and *Elishama* (1 Chronicles iii. 6), and in Mr. Norris's Scythic Examples of *Dariyamaus* and

the Scythic M interchanges with V (B), and the title of *Mazd* is of constant occurrence in the Armenian nomenclature of later date.¹⁸

The titles indeed of Artaxias and Artavasdes seem to have alternated in the family succession, under the ancient rule of calling the grandson after the grandfather. That the term Artaxias came to be a royal title is abundantly clear; a contemporary and parallel course was pursued in the continuation of the name of Arsaces—and so distinctly was Artaxias used as a reigning designation, that we find it bestowed upon Zeno, King of Pontus, on his coronation as King of Armenia, under the auspices of Germanicus, in A.D. 18.¹⁹ Artavasdes, in like manner, is said to have been the name, but was probably only the titular designation of the reigning monarch, as in the case of the two contemporary kings of Armenia and Media Atropatène at the period of Antony's expedition (B.C. 36).²⁰

Mata, or *Tariyavaus* and *Vata*.—(Jour. R. A. S., xv. 28. See also Oppert, *Journal Asiatique* (1860), 104; and Ménant, "Grammaire Assyrienne," Paris, 1868, p. 18. The more peculiar question of the confusion of these consonants in the older Armenian, was long ago established by Dr. Hincks in his tentative analysis of the Cuneiform Inscriptions at Van, where he remarks, "a single character has the power of *vi*, *bi*, *mi*, or *pi*."—(J. R. A. S., ix. (1847), 429). "Under Grecian treatment, we have a coin inscribed with 'ΑΡΞΑΜΟΥ, while the king is entitled 'Αρσάβης in the Greek."—Visconti, ii., Pl. xlv., fig. 1; Pellerin, *Rois*, Pl. ii.; Polyen. *Strat.*, iv., c. 17.

¹⁸ St. Martin, "Arménie," i. 412.

¹⁹ Tacitus (*Annals*, ii. 57) asserts that the name was derived from the capital, Artaxata; but this may be gravely questioned: "Igitur Germanicus in urbe Artaxata adprobantibus nobilibus, circumfusa multitudine insigne regium capiti ejus imposuit; ceteri venerantes regem Artaxiam consalutavere, quod illi vocabulum indiderant ex nomine urbis." See also coin of Germanicus and Artaxias. Cohen, vol. i. p. 138, No. 1.

²⁰ Dion. Cass., xlix. 25; xlix. 33, &c.; Plutarch in Antony.

It is true that the name cited by Justin may have been a more or less illiterate reproduction of an imperfectly appreciated foreign term,²¹ something after the manner of

"Quos fama obliterat, et quos
Barbara Romanæ non tradunt nomina linguæ,"
Suetonius, Delp. edit., p. 1135;

but the coincidence is curious, and as regards the general question of the attribution of these coins to Armenia, and their association with the first independent native ruler after the Seleucidan domination, there can be little or no doubt, for whatever may have been thought at first sight, of the singular helmets, which are now found so closely to accord with one of the peculiarities of local costume, no practical numismatist has ever contested that the mitre-turban was the symbol of Armenia or some of its various divisions or dependencies.²²

I now append a full recapitulation of the various readings contributed by the coins :—

²¹ St. Martin refers to an Ardasches (iii.) who is called by the Greeks "Exedares or Axidares," i. 412.

²² Visconti, "Iconographie Grecque," ii., Pl. xlv., fig. 4; M. V. Langlois, "Numismatique d'Arménie (Paris, 1859), Pl. i., figs. 6, 8, 9, &c.; "Trésor de Numismatique," Pl. xxxiv., figs. 12, 13.

RÉSUMÉ OF LEGENDS.

Left Side.	Foot.	Right Side.	
Dr. Levy, Plate i., No. 1.	רחדשיג	בדח	N.C., No. 2, p. 237, vol. vii. (1867), n.s., and o.s., xviii. 6.
" " 2.	רחדשיג	בדי	N.C., No. 3, p. 238, vol. xviii. 7.
" " 9b.	רחדשיג	רחדח בד	N.C., No. 4, p. 242. "
" " 3.	רחדשיג (אסכד)	רחד ..	N.C., No. 5, p. 243; xviii. 8.
" " 11.	דש	רחד ..	N.C., ix.; Paris colln., c. iv.
" " 10.	רחדש	רחד ..	N.C., No. viii.; also, n.s., vol. viii. 219.
" " 6.	שיד	בד	Paris colln. c. vi. 2; N.C., x.
" " 7.	גש	רחד ..	N.C., No. vii.; and n.s., vol. viii. 218.
" " 8.	ד	רחד ..	N.C., xi.; Paris colln. v. 2 (double-struck).
" " 4.	רחבד	רחד ..	N.C., xii.; Bib. Imp., old collection.
" " "	רחדשיג	רחד ..	Unpublished coin.
Dr. Levy, No. 14	דשיגשד	רחד ..	N.C. xiii. Small coin.

It remains for me to consider the bearings of subordinate portions of the general legend. None of the recently examined coins afford any aid in the determination of the title of ארסך, which, indeed, is only fairly legible on a single piece (No. 3, p. 238, N.C., vol. vii. N.S.) of what was possibly the first issue from the mints of Artaxias. The letters visible on coin No. 5, though indistinct on the original, and still more imperfectly traced in the published engravings, sufficiently support the prominent exemplar, and the trilateral conclusion of the legend in coin No. 10, through changing the sibilant ס, *s*, into ש, *sh*, may perchance form a portion of the identical title. Under these circumstances I prefer to avoid further speculation as to the import of the word, and leave it as originally suggested to do duty for *Arsaces* under one of the many forms of that title,²³ but preferentially as *Irs-saka*, or *Ars-saka*, the great Scythian,²⁴ as in the parallel Σκυθάρης, *Scythares* of Ctesias (Pers. 29, 17, and note p. 65 a). However appropriate under the above etymology, the name of *Arsaces* might be to the supreme head of the Parthians, the name was not originated by or special to that race,²⁵ as the designation is found in Æschylus

²³ Persian Cuneiform *Arsaka* (Oppert, Jour. Asiatique, 1852, p. 213). Seal of Arsaces, the chamberlain (Lajard, "Culte de Mithra," Pl. xxxii. 1. King's "Gems," p. 129); Bactrian *Ashshaka* (N.C., iv. 197); ארשך (N.C., xii. 84, xvii. 164).

²⁴ Norris, J. R. A. S., xv. 205. M. Oppert says: "*Issaka* est un mot Turanien, qui comme *Sakkanakhu* indique la royauté."—(Jour. Asiatique, 1857, p. 151). The *nakhu* may be traced in the Persian *Naga vazarka* (J. R. A. S., xv. 159, xix. 269), and in the Assyrian *Ni-qab*, the Ethiopian *Negus*, and *Nekab*. Birch. *Varia-Aethiopica*, Zeitschrift für Aegypt. June, 1868, p. 68.

²⁵ There is a curious passage in Abūl Faraj bearing upon the

(Pers. 957), and, as has been before remarked, it was the early name of Artaxerxes Mnemon.

Supposing that the letters of the doubtful word on the coin are correctly ascertained, another identification might preferentially commend itself as associated more directly with the traditions of Armenian speech, in some of the variants of the Scythic *Ko*=king (خان)²⁶ the Armenian *Kak*, *Kakig*.²⁷

The remaining detached words on the field of these coins follow, to a certain extent, the incidental modifications of the leading device; both one and the other indicate the transitional variations of an imperfectly-established national mintage. After the introductory *Bahdat* and *Bagdi*, which associate themselves with the synonymous *Mazdi* of the Achæmenian medals,²⁸ the legends seem to refer to a more advanced stage of Zoroastrian worship in the *Hirbad* and the *Aderbadi*,²⁹ as well as in the more

early use of the name of *Arsaces* and the assertion of independence by the Armenians, which may be based upon some authority which has not reached us from other sources. Pocock's translation from the original Arabic text is as follows:—

"*Ptolomæus Philadelphus* . . . regnavit annos triginta-octo (B.C. 285—247). Ejus tempore à Regum Græcorum obsequio se subduxerunt *Armeni*, rege sibi constituto, nomine *Arshaco*; ex quo appellati sunt *Arshacida*."—P. 64, Oxford edit., 1663.

²⁶ Norris, J. R. A. S., xv. pp. 18, 96, 181. The Tamil *Kō* or *Kon*, Altai *kān*, Caldwell.—"Dravidian Grammar," pp. 68, 78.

²⁷ E. Dulaurier, *Journal Asiatique*, 1860, p. 283. Persian

کي, Zend *Kava*, Sanskrit *Kari*. See also *Maghkhaz*, "chef, ou prince." St. Martin, i. 249. The word *Khadj* is translated by M. E. Prudhomme as "le plus glorieux." J. A., 1866, p. 116.

²⁸ Mionnet, Nos. 85, 86. Gesenius, Pl. xxxvi., fig. G. *Trésor de Num.*, Pl. lxvi. 1, 2.

²⁹ It is probable that many of the letters which at first sight appear to be 7, D's, on the surface of the coins, are, in effect,

doubtful *Ratu-bad* and *Ratu dad-bad*.³⁰ Of course, the readings of all these minor legends are especially open to correction, the imperfect system of orthography indulged in on the original coins is sufficiently obvious, and the true outlines of the straggling and cramped letters are under any circumstances difficult to determine. So that we may rest content with supposing that, however modified from time to time, the side legends continue to indicate the hierarchal dignity of the ruling monarch, until the simple title of *Malik* superseded all these adventitious honours. In concluding this notice of the supposed coins of Artaxias, it may be freely admitted, on the one part, that there is very limited authority for confining the entire series above described to the first champion of the national independence, while on the other hand we are scarcely in a position to say that any single one of the pieces in question symbolizes the domination of an immediate successor, whose reign is affirmed by native testimony alone. The Greek and Roman authors do not recognise any sovereign as intervening between Artaxias and Tigranes I.; and Moses of Khorene, who relates in detail the conquest of the country by Mithradates I. (Arsaces VI.) of Parthia, and his establishment of his own brother, Val Arsaces, in the government, fails to indicate

designed for 𐎠, B's, the continuous foot-stroke of which has been omitted, or obscured. So, also, the 𐎡, R's, and 𐎢, D's, are with difficulty distinguishable; and many 𐎣, W's, stand for, or exchange with, either one or the other of these similarly outlined letters.

³⁰ "*Ratu*, as has been before remarked, means the 'master,' and is a term specially applied to Zoroaster."—Num. Chron., N.S., vi. 247. Haug, "Language and Literature of the Parthians," pp. 124, 126, 155, 172-3.

the name of the monarch then displaced.³¹ It will be seen from the outline of Artaxias' life derived from classic sources previously given,³² that either the turbulent old Artaxias must have survived his capture of Antiochus Epiphanes, and regained his kingdom, together with more than his early power, or that his proximate successor must have inherited the identical name or title, with all the prestige and effective force of the old sovereignty, to have been recognised as so leading a potentate in the politics of coterminous lands between B.C. 162 and 149. The former is probably the most simple explanation of the difficulty, for although Appian tells us that Artaxias was taken alive, he does not say that he was put to death, and the tenor of Diodorus' text would seem to imply that it was the first and great Artaxias who was scheming to extend his dominions of the absorption of Sophene.³³ Such a conclusion derives weight from the portraiture of

³¹ Here is what the newly-appointed monarch says of his kingdom:—*Lettre de Vagharchag, roi des Arméniens, au grand Archag, roi des Perses.*—"Archag, roi de la terre et de la mer, toi, de qui la personne et l'image sont comme celles-mêmes de nos dieux, la fortune et les destinées au-dessus de celles de tous les rois, etc., Vagharchag ton frère puiné et ton compagnon d'armes, par ta grace roi des Arméniens, salut, santé, victoire.

"A présent que ce royaume est bien établi par tes soins, j'ai conçu la pensée de savoir, quels princes avant moi ont commandé au pays des Arméniens, d'où viennent les satrapies qui existent ici. Car ici point de réglemens connus, point de fonctions des temples déterminées; on ne sait, quel est le premier des notables, quel est le dernier du pays, rien n'est légal: tout est confus, à l'état sauvage."—*M. Khor, French Edit. i. p. 41.*

³² *Num. Chron., N.S., vii. 280; Diod. Sic., xxxi. 82; Appian Syr. pp. 45, 46, 66.*

³³ I failed to detect this inconsistency in the relative dates, in my notice above referred to. The figures indicating the accession of Ariarathes V. (Philopator), of Cappadocia, were inserted, at the last moment, in the final revise, without advertence to the period of the capture of Artaxias.

the monarch on coin No. 6, which, however much it may have been damaged by time and other causes, clearly represents a man considerably advanced in years, though this assumption in no wise militates against the accession of the Astavasdes, as stated by the native authorities, in or after 159 B.C., whose career was finally eclipsed by the growing power of the Parthian Arsacidæ.

M. St. Martin has compiled a very careful summary of the serial order of the local rulers, a portion of which is subjoined for facility of reference.

- B.C. 189. Artaxias.
 159. Artavasde, ou Ardavazt, son fils.
 149. Il est détrôné par les Arsacides après un règne d'environ dix ans.
 149. Valarsace ou Vagharschag I., frère de Mithridate I., roi des Parthes.
 127. Arsace ou Arsachag I., son fils.
 114. Artaxès ou Ardaschès I., son fils.
 89. Tigrane ou Dikran I.³⁴
 55. Il règne avec son fils Artavasde.
 36. Artavasde ou Ardavazt I., règne seul.
 34. Marc-Antoine s'empare de sa personne et l'emmène prisonnier à Alexandrie; les troupes Arméniennes proclament alors roi Artaxès, l'aîné des fils d'Artavasde, qui fut bientôt après obligé de se réfugier chez Phrahates IV. roi des Parthes.
 Alexandre, fils d'Antoine et de Cléopâtre.
 30. Artaxès II., chasse les troupes Romaines laissées par Antoine.
 20. Tigrane II., son frère.
 Tigrane III., son fils, détrôné par les Romains.
 6. Artavasde II., prince du sang royal.
 5. Tigrane III., rétabli.
 2. Erato, veuve de Tigrane III. Elle est forcée d'abdiquer.
 A.D. 2. Ariobarzane, prince Mède, nommé roi par les Romains.

³⁴ Chosen King of Syria in 82 B.C.—Justin xl. 1; Clinton, B.C. 88. The latter authority makes Tigranes reign in Armenia from B.C. 96 to 56.

- A.D. 4. Artavasde III., son fils détrôné peu après.
 5. Erato remonte sur le trône. Sa mort fut suivie d'un interrègne.
 16. Vononès, roi des Parthes, fils de Phrabates IV. : chassé par Artaban III., il vint chercher un asyle chez les Arméniens, qui le placèrent sur le trône, où il ne put se maintenir.
 17. Interrègne.
 18. Zénon, fils de Polémon, roi de Pont. Il fut couronné par Germanicus, et il prit, en montant sur le trône, le nom d'Artaxias.



No. 16.—Silver. Weight, 60 grs. B.M.

Obv.—King's head to the right, with a modified form of the ancient helmet, surmounted by an eagle.

The projecting *bever* of the earlier mintages is altogether abandoned, and the closely-clipped beard of Nos. 2 and 8 has been allowed a more free growth³⁵ to make up for the loss of the usual protection for the chin. The external diadem is still retained, as are the massive ear-rings.

Rev.—The King praying before the fire-temple, with Ormazd issuing from the flames; to the left, a peacock seated on the altar standard.

No legends whatever are perceptible on any of the specimens.

My first impression, on noticing the simultaneous

³⁵ The contrasted methods of shaving and clipping the beard, in early days, are exemplified in a passage in Plautus :—

TYNDARUS : " Nunc senex est in tonstrina : nunc jam cultros attinet.

Ne id quidem involucre injicere voluit, vestem ut ne inquinet. Sed utrum, strictissime attonsurum dicam esse, an per pectinem, Nescio : verum si frugi est, usque admutilabit probe."

PLAUTUS, Capt. ii. 2, 16.

See also Pliny vii. 59 ; Suetonius " Octavius," 79, " ac modo tonderet modo raderet barbam."

adoption of an eagle as the crest of the modified provincial helmet, conjoined with the disuse of native legends, naturally pointed to the influence of Roman supremacy in Armenia, either by protective alliance or by direct occupation.³⁶ But, on examining the typical indications of the collateral series of coins, by the aid of the annals of more easterly nationalities, it would appear that the mintages, of which No. 16 is a type, however seemingly severed in design and execution from their introductory prototypes, are but little removed from them in point of date. I revert, therefore, to the more simple explanation of the device, as the regal symbol of Persia,³⁷ which

³⁶ Letter to the *Athenæan*, September 28, 1866. Sassanian Inscriptions (1868), p. 131.

³⁷ Isaiah typifies Cyrus, King of Persia, by the emblem of an eagle. "Thus said the Lord to his anointed, to Cyrus, whose right hand I have holden, to subdue nations before him," xlv. 1. "Calling a ravenous bird from the East, the man that executeth my counsel from a far country," xlv. 11. The word here made use of is *וַיַּעַן*, from the root *וַיַּעַן*, "to rush upon, to fly upon." The term is rendered by *πετεινός* in the LXX.

The myth of the nurture of Achæmenes by an eagle, is also preserved in *Ælian* :—

"Εἰ δὲ τῷ δοκεῖ μῦθος τοῦτο, σύμφημι πειρώμενος εἰς ἰσχὺν κατεγνώκεναι αὐτόν· ἀλλ' Ἀχαιμένη μὲν τὸν Πέρσην, ἀφ' οὗ καὶ κάτεισιν ἡ τῶν Περσῶν εὐγένεια, αἰετοῦ τρόφιμον ἀκούω γενέσθαι."
—*De Natura Animalium*, xii. 21.

* * * *

"ΑΤΟΣΣΑ. "Ὅρῳ δὲ φεύγοντ' αἰετὸν πρὸς ἰσχάραν
Φοίβον· φόβῳ δ' ἄφθογγος ἐστάθη, φίλοι."
ÆSCHYLUS, The Persians, 204.

ἦν δ' αὐτῷ τὸ σημεῖον, αἰετός χρυσοῦς ἐπὶ δόρατος μακροῦ ἀνατεταμένος. Καὶ νῦν δὲ ἐτι τοῦτο τῷ σημεῖον τῷ Περσῶν βασιλεῖ διαμένει.—*Xenophon Cyr.*, vii. c. i. 4. Καὶ τὸ βασιλεῖον σημεῖον ὁρᾶν ἔφασαν, αἰετὸν τινα χρυσοῦν ἐπὶ πέλτης ἀνατεταμένον."—*Xen. Anab. i.*, c. x. § 12.

"*Utrumque currus latus deorum simulacra ex auro argenteoque expressa decorabant: distinguebant internitentes gemmæ jugum, ex quo eminebant duo aurea simulacra cubitalia, quorum*

was largely affected by the Armenians³⁸ long before the second consulship of Caius Marius (B.C. 104), when the eagle superseded the other *signa militaria* of the Roman legions.³⁹

Under this aspect, the adoption of the device may be associated with the change in the ruling power in Armenia, on the occasion of the supercession of the native dynasty of Artaxias and the accession of Valarsaces under the auspices of his brother Mithradates I., the supreme head of the Parthians⁴⁰ and representative of the imperial honours of the Achæmenidæ. The absence of legends likewise admits of a twofold explanation; Valarsaces seems scarcely to have been recognised as a fully inde-

alterum Nini, alterum Beli gerebat effigiem. Inter hæc auream aquilam pinnas extendenti similem sacraverant."—Q. Curtius iii. c. iii. § 16 (See Isaiah xlv. 1, Bel and Nebo).

"Μηδοὶ ταῦτα, καὶ Βαβυλῶν μέση· καὶ τὸ σημεῖον τὸ βασιλείου ὁ χρυσοῦς ἐπὶ τῆς πέλτης ἀετός."—Philostratus *Icones*, ii. 32.

³⁸ M. Johannes Avdall, in a "Memoir of a Hindu colony in ancient Armenia" (*Jour. Asiatic Soc. Bengal*, 1836, p. 831), notices that "*Arzrunies* was the title of a satrapy in Armenia, the name signifying 'Eagle-bearers.' The satraps known by this appellation, used to carry eagles before the Arsacian king VALARSACES and his successors." See also Moses of Khorene, Book ii. c. vii. "*Ardzirouni*, ceux qui portaient des aigles devant Vagharchag," (French Edit., vol. i. p. 155). See also *Eagle Reverse* of coin of Abdissar. Visconti *Icon. Grecque* ii., Pl. xlv., fig. 4, *Trésor de Num.*, xxxiv., fig. 12 and the eagles on the tiara of Tigranes of Armenia, in Syria, *Mionnet* viii., Pl. xiv., 3; T. de N., Pl. lv., 10, 11, &c.

³⁹ Pliny, x. 5.

⁴⁰ The retention of the eagles on the Tyrian tiara of Tigranes I. of Armenia, after his accession to the sovereignty of the Seleucidæ, seems to be conclusive as to this association. Tigranes, like Cyrus (*Xen. Cyr.* viii. c. 3, § 13), affected the Asiatic tiara, encircled with the Western diadem (*Dio. Cass.*, xxxvi. 65). The two eagles which surmount the crown, in the present instance, may be taken to indicate, under local conventionalism, the combined lordship of Armenia and the Syrian

pendent king⁴¹ and may, in consequence, have had some reserve in emblazoning his own name and dignities on the coinage, or possibly the Parthians, who possessed no writing of their own, may have felt objections to local legends they had still to learn the meaning of, while confessing the inappropriateness of the Greek alphabet and the borrowed titles of that tongue they had adopted elsewhere, in the ordinary course, from Alexander's successors in the East.⁴²

I have still to advert to the significant modification of the reverse device effected by the introduction of a peacock

kingdom of the Greeks. The adoption of the double crown or diadem was not new, it obtained in Egypt in very early times (Wilkinson, "Anc. Egypt," iii. 351), and Ptolemy Philometor united the crowns of Europe and Asia, later, in point of time, Artabanus of Parthia is reported to have worn the double diadem (Herodian, vii. c. i. § 2).

⁴¹ Moses of Khorene, in adverting to the increased power of Ardaches, the grandson of Valarsaces, mentions, "Vu l'agrandissement de sa fortune, il ne veut plus le deuxième trône il veut le premier rang; Archagan consent à lui donner la suprématie royale."

⁴² The Parthians did not finally adopt native legends on their imperial mintages till their knowledge of Greek had nearly failed them (*Vologeses*, iv., N.C., xii. 84; Sassanian Insc., p. 125). In the early days, having no literature of their own, they readily fell into the use of Greek, which circumstances confirmed in its supremacy. Plutarch, in "Crassus," has a proper sneer at the fact of the Parthians censuring the Roman admiration of the *Milesiaca* of Aristides, when so many of the Arsacidæ who filled the throne were sons of Milesian or Ionian courtesans; and he goes on to remark that Orodes was not unversed in Greek literature, and Artavasdes of Armenia had written tragedies himself, as well as orations and histories, then still extant. The head of Crassus, indeed, was brought in while these two kings were witnessing the representation of the *Bacche* of Euripides, and quotations from the drama were, then and there, improvised and made applicable to the circumstances of the death of the Roman general.

on the sacred altar-standard, which indicates the first departure from pure fire-worship, and the leaning to the adoration of Anahid, which eventually became so dominant in the land.⁴³ This is not the place nor the fit occasion to enlarge upon the "culte de Vénus," which found such favour, under its manifold forms, among the nations of the East,⁴⁴ and of the existence of which we have positive record so early as twenty-two centuries before Christ.⁴⁵ The later Cuneiform inscriptions testify how the worship of Tanais intruded upon the severe Achæmenian reverence of Ormazd,⁴⁶ and Berosus bears witness to its propagation by Artaxerxes Ochus, to the determined extent of the erection of shrines in no less than seven of the chief cities of the empire,⁴⁷ possibly in juxtaposition, if not in direct

⁴³ Venus must have intruded very early upon the ancient fire worship to have obtained the name of 'Αραγάρης, which seems to be merely the Persian *Adar* "fire," and *Gird* "around," a city (a temple?), as in *Dārābgird* and *Tigranocerta*. Δερκερώ is probably only a corrupted synonym, the initial A of which has been lost.

⁴⁴ "Religions de l'Antiquité du Dr. Creuzer," par M. Guignaut, ii. p. 731. "Hyde. Relig. Vet. Persarum," p. 112. Jour. Asiatic Society of Bengal, iii. (1834) p. 449, v. (1836) p. 266. "Ariana Antiqua," p. 362.

⁴⁵ See letter of Mr. George Smith, *Athenæum*, Oct. 10, 1868. The image of the goddess Nana recovered by Assur-bani-pal, King of Assyria, about B.C. 651, which had been carried off by the Elamites 1,635 years previously, or in B.C. 2286. *Zeitschrift für Aegyptische Sprache*, Nov., 1868, p. 116.

⁴⁶ Norris, Jour. R. Asiatic Society, xv. pp. 159—162. "Darius, my ancestor, anciently built this temple, and afterwards it was repaired (?) by Artaxerxes, my grandfather. By the aid of Ormazd I placed the effigies of Tanaitis and Mithra in the temple."—Sir H. Rawlinson, J. R. A. S., xv., note p. 227 and 254.

⁴⁷ Berosus in Clemens Alexandrinus, i. 57. 1, Susa; 2, Persepolis; 3, Babylon; 4, Ecbatana; 5, Damascus; 6, Sardis; 7, Bactra.

association with the sacred fire of the primitive Zoroastrians, just as the emblems of the two creeds are mingled in the present device.

It is curious to remark how closely the design here embodied accords with one example of the ancient Babylonian prototype,⁴⁸ which may be supposed, in like manner to represent the conventional worship of Venus (Luna) under one of her many forms,⁴⁹ with the appro-



The worship of Ashteroth of the two horns. — Gen. xiv. 5.

priate symbol of the hen in precisely the same relative

⁴⁸ I am indebted to Mr. Murray for the use of this woodcut, which originally appeared in Layard's "Nineveh," p. 539. An independent engraving of the same cylinder is given in King's Gems, p. 129. I have slightly modified the cut, on the authority of the original cylinder.

⁴⁹ See, *inter alia*, Genesis xiv. 5 ("Ashtaroth of the two horns"); Deut. i. 4, vii. 18, xvi. 21, 22 ("any pillar"), &c.; Joshua ix. 10, &c.; Judges ii. 18, vi. 25, x. 6; 1 Samuel vii. 8, 4, xii. 10, xxxi. 10; 1 Kings xi. 5, xvi. 33; 2 Kings xiii. 6, xxi. 3, 7, xxiii. 5, 13, 14; 2 Chron. xxxi. 1 ("Image-pillars of Ashera"), xxxiii. 3; Daniel xi. 37; 1 Maccab. v. 43, 44; 2 Maccab. i. 13, 16, xii. 26. Josephus Ant., vi., c. xiv. 8, viii. c. v. 3, xii. c. viii. 4. Contra Apion, i. 18.

Herodotus, i. 105; Cicero, "de Nat. Deor.," iii. 28, "Syria Tyroque concepta, quæ Astarte vocatur." Strabo, xi. c. viii.

position to the other adjuncts that the peacock retains in the later device.⁵⁰



No. 17.—S. billon. Weight 62 grs. British Museum.

Coin similar to No. 16, but of later date.

No trace of any legends.

4, 5, c. xiv. 16, xii. c. iii. 37, xv. iii. 13, 14, 15, xvi. c. i. 27, c. iv. 27, Diod. Sic. ii. 4. Pliny, v. 20, xvi. 64, xxxii. 24. Plutarch, in Artaxerxes, xxvii; in Crassus, xvii. Tacitus Hist., ii. 3. "Simulacrum deæ non effigie humana."

Dio. Cass., xxxvi. 31, 65. Lucian, "De Dea Syria," 4, "Ἀστάρτην δ' ἐγὼ δοκέω Σεληναίην ἔμμεναι." Herodian, v. c. vi. 6, "Αἰβυες μὲν θυν ἀντήν Οὐρανίαν καλοῦσι, Φοίνικες δὲ Ἀστροόρχην ὀνομαζονσι."

Selden, "de Dis Syris," p. 231, *et seq.* Gesenius, "Mon. Phoen.," 115. Judas, "La Langue Phénicienne" (Paris, 1847), pp. 72, 91, 92, 124, 129, 212, 216, &c. Landsceer, "Sabeian Researches," p. 70, &c. Alfred Maury (Paris, 1857), i. 157, 413, &c. Haug. 178.

Lajard, "Culte de Mithra," xvi. 1. "Ariana Antiqua," pp. 14, 362, Pls. xi. 17, xiv. 1, xxi. 18. Prinsep's Essays, i. 132, 225, &c., Pl. ii., 10, vii. 7, viii. 11, xxi. 1, 3, 4, 9, 10, &c.; xxix. 4, 5, &c.

J. R. A. S., xii. pp. 15, 65, 74, 76; xviii. pp. 62, 75; vol. iii., N.S., pp. 23, 62. Jour. As. Soc. Bengal, iii. 449, v. 266-7. Ménant, "Gram. Assyr.," pp. 334, 337.

Journal Asiatique, 1865, p. 427; 1857, p. 492; 1859, pp. 235, 270; 1863, p. 469; 1864, p. 397. Texier, "Asie Mineure, i., Pl. lxxx., p. 228.

⁵⁰ Pliny Hist. Nat., x. 77. Selden de Dis Syris, pp. 249, 309. —Lajard's "Nineveh" (1853), p. 538, "Cock of the men of Cuth;" Lajard "Culte de Mithra," Pl. xlii., figs. 12, 14, 15; Haug, "Language and Literature of the Parsees," p. 213. "The services rendered by the cock, *Parô-dars*, the bird of Serosh" (xviiith Fagard of the Zend Avesta), *Anahita*, the mighty goddess of the ancient Persians, 178; M. Vambéry, "Sketches of Central Asia" (London, 1868); "A cock is offered on the *Navroz* by all Fire-Worshippers at Bokhara."

The usual weight of these coins is 62·0 grains; one specimen rises as high as 62·5 grains. There is a series of smaller pieces of the same type ranging from 9·6 and 9·7 grains.



ITURDAT ('Αρπαδάρης).

No. 18.—Silver. Weight, 55·0 grs. (worn).

Brit. Mus.

Obv.—Head of king to the left. The helmet has lost much of the conventional appearance, and the eagle is replaced by a crescent. The growth of the beard has been further encouraged, so as to admit of its being arranged in formal curls.

Rev.—The usual device, as in Nos. 16—17, but with the introduction of straggling and badly-executed native legends, which nevertheless read sufficiently clearly יתורדת מלכא, *Iturdat Malká*. The majority of the coins disregard, or have no space for, the final א, A, but it is obvious on one of the better executed pieces.

No. 19.—Debased silver. Weight, 61 grs. Brit. Mus.

Obv.—Parthian head to the left, with flowing beard; the features and general outline presenting a close copy of one of the conventional types of the coin portraiture of Mithradates I. (Arsaces VI.) of Parthia.⁶¹ With this distinction, however, that the crescent of the preceding Armenian series is introduced as a discriminative symbol, no trace of which is to be seen in the original Arsacidan prototype.

Rev.—The conventional altar, with peacock, &c., of the previous mintages. Legend, יתורדת מלך, *Iturdat Malka*.

The peacock was specially the bird of Parvatī in India, of Juno in the Latin system, and was at times devoted to Hera, as at Samos (Athenæus xiv. 655, and Coins of the Island).

⁶¹ Longpérier, Pl. iv. Lindsay, Pl. v. fig. 1.

TIRIDATES.

No. 20.—Debased silver. Weight 53 grs. (worn). Brit. Mus.

Obv.—Parthian head to the left, imitating the western types of the money of Mithradates I. (Arsaces VI.) of Parthia, but surmounted by the distinctive crescent symbol of Armenia.

Rev.—The fire-altar, &c., as in previous mintages. Legend, תרדח מלך (or תרדחי). *Tardat* (or *Tiridati*),⁵² *Malka*.

EDWARD THOMAS.

(*To be continued.*)

⁵² The last is the more frequent form. It will be remembered that the Persian name of *Tiribazes* (coin 1, p. 235, N.C.) is written with the vowel תִּירִי, *Tiri*. The orthography in the present instance is a nearer approach to the Armenian provincialism of "*Dertad*."

XV.

ON THE CHEMICAL COMPOSITION OF A BACTRIAN
COIN.

IN the beginning of August last I received from General Cunningham a Bactrian coin of the second century B.C. The coin appeared to him to be composed of metal of an unusual character, and he was desirous that an inquiry should be made as to its nature. It has been submitted to analysis in the laboratory of the Mineral Department of the British Museum, and I have the honour of laying before the Society the results of the examination.

The coin in question weighed 5.266 grammes. Its surface had been worn away to a considerable degree, and its form was somewhat elliptical, the greater diameter being fifteen millimetres. The metal was at the centre more than twice the thickness of what it was near the circumference. Parts of the surface were corroded and covered with a green coating, in which a pocket lens enabled one to distinguish small masses of "red rust." On the obverse a head could still be distinguished, and on the reverse were a tripod of very elegant form and the name ΕΥΘΥΔΗ [ΜΟΣ.]

The metal of the coin possesses a bright, white colour,

with a very faint tinge of yellow; exhibits, when broken, a fine granular fracture, of a dull grey colour, resembling that of cast steel, and has a specific gravity of 8.89.

A preliminary qualitative examination showed the coin to consist of an alloy of copper and nickel, and a quantitative analysis was then made of a portion weighing 1.4451 grammes, the copper being determined volumetrically by De Haen's method, and the nickel and cobalt separated by Liebig's process. The determinations showed the coin to possess the following percentage composition:—

Copper	.	.	.	.	.	.	77.585
Nickel	.	.	.	.	.	.	20.038
Cobalt	.	.	.	.	.	.	0.544
Iron	.	.	.	.	.	.	1.048
Tin	.	.	.	.	.	.	0.038
Silver	.	.	.	.	.	.	trace.
Sulphur	.	.	.	.	.	.	0.090
							<hr/>
							99.348

The loss of two-thirds of a percent may, perhaps, be in part accounted for by the fact of the portion analysed not having been wholly free from the corroded crust.

This coin essentially consists, therefore, of an alloy of copper and nickel, the percentage composition of which, it is interesting to notice, differs in no considerable degree from that of the alloy of which the five- and ten-centime pieces at present issued by the Belgian mint are composed. M. P. Dewilde,¹ Professor at the Institute of Gembloux, analysed the Belgian alloy a few years since, and found it to possess the following composition:—

Copper	.	.	.	.	.	74.4
Nickel	.	.	.	.	.	25.55
						<hr/>
						99.95

¹ Dewilde. Bull. de la Soc. Chim. de Paris. 1862. 82.

The legal standard of the alloy adopted by the Belgian Mint is copper 75, nickel 25. The specific gravity of a ten-centime was found to be 9.16, a number somewhat in excess of that found in the case of the Bactrian coin, and due, doubtless, to the far greater pressure to which the former coin will have been subjected. The fracture of the two coins was very similar.

Nickel was first shown to be a metal by Cronstedt² in the year 1751. In Saxony and Bohemia had been found veins of an ore of a reddish tint, bearing a great resemblance to that of copper. Attracted by the colour, the Saxon smelters endeavoured to obtain copper from this ore, but finding all attempts to extract this metal of no avail, they gave the ore the ill name of Kupfernickel, and cast it aside. Cronstedt afterwards investigated the subject, showed that Kupfernickel contained a new metal, up to that time unknown, and named it after its ore—nickel.

Although this metal was isolated but a little more than a century ago, and has only since Cronstedt's time come into general use in Europe; it seems to have formed a very constant constituent of some of the alloys known for a long period to the Chinese. Fyfe³ found *Pachfong*, or *Pachtong*, to consist of copper 40.4, nickel 31.6, zinc 25.4, and iron 2.6. *Tutenag* contains copper 45.7, nickel 17.4, and zinc 36.9. Levol,⁴ moreover, gives an analysis of a specimen of "white copper" from China, containing copper 79.4, nickel 16.02, and iron 4.58, which, it will be observed, bears a great resemblance to the Bac-

² Cronstedt. Abhandl. d. Schwed. Akadem. d. Wiss. 1751, S. 293, u. 1754, S. 38.

³ Fyfe. Edinb. Phil. Jour., vii. 69.

⁴ Pelouze et Frémy. Traité de Chimie. 3me ed., ii. 1080.

trian and Belgian alloys. I have unfortunately been unable to gather any additional facts relating to the history of the specimens whose analyses have just been given.

The alloy of nickel and copper, of which the Bactrian coin is composed, may, perhaps, have been obtained by a method similar to that at present adopted at Klewa, in Sweden. A magnetic pyrites, containing sulphides of copper, nickel, and iron, is roasted in heaps, and then mixed with quartz and smelted. The iron oxidised by the roasting passes away with the silicic acid in the form of slag, and a matt of copper and nickel is obtained. This is broken up, roasted in a reverberatory furnace, and then fused again, and after having been subjected to several repetitions of these processes, furnishes matts very rich in nickel, the final matt being an alloy of nickel 70—80, copper 18—22, and iron 1·5—2·5.

WALTER FLIGHT, D. Sc.

In the interval which has elapsed since the occasion when I had the honour of laying the foregoing paper before the Society and the present date, I have been enabled, through the kindness of General Cunningham, to make a qualitative examination of two more Bactrian coins, the metal of which bore a great resemblance to that of the coin above described. Of these two, one was likewise of the time of Euthydemus, bearing his head on the obverse, and his name with the tripod on the reverse. The portions of metal removed from the edge of this coin were found by analysis to contain no silver, a trace of tin, much copper, a little iron, a considerable amount of nickel, and a trace of zinc. The second coin, of the reign of Agathocles, was found to be composed of much copper, a little iron, a considerable amount of nickel, a trace of tin, and it contained no silver. All the three coins, therefore, are made of the alloy of copper and nickel.

W. F.

30th December, 1868.

XVI.

ON SOME UNPUBLISHED TETRADRACHMS OF
ALEXANDER THE GREAT.

[Read before the Numismatic Society, May 21, 1868.]

THE valuable work of M. Müller upon the coins of Alexander the Great, published in 1855, contained so large a number of varieties, and was based upon the examination of so many of the principal museums in Europe, that it would naturally appear that it must be difficult to make any considerable additions to this interesting series. But the case is far otherwise. So vast is the number of varieties presented by the coinage in question, that a few years afterwards Baron von Prokesch-Osten¹ was able to add not less than 164 new varieties to the 1,735 already enumerated by M. Müller, and almost every private collection of any importance will be found to contain varieties still unpublished. Many of these, of course, present only trifling variations of type, such as different accessory monograms, or isolated letters; others are of more interest, as exhibiting peculiarities not less marked than those which serve to distinguish the principal varieties described by M. Müller. Of those in my collection which I do not find enumerated in either of the lists above referred to,

¹ See his "*Inedita meiner Sammlung*," 2nd Part, 4to, Vienna, 1859.

the following appear to me to be deserving, for one reason or another, of a notice in these pages. They are all tetradrachms, and belong, with one exception, to the interesting series of those broad, spread coins, of a peculiar style of fabric, which were struck exclusively in the cities of Asia Minor, and constitute the sixth class in M. Müller's arrangement:—

CYME IN ÆOLIS.²

1. *Rev.*—Jupiter seated on a throne without a back; in front, beneath the eagle, the monogram $\Phi\epsilon$, and under this a horse walking to left, lifting up one of its fore-feet; beneath the throne ΔI .
2. *Rev.*—Jupiter seated, as usual, but the throne having a back. In front, a vase with one handle; and, beneath it, at the feet of Jupiter, the fore-half of a horse, in a prancing attitude. In the exergue, the magistrate's name $\Delta\text{IONY}\Sigma\text{IO}\Sigma$.

M. Müller has followed the example of Mionnet and Eckhel in assigning to Cyme those coins of Alexander which have in the field the peculiar kind of one-handled vase so generally found on the autonomous coins of Cyme, and which, as Eckhel justly observes,³ is not found on those of any other city. Hence, there are few attributions that may be relied on with more confidence. The second of the above coins has in addition the fore-half of a horse, a symbol common on the copper coins of Cyme, and which is found also on one of the tetradrachms of Alexander described by M. Müller (No. 949). It is there, however, of much smaller size, and enclosed within a circle, and is associated with the magistrate's name

² I have not thought it necessary to describe the obverse, which of course presents the usual head of Hercules, except where (as in No. 3) it presents any peculiarity.

³ "Nummi Veteres Anecdoti," p. 78.

ΔΙΟΓΕΝΗΣ; that of ΔΙΟΝΥΣΙΟΣ is, I believe, unpublished.

The attribution of the first of the above coins must be admitted to be much less certain from the absence of the distinctive vase. On the other hand, a horse walking and lifting up his fore-leg in a peculiar manner, is well known to be the universal type of the silver tetradrachms of Cyme (which are probably but little posterior in date to the coins in question), and is found also very frequently on the copper coinage of the same city. It is true that the horse thus represented on the coins of Cyme is always (so far as I am aware) walking *to the right*, and that on the tetradrachm before us is walking *to the left*; but this can hardly be held as a conclusive objection, for though, in general, the subordinate types inserted as distinctive accessories on the coins of Alexander adhere with great regularity to the established usage of each city in this respect, the rule is not without exceptions.

I was inclined at one time to doubt whether the coin in question might not with more probability be assigned to Alexandria Troas; but, although the horse is one of the most characteristic types of that city, it is universally represented in an attitude as if *feeding*; and, trifling as the difference may at first appear, there is no doubt that a horse walking and a horse feeding were regarded as distinct types, as much as a lion *rampant* and a lion *passant* are in modern heraldry. Moreover, the horse *feeding* is found as a distinguishing accessory on tetradrachms of Alexander, which on this account are assigned by M. Müller, as well as by Eckhel,⁴ to Alexandria Troas. It appears also in the exergue of tetradrachms of the Syrian

⁴ "Nummi Vet. Anecd.," p. 72.

King, Antiochus II., which were in all probability struck in that city.⁵ The monogram above the horse also, though it *might* be read as $\Lambda\Delta E$, seems to be much more easily resolvable into $EK\Lambda$, in which case it doubtless represents the name of a magistrate.

TEMNOS IN \mathcal{A} EOLIS, with countermark of PRIENE.

3. Head of Hercules, of usual style, but with the letters $\Pi\Pi H$ impressed as a countermark.

Rev.—Usual types; in front of the seated figure a one-handled vase, surmounted by a vine-branch, above it the monogram \mathcal{A} and the letter E.

This coin is identical with one of those described by Müller (No. 956), and assigned by him, though on grounds which are less satisfactory than in many other cases, to Temnos in \mathcal{A} Eolis. My coin, however, is rendered remarkable by having impressed on it a countermark, unquestionably stamped at the city of Priene, in Ionia. This is the only instance I remember to have seen of a tetradrachm of Alexander countermarked by a city, which itself struck other tetradrachms of that monarch. It is not very common, indeed, to find coins of this class countermarked with any other sign than that of the Seleucidan anchor, which, as M. Müller remarks, is of frequent occurrence.⁶ Mr. Waddington, however, has figured and described⁷ an interesting drachm of Alexander,

⁵ I may, perhaps, take this opportunity to mention that another tetradrachm of Antiochus II. (with the seated figure of Hercules) has in the field the *one-handled vase*, as on the coins of Cyme, while a third has the flaming torch of Cyzicus. It would, therefore, seem that the tetradrachms of that monarch were struck principally in this part of Asia.

⁶ "Numismatique d'Alexandre," p. 105. This is especially found on the coins ascribed to Pamphylia and Pisidia, and bearing dates. Müller, *ib.* p. 267.

⁷ "Revue Numismatique," N.S., tom. x. p. 223.

countermarked with the prow of a ship, and the letters IIY, the first letter having the peculiar form so well known on the coins of Byzantium; and a similar specimen is in my own possession. On the other hand, a tetradrachm (also in my cabinet) has a similar countermark, but on which the letters are distinctly IIY, according to the ordinary mode of writing.⁸ But it is well known that there are no tetradrachms of Alexander with the attributes of Byzantium, though so large a number of those of his successor, Lysimachus, were struck in that city. Priene, on the contrary, undoubtedly coined tetradrachms of its own with the types of Alexander; these being identified, beyond the possibility of a doubt, by their bearing the trident (the usual type of the city) with the letters IIPI. (See Müller, p. 249, Nos. 1026—1032.) The circumstance that on these coins the trident, as the distinguishing mark of the city, is uniformly associated with the initial letters of its name, renders it the more singular that in the countermark on my coin the name only is found, without any accompanying symbol.

MILETUS OR HERACLEA.

4. *Rev.*—Jupiter seated on a throne without a back, and of very peculiar construction, beneath it a knotted club in a horizontal position; the monogram W beneath the seat; in front a lion walking, to left, above it, IM.

This coin, which is in very fine condition, presents strong points of resemblance with that figured by General Fox in his "Unedited Coins," pl. vii. fig. 64, which has in like manner a club placed horizontally immediately beneath the throne. General Fox's coin, however, has

⁸ Mr. Evans also informs me that a tetradrachm with the same countermark is in his possession.

the monogram of Heraclea (HPA) in front of the Jupiter, and there can, therefore, be no doubt of the attribution. On the present coin, on the contrary, the adjuncts in front, occupying the place where we usually find the symbols of the city, especially on the Græco-Asiatic coins of the present class—would seem to point to a different origin. These adjuncts, however, are not in themselves conclusive, but they would naturally lead us to assign the coin to Miletus.

An objection to this attribution may undoubtedly be found in the circumstance that there exist numerous tetradrachms, which may without doubt be attributed to that city, all of which bear the letters MI in monogram (M), and (in most cases) also the type of the lion standing and looking back at a star, precisely as on the ordinary autonomous coins of Miletus.* On the one now under consideration, on the contrary, the lion is walking, with one foot uplifted, more in the style of the lion on the autonomous tetradrachms of Smyrna. The letters above it, moreover, are distinctly written IM, instead of MI, or the customary monogram; and though such an inversion—considered as a mere slip of the engraver—was more likely to arise, on account of the initials being usually written in monogram, it is still a singularity which tends to throw doubt upon the attribution.

It may be added that the tetradrachms struck at Miletus—those at least with the lion and star—are, in general, of rather rude work, and coarsely executed; while the head of Hercules on my coin is of much bolder work and higher relief than usual on these Asiatic tetradrachms, resembling in this respect the coin figured by General

* See Müller, "Num. d'Alexandre," p. 249, Nos. 1088—1057.

Fox. The reverse, however, is of loose and careless design, though perfectly well struck. On the whole, therefore, I should believe the coin in question to have been struck at Heraclea, rather than at Miletus. But it must be borne in mind that the close proximity of the two cities—the Ionian Heraclea being situated at the head of the Latmian Gulf, but a few miles from Miletus—rendered a close connexion between the two highly probable, and may account for the combination of their symbols on the same coin.

SMYRNA.

5. *Rev.*—Same types; in the field, in front of the seated figure, a small turreted female head, to the right; above it, the letter Φ .

M. Müller has assigned to Smyrna several tetradrachms¹⁰ which have in the field a female head crowned with towers, accompanied by a monogram; and, as this head is almost precisely similar to that on the obverse of the fine autonomous tetradrachms of the city, the attribution can admit of no reasonable doubt. But on all these tetradrachms the head is to the left, while on my coin it is to the right; agreeing in this respect with the coin of Lysimachus figured by M. Müller (*Münzen des Lysimachus*, No. 408), and also referred by him to Smyrna, on which the female head is in like manner accompanied by the letter Φ . A more important difference is in the style of fabric; that of the coins cited by M. Müller being of the ordinary Asiatic character,¹¹ while the coin above described, is of a wholly different style, which would

¹⁰ "Numismatique d'Alexandre," p. 243, Nos. 991—994.

¹¹ One in my possession, with a different monogram from any given by M. Müller, is, indeed, of ruder and rougher work than most of the tetradrachms of Græco-Asiatic fabric.

certainly lead one, in the absence of any other criterion, to refer it to some city of European Greece or Macedonia. The reverse, especially, is of very good style, both of design and execution; and it has nothing of the broad and outspread form so universal among the coins struck in this part of Asia. Whether these peculiarities are sufficient to prevent us from referring it to Smyrna, may deserve further consideration.

TEOS.

6. Jupiter seated, as usual, the throne without a back; in front, a cantharus, and under it the letters THI; beneath the throne the monogram Φ .

As this coin differs from that published by Eckhel¹² (and from him by M. Müller, No. 1005) only in the monogram under the throne, I should not have thought it worthy of notice in this place but for the great rarity of coins of Teos, with this adjunct, that figured so long ago by Eckhel being the only one known to M. Müller. There is none in the British Museum; and Signor Scrosoppi, who, from his long residence at Smyrna, is particularly well acquainted with the coins of this class, told me he had never seen one. The cantharus, which is represented exactly as on the silver coins of Teos, with the addition of the letters THI, leaves no possible doubt with regard to the attribution.

RHODES.

7. Usual types, with PO beneath the throne, in front a flower of the rose, and above it ANTΥB in monogram ($\overline{\text{AB}}$).
8. Similar types, but without PO, with the same flower in front, and above it the magistrate's name, ΤΙΜΑΙΟΣ.

¹² "Nummi Veteres Anecdoti," p. 82, pl. 6, fig. 8.

The former of these coins was obtained by me in August, 1861, from the sale of Mr. O. Borrell's collection, and is the same that is referred to by Prof. Babington in his interesting notice of a tetradrachm of Alexander with the name of ΑΙΝΗΤΩΠ in monogram;¹³ but, from not having seen the coin himself, he has fallen into the error of supposing it to bear the same monogram as the one he was there describing. The monogram on my coin (which is in excellent preservation) is undoubtedly as I have given it, and is clearly the same as that on No. 1158 of Müller's catalogue, but which is there imperfectly figured, doubtless from the defective condition of the original. On this account I have here reproduced it. The analogy of the coins giving the names of ΑΙΝΗΤΩΠ and ΣΤΑΣΙΩΝ in monogram (first pointed out by Prof. Babington) leaves no doubt that we have here also the name of a magistrate, but it is not easy to determine the signification of the monogram. The most plausible mode of resolving it is undoubtedly that already suggested; but I am not aware of any Greek name that can begin with ΑΝΤΥΒ.

The second of the above coins was procured by me at the sale of the Ivanoff collection (lot 77). It is erroneously described in the catalogue as having the magistrate's name, ΤΙΜΑΡΧ, which could only be an abbreviation of ΤΙΜΑΡΧΟΣ.¹⁴ Such an abbreviated mode of writing a name, otherwise given at full, would, however, be without example on the Rhodian tetradrachms; and an attentive examination shows that the name is clearly ΤΙΜΑΙΟΣ, though the two last letters are partially effaced. The

¹³ Num. Chron., N.S., vol. iv., pp. 1—5.

¹⁴ Professor Babington, who cites the coin (p. 5), was also misled by the catalogue.

fabric of the coin, as well as the occurrence of the magistrate's name at full, leaves no doubt of its being struck at Rhodes, notwithstanding the omission of the PO beneath the throne, which is probably merely accidental. At least, I observe the same omission on a coin in my collection with the name of ΤΕΙΣΥΛΑΟΣ; though the other specimens which have been published with that magistrate's name appear to have the two letters as usual.

As Prof. Babington has drawn especial attention to the weight of the Rhodian tetradrachms, it may be worth while to subjoin here a list of the weights of those in my collection, for the purpose of comparison with the *data* furnished by him:—

Tetradrachm with ANTΥB in monogram (very well preserved)	261 grains.
„ with ΑΙΝΗΤΩΡ at full (very well preserved)	258
„ with ΑΡΙΣΤΟΒΟΥΛΟΣ (well preserved).	250½ ¹⁵
„ with ΔΑΜΑΤΡΙΟΣ (very well preserved)	260½
„ with ΗΦΑΙΣΤΙΩΝ (rubbed)	261
„ with ΣΤΑΣΙΩΝ (fine) ¹⁶	263½
„ with ΤΕΙΣΥΛΑΟΣ (fine)	268
„ with ΤΙΜΑΙΟΣ (very well preserved).	261

The result appears to be that the weight of the coins of this class presents an unusual amount of variation, but that they rarely exceed 261 grains. I have found the

¹⁵ The low weight of this coin is remarkable. It is slightly double struck and blurred, which interferes with its fineness as a specimen for the cabinet, but it is in very good preservation, and has no appearance of being plated.

¹⁶ Another specimen, discarded as a duplicate as being a good deal rubbed, has, nevertheless, just the same weight, and must, therefore, have been originally considerably heavier.

same to be the case with the rest of the tetradrachms of Græco-Asiatic fabric in my collection, which range, for the most part, from 255 to 261 grains, though in a few instances rising as high as 264 or 265 grains. My experience, therefore, does not differ much from that of M. Müller (Num. d'Alex., p. 8), though he undoubtedly goes too far in saying that the tetradrachms of his sixth class *never* exceed 17 grammes or 262.5 grains.

UNCERTAIN OF ASIA MINOR.

9. *Rev.*—Usual type; throne without a back; in front, a palm-branch and the letters ΔΙ.

I feel some doubt whether this coin can be referred to the peculiar Græco-Asiatic class; it is indeed large and spread, somewhat exceeding size 8 of Mionnet's scale, and the character of the obverse has something of the Ionian type about it; but the reverse is of much better work than usual, the figure of Jupiter bending forward with unusual ease and freedom, and the muscles of the torso being finished with a care and skill seldom seen in the Asiatic tetradrachms. In any case, I am at a loss to what city to attribute it. Dium, in Macedonia, to which the letter ΔΙ would naturally lead one to refer it, seems to me excluded by the style of fabric. Those assigned to that city by M. Müller belong to his first class, and are of rude Macedonian fabric, totally dissimilar from the one under consideration. But the letters ΔΙ, whether separate or in monogram, are of such frequent occurrence on coins, being the initials of several of the commonest Greek names, that it appears to me wholly unsafe to found any conclusion upon them alone.

It only remains for me to mention two tetradrachms of the well known series struck at Aradus, but with the unpublished dates ΝΘ (59) and ΞΔ (64).

M. Müller has already pointed out (Num. d'Alexandre, p. 80, 294) the peculiarity that, while there exists a numerous series of tetradrachms with the types of Aradus,—a palm tree in the field, and the letters AP in monogram under the throne,—with dates from the year 21 to 45, expressed in *Phœnician* numerals, there are found also similar coins with *higher* dates expressed in *Greek* numerals. Of these he has published only two, bearing the dates ΞA (61) and OE (76). The first of mine has, therefore, some interest as being the lowest date yet known in the Greek series, and contributing *pro tanto* to fill up the great gap which exists between these and the *Phœnician* series. It may be added that the occurrence of two additional dates, very near to those already known, shows clearly that these were not, as they are called by M. Müller, "isolated cases," and leaves no doubt that the series was once complete. Unfortunately the era to which these dates refer, like those on the other dated series of tetradrachms of Alexander, is still a matter of uncertainty. M. Müller is disposed to regard them as dating from the year B.C. 334; in which case the tetradrachms in question would belong to the years 275 and 270 B.C., under the reign of Antiochus I. In any case there is no doubt that they were not struck till long after the death of Alexander.

E. H. BUNBURY.



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FAVSTINA. II.



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SEPT. SEVERVS.

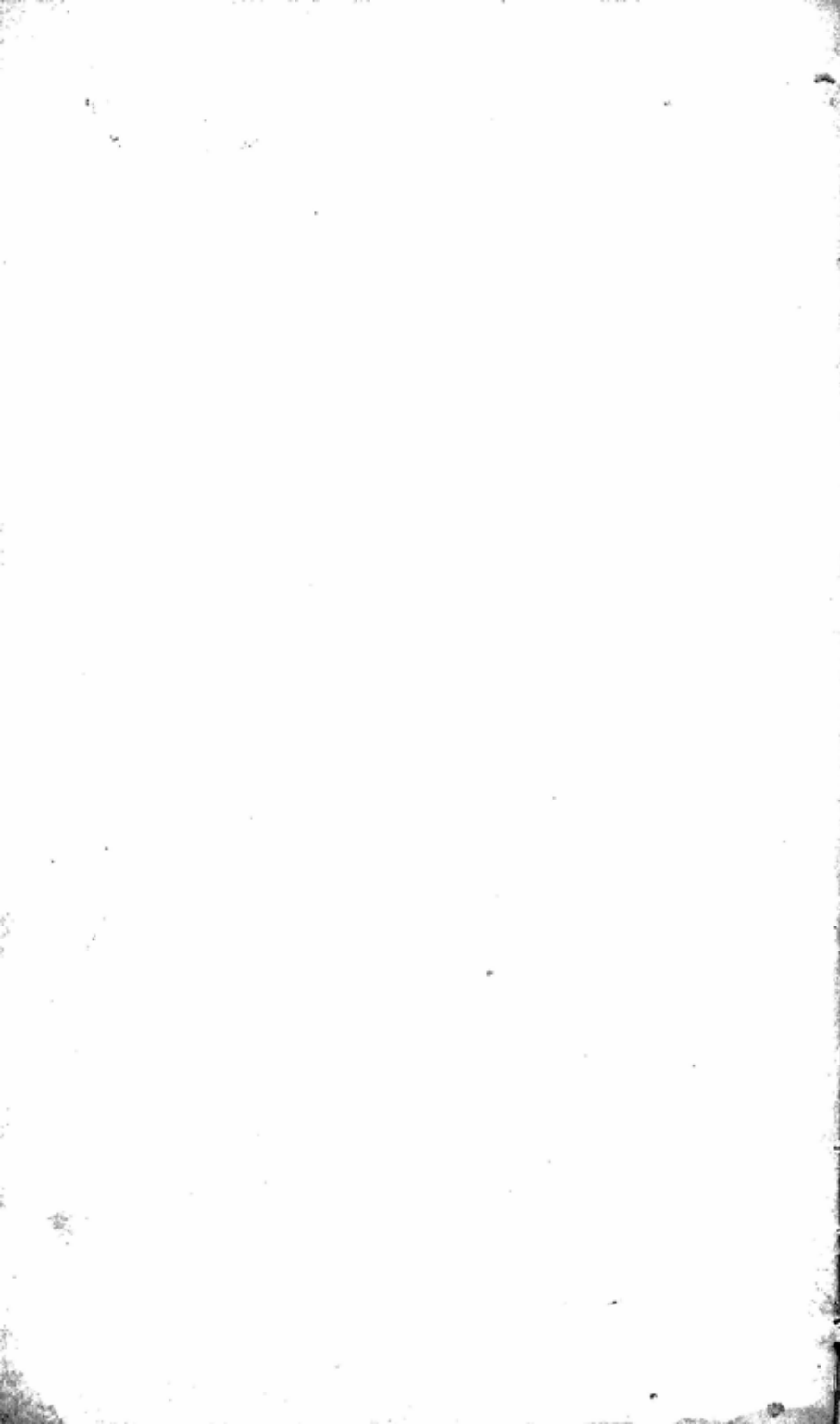


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IVLIA DOMNA.



XVII.

NOTES ON ILION, NUMISMATIC AND HISTORICAL.

[Read before the Numismatic Society, Nov. 19th, 1868.]

BEFORE I enter upon the numismatic portion of this paper it may be interesting to give a few minutes' consideration to the history of the town of Ilion, and to notice the effects produced upon its fortunes by the reverence paid on all sides to the legendary heroes of antiquity, whose exploits were celebrated by the great poet of the Trojan War. This will serve to illustrate some of the subjects represented on the coins of the Ilieans, both Autonomous and Imperial.

Ilion was built, as the story goes, by one Ilos, a Phrygian, and grandfather of Priam. This Ilos, in answer to a prayer which he had offered up to Zeus for protection to his new city, was favoured with a token from heaven in the shape of a little statue of Athena, holding a spear in one hand and in the other a distaff and spindle.¹ This was the celebrated Palladion, the guardian of the city, which we see represented, either as a principal or as an accessory type, upon a very large majority of the coins of

¹ Apollod., iii. 12, 3: "Τῷ δὲ Διὶ σημεῖον ἐξάμενος αὐτῷ τι φανῆναι, μὲν' ἡμέραν τὸ δῦπετις Παλλάδιον πρὸ τῆς σκηνῆς κείμενον ἰθιάσατο. ἦν δὲ τῷ μεγέθει τρίπηχυν. καὶ τῇ μὲν δεξιᾷ δόρυ διγρυμῖνον ἔχον, τῇ δὲ ἐτέρᾳ ἡλακᾶτην καὶ ἄτρακτον."

Ilion. The story of the Trojan War, and of the destruction of the city by the Greeks, is so familiar that any account of it here is unnecessary. This event is supposed to have taken place about the year 1184 B.C. I need hardly say that no coins exist of this, or, indeed, of any other city of so early a date. The æra of the foundation of the town of New Ilion is not accurately known, possibly the site was at no time altogether deserted; it is certain, however, that a town of that name existed as early as the time of Xerxes. Strabo says that it was originally nothing more than a village possessing a temple of Athena of paltry dimensions;² so great, however, was the reverence felt for the Homeric poems, that from the time of Alexander the Great, Greeks, no less than Romans, were found eager to heap privileges, wealth, and honours upon the inhabitants of the town, who, on their part, were far from unwilling to be looked upon as the descendants of the ancient Trojans. New Ilion owed all its prosperity to the fact that, many centuries before its existence as a city, a great poet had made famous, for ever, in the grandest epic poem the world has yet seen, the siege and destruction of what, after all, may only have been, comparatively, a very unimportant city in Phrygia.

The people of new Ilion were unwilling to believe that their town had ever been entirely destroyed, for they possessed an ancient statue of Athena Ilias, which they cherished as having been handed down to them from Old Ilion, and which they believed was the same as that mentioned by Homer. The following reason is given by

² Strabo, xiii. 593: "Τὴν δὲ τῶν Ἰλίων πόλιν τῶν νῦν τέως μὲν κώμην εἶναι φασί, τὸ ἱερόν ἔχουσιν τῆς Ἀθηνᾶς μικρὸν καὶ ἐντελές."

Strabo to prove the fallacy of their belief. The statue of Pallas Athena at Ilion, according to Homer, must have been a seated figure, for Theâno places the peplos upon the knees of the goddess—

“Ἡ δ' ἄρα πέπλον ἑλοῦσα Θεανὸ καλλιπάρῃος
Θῆκεν Ἀθηναίης ἐπὶ γούνασιν ἡῦκόμοιο,”³

while in Strabo's time the statue at Ilion was standing, as the coins also testify. This image of Athena was, however, generally held to be of very great antiquity, and was revered accordingly. We read that Xerxes halted on his march against Greece to do homage to the presiding goddess of Ilion.

“ἐπὶ τούτῳ δὴ τὸν ποταμὸν ὡς ἀπίκετο Ξέρξης, ἐς τὸ Πριάμον Πέργαμον ἀνέβη, ἡμέρον ἔχων θεήσασθαι. θεησάμενος δὲ καὶ πυθόμενος κείνων ἕκαστα, τῇ Ἀθηναίῃ τῇ Ἰλιάδι ἔθυσσε βοῦς χιλίας· χοὰς δὲ οἱ μάγοι τοῖσι ἥρωσι ἔχέαντο.”⁴

Alexander the Great, after his victory at the Granikos, ascended to the temple and decorated it with offerings; he also conferred the title of city upon the town, gave orders to those who had the management of such things to improve it with new buildings, and declared it free and exempt from taxation.⁵ Moreover, he had the arms taken from the statue of Athena Ilias, and carried before his army to ensure him a victorious march. Lysimachus, also, after the death of Alexander, took the city under his especial protection, built a temple for the goddess, and surrounded the city with a wall. Julius Cæsar, too, as being more especially connected with the family of Æneas, paid a visit to the city.

“ὁ δὲ Καῖσαρ καὶ φιλαλέξανδρος ὢν καὶ τῆς πρὸς τοὺς Ἰλιάας συγγενείας γνωριμώτερα ἔχων τεκμήρια, ἐπερρώσθη πρὸς τὴν εὐερ-

³ Iliad, vi. 302. ⁴ Herod., vii. 43. ⁵ Strabo, xiii., c. 598.

γεσίαν νεανικῶς· γνωριμώτερα δέ, πρῶτον μὲν ὅτι Ῥωμαῖος, οἱ δὲ Ῥωμαῖοι τὸν Αἰνεῖαν ἀρχηγέτην ἡγοῦνται, ἔπειτα ὅτι Ἰούλιος ἀπὸ Ἰούλου τινὸς τῶν προγόνων· ἐκεῖνος δ' ἀπὸ Ἰούλου τὴν προσωνυμίαν ἔσχε ταύτην, τῶν ἀπογόνων εἰς ὧν τῶν ἀπὸ Αἰνείου." ⁶

This visit of Cæsar's is mentioned by Lucan in the following lines :—

"Sigeasque petit famæ mirator arenas,
Et Simöentis aquas, et Graio nobile busto
Rhætion, et multum debentes vatibus umbras." ⁷

On this occasion he sacrificed to Athena Ilias, prayed to her for a fortunate career, and promised to bestow benefits upon the people of Ilion, and to rebuild their walls :—

"Ut ducis implevit visus veneranda vetustas,
Erexit subitas congestu cespitis aras,
Votaque turicremos non irrita fudit in ignes.
Dii cinerum Phrygiæ colitis quicunque ruinas,
Æneæque mei, quos nunc Lavinia sedes
Servat et Alba lares, et quorum lucet in aris
Ignis adhuc Phrygius, nullique aspecta virorum
Pallas in abstruso pignus memorabile templo,
Gentis Iulæ vestris clarissimus aris
Dat pia tura nepos, et vos in sede priori
Rite vocat : date felices in cætera cursus :
Restituam populos : grata vice mœnia reddent
Ausonidæ Phrygibus, Romanaque Pergama surgent." ⁸

Thus we see how much the modern Ilieans were indebted to antiquity for their prosperity. Tacitus says of them :—

"Ilienses antiquitatis gloriâ pollebant." ⁹

With all this it is more than doubtful whether New Ilion even so much as occupied the site of the ancient city. Demetrios of Skepsis, and Strabo were the first to

⁶ Strabo, xiii. 594.

⁷ Lucan, *Phar.*, ix. 961. ff.

⁸ Lucan, *Phar.*, ix. 990—1002.

⁹ Tacitus, *Annal.*, iv., cap. 55.

question the identity of the site of the modern Ilion with that of old Troy, and from their time to the present it has been a subject for discussion. Yet, in spite of the doubts of the learned, the Ilians continued to have as firm a faith in the descent of their city, and of themselves, from the Trojans of old, as many highly respectable English families still have in the fact of some of their remote ancestors having "come over with the Conqueror." They were proud to show, in and around their city, the tombs of the heroes of the Iliad, and the vestiges of ancient Troy. Lucan represents Julius Cæsar as treading unwittingly upon the long grass which covered the ashes of Hektor, and thus exposing himself to a rebuke from a Phrygian peasant—

"Securus in alto

Gramine poncbat gressus : Phryx incola manes

Hectoreos calcare vetat : discussa jacebant

Saxa, nec ullius faciem servantia sacri.

Hectoreas, monstrator ait, non respicis aras ?" ¹⁰

Hektor, indeed, was the great champion of Ilion, and affectionately remembered and honoured by the people of the new town. This accounts for his frequent occurrence as a type upon its coins; the usual legend is ΕΚΤΩΡ ΙΛΙΕΩΝ. Sometimes we find his bust, sometimes we see him fighting before the ships of the Greeks, sometimes he is standing before the Palladion; he is always in complete armour—the μέγας κορυθαίολος Έκτωρ of the Iliad. One of the casts which I have brought for exhibition this evening is taken from a bronze medallion of Septimius Severus; it is extremely rare (I am not aware of its being published), ¹¹ and is in a fine state of preservation, with

¹⁰ Lucan, *Phar.*, ix. 978—82.

¹¹ Eckhel thus describes a coin, possibly similar to, though

the exception of a hole, which has, unfortunately, been punched through the field. The subject of the reverse-type is an incident in the Iliad, on which account alone it would be well worthy of notice.

Obv.—ΑΥΡ ΟΕΠ ΟΕΟ [ΥΗΡ]ΟΟ Π. Bust of the Emperor, laureated, to right, and wearing cuirass.

Rev.—[Ε]ΚΤΩΡ ΙΑΙΕΩΝ. In exergue, ΠΑΤΡΟΚΛΑΟΣ. Pl. xi., No. 2.

The artist has here chosen that moment of the whole Trojan War fraught with the greatest grief to the Greeks; Patroklos lies dead upon his back at the feet of the victorious Trojan; his shield has fallen from him, and Hektor stands with one foot advanced upon the body of his prostrate foe, while with his two arms he draws the spear out from the wound. The coin may be described in Homer's own words:—

“Ὡς ἄρα φωνήσας δόρυ χάλκεον ἐξ ὤτειλῆς
Εἵρυσσε, λαξ προσβάς· τὸν δ' ὕπτιον ὥς' ἀπὸ δουρός.”¹²

λαξ προσβάς, stepping upon him with his foot. The lines of the Iliad correspond so exactly with the type of the coin, that there can be no doubt whatever that the artist engraved the die with these very words of Homer in his mind at the time.

This precious coin was purchased some time ago by the Duke of St. Albans, I believe in Athens, and has since been added to the collection in the British Museum. It furnishes us with a striking illustration of the love for Homer prevalent among the people of Ilion, and of their especial affection for the memory of Hektor in particular

certainly not identical with, this medallion: “*Hector pro caesi Patrocli cadavere dimicans, Macrini*” (Mus. Albani).

¹² Iliad, xvi. 862.

among the Homeric heroes. It is said that the Ilieans believed that the spirit of Hektor still haunted the city he had loved so well, and that his ghost was sometimes seen to walk in gleaming armour over the plain of Troy:—

“Ὁ δὲ Ἑκτωρ κατὰ χώραν μένει, ὡς ὁ Ἰλίου λόγος, καὶ φαντάζεται πηδῶν ἀνὰ το πεδίων καὶ ἀστράπτων.”¹³

Strabo tells us that when Fimbrias was boasting that he had taken a city on the eleventh day which Agamemnon had reduced with difficulty in the tenth year of the siege, with the assistance of the whole of Hellas and a fleet of a thousand vessels, one of the Ilieans replied:—

“οὐ γὰρ ἦν Ἑκτωρ ὁ ὑπερμαχῶν τῆς πόλεως.”¹⁴

I shall now notice a very curious type which occurs upon several Imperial coins of Ilion, of Marcus Aurelius, Faustina II., Crispina, and Julia Domna. The Palladion, or the image of Athena Ilias, stands upon a small base to the left of the coin; before her is a tree, from which a bull seems to be suspended; behind the bull, or kneeling upon his back, appears the upper part of a human figure, lightly draped, the arms apparently bare, holding the bull by one of its horns with the left hand, and with the right plunging a knife into the back of its neck.¹⁵ (Pl. xi. No. 1.)

A sacrifice to Athena Ilias is here represented, without

¹³ Maximus Tyrius, Dissert., xv.

¹⁴ Strabo, xiii. 594.

¹⁵ Mionnet publishes five coins of this type, but none of his descriptions seem to me to be thoroughly satisfactory.

Mionnet, Tom. II., Troade.

FAUSTINA IVNIOR.

216. *Obv.*—ΦΑΥΤΙΝ. Μ. ΑΥΡΗ. ΟΕΒΑΟ. Tête de Faustine jeune à droite.

Rev.—ΙΑΙΕΝ. Figure attachée sur un taureau suspendu

doubt; but, we may ask, why has the artist chosen to represent a sacrifice conducted in so strange a fashion? why is the victim suspended from a tree? for I suppose it is suspended, as there is no resting place for its hind legs. Is it a local myth connected with the legendary history of old Ilion? For instance, a sacrifice of Ilos, the founder of the city? I think not; in the first place there

à un mât; devant, statue de Minerve-Iliade posée sur une base.

JULIA DOMNA.

227. *Obv.*—IOYAIA. CEBACTH. Tête de Julie à droite.

Rev.—IAIE. Minerve-Iliade en terme sur un piédestal, la quenouille à la main; devant elle, une femme sur un taureau dressé sur ses pieds de derrière et franchissant une borne.

Supp. V.

MARCUS AURELIUS.

425. *Obv.*—AY. KAI. M. AY. ANTONINO . . . Tête jeune laurée.

Rev.—IAIEON. Minerve-Iliade sur une base, tenant de la m. dr. une haste transversale, et de la g. un flambeau; devant elle, une femme assommant un taureau dressé sur ses deux pieds.

FAUSTINA JUNIOR.

430. *Obv.*—ΦΑΥCΤΙΝΑ. CEBACT. Tête de Faustine.

Rev.—IAIEON. Homme monté sur un taureau bondissant, près d'un arbre; devant le *palladium* sur un cippe.

CRISPINA.

455. *Obv.*—ΚΡΙCΠΗΙΝΑ. CEBACTH.

Rev.—IAIEON. Minerve-Iliade en terme, placée sur un cippe; elle tient de la main droite une haste, et de la gauche une quenouille, le *modius* sur la tête; en face, une femme attachée aux cornes d'un taureau furieux, dressé sur ses deux pieds de derrière.

is no mention of any such sacrifice, although Ilos is said to have propitiated the image of Athena, and by that means regained his sight, for he had been struck blind for daring to gaze upon the sacred Palladion on one occasion when, the temple of the goddess having taken fire, he rescued it from the flames.¹⁶ Again, it cannot be Laokoon, for, although he was sacrificing a bull when the vengeance of Athena overtook him, and although the serpents afterwards sought the temple of Athena Tritonis, and took shelter at the feet of that goddess,

“Sub pedibusque dææ clipeique sub orbe teguntur,”¹⁷—

nevertheless he was not at the time sacrificing to the Palladion, but to Poseidon.

It is, I think, safer, on the whole, to conclude that the sacrifice represented upon these coins is not any one particular sacrifice, connected with the mythical history of the town, but rather one of the usual sacrifices to Athena Ilias, repeated at stated times, and, doubtless, with certain rites, peculiar to the cultus of this goddess. It is, therefore, rather in religious than in mythical history that an explanation of this type should be sought.

The religion of the Greeks was, above all things, many-sided. Originally, no doubt, the elementary Powers of Nature, such as Light and Darkness, Fire and Storm, the Sea and the Wind, &c., the great Causes beyond which the human understanding could not penetrate, were alone worshipped. It would not be long, however, before the manifold effects produced by these primary causes would be noticed, and so, what at first was a simple conception,

¹⁶ Plutarch, Parall., gr. et rom., 17: “Ἐν Ἰλίῳ τοῦ ναοῦ τῆς Ἀθηνᾶς ἐμπρησθέντος, προσδραμὼν Ἴλος τὸ διοπιετὲς ἤρπασε παλλάδιον, καὶ ἐτυφλώθη· οὐ γὰρ ἔξεν ὑπ’ ἀνδρὸς βλέπεσθαι. ὕστερον δ’ ἐξιδασάμενος ἀνέβλεψεν· ὡς Δίρκυλλος ἐν πρώτῳ κτίσεων.”

¹⁷ Virg., Æn., ii. 227.

would come to be looked upon as the parent of its effects, which, in their turn, would assume the importance of gods or heroes, and be revered accordingly. And as the effects of one great cause are many, so each originally simple conception grew into a divine personification, which might be worshipped from different aspects, according to the predominating effect in any given locality.

Let us take as an example, Athena. The first conception of this goddess is the idea of Light. She is the bright, clear sky, the pure Aether, from which her name seems to have been formed. Athens, the brightness and the purity of whose atmosphere has been renowned from the earliest times¹⁸ to the present day, was the chief seat of her worship. The olive-tree which produced the oil for the lamp, the symbol of ætherial brightness, which

¹⁸ Euripides, *Medea*, 829, describes the Athenians as "ἀεὶ διὰ λαμπροῦ ἁλίου ἀβρῶς αἰθίρος." Byron also, in the following matchless lines, thus celebrates the glory of an Athenian sunset:—

"Slow sinks, more lovely, ere his race be run,
 Along Morea's hills, the setting sun;
 Not, as in northern climes, obscurely bright,
 But one unclouded blaze of living light!
 O'er the hushed deep the yellow beam he throws,
 Gilds the green wave that trembles as it glows.
 On old Ægina's rock, and Idra's isle,
 The god of gladness sheds his parting smile;
 O'er his own regions lingering, loves to shine,
 Though there his altars are no more divine.
 Descending fast the mountain-shadows kiss
 Thy glorious gulph, unconquered Salamis!
 Their azure arches through the long expanse,
 More deeply purpled meet this mellowing glance,
 And tenderest tints, along their summits driven,
 Mark his gay course and own the hues of heaven;
 Till, darkly shaded from the land and deep,
 Behind his Delphian cliff he sinks to sleep."

ever burned before her statue,¹⁹ was the tree of all others sacred to the Goddess of Light, and Warmth, and Life. In this, her primary character, she was celebrated during the Panathenaic festival with torch-races, and, therefore, she is represented upon some of the coins of Ilion holding a torch in her hand.

From this first conception of pure air, light, and warmth it is easy to see how, in agricultural districts, as in Bœotia, Athena came to be regarded, like Demeter, as the vivifying power in nature; the sunshine and the dewy moonlight that make the fields and the trees green in spring and fruitful in autumn. Whence the festival of the *προχαριστήρια* in the beginning of spring, when thanks were returned to her, and a sacrifice was offered in gratitude for the budding forth of grass and flowers after the departure of the winter.²⁰ In this agrarian character we find her upon an Alexandrian coin of Hadrian (year IZ), holding in her hand ears of corn. She was also the inventor of the art of ploughing, as her epithets, *βοαρμία*, *βουδέα* testify. (See below, page 336.)

As Zeus was the God of Heaven, the Dyaus of the Rig-Veda, the God of Light who dwelt in the bright æther, yet no less was he the cloud-gatherer (*νεφεληγερέτα*), the wielder of the thunderbolt and the bearer of the ægis (*αίγιοςχος*); so Athena, who is of the essence of her father, is the warlike virgin goddess, who hurls the spear and bears the shield; her colossal statue as Athena Promachos, by

¹⁹ Pausanias, lib. i., cap. xxvi. 7: "Λύχρον δὲ τῇ θεῇ χρυσοῦν Καλλιμαχος ἐποίησεν. ἐμπλήσαντες δὲ ἐλαίου τὸν λύχρον τὴν αὐτὴν τοῦ μέλλοντος ἔτους ἀναμύνουσιν ἡμέραν."

²⁰ Suid., iii. p. 215: "ἡμέρα ἐν ᾗ οἱ ἐν τῇ ἀρχῇ πάντες, ἀρχομένων καρπῶν φύεσθαι, λήγοντος ἤδη τοῦ χειμῶνος ἔθουν τῇ Ἀθηνᾷ, τῇ ἔξ ὁμοίας ὄνομα Προχαριστήρια. Λυκούργος ἐν τῷ περὶ τῆς ἱερωσύνης τὴν τοίνυν ἀρχαιοτάτην θυσίαν διὰ τὴν ἀνοδὸν τῆς θεοῦ, ὀνομασθεῖσαν δὲ Προχαριστήρια, διὰ τὴν βλάστησιν τῶν καρπῶν."

Pheidias, stood on the Akropolis at Athens, and when it shone in the last rays of the setting sun, it was a landmark to ships at sea, and visible at a great distance. Again, she is the guardian of the city (πολιάς, πολιούχος), wise and prudent to keep the state in safety; in this character she was worshipped not only at Athens, where she had an ancient statue of olive-wood, said to have fallen from heaven; but also at Ilion, where there was a similar statue, and in other places.

Unbegotten, but sprung from the brain of her father Zeus, she was the wisest of all the gods, the embodiment of the *spiritual*, the personification of pure thought (whence her name in Italy, Minerva, cf. mens?); thus she became the patron of the arts, the goddess of womanly industry, Athena Ergane, and the inventor of the art of weaving; in this character we see her on some of the coins of Ilion holding the spindle and the distaff; and, as Ergane, she had, at every great Panathenaic festival at Athens, the peplos worked by the virgins of Attika laid upon her knees as an offering.

Thus, by many gradations from the original idea of Light, Athena came to be regarded as the Goddess at once of Virgin Purity, of Warlike Valour, of Defence against the foes of the State, of Wisdom in Council, of Invention in the Arts and Sciences, of the Earth's Fertility, &c., &c. Further on I shall endeavour to show in what light she was regarded by the people of Ilion when they struck the coins which I am now considering. In the meantime let us examine them more carefully.

The figure of the sacrificer appears to me to have a peculiarly feminine appearance. The face and the drapery are those of a woman rather than of a man. Possibly she is the priestess of the Iliean Athena, for her worship was

conducted by a priestess, and not by a priest, as we gather from various sources. Homer says :—

“Κισσηὺς ἄλοχος Ἀντήνορος ἵπποδάμοιο·
Τὴν γὰρ Τρώες ἔθηκεν Ἀθηναίης ἱέρειαν.”²¹

The following is from an inscription found at Sigeion, and is published in Chishull's “*Antiquitates Asiaticæ* ;” it is entitled “*Psephisma Sigeorum ad Antiochum Soterem spectans.*”

In this decree prayers are ordered to be offered up to various gods and heroes for the well-being of Antiochus and his Queen ; here we find it ordained that, after the supplications, the *priestess* and her ministers should perform the customary sacrifice as appointed by law.

Line

19. “ ΤΥΧΗΙΤΗΙΑΤΑΘΗΙΔΕΔΟΧΘΑΙΤΗΒ.....ΤΩΙ

20. ΔΗΜΟΙΤΗΜΜΕΝΙΕΡΕΙΑΝΚΑΙΤΟΥΣΙΕΡΟΝΟΜΟΥΣΚΑΙ-
ΤΟΥΣ.....ΕΙΣΕΥΞΑΣ

21. ΘΑΙΤΗΙΑΘΗΝΑΙΤΗΠΙΛΙΑΔΙ

28. ΤΑΙΣΕΥΧΑΙΣΤΗΜΕΝΑΘΗΝΑΙΣΥΝΤΕΛΕΣΑΤΩΣΑΝΤ-
ΗΝΝΟΜΙΩΜΕΝΗΝΚΑΙΤΑΤ.....

29. ΣΙΑΝΟΙΤΕΙΕΡΟΝΟΜΟΙΚΑΙΟΙΠΡΥΤΑΝΕΙΣΜΕΤΑΤΗΣΙ-
ΕΡΕΙΑΣΚΑΙΤΩΜΠΡΕΣΒΕΥΤΩΝ.

19. Τύχη τῇ ἀγαθῇ δεδόχθαι τῇ β[ουλῇ καὶ] τῷ δήμῳ τῇ μὲν ἱερειαν καὶ τοὺς ἱερονόμους, καὶ τοὺς [πρυτάν]εις εὐξασθαι τῇ Ἀθηνᾷ τῇ Ἰλιάδι, κ.τ.λ.

28. [Ἄμα δὲ] ταῖς Εὐχαῖς τῇ μὲν Ἀθηνᾷ συντελεσάτωσαν τὴν νομιζομένην καὶ τατ[τομένην θυ]σίαν οἱ τε ἱερονόμοι, καὶ οἱ πρυτάνεις μετὰ τῆς ἱερείας καὶ τῶν πρεσβυτέρων, κ.τ.λ.”

Chishull remarks in a note upon this passage :—

“*Lucescit hic Minervæ Iliensis Religio per sacerdotem fœminam et ἱερονόμους, hoc est sacrorum sub eâ magistros, et Prytanes administrata. Nimirum vastato quanquam Ilio et portato in Italiam Palladio, revixit tamen in Troade Minervæ Iliensis cultus.*”

²¹ Iliad, vi. 300.

It is true that this decree dates from the second century, B.C., and that these coins were struck during the Roman dominion, after the elapse of more than three hundred years. Nothing, however, occurred in the interval to interrupt the due performance of the worship of the presiding goddess of the town. On the contrary, the Romans, as claiming descent from the ancient Trojans, would be especially inclined to respect and encourage any religious ceremonies which might prevail in Ilion, and the Troad generally.

We find, indeed, that they did so; Augustus restored to the Ilieans the statue of Aias, which had been carried off into Egypt by Mark Antony from a temple near his tomb. Caracalla also paid a visit to Ilion, a sort of pilgrimage, for the purpose of doing honour to the ashes of Achilleus, and here, following the example of Alexander the Great, he caused all the ceremonies of the funeral of Patroklos to be repeated, and, as Herodian²² would have us believe, even went so far as to have his dearest friend, Festus, poisoned to complete the analogy; he himself represented Achilleus, caused a funeral pile to be erected, invoked the winds, and sacrificed numberless victims. In fact, he complied with every ceremony with one exception, he was bald, and when the time came for him to cut off his hair, as Achilleus did, and to offer it to

²² Herodian, iv. 8, 4: "ἐπελθὼν δὲ πάντα τὰ τῆς πόλεως λείψανα, ἤκειν ἐπὶ τὸν Ἀχιλλεύως τάφον, στεφάνοις τε κοσμήσας καὶ ἀνθεσι πολυτελεῶς πάλιν Ἀχιλλεῖα ἐμμεῖτο. ζητῶν δὲ καὶ Πάτροκλόν τινα ἐποίησέ τι τοιοῦτον. ἦν αὐτῷ τις τῶν ἀπελευθέρων φίλτατος, Φῆστος μὲν ὄνομα, τῆς δὲ βασιλείου μνήμης προστώς. οὗτος ὄντος αὐτοῦ ἐν Ἰλίῳ ἐτελεύτησεν, ὥς μὲν τινες ἔλεγον, φαρμάκῳ ἀναιρεθείς ἢ ὥς Πάτροκλος ταφῇ, ὥς δὲ ἕτεροι ἔφασκον, νόσῳ διαφθαρείς. τούτου κομισθῆναι κελεύει τὸν νέκυν, ζέλων τε πολλῶν ἀθροισθῆναι πυράν· ἐπιθειῖς δὲ αὐτὸν ἐν μέσῳ καὶ παντοδαπὰ ζῶα κατασφάζας ὑψήψῃ τε, καὶ φιάλην λαβὼν σπένδων τε τοῖς ἀνέμοις εὐχετο. πάνν τε ὧν ψιλοκόρησεν πλόκαμον ἐπιθειῖναι τῷ πυρὶ ζητῶν ἐγελᾶτο· πλὴν ὧν εἶχε τριχῶν ἀπεκείρατο."

the manes of his friends, he was not able, and so moved to laughter the spectators of this solemn mockery of grief.

But to return to our coins. The sacrifice which we see here represented, I take, therefore, to be one of the customary offerings to Athena; by *customary* I do not mean customary everywhere, but specially at Ilion, for we must bear in mind the fact that the Greeks did not form at any time a united nation in our sense of the word, that is, a people bound by the same laws, and possessing an established form of worship, a national church. Their religious ceremonies were rather municipal than national. Each city had its own religion, its *θεοὶ πατριοί*, and a form of worship established by its own laws, for itself.

They did not permit men to worship the gods according to their own private fancies.²³ Each citizen was expected to follow the ancient customs of the town, and to comply with that particular form of worship which was there established by law (*τὸ νομιζόμενον*), and to do honour (*τιμᾶν*), after the prescribed manner, to the gods which were *πολιόυχοι*, *ἐγχώριοι*, *ἔντοποι*, or *ἐγγενεῖς* in each particular city.

Although I can find no mention of a sacrifice ever being conducted in this strange fashion, the ox was one of the animals which it was usual to sacrifice to Athena, whence she is sometimes called *Taurobolos*.

Gerhard, in his "*Etruskische und Kampanische Vasenbilder*," Pl. ii., figures a Panathenaic vase, on which is represented the sacrificial bull, led by three attendants to

²³ Xen., *Memor.*, lib. iv., cap. vi. 2: "Ἐχίς οὖν εἰπεῖν ὁποῖός τις ὁ εὐσεβής ἐστιν; Ἐμοὶ μὲν δοκεῖ, ἔφη, ὁ τοῦς θεοῦς τιμῶν. Ἐξίστι δὲ ἂν τις βούληται τρόπον τοῦς θεοῦς τιμᾶν; Οὐκ. ἀλλὰ νομοὶ εἰσὶ καθ' οὓς δεῖ τοῦτο ποιῆν."

the altar, in front of which stands the priestess of Athena, holding in each hand a branch of the sacred olive tree, and apparently supplicating the goddess, who stands on the other side of the altar.

On several of the Imperial coins of Ilion we see a bull standing before the Palladion, unaccompanied by any sacrificing person (Pl. xi. No. 3.) ; here it may be the symbol of fertility. The ox was the animal by whose aid, when yoked to the plough, the fields were rendered fruitful, and thus, coupled as it is here with the image of the goddess, it serves to explain one light in which she was regarded at Ilion, where she seems to have been worshipped, as at various other places in Greece, as the Earth-goddess, or the productive power of Nature. Her festival was celebrated in Attika by a sacred ploughing round the city, during which the custody of the plough, and of the holy oxen who drew it, was confided to the Βουζύγης (ὁ τοὺς ἱερὸν ἀρότους ἐπιτελῶν); one of her epithets was Βούδεια, the yoker of oxen.²⁴ It is in this character of Earth-goddess that she received offerings of corn, fruits, &c., and that sacrifices of oxen and rams were made to her.

One of these sacrifices, I should imagine, is here portrayed. The tree, at which the bull is being offered, we may suppose to represent some tree sacred to Athena. All nations in their infancy have regarded trees with a strange kind of veneration. Greeks and Latins, no less than the ancient Keltic inhabitants of our own land, worshipped their gods in sacred groves; and long after they had learned to build temples in their honour and for the performance of their ceremonial worship, they

²⁴ Tzetx ad Lykophron, 859: "Βούδεια γὰρ ἡ φρόνησις, ὅτι τοῖς βόας ἀρότρῳ καὶ ζυγοῖ, ὑποδίδει, καὶ τέμνει τὰς αἵλακας."

continued to look upon certain trees as peculiarly sacred to certain divinities. Pliny says:—

“Hæc fuere numinum templa, priscoque ritu simplicia rura etiam nunc deo præcellentem arborem dicant. Nec magis auro fulgentia atque ebore simulacra quam lucos et in iis silentia ipsa adoramus. Arborum genera numinibus suis dicata perpetuo servantur: ut Jovi esculus, Apollini laurus, Minervæ olea, Veneri myrtus, Herculi populus. Quin et Silvanos Faunosque et dearum genera ac sua numina tanquam et cælo attributa credimus.”²⁵

These sacred trees, which were often enclosed within the precincts of a temple, were carefully tended by its ministers; their boughs and leaves were made use of in the sacred rites of the god for crowning the officiating priest during the sacrifice, even the victim itself was constantly adorned with a garland. The branches of the holy tree were often hung with offerings to the presiding deity of the place, and vows were made and accomplished under its shade.²⁶ Sailors saved from shipwreck affixed to its trunk their thank-offerings to the god to whom it was sacred who had listened to their prayers.

²⁵ Plinius, xii. 2.

²⁶ This custom lasted down to the fifth century, A.D., as we learn from St. Augustine, “De Temp. Sermo,” 241: “Pro qua re nec ad arbores debent Christiani vota reddere, nec ad fontem orare, si se volunt per gratiam Dei de æterno supplicio liberari. Et ideo quicumque in agro suo, aut in villâ, aut juxta villam aliquas arbores aut aras, vel quælibet vana habuerit, ubi miseri homines solent aliqua vota reddere; si eas non destruxerit atque succiderit, in illis sacrilegiis quæ ibi facta fuerint, sine dubio, particeps erit. Nam et illud quale est, quod quando arbores illæ ubi vota redduntur ceciderint, nemo ex illis arboribus lignum ad focum affert? Et videte miseriam vel stultitiam generis humani; arbori enim mortuæ honorem impendunt, et Dei viventis præcepta contemnunt; ramos arbores non sunt ausi mittere in focum, et se ipsos, per sacrilegium præcipitant in infernum.”

"Forte sacer Fauno foliis oleaster amaris
Hic steterat, nautis olim venerabile lignum,
Servati ex undis ubi figere dona solebant
Laurenti deos et votas suspendere vestes." 27

Hunters, too, made offerings of portions of the animals they had killed in the field, hanging them upon the branches of the sacred tree.²⁸

Why then should we not look upon the tree on these coins of Ilion as a sacred tree-altar to the Ilican Athena, upon which the priestess of the goddess is sacrificing the ox as the emblem of fertility to Athena, as *Bovðéa*, the yoker of oxen, the inventor of the plough, and the author of the fertility of the fields and trees? I am aware that this is not the common conception of Athena, nor was it at any time the character in which she was best known; but that it was one of the ideas which, in certain districts, grew to be associated with her worship, I think there can be no doubt.

This is the only suggestion which, after a careful study of the subject, I am able to offer. Perhaps some one present this evening may give me some information concerning this singular mode of sacrificing, which may be of greater value than my own suggestion, offered as it is with considerable diffidence, and may guide us to a more probable explanation of this curious type.

BARCLAY V. HEAD.

²⁷ Virg., *Æn.*, xii. 766.

²⁸ Bötticher, *Baumkultus der Hellenen*, p. 69.

XVIII.

THE "MULLET-MARKED" GROAT.

A PAPER on the "London and Calais groats of Henry IV. V., and VI.," which appeared lately in the Numismatic Chronicle, was doubtless read by many of us with interest ; at least, I for one was glad to see some one else delving in the same plat on which I had myself been bestowing labour. If, after reading that paper, I am tempted to comment upon it, the result will be to show how far the views agree of those who are engaged in this inquiry ; perhaps also it may induce Mr. Neck to elucidate still further the subject he has taken up. Some elucidation is still required, I venture to think, and (if I do it no injustice) his present argument in favour of the attribution of some of the *hENRICOVS* pieces has yet to be enforced by proofs stouter than those arrayed in his paper. Until the gold coinage of that period has been brought carefully into comparison with the silver, and the coins of the two most prolific mints balanced as regards marks, so as to demonstrate approximately the order of their appearance, I question whether our conclusions will be esteemed by the collector, who stands outside the circle of the present inquiry, as more than expressions of opinion by this or that writer, deserving more or less importance, but not conclusions derived from well-

admitted premises, such as he wants, or a learned society may rightly demand. More than this, I consider there is need to push on to any conclusion with caution, because, as regards the attribution of coins to one of these kings, we have to prevail on a large class, outside ourselves, to exchange bad reasons for good. As in the world there are ever many more spectators than observers, so with not a few coin-collectors there is always a temptation lazily to rest content with some point of difference easily observed, like the "eyelet hole," or amulet mint-mark on the groats of Calais and London. For them it serves as well as any other mark to constitute a difference, and coins so marked will continue to be called and sold as coins of Henry V. till doomsday, unless we are able to substantiate assertion by an appeal to evidence. A belief in this necessity has hitherto held me back from the position taken up by others, even while my own research, incomplete as it is, was drawing me towards similar conclusions. The opinion now advanced by Mr. Neck that the "mullet-marked" groat is the money of Henry V. is not new among numismatists, nor is it now published for the first time; and as a "pious opinion" it may be held by many as part of a numismatist's belief, with reserve, and without including it, as he does, in our articles of faith. But this I would add; before men, who give attention to an examination of its soundness, commit themselves to the holding of it, they ought to be able to show that, in the way of obtainable proof, Ossa has been piled on Pelion; that the marks upon the gold have been tried against those upon the silver; and that not one alone, but all classes of the silver have been studied. In a case so intricate, not less than this, in my opinion, is demanded of us; and this, I suspect, has never yet been done completely; though the silver has met with its

share of attention, and documents have been ransacked, or, at least, quoted by us over and over again. I have, however, another little complaint against the writer of this paper, if I may bring it forward without ill-nature: I demur to some statements in his opening paragraphs, for they seem to describe, to my mind but imperfectly, the present condition of this question. Regarding our acquaintance with these coins, the case assuredly is not where Ruding and Hawkins left it, as might be inferred from the review Mr. Neck gives us in those sentences. And in remarks which were intended to set before us all "how the question at presents stands," to refer to the information we possess as meagre, is little likely to enlist the numismatic mind in arriving with him at an absolute decision. Could he have shown us it was *not* meagre, we might have hastened with him to the judgment-seat. Not, however, that I myself desire to disparage what has been added to our store of knowledge about these coins during the last few years; enough has been gained to make us hopeful for the future. Mr. Longstaffe, in his letter (*Numismatic Chronicle*, N.S. No. xxv.), dealt out right and left many valuable and interesting particulars; and whatever impression may have been left in the thoughts of numismatists by his argument, to weigh it requires no slight insight into the series, and a feeble effort will certainly not refute his statement of facts. He is often daring in ascribing coins to the kings, severally; but his boldness is based on a wide knowledge of the coins, and aided by a quick eye for a difference; and to Henry V. he attributes some without hesitation. Mr. Lindsay, of Cork, has done the same thing. In a catalogue, published by Mr. Sainthill in the "*Olla Podrida*," page 193, the "mullet-marked groats" were assigned to Henry V., twenty years ago. That uncertainty attaches

to the verdict of these two writers, Mr. Neck himself appears to feel, when he says (page 161), "*No English or Calais coins have yet been ascribed with certainty to this king,*" (Henry V.) But a degree of uncertainty attaches to them still, with a force undiminished by what is brought before us in his paper, for no affirmation of opinion can take the place of proof. Probably none of us can study these coins of the Henries without entertaining the surmise that the mullet-marked groat may be Henry V.'s,—the coin appears to fit the place nicely which we want it for; and some day proof may be forthcoming to demonstrate the fact with a convincingness which at present I humbly submit we do not possess. There can be no question as to their falling into order between the light groat of Henry IV. and the early "annulet" money; but suppose an objector to this view of Mr. Neck's gave them rather to Henry IV., though the reasonableness of the gift might be disputed, I think its value could only be determined by a balancing of probabilities, and it is more than a balance of the probable which is required before we assume the case to be decided.

These coins, I said, fall into place between the light groats of Henry IV., and the early annulet money.¹ This is not strictly correct if we mean to imply by it that

¹ At page 167 of his paper Mr. Neck considers my argument concerning the Calais money (Numismatic Chronicle, N.S., xxv. p. 15) untrustworthy, because, he says, the documentary evidence on which it rests is unsupported by the evidence of the coins themselves. I endeavoured in that article to show from such records as were accessible, that the Calais money could not possibly be Henry IV.'s, that the bulk of it must be Henry VI.'s; and then I inferred that *any coins struck at Calais by Henry V. must be very few in number*. The inference was a just one, I still venture to think. Whether it be not supported by the testimony of the coins themselves, I will ask him to

they are the only variety which must come in here. Another has to be inserted somewhere before the "annulet" coins, which, as far as I know, has never yet been noticed. It presents no special marks, but reads $\pi\eta\epsilon\lambda\iota\alpha$, and is cusped in base.

✠ $\eta\epsilon\pi\pi\rho\iota\alpha$ $\text{DI} \times \text{GRA. REX } \pi\eta\epsilon\lambda\iota\alpha$ ✠ FRANC
 $\text{POSVI DEVM } \times \text{DIVTORG} \times \text{MEVM.}$
 $\text{CIVITAS } \times \text{LONDON.}$

From the peculiar character of the coin there can be no question that it belongs to this portion of the series. That it is unusually rare, I have no reason for supposing; these coins have been comparatively so little worked upon that nothing was easier than for a variety to escape unnoticed.

As a further illustration of the imperfect condition of our knowledge with respect to these coins of the Henries, and of the necessity which exists for still further heaping up materials before we begin to build, I may mention that I also possess a light groat of Henry IV., which is a distinct variation upon that described in Hawkins, p. 104. It will be seen to differ from that by showing the trefoil, not upon the breast, and after POSVI, but at the end of the legend on the obverse; it reads, though a little worn,

✠ $\eta\epsilon\pi\pi\rho\iota\alpha$ $\times \text{DI} \times \text{GRA. REX FRANC}$ ✠
 $\text{POSVI DEVM} \pi \times \text{DIVTORG} \times \text{MEVM}$
 CIVITAS LONDON.

Its pellets on the quarters of the reverse lie trefoil-wise. This difference on a common coin would be unworthy of notice, but on one so rare, as a groat of Henry IV., I deem it important enough to deserve the attention

re-consider. He knows the early annulet coins which read " $\pi\eta\epsilon\lambda\iota\alpha$;" I call them as witnesses, if I may assume on his showing that they are Henry V.'s money.

of collectors. Would that attention of a degree far more intense could be secured from them for a portion of the English coinage, which has yet lying upon it the clouds and fogs of ignorance and indifference! Whole pages are written about the money of Greece and Rome and the remote East, with a touch of earnestness and a depth of search our own English coins of certain periods never seem to have commanded. How few of these pieces of Henry IV. money there are, yet who knows how many or where they are?² Though doubtless some may be lying in collections, unrecognised by their owners, the number of those known could easily be ascertained if collectors would only undertake the trouble. The attempt I made³ by favour of the editor of the Numismatic Chronicle to determine this fact was unsuccessful, not a single reply having been given to my inquiry. What this betokened, it is hard to say; but the advisability of registering the few that are known must be evident to students, and not the less so if it appear that variation of type is also to be observed. Pieces which are perhaps more rare than Simon's Petition Crown deserve to be enrolled, coin by coin, unless an indiscriminating collectorism (to use Mr. Longstaffe's word) gives a seat in its coin-cabinet only to those candidates which add to rarity the charm of fine workmanship.

ASSHETON POWNALL.

² The coin figured in Ruding as being one of Henry IV. (Supplement, plate i. 41, and referred to by Mr. Hawkins, p. 329) is an undoubted Henry VI. of the later sort; any one familiar with the marks upon his last coinages will not hesitate to pronounce this sentence upon it.

³ May I repeat the attempt by asking collectors who possess, or believe they possess, coins of Henry IV., to do me the favour of sending to me, at South Kilworth Rectory, Rugby, sealing-wax impressions of them, with their weight in grains?

NOTICE OF RECENT NUMISMATIC PUBLICATIONS.

The *Annuaire de la Société française de Numismatique et d'Archéologie* for 1867 contains the following articles:—

1. "Coins of the Gaulish Chiefs mentioned in Cæsar's Commentaries," by M. F. de Sauley.

2. "Notice of the coins of the Lingones, and of some coins of the Leuci, the Sequani, and the Ædui," by M. Pistolet de Saint-Ferjeux.

3. "On the Military Organization of the Roman Empire and the Legionary medals," by M. J. Roman.

4. "On the Roman bronze coinage," by M. J. Sabatier.

5. "A Description of some early French coins," by M. Ernest Gariel.

6. "On the Engravers, *généraux et particuliers*, of the Mints of France," by M. Albert Barre.

7. "On the Communal coins of Amiens," by M. E. Caron.

8. "Numismatic Chart of the Armorican Peninsula," by M. Lecoq-Kerneven.

9. "Medal struck at the Paris Mint, under Charles VII., in commemoration of the expulsion of the English in 1451 and the following years," by M. Vallet de Viriville.

10. "Jetons of the States of Burgundy," by M. A. Preux.

In the *Correspondance* are the following letters:—

1. "On the coins of the Æduan Divitiacus," by M. F. de Sauley.

2. "Inscription and coins bearing the name of Togirix," by M. J. Colin.

3. "The Empress Victoria, the oldest mention of France upon a coin," by M. Eichhoff.

4. "Ancient bronze weights," by M. Sabatier.

5. "The 'Ἐπίσημον βάλ,' by M. F. Calmettes.

6. "On a meaning of the word *Honor* in low Latin." "On the legends ADVBIA VICO and ABINIO FIT," by M. J. Colin.

7. "On the formation of the name of the town of le Mans," by the Viscount de Ponton d'Amécourt.

8. "Attribution of Merovingian coins to Crémieux and to Louèche," by M. G. Vallier.

9. "Had the town of Sainte-Menehould a mint?" by M. Ch. Maurand.

10. "Coins attributed to Guessin restored to Guiche," by M. H. Heulz.

11. "Inedited coin of Montpellier," by M. Al. Heïss.
12. "On the coins called *obsidional*," by Lieut.-Col. de Mondésir.
13. "Inedited Paper-money of the French Revolution," by M. Reynard-Lespinasse.
14. "Coins of the sixteenth century," by M. Labouchère.
15. "A leaden medal of the first Republic," by M. Reynard-Lespinasse.
16. "Notice of some Portuguese Numismatists of the seventeenth, eighteenth, and nineteenth centuries," by M. Teixeira de Aragão.

In the *Chronique* are the following notices:—

1. "French coins in 1866," by M. Albert Barro.
2. "French medals in 1866," by M. Clérot.
3. "Numismatic and archæological discoveries of 1866," by MM. Marciilly, Gariel, &c., &c.
4. "Sales and transfers of cabinets," &c.
5. "Statistics of the Archæological and Numismatic Museums of France," by M. A. Lemaitre.
6. "Statistics of private collections," by M. le Vicomte de Ponton d'Amécourt.
7. "Numismatic Institutions: their officers," &c.
8. "Prizes offered by l'Académie des Inscriptions et Belles-lettres.
9. "Numismatics at the Universal Exhibition of 1867."
10. "M. Parent's Museum."
11. "The coin trade."
12. "Necrology of members of the Society," &c.
13. "Jacques-Jean Barre." A short notice of the life of this celebrated artist, who rose from being a workman in the mint, to be chief engraver of coins, an office which he held from 1843 to 1855. At the beginning of the *Annuaire* is an engraving of his portrait in a medallion designed by Paul Delaroche.

In the *Bibliographie* are notices of:—

1. "New works on Numismatics," by MM. le Vicomte de Ponton d'Amécourt, de la Pomeraye, &c,
2. "Works announced, or in course of publication."
3. "Periodical publications."
4. "Numismatic Bibliography of 1869," by M. le Vicomte de Ponton d'Amécourt.
5. "Bibliography of the members of the Society."

This, the second yearly volume, published by the Société française de Numismatique et Archéologie, fully realizes our

highest expectations. It contains numerous plates, by M. Dardel, which our English artists will do well to study, although we fear it will be long before they are able to produce anything nearly so fine.

We have much pleasure in calling attention to the advent of a new Numismatic periodical, in a country in which such documents are somewhat rare. It is called *Memorial Numismático Español*, and is published at Barcelona, under the care of D. Alvaro Campaner y Fuertes, who is the chief editor. It commenced in January, 1866. Among the papers published in it we notice a very valuable one by Jacobo Zobel de Zangroniz—whose name is a sufficient guarantee for its excellence—entitled “Noticia de varios Monumentos que demuestran la existencia de un Alfabeto desconocido en la Bética;” a paper of considerable local interest, by D. Alvaro Campaner y Fuertes, called “Descripción y ensayo de Clasificación de la Monedas del Condado de Urgel;” a paper entitled “Algunas Observaciones acerca de la interpretación de las leyendas ó epígrafes de las Medallas llamadas Ibéricas y Púnicas,” by D. Ales. Fastagüeras; and another on nearly the same subject by M. Alois Heiss; a most important paper by Don Alvaro Campaner y Fuertes, “On the Gothic coins not known to Florez;” and a learned paper, by J. Sabatier, “On the Names and Weights of Roman gold coins:—1. Under the Republic; 2. Under the Empire; 3. In Byzantine times.” We may add that the plates representing the coins engraven for publication are remarkably well done, and that the whole publication indicates the care and judgment of a practical editor.

“Illustrations of the Coinage of Scotland, drawn from specimens existing in the Author's Cabinet,” by James Wingate, Mem. Num. Soc., Lond., &c. Glasgow. 1868. 4to. Pp. 148 and 48 Plates.

It is satisfactory to find the coinage of Scotland receiving so much attention at the present day, as it is a series which is not only interesting in itself, but is illustrative of the coinage both of England and of France. The author of the work before us has adopted the best means of becoming thoroughly acquainted with all the details of his subject, by forming the magnificent collection of which this work forms, in fact, the catalogue. Like many others, he has found instruction, occupation, and intellectual pleasure in the study of his coins, and, as he says in his preface, “The compiling of the following pages and the drawing of the plates attached to this volume

are the results of many happy hours of recreation, after days spent amidst the cares and anxieties of an active business life." A work of this kind, privately printed, and only to the extent of 150 copies, is hardly a fit subject for criticism. We must, however, say that to those who are fortunate enough to obtain a copy of Mr. Wingate's book, it will be found a valuable accessory to the other works on Scottish Numismatics, and we may express a hope that at some future time its author may venture on the publication of an even more comprehensive treatise on the whole subject. In the present volume, besides the preliminary account of each reign which accompanies the list of each monarch's coins, there are supplementary chapters on the prices of coins, the legends upon them, and their forgeries. Among these latter the author is inclined to place the MONETA REGIS farthing of David II., and the Glasgow groat of Robert III. figured as Nos. 8 and 9 in *Plato i.* of Lindsay's second "Supplement to the Coinage of Scotland."

MISCELLANEA.

NOTE ON THE "VOCE POPULI" HALFPENCE AND FARTHING.

To the Editors of the Numismatic Chronicle.

I, Greville Place, N.W.,
25th Nov., 1868.

GENTLEMEN,

I send you a note on the so-called "Voce Populi" coins, which probably may be of interest to some of your readers.

It was kindly transmitted to me some time ago, as the date will show, by Dr. Aquilla Smith, of Dublin, in answer to my inquiries about these coins.

They have generally, I believe, been considered as having some reference to the Pretender family. This note, however, makes no allusion to such a reference. They can hardly relate to the old Pretender, the Chevalier St. George, who was born 1688, and was therefore seventy-two years old when these coins or counters were issued; and the portrait on them is certainly not that of a man of so advanced an age. He died in 1765. But it is not impossible they may be meant to represent the young Pretender, Prince Charles, born 1720, and who, there-

fore, in 1760 would be forty years old ; and the legend on the obverse may be supposed to represent the *popular voice* of Catholic Ireland, proclaiming its adherence to the pretended heir to the crown of the British Isles.

Yours truly,

T. J. ARNOLD.

“ For some years prior to 1760, very little copper money was struck for Ireland, which caused such a scarcity of small change, that all sorts of base stuff was cast into pieces that passed for halfpence and farthings. This gave an opportunity to a Mr. Roche, of South King Street, Dublin (who struck metal buttons for the army), to issue copper halfpence and farthings, which was generally received in preference to the wretched sort then in circulation. The first sort he sent out was badly finished, and on one side a head laureat, looking to the left ; and for inscription VOX POPULI ; reverse, Hibernia sitting on a globe, holding a laurel branch in the right hand, and a spear in the left, with HIBERNIA round ; in the exergue the date 1760.

“ The second sort that he issued was much neater, and better copper, with the inscription on the head side altered to VOCE POPULI ; the halfpence were a larger size, and done in the same manner. However, on information being given to the then Lord Mayor of Dublin, the whole apparatus for striking the aforesaid coin was seized, and lodged in the Tholsel. Roche fled from the same. Some time before the death of George II., there was a great quantity of copper coin prepared for this kingdom, although they did not arrive till the beginning of 1761 ; they were done in the same manner as others coined in this reign, with this difference, that the head was done more in the Roman style.

“ About the year 1766 a new coinage of George III. was issued here, resembling those of George II., the head looking to the left ; and for some years after a constant supply of this coinage, with much improvement in the execution of the dies, yearly arrived.

“ I cannot help taking notice of the great injury done this kingdom for want of a mint for the striking at least of copper money. When the least scarcity of halfpence appears, immediately raps come out—a great oppression to the poor, when they in turn are refused. In the years 1781, 1782, and 1783 were struck the best counterfeits that ever appeared in this kingdom, not inferior to originals, except in the weight. It was generally believed they were struck at a button manufactory in Smithfield ; the copper tolerably good.”

"Copy of a note in handwriting of the last century, on the back of page 77 of a copy of the first edition of Simon 'On Irish Coins.' 1749 *penes*, Sir William R. Wilde.

"A. SMITH.

"26th July, 1865."

To the Editors of the Numismatic Chronicle.

GENTLEMEN,—Some time ago, when I was hot upon the collection of a series of Pretender medals, I purchased a small specimen from a dealer, which I was informed had reference to a member of the Stuart family. After much fruitless research in the matter, I am satisfied that my informant was in error. I call my research fruitless, as I have not yet been able to find to whom the medallet does refer, and if any of your readers can give me some account of it, I shall feel greatly obliged.

Brass. Size 8. (Mionnet.)

Obv.—L. BAR. D. SC. D. P. L. O. D. L. M. A. M.
Youthful female head to right. H. R. F. below.

Rev.—PICCOLA SI. MA FA PUR GRAVE LE FERITE.
(She is small indeed; nevertheless, she causes serious wounds.)
A bee flying right, over rough ground; a bee-hive in the distance. In *exergue* 1708.

I am by no means sure that I have taken the reading of the legend on the obverse in its right order. This series of initials is very puzzling when one does not know what they mean. I have commenced with the lowest letter on the left. If it were to begin from the top, the first letters would be D. L. O. The initials below it probably mean *Henri Roussel l'écrit*. I am indebted to Mr. Freudenthal for this suggestion. Roussel, I find from Bolzenthall, "*Kunstgeschichte der modernen Medaillen-Arbeit*," p. 233, was one of the artists who, at the close of the seventeenth and the beginning of the eighteenth century, worked on the series of medals executed for Louis XIV.

Yours truly,

T. J. ARNOLD.

1, Greville Place, N.W., Nov. 20, 1868.

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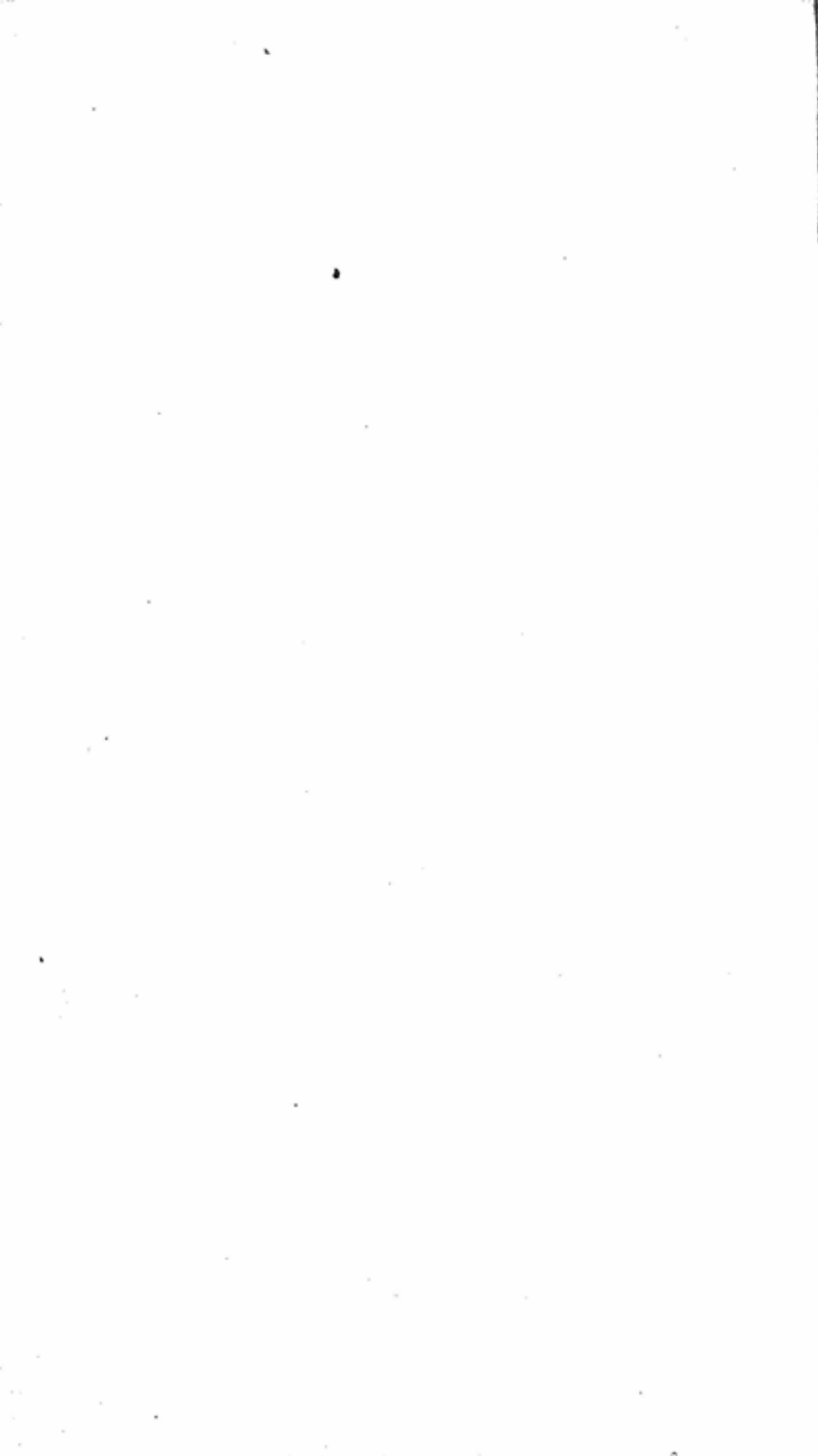
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PROCEEDINGS OF THE NUMISMATIC SOCIETY.

SESSION 1867—1868.

OCTOBER 17, 1867.

W. S. W. VAUX, Esq., President, in the Chair.

The following presents were announced, and laid on the table :—

1. Prinsep's Indian Antiquities, edited by Edward Thomas, Esq. London, 1858. 2 vols. 8vo. From the Editor.

2. Méreaux de Tournai, by R. Chalon. Bruxelles, 1867. 8vo. From the Author.

3. Une once de Malines, by R. Chalon. From the Author.

4. Quart de dinar trouvé près d'Ypres, by R. Chalon. From the Author.

5. La plus grande médaille qu'on ait jamais frappé, by R. Chalon. From the Author.

6. Die Münzen und Medaillen Graubündens, by C. F. Trachsel. 1st Part. Berlin, 1866. From the Author.

7. An account of the hoard of Anglo-Saxon coins found at Chancton Farm, by B. V. Head. From the Author.

8. Address to the Members of the Historic Society of Lancashire and Cheshire, by J. Mayer, Esq., 1867. From the Author.

9. On Public Libraries: their use and National profit. From J. Mayer, Esq.

10. Beschreibung der in der Schweiz aufgefundenen gal-lischen Münzen, by Dr. H. Meyer, 1863. From the Author.

11. *Revue de la Numismatique Belge*, 4^{me} Série, tom. v., liv. 4. From the Society.

12. Transactions of the Historic Society of Lancashire and Cheshire, N.S., vol. vi. Session, 1865—66. From the Society.

13. Rapport sur l'activité de la Commission Impériale Archéologique en 1864. St. Petersburg, 1865. From the Commission.

14. Proceedings and Papers of the Kilkenny and S. E. of Ireland Archaeological Society, vol. vi., N.S., July, 1866, No. 53. From the Society.

15. Bulletin de la Société des Antiquaires de l'Ouest, 2^{me} trimestre de 1867. From the Society.

16. Smithsonian Report, 1865. From the Smithsonian Institute.

17. Smithsonian Miscellaneous Collections, vols. vi. and vii., 1867. From the Smithsonian Institute.

18. Proceedings of the Numismatic and Antiquarian Society of Philadelphia from May 4, 1865, to December 31, 1866. From the Society.

19. Annual Report of the Secretary of War of the U. S. of America, 1866. From Edwin M. Stanton, Esq., Sec. of War.

Mr. Wilson exhibited two medals of the French Exhibition.

Mr. Evans exhibited a Penny of Archbishop Vulfred, lately found near Bury St. Edmunds. It is of the type, Ruding, Pl. xiii. No. 1, with the monogram of Dorobernia Civitas in the centre of the reverse. The moneyer's name is SVVEENERD. Ruding mentions no other moneyer than SAEBERHT; but a similar coin to this was in Mr. Cuff's collection, and another type of SWEENERD's is given by Hawkins, No. 144.

Mr. S. Sharp exhibited a Solidus of Magnus Maximus, found at King's Cliffe in 1862.

Mr. Evans read a paper, by himself, "On the Coins of Magnus Maximus struck in London." See Numismatic Chronicle, vol. vii. p. 329.

Mr. J. F. W. de Salis communicated a paper "On the Coins of the Two Eudoxias, Eudocia, Placidia, and Honoria, and of Theodosius II., Marcian, and Leo I., struck in Italy." Printed in the Numismatic Chronicle, vol. vii. p. 208.

NOVEMBER 21, 1867.

W. S. W. VAUX, Esq., President, in the Chair.

Mr. Madden communicated some remarks on the Roman gold coins of the late Duke of Blacas. See the Numismatic Chronicle, vol. vii. p. 251, and vol. viii. p. 1.

Mr. Webster exhibited a short-cross penny, bearing the name of HENRICVS, but with the outer circle on the reverse divided into compartments by a square, with the sides slightly curved inwards, and surrounding the inner circle. In these compartments is a legend, of which only the letters ADO L are visible.

Mr. C. Roach Smith communicated a short notice of a penny of William, of the canopy type, with the name of the moneyer +EALD6TR ON LVNDN. It was dredged up at Chatham.

DECEMBER 19, 1867.

W. S. W. VAUX, Esq., President, in the Chair.

Messrs. W. Harvey and F. Spicer were elected members.

Mr. C. Roach Smith exhibited casts of a gold British coin found with four others at Yarmouth, in the Isle of Wight. It is uninscribed, and differs in several particulars from any engraved in Evans. Also a Saxon sceatta, and a small coin of Edward the Confessor, found at Hoylake on the sea-shore.

Mr. Rolfe exhibited a nearly similar coin of Edward the Confessor, procured in London.

Mr. Vaux read a paper, by himself, "On the Coins of Tomi and Callatia, collected by Dr. Cullen, M.D."

Mr. B. V. Head read a paper, by himself, "On the Render to Caesar Crowns."

Mr. S. F. Corkran communicated a note, "On Two Gold Pennies of Henry the Third." See *Numismatic Chronicle*, vol. viii. p. 235.

Mr. Evans read a notice of some new discoveries at Constantinople by Dr. Dethier.

JANUARY 16, 1868.

W. S. W. VAUX, Esq., President, in the Chair.

Capt. C. C. Abbott, Messrs. J. Cameron and J. S. Wyon were elected members.

Mr. Corkran exhibited electrotypes of two remarkable Moutons d'Or, of great rarity. One of them is of Edward III., with the inscription EDWARD beneath the Holy Lamb on the obverse. The second is possibly of the same monarch, but has the inscription EOW REX .

Mr. Smallfield exhibited a pewter piece of the time of Elizabeth, having on the obverse a Phoenix and the legend SOLA PHENIX MVNDYE, and on the reverse a rose crowned with E R on either side, and the legend REGINA BEATY. It was found in the Thames. He also exhibited a small leaden piece with the Virgin in a crescent on the obverse, and the date 1540 on the reverse—found in the same place.

Mr. Evans exhibited a coin of the Vandal King Genseric, struck at Carthage, with N XLIII on the reverse.

Mr. J. F. W. de Salis communicated a paper "On Roman Coins struck in Britain." See *Numismatic Chronicle*, vol. vii. p. 321.

Mr. Vaux made some remarks on the Stamford find (2,942 coins), which principally consist of coins of Henry IV., V., and VI.; he also called the attention of the Society to a large find of English and Venetian coins (7,000) at Highbury.

FEBRUARY 20, 1868.

W. S. W. VAUX, Esq., President, in the Chair.

Dr. Froudenthal exhibited some tokens of Roumania, Trinidad, and Orange River:—

ROUMANIA.

Obv.—Under a regal crown, arms quarterly of Wallachia [an eagle holding a cross in his beak] and Moldavia [a bull's head, above a star of five points]. Supporters, a woman holding a sabre, and a lion. Motto, NIHIL SINE DEO. The whole surrounded by a mantle under a regal crown. Above, ROMANIA.

Rev.—Within sprigs of laurel and oak IO | BANI | 1867
Below, HEATON. Penny size. In the centre the Hohenzollern cheque, party per cross argent and sable.

TRINIDAD.

Obv.—BAKERY & GROCERY; lower leg. 9, FRED-
RICK St., PORT OF SPAIN. In the field,
rose, thistle, and shamrock.

Rev.—REDEEMABLE AT; lower leg. H. E. RAPSEY'S.
In the field, HALF | STAMPEE. Halfpenny
size.

ORANGE RIVER.

Obv.—BLOEMFONTEIN; lower leg. ORANJE FRY
STAAT. Arms, a tree between a fox (?) and a
lion. In the field three bugle-horns. Behind
the shield two flags; and to the sides 18—67.

Rev.—GOED VOOR; lower leg. DANIEL & HYMAN.
In the field 2s. German silver.
The same with 1s.

Mr. Vaux exhibited two specimens of a guinea of Charles II., of 1675, with the blundered legend CRAOLVS instead of CAROLVS.

Mr. Webster exhibited a large brass coin of Caracalla, with the Circus Maximus on the reverse.

The Rev. J. Kenrick exhibited a second brass coin of Didia Clara.

Mr. Francis, of Croydon, exhibited a Merovingian *triens* of Rheims. *Obv.* RIMVS FIT. *Rev.* FILOMARVS. Found at Croydon.

Dr. Freudenthal exhibited two copper coins of the time of the Crusades, supposed by De Sanley to have been struck under Conrad III. and Louis VII. (1148), but which he considered to be of a different attribution.

Signor Domenico Pierrugues, of Florence, sent for exhibition a photograph of a brass coin of Agrippa, with a new reverse, that of VESTA with a seated figure—a reverse not hitherto found before the reign of Caligula.

Mr. J. F. Neck communicated a paper "On the Groats of Henry IV., V., VI." See Numismatic Chronicle, vol. viii. p. 158.

MARCH 19, 1868.

W. S. W. VAUX, Esq., President, in the Chair.

Mr. Evans exhibited a rare gold coin of Vitellius, with the head of L. Vitellius on the reverse, being a slight variety of the example first published by Mr. Madden, from the Blacas Collection. See Numismatic Chronicle, vol. viii. p. 258.

The Rev. A. Pownall exhibited a bronze medallion, struck on the death of Gustavus Adolphus.

The Rev. T. Cornthwaite exhibited a coin of Hettam I. and Isabella of Armenia, and two leaden bullæ of Byzantine workmanship.

Mr. J. Rashleigh communicated "An Account of Anglo-Saxon Coins and Gold and Silver Ornaments found at Tre-whiddle, near St. Austell, Cornwall, in 1774, and some Remarks

on other Anglo-Saxon Hoards." See Numismatic Chronicle, vol. viii. p. 137.

Mr. B. V. Head read a paper, by himself, "On Anglo-Saxon Coins, with Runic Legends." See Numismatic Chronicle, vol. viii. p. 75.

APRIL 16, 1868.

W. S. VAUX, Esq., President, in the Chair.

The following presents were announced and laid upon the table:—

1. Bulletins de l'Académie Royale de Belgique, 36^{me}. année, 2^{me}. Série, tom. xxiv., 1867.

2. Annuaire de l'Académie Royale de Belgique, 1868. From the Academy.

3. Revue de la Numismatique Belge, 4^{me}. Série, tom. vi., 2^{me}. livraison. From the Society.

4. Bulletins de la Société des Antiquaires de l'Ouest, 4^{me}. trimestre de 1867. From the Society.

5. Memorial Numismatico Español, tom. i., 1866, and ano ii., Barcelona, 1868. From the Editor.

6. Proceedings of the Kilkenny and S. E. of Ireland Archaeological Society, vol. v., N.S., October, 1868. No. 54. From the Society.

Mr. J. Mayer exhibited a coin of Jaenberht, Archbishop of Canterbury.

MAY 21, 1868.

W. S. W. VAUX, Esq., President, in the Chair.

The following presents were announced and laid upon the table:—

1. Journal of the Historical and Archaeological Association

of Ireland. 3rd Series, vol. i., No. 1., January, 1868. From the Association.

2. Journal of the Royal Asiatic Society of Great Britain and Ireland, N.S., vol. iii., Part i., 1867. From the Society.

8. *Annuaire de la Société Française de Numismatique et d'Archéologie*, 2^e année, 1867. From the Society.

4. *Seigneurs de Florennes, leurs sceaux et leurs monnaies*, by R. Chalon. From the Author.

5. The coinage of Suffolk, by Charles Golding, Esq. From the Author.

6. Metric Weights and Measures. Speech of Mr. Beresford Hope, M.P., in moving the rejection of the Weights and Measures Bill, May 18, 1868.

Mr. Vaux made some remarks upon the find of Groats at Stamford.

JUNE 18, 1868.

ANNIVERSARY MEETING.

W. S. W. VAUX, Esq., President, in the Chair.

The minutes of the last Anniversary Meeting were read and confirmed. The Report of the Council was then read to the Meeting:—

GENTLEMEN,—In accordance with the usual custom of this Society, the Council have the honour to lay before you their Annual Report as to the state of the Numismatic Society, at this, another Anniversary Meeting.

The Council regret to have to announce their loss, by death, of their honorary member, M. le Prof. P. O. Van der Chijs, who expired at Leyden on the 4th Nov., 1867.¹ The name of

¹ Since this was written we regret to have to record the deaths of R. Whitbourn, Esq., F.S.A.; of William Henry

C. H. Wyndham has, by order of the Council, been erased from the list of members.

On the other hand the Council have much pleasure in recording the election of the eight following members :—

Capt. Charles Compton Albott.

James Cameron, Esq.

Capt. R. J. H. Douglas.

William Harvey, Esq., F.S.A.

R. W. Maclachlan, Esq.

Frederic Spicer, Esq.

J. Shepherd Wyon, Esq.

James Wingate, Esq.

According to our Secretary's Report, our numbers are therefore as follows :—

	Original.	Elected.	Honorary.	Total.
Members, June, 1867 . . .	6	116	42	164
Since elected	—	8	—	8
	6	124	42	172
Deceased	—	—	1 ²	1
Resigned	—	—	—	—
Erased	—	1 ³	—	1
Members, June, 1868 . . .	6	123	41	170

Barton, Esq., of the Royal Mint; and of our honorary member, M. Jacques Boucher de Crèvecoeur de Perthes, of Abbeville. We hope to give notices of these our deceased members at the next Annual Meeting.

We have also to announce the resignations of William Boyne, Esq., F.S.A., and of George Baynton Davy, Esq.

² M. le Prof. P. O. Van der Chijs.

³ C. H. Wyndham.

We proceed to give a brief notice of our deceased friend, the late Prof. Van der Chijs.

M. Vander Chijs died suddenly on the 4th November, 1867, at Leyden, in the University of which town he has been for many years the keeper of coins and medals. His great work, "On the Coins Struck in the Low Countries before the Peace of Ghent," has made his name familiar to Numismatists of all countries. From his early youth he had devoted his attention to the study of coins; and the great quantity of foreign money of all periods, and of every country, which was at that time in circulation in Holland, afforded ample material for his *résearches*. He studied the "*belles-lettres*," under the direction of M. Reuvens, on whose death he was appointed Director of the Coin Cabinet, which at that time consisted only of a collection of Greek and Roman coins, collected by M. Reuvens, and by him bequeathed to the University. M. Van der Chijs wrote a treatise on the "Utility of the Study of Numismatics," and began the publication of a Numismatic journal, of which, however, only two volumes were published. His principal work, "On the Coins of the Netherlands before the Peace of Ghent," already alluded to, was undertaken by him as a work of competition for a prize offered by the Société Teyler. He had long thought of publishing a new edition of Van Alkemade's "*Description des Monnaies des Comtes de Hollande*," and for this purpose he had collected numerous drawings, &c. He therefore, resolved immediately to commence his work. Aided by his wife, who copied out the text, he travelled through a great part of Holland, visiting every known collection, and obtaining drawings of all interesting and inedited pieces. It is needless to say that M. Van der Chijs acquitted himself of his task with indefatigable zeal, and in spite of age and ill health, brought it to a close shortly before his death. Prof. Van der Chijs was elected an honorary member of the Numismatic Society in 1867, only a few months before his decease.

The Council beg leave further to state that Mr. F. W. Madden to whom the Society has been so long indebted for a great deal of arduous and gratuitous labour, performed by him with singular zeal and intelligence, as one of your Secretaries, and Joint Editor of the Chronicle, with Mr. Evans and Mr. Vaux, has expressed a wish, owing to ill health, to retire from the duties of Secretary, and that Mr. Barclay Vincent Head has consented to take his place. The Council believe that they are only expressing the unanimous feeling of the Society in asking the members present to agree to a vote of thanks, which will be proposed by your President to Mr. Madden, as a slight recognition of the good service he has performed for this Society. Mr. Madden will still continue, as before, to assist in the editing of the Chronicle.

The Council cannot conclude their Report without congratulating the Society on its continued prosperity. It is true that we are not a numerous body, and that, if we are to be as efficient as we hope to be, a considerable addition ought to be made—and quickly too—to the number of our paying members. Still we have not, on this occasion, to record any falling-off under this head. It ought, however, to be distinctly remembered, that our annual subscriptions—including what we receive for the sale of the Chronicle—hardly avail to meet the current expenses of the four parts, which we endeavour to publish with regularity, and which, on the whole, we have been enabled to lay before our members with less delay than is often but too common in the case of far larger and richer societies. The Council, therefore, feel that it is of the greatest importance that every well-wisher to the Numismatic Society should do his utmost to procure for us an increased number of members, believing as they do that the Chronicle is the life of the Numismatic Society, and that if once we fail, from want of means, in issuing our quarterly volume, we sustain ourselves, and, in ourselves, that Numismatic science sustains also, an

irreparable loss. The Council would be sorry to see the day when the publication of the Numismatic Chronicle should be stopped, or even long delayed, owing to the scarcity of funds, as they fully recognise the fact that, in the quality of its materials, and in the ability shown by the papers published in it, the character of English Numismatic science is well maintained in comparison with that on the Continent, as exhibited in foreign Numismatic journals.

The Report of the Librarian is as follows :—

165 volumes of books belonging to the Society have been bound.

127 slips have been written for the Catalogue of the Books of the Society.

The Report of the Treasurer is as follows :—

The Meeting then proceeded to ballot for the officers of the ensuing year, when the following gentlemen were elected :—

President.

W. S. W. VAUX, Esq., M.A., F.R.S., F.S.A., F.R.A.S.

Vice-Presidents.

S. BIRCH, Esq., LL.D., F.S.A.

RT. HON. THE EARL OF ENNISKILLEN, Hon D.C.L.,
F.R.S., F.G.S.

Treasurer.

W. FREUDENTHAL, Esq., M.D.

Secretaries.

JOHN EVANS, Esq., F.R.S., F.S.A., F.G.S.

BARCLAY VINCENT HEAD, Esq.

Foreign Secretary.

JOHN YONGE AKERMAN, Esq., F.S.A.

Librarian.

SUTTON FRASER CORKRAN, Esq.

Members of the Council.

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REV. TULLIE CORNTHWAITE, M.A.

JOHN DAVIDSON, Esq.

A. W. FRANKS, Esq., F.S.A.

FREDERIC W. MADDEN, Esq.

J. F. NECK, Esq.

REV. J. H. POLLEXFEN, M.A.

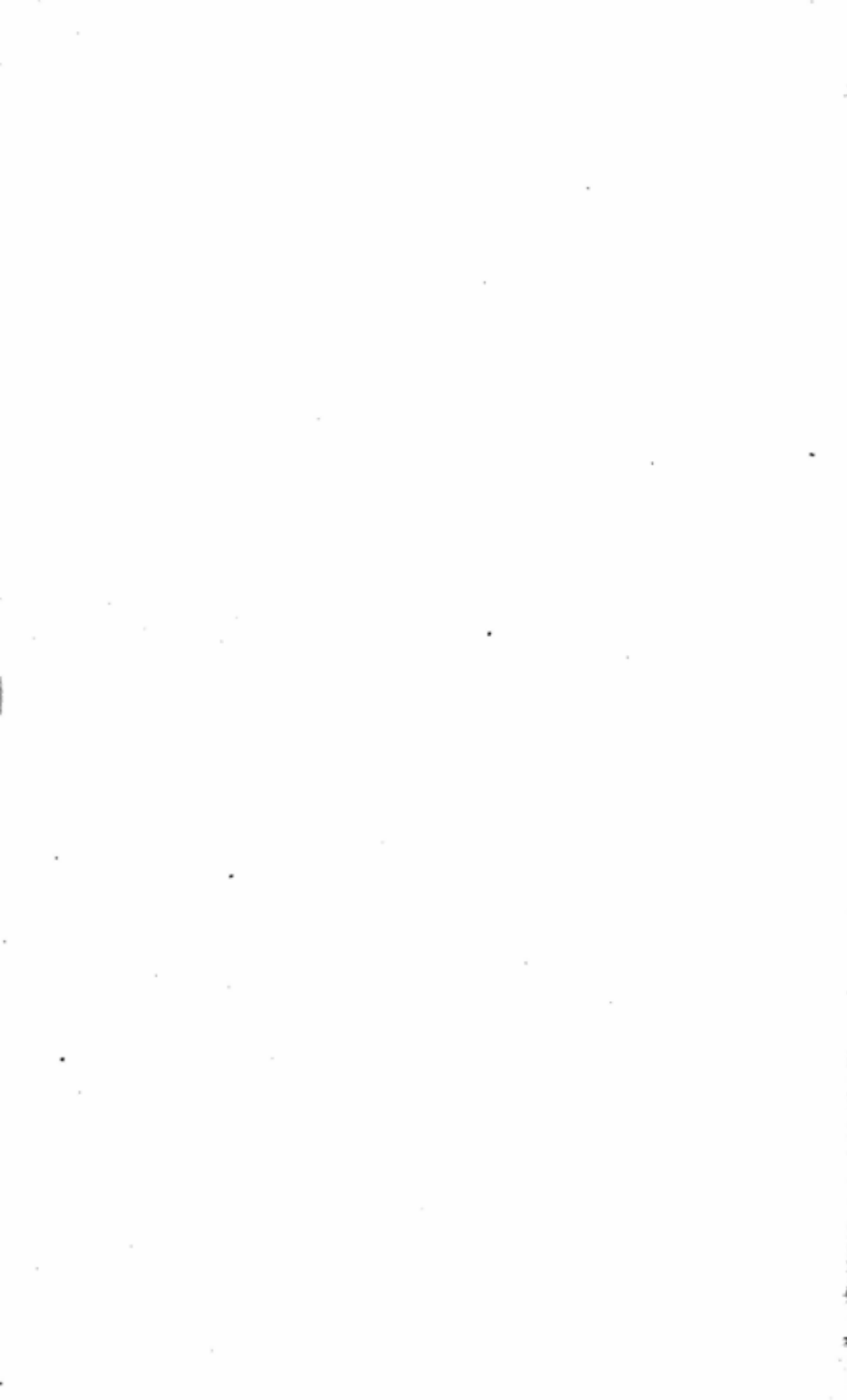
S. SHARP, Esq., F.S.A., F.G.S.

J. S. SMALLFIELD, Esq.

JOHN WILLIAMS, Esq., F.S.A.

After a vote of thanks to Mr. Madden for his valuable services, the Society then adjourned until October 15th, 1868.

LIST OF MEMBERS
OF THE
NUMISMATIC SOCIETY
OF LONDON,
DECEMBER, 1868.



LIST OF MEMBERS

OF THE

NUMISMATIC SOCIETY

OF LONDON,

DECEMBER, 1868.

An Asterisk prefixed to a name indicates that the Member has compounded for his annual contribution. (O.M.)=Original Member.

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- ANDERSON, COLONEL WILLIAM, C.B., 19, Gloucester Square.
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- (O. M.) BERGNE, JOHN B., Esq., F.S.A., Foreign Office, Downing Street.
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GROTEFEND, DR. C. L., Hanover.

GUIOTH, M. LÉON, Liège.

HART, A. WELLINGTON, ESQ., 16, Ex Place, New York.

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HOLMBOE, PROF., Direct. du Cab. des Médailles, Christiana.

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Musée de l'Ermitage Impériale, St. Petersburg.

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LEEMANS, DR. CONRAD, Direct. du Musée d'Antiquités, Leyden.

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LIS Y RIVES, SEÑOR DON V. BERTRAN DE, Madrid.

LONGPÉRIER, M. ADRIEN DE, Musée du Louvre, Paris.

MEYER, DR. HEINRICH, im Berg, Zurich.

MINERVINI, CAV. GIULIO, Rome.

MÜLLER, DR. L., Insp. du Cab. des Médailles, Copenhagen.

NAMUR, DR. A., Luxembourg.

OSTEN, THE BARON PROKESCH D', Constantinople.

RICCIO, M. GENNARO, Naples.

SABATIER, M. J., 6, Rue Couchois, Montmartre, Paris.

SAULCY, M. F. DE, 5, Rue du Cirque, Paris.

SAUSSAYE, M. DE LA, 34, Rue de l'Université, Paris.

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SMITH, C. ROACH, ESQ., F.S.A., Temple Place, Strood, Kent.

VALLERSANI, IL PROF., Florence.

VERACHTER, M. FREDERICK, Antwerp.

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