THE

NUMISMATIC CHRONICLE,

AND

JOURNAL OF THE NUMISMATIC SOCIETY.
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AND
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OF THE
NUMISMATIC SOCIETY.

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AND
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NUMISMATIC CHRONICLE.

I.

ON AN UNPUBLISHED TETRADRACHM OF ALEXANDER III. STRUCK AT RHODES;

WITH SOME OBSERVATIONS ON THE RHODIAN SYMBOL, AND OTHER MATTERS CONNECTED WITH RHODES.

The tetradrachm about to be described was obtained at the Baron de Chaudoir's sale in 1860 (Lot 1070); it is of the usual type, its fabric belonging to Class VI. of Müller's "Numismatique d'Alexandre le Grand," having the legend ΑΛΕΞΑΝΔΡΟΥ. The throne of Jupiter has a back, and his feet rest on a stool; below the throne are the letters PO; in the field is the Rhodian symbol, below his outstretched arm is the monogram of ΑΙΝΗΤΩΡ(Φ). His right knee is so much bent that the foot falls almost behind the stool. Size, 8; weight, nearly 26½ grains (but originally several grains heavier, as the reverse of the coin is considerably rubbed). Another specimen is in the British Museum, weighing 261,6 grains.¹

We may observe, before passing to other matters, that the tetradrachms of Alexander, struck at Rhodes, appear to be the heaviest in the whole series. Coins of this magni-

¹ I should suppose that a Rhodian tetradrachm of Alexander, described as having ANTYB, in monogram, is the same coin. (O. Borrell's Sale Cat., August, 1861, Lot 11.)

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tude, however, struck in different cities, and even in the same city, vary much in weight. Thus two very perfect specimens in the Thomas collection, struck at Byzantium from the very same die, differ from each other by five grains (or more exactly \(\frac{5}{10}\) grains), as they respectively weigh \(256\frac{4}{10}\) and \(261\frac{5}{10}\) grains, "a fact," as Mr. Burgon observes, "to be noted" (Cat., p. 149). It is not often that Alexander's tetradrachms reach 267 grains; this specimen, however, probably was at least as heavy. A specimen in Mr. H. P. Borrell's Catalogue, Lot 73 (1852), struck at Rhodes, with magistrate's name, ΑΡΙΣΤΟΒΟΥΛΟΣ, weighed 267 grains; and a most extraordinary coin, in my possession, struck at Rhodes, with magistrate's name, ΔΙΟΦΑΝΗΣ, weighs 27\(\frac{1}{4}\) grains.² It has the appearance of being perfectly genuine, and of having even lost slightly in weight. Rhodian tetradrachms of Alexander weighing 265 or 266 grains, are, I suspect, not very uncommon. In any case, my experience differs widely from M. Müller's, who says, that while tetradrachms of his first five classes often reach 17,3 grammes³ (≈ 267,1 grains), those of his sixth and seventh seldom reach and never exceed 17 grammes⁴ (≈ 262,4 grains), their

² A similar coin in the British Museum weighs above 264 grains.
³ A gramme weighs 15,44 grains.
⁴ A Rhodian specimen, marked with the name ΑΙΝΗΤΩΡ, in my cabinet, in good but not fine preservation, weighs about 266 grains; and I have an electrotype of another, the magistrate's name being ΗΦΑΙΣΤΙΟΝ, which weighs 263 grains. Other Rhodian tetradrachms, in the British Museum (ΣΤΑΣΙΟΝ) and Colonel Leake's collection, rather exceed 260 grains; so does a very fine one in the Thomas collection (262 grains nearly); while another has, what I believe to be, the unusually low weight of 260\(\frac{4}{10}\) grains (Cat., p. 164). It is said to be "in good condition." A plated coin (ΤΕΙΣΥΛΟΣ) in the British Museum weighs 226 grains.
average weight being 16,5 grammes (= 254.7 grains), while it is often much less (p. 8.) These matters, however, must be left to metrologists, who would probably find that the coins of Rhodes in general offer a tempting field of inquiry.

Most of the interest attaching to our present coin lies in the fact that the monogram admits of a sure interpretation on comparison with another coin (not of very rare occurrence), where the magistrate's name, ΑΙΝΗΤΩΡ, is written at length. (Mionnet, vol. i. n. 271; Müller, pl. ii. fig. 8.) It is almost equally certain that another coin of Alexander, struck at Rhodes (Müller, n. 1,159), represents the same name by a different monogram. It may be noted that the Ω in both cases appears in the common printed shape of the small (not the capital) letter (ω); a very early example of such a formation. An autonomous drachma of Rhodes, of pretty, but rather mannered execution, likewise bears the name ΑΙΝΗΤΩΡ, together with a caduceus in the field; he may probably be the same person. If so, we obtain an approximate date for this last coin, as well as for certain pieces of inscribed pottery of Rhodes, where the name occurs on diotyal manubria.

As a confirmation that the foregoing interpretation of the monogram is correct, we may observe that the name Stasion occurs at length on a coin of Alexander struck at Rhodes, and that several monograms on other of his Rhodian coins unmistakably express the same word. Both Mionnet and Müller have figured these monograms without noticing the fact. (See Müller, pl. xvi. n. 1156 and 1157; and also, Mionnet Réc., pl. v. n. 354.)

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5 See Mionnet, vol. iii. p. 417, for several varieties, inscribed ΑΙΝΗΤΩΡ.

It may not be out of place to add a few words on the significance of the Rhodian symbol, which has been variously taken by numismatists for the flower of the pomegranate (balaustium) and the flower of the rose. Eckhel observes (Doct. Vet. Num., vol. ii. p. 602): "In aversā monetae Rhodiae fere constanter flos comparet. Eum antiquarii olim omnes rosam credidere, quam sententiam plane evertere conatus est Spanhemius secutus Vossium, et esse balaustium, id est, florem mali Punici, quo ad tingendum lanam utebantur Rhodii, copiosis argumentis comprobavit. Non adversabor utriusque viri conjecturae atque istud tanto minus, quia flos hic in plerisque his nummis roseae speciem omnino non presert, sed ejus potius quam tulipam vocamus, cujus formae sitne balaustium, Florae filiis permitto. Nolim tamen prorsus ex his nummis eliminari rosam, nam sunt non pauci, forte Spanhemio ignoti, in quibus rosa adversa ex formâ rotundâ et ejus complicatis foliis facile agnoscitur. . . . . Nihil igitur obest quo minus credamus utrumque florem a Rhodiis insertum monetae." If Eckhel had but taken counsel of these sons of Flora, he might have seen that Spanheim's erudite speculations are beside the mark, and that his own compromise only obscures and complicates a very simple matter. The toothed calyx, which is evident in the tulip-shaped representations, at once fixes the symbol to the rose, from which the island also derives its name. For this remark, though obvious enough to every botanist, I am indebted to my lamented friend, the Rev. Professor Henslow, which he let fall in a casual conversation on floral representations and symbols upon coins.

The Rhodian tetradrachms of Alexander⁷ may be

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⁷ Various coins of Alexander III., not contained in Müller's work, are in my cabinet, which I hope some day to describe.
further augmented from the catalogue of the Ivanoff collection, composed by the ready and trustworthy pen of Mr. Maximilian Borrell, from which it appears that a specimen therein contained (Lot 77, p. 8, 1868) had the magistrate’s abbreviated name TIMAPX, and the (so-called) balanustium, but not the PO. The occurrence of the magistrate’s name would certainly lead me to assign it to Rhodes, and not to Trælium, where the same symbol occurs, but no magistrate, except perhaps in monogram. The cities in which Alexander’s coins have the names of magistrates in full, or nearly so, are but few, compared with the whole number of money-striking cities. In Europe they scarcely occur, except on coins of Odessus, and in almost all cases not quite at length. In Asiatic Greece we have them on coins of Cyme, Temnos, Mytilene, Clazomenæ, Erythrae, Colophon, Chios, Mylasa, and Rhodes. There are a few others, probably Asiatic, of uncertain towns.

It is worth mentioning, that the earliest regal coin (so far as I know) bearing the name of a magistrate in full, is a coin of Rhodes. A gold stater of Philip II., once in Lord Northwick’s, now in Mr. Addington’s cabinet, bears the legend ΦΙΛΙΠΠΙΟΥ, ΜΝΑΣΙΜΑΧΟΣ, PO, and the Rhodian symbol. Millingen, and subsequently Müller, have commented thereon. Both consider it to have been struck after Philip’s death, and have no doubt been influenced by the consideration that magistrates’ names, in all other instances, appear on Alexander’s coins for the first

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8 ΝΙΚΟΔ is found on a coin ascribed to Amphipolis, and ΟΙΝΙΑ and ΑΠΙΟΛΑΑ on coins doubtfully assigned to Mesembria. The monograms and letters (one or more) which are found on very many of Alexander’s coins, are probably, in some cases at least, abbreviations of magistrates’ names.
time. Millingen thinks that the Rhodians of Alexander's time struck it out of compliment to his father, which seems vastly improbable; Müller, that the Rhodians imitated the widely-spread gold Philippus, to give it a more ready currency. This argument might have more force if the Rhodians had been barbarians who stood in need of credit; but as the Rhodians struck silver money in abundance, they can hardly have thought it necessary to draw upon the credit of foreign money or foreign princes for their gold. Rhodes, as we know, was in a most disturbed and unsettled state from the reign of Philip onwards: now depending on Athens, now in revolt from her; now subject to the Carian satraps, now a free state; now in active opposition to Philip, now Macedonised in the time of Alexander and Antipater. It seems, therefore, to me, that the Philippising party in Rhodes (and there were then Macedonian and anti-Macedonian parties in most Greek cities) obtained a momentary ascendancy, of which this unique piece of money is an ever-living monument. At any rate, we know that towards the close of Philip's reign (B.C. 338), when a false report, after the battle of Chæronea, reached Rhodes that Athens was taken, the Rhodians, released from fear, sent out cruisers to prey on the ships of the Ægean, showing that the sympathies of many among them were on the side of Philip rather than of Athens. This coin may even have been struck at that very time.

Churchill Babington.

II.

THE COINS OF THE PTOLEMIES.

The general opinion of numismatists as to the coins of the Ptolemies, Kings of Egypt, cannot be better expressed than by quoting the words of a writer equally distinguished as a numismatist and as a classical scholar. Mr. E. H. Bunbury closes his series of articles on the Ptolemies in Dr. William Smith's "Dictionary of Greek and Roman Biography and Mythology," with this remark, "Of the coins of the Ptolemies, it may be observed, that most of them can only be assigned to the several monarchs of the name by conjecture; very few of them bearing any title but those of ΠΤΟΛΕΜΑΙΟΥ ΒΑΣΙΛΕΩΣ. Hence they are of little or no historical value" (vol. iii. p. 599). Extreme as is this opinion, it is shared by most numismatists. The series, if not abandoned as inexplicable as a whole, is not the subject of serious examination. Museums cease to collect any but the most marked or choicest specimens—some of those few which either tell distinctly by whom they were struck, or are too beautiful, for their period, to be discarded. Private collections contain a few gold and fewer silver coins of the series, and the copper money is left to the inexperienced beginners. The numismatic journals scarcely ever notice a Ptolemaic coin, and it is some advantage, in commencing a thorough inquiry, to be saved the difficulty of comparing a multitude of
detached opinions, however valuable, on the several items of the subject. However, neither the defects of cabinets, nor the absence of discussion, are convincing proofs of the unsatisfactory arrangement of a series. It is enough to glance at the series as arranged in any cabinet (except, I may be allowed to say, that of the British Museum) to see how thoroughly hap-hazard is the manner in which the coins are placed. Sicily and Greece show all the signs of modern criticism. Even the coins of the remote Arsacidæ and Bactrians have been reasonably arranged. When you reach the cabinet of Egypt, you find yourself far back in the last century; style, fabric, historical and chronological indications, are all despised. According to the old plan of giving each king a representative in the series of coins, transpositions which the simplest exercise of numismatic common sense would have avoided, have been effected, and the whole rendered so confused and confusing, that the only remedy is to destroy all the titles, take all the coins out of their places, and begin afresh.

I must justify what may be called a sweeping condemnation, by a few instances of the utter disorder in which numismatists have been content to leave this important, and, I will venture to add, interesting series. I take the list in Sestini's "Classes Generales" as the best extant, or at least, as a full outline of arrangement by a good numismatist, from which scarcely any important deviations have been made, except where coins have been shifted, rather as a numismatic amusement, than on any scientific plan.

In this list I find that Ptolemy II. dated his coins according to two eras, the first his father's, the second his own. The dates of the first era are ΜΑ (41), ΜΓ (43), ΜΔ (44), ΜΘ (49), Ν (50), ΝΘ, read ΝΑ? (51 ?), ΝΓ (53), ΝΔ (54);
the dates of the second are, \( \Xi \) (7), \( \iota \Theta \) (19), \( \kappa \) (20), \( \kappa \alpha \) (21), \( \kappa \beta \) (22), \( \kappa \gamma \) (23), \( \kappa \Delta \) (24), \( \kappa \varsigma \) (26), \( \kappa \eta \) (28), \( \kappa \Theta \) (29), \( \Lambda \alpha \) (31), \( \Lambda \Gamma \) (33), \( \Lambda \varepsilon \) (35), \( \Lambda \varsigma \) (36), \( \Lambda \Theta \) (39). Thus in his 5th year Ptolemy Philadelphus reckoned by his father's era, in his 7th by his own, in his 10th again by his father's, which he suddenly dropped in his 15th, returning in (or before) his 19th to his own era.

To Ptolemy VI., Philometor, are attributed silver coins of the year \( \iota \Delta \) (14), and potin of the years \( \Theta \) (9), \( \iota \) (10), \( \iota \beta \) (12), \( \iota \Gamma \) (13), \( \iota \Delta \) (14), \( \iota \varepsilon \) (15), \( \iota \varsigma \) (16), \( \iota \zeta \) (17), \( \iota \H \) (18), \( \iota \Theta \) (19). We are thus expected to believe that didrachms (commonly called tetradrachms) were issued in the same year of pure and base silver.

To Ptolemy IX., Lathurus (vulg. VIII.), gold staters are assigned; whereas the other gold staters are of Ptolemy II., IV., and V.; and the only other gold coins of Ptolemy I., and of the queens of Ptolemy II., III., and IV. Sestini, indeed, assigns the staters of Ptolemy II. to Ptolemy III.; but in any case he admits a series of gold coins from Ptolemy I. to Ptolemy V., and of staters from Ptolemy II. to Ptolemy V., and then suddenly recommences the series under Ptolemy IX.

It is not necessary to give further instances. I have confined myself to the simplest first principles of arrangement. Had I entered upon the question of fabric, I should have shown how utterly it had been disregarded by Sestini in each of these cases.

While thus condemning the ordinary classification of the coins of the Ptolemies, I must claim for myself the indulgence which is extended to all who break ground in a new department of science. I can but hope to lay a sound basis for future inquiry, leaving a multitude of details to be supplied, perhaps some radical errors to be
corrected, by those who may afterwards take up the subject. I propose to conduct the inquiry upon the following principles:—

1. To advance from what is certain to what is uncertain, and not to follow a chronological order.

2. To attempt the determination of the beginning and the end of the series.

3. To recognise no era not recorded in history, though such an era may be conjectured and left undetermined.

Besides these principles, the following postulates will, I think, greatly further the success of the inquiry.

1. A series of silver coins of a fixed weight, size, and fabric, cannot be interrupted by a series of base metal coins of the same denomination and then resumed.

2. Coins of the same weight and size, but of silver and base metal respectively, cannot have been issued at the same time.

3. The series of gold coins of the Ptolemies, the pieces of Ptolemy I. and Ptolemy V. being known, must be continuous between the reigns of those kings.

4. The abandonment and resumption of mints is very improbable: e.g., if we find a series of coins with the mint-marks ΠA, ΣA, ΚI, and another with the mint-mark ΠA only, it is very improbable that the latter series should be placed within the former so as to interrupt it.

5. Fabric, due allowance being made for local differences, and the extent of that allowance having been determined as far as possible by the comparison of coins of known date, is a sure test of age.

1. COINS OF PTOLEMY I.

I begin with the silver coins of Ptolemy I. Of these there is a dated series of great importance for the deter-
mination of the whole class of this metal. The evidence it affords may be tabulated as follows:

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<th>Year of</th>
<th>Tyre</th>
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<th>Ptolemais</th>
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Inscription, ΠΠοΔΕΜΑΙοΥ ΒΑΣΙΛΕΩΣ.

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Inscription, ΠΠοΔΕΜΑΙοΥ ΣΩΤΗΡΟΣ.

Description of Plate.

1. Didrachm of Ptolemy I., struck at Tyre. Obv. Bust of Ptolemy, to right, diademed and wearing aegis. Rev. ΠΠοΔΕΜΑΙοΥ ΒΑΣΙΛΕΩΣ. Eagle, to left, on thunderbolt; in front, monogram of Tyre, ΤΥΡ, beneath which, club of Hercules; behind, monogram KB (22).


6. Didrachm of Ptolemy I., struck at Tyre. Obv. Bust of Ptolemy, to right, diademed and wearing aegis. Rev. ΠΠοΔΕΜΑΙοΥ ΣΩΤΗΡΟΣ. Eagle, to left, on thunderbolt; in front, mon. of Tyre, ΤΥΡ; behind, Δ (30) and ΑΒ in mon.; beneath, Α.


10. Mon. ΠΠΙ or ΠΙΠ: from didrachm of unknown town.

11. Mon. ΠΑ: from didrachm of unknown town. [Mon. No. 15 occurs on a didrachm of this town.]


The table, with the additional evidence furnished by the plate, affords the following data:—

1. The title King is used as late as the year 24.
2. The title Soter begins in the year 25.
3. The coins of the years 22, 23, 24, 25, 26, are separated from those of the years 29, 30, 31, 32, 33, 34, 35, 36, 37, by a gap of not less than two years, and in the case of some mints, of more, as far as my information goes, the two groups being characterized by a striking difference in the style of the portrait and the character of the workmanship. Of this difference I have given instances in the two coins engraved in the plate, which are the first of each class, that before and that after the gap. I do not assert that the difference is universal in all coins of every or any mint, but it is certainly general.

4. The series of Tyre begins in the year 22, that of Sidon in the year 25, and that of Ptolemaïs in the same year.

5. The dates on these coins being years of Ptolemy, can only be Vague Egyptian, or Syro-Macedonian. The latter are known, from a hieroglyphic inscription, to have been used by the Greeks in Egypt under the Ptolemies. It might be doubted whether they were regnal or current, but the opinion of chronologers is now in favour of the latter supposition, and the numismatic dates seem to confirm it, giving, for instance, 30 years to Aulctes, who reigned but 29. The Egyptian Vague year in the time of Ptolemy I. began in the first half of November, the Syro-Macedonian at the autumnal equinox, or a little later. The year therefore, in either case, would roughly correspond to the last portion of the proleptic Julian year, and the rest of that following, from autumn to autumn.

1 Champollion, Grammaire, p. 339.
Let us compare these results with history:—

1. Ptolemy is said to have received the title Soter from the Rhodians in B.C. 305, his 20th year. It is therefore not improbable that he should first have taken it in his 25th, as appears from the coins.

2. During the second half of Ptolemy's reign the rule of Phœnicia and Cœle-Syria, as well as Cyprus, was several times contested by the successors of Alexander. The chief historical facts are the following:—

a. In the winter, or possibly autumn, preceding the year of the battle of Ipsus, cir. August, B.C. 301, therefore late in B.C. 302, Ptolemy marched out of Egypt and took the cities of Cœle-Syria, but on a false rumour of the victory and advance of Antigonus, hastily retired into Egypt, having made a truce of four months with the Sidonians, whose city he was besieging, and garrisoned the cities he had taken. (Diod. Sic., xx. 113. Justin, xv. 2, 4.)

b. After the battle of Ipsus, cir. August, B.C. 301, Seleucus advanced into Phœnicia and claimed Cœle-Syria, which Ptolemy already held, but at last agreed that he would waive his right for the present. (Diod. Sic. Reliq., xxi. 5.) According to Polybius, at a later period the kings of Egypt and Syria respectively laid claim to Cœle-Syria, and Phœnicia, on the right conferred by this arrangement—the Syrian claiming on the ground of constant occupation from Seleucus downwards; the Egyptian, on the ground that Ptolemy I. had endeavoured to secure these provinces for himself. (V. 67.) From which it would appear that Seleucus gained these provinces before his death, B.C. 280.

The dates of the chief later events following the battle of Ipsus, until the conquest of Cyprus (Salamis excepted) by Ptolemy I., are thus given by the Bishop of St. David's:—
b.c. 299. Seleucus asks the hand of Stratonice, daughter of Demetrius. At this time Demetrius still held Cyprus and the Phoenician towns.

Alliance of Demetrius with Ptolemy, terms unknown.

For two or three years a blank. Plutarch gives no hint of such an interval, and he is followed by Fynes Clinton. The Bishop collects the chronology from a decrees as to Democharis. (Vit. x. Orr.)

b.c. 298. Rupture with Seleucus, who demanded Tyre and Sidon of Demetrius. Demetrius strengthens their garrisons.

b.c. 297, probably in spring of, Demetrius sails for Greece.

b.c. 296. Demetrius besieges Athens, still holds Cyprus.

b.c. 295. Athens taken.

Ptolemy conquers Cyprus, except Salamis. Seleucus, there can be little doubt, captures the mainland Asiatic territories of Demetrius. (History of Greece, new Ed., 1852, vol. viii. pp. 1—16.)

Of the contest between Seleucus and Ptolemy, after the battle of Ipsus, the historian says nothing.

The obvious inferences to be drawn from these data would seem to be the following:

<table>
<thead>
<tr>
<th>Current Year</th>
<th>Year of Ptolemy</th>
<th>b.c.</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>22</td>
<td>302</td>
<td>Ptolemy takes Cœle-Syria, and Phœnicia, except Sidon.</td>
</tr>
<tr>
<td>&quot;</td>
<td>23</td>
<td>301</td>
<td></td>
</tr>
<tr>
<td>&quot;</td>
<td>24</td>
<td>300</td>
<td>Seleucus claims but does not gain Cœle-Syria, and Phœnicia.</td>
</tr>
<tr>
<td>&quot;</td>
<td>26</td>
<td>298</td>
<td>Demetrius holds Tyre and Sidon.</td>
</tr>
<tr>
<td>&quot;</td>
<td>27</td>
<td>297</td>
<td>Demetrius sails for Greece.</td>
</tr>
<tr>
<td>&quot;</td>
<td>28</td>
<td>296</td>
<td></td>
</tr>
<tr>
<td>&quot;</td>
<td>29</td>
<td>295</td>
<td>Ptolemy conquers Cyprus.</td>
</tr>
</tbody>
</table>
It will be observed that the coins afford the following data bearing upon the changes of the occupation of Phœnicia:

1. Ptolemy's first dated coinage in Phœnicia was separated by a gap from his second.

2. This gap, according to the evidence to which I have had access, is of three years, 27, 28, 29, at Tyre; two, 27, 28, at Sidon; and four, 26, 27, 28, 29, at Ptolemaïs. Future discoveries may modify the lengths of these periods, but the change of style in the coins shows that the issue of Ptolemy's money in Phœnicia had been interrupted at all the three cities.

The result may be thus tabulated:

<table>
<thead>
<tr>
<th>Year of Ptolemy</th>
<th>B.C.</th>
<th>Events.</th>
<th>Coins.</th>
</tr>
</thead>
<tbody>
<tr>
<td>22</td>
<td></td>
<td>Ptolemy takes C.</td>
<td>Tyre.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Syria, &amp; Phœnicia, exc. Sidon.</td>
<td></td>
</tr>
<tr>
<td>23</td>
<td>302 - 301</td>
<td>Demetrias holds Tyre and Sidon.</td>
<td></td>
</tr>
<tr>
<td>24</td>
<td>301 - 300</td>
<td>Demetrias sails for Greece.</td>
<td></td>
</tr>
<tr>
<td>25</td>
<td>300 - 299</td>
<td></td>
<td>Tyre, Sidon.</td>
</tr>
<tr>
<td>26</td>
<td>299 - 298</td>
<td></td>
<td></td>
</tr>
<tr>
<td>27</td>
<td>298 - 297</td>
<td></td>
<td>Tyre, Sidon.</td>
</tr>
<tr>
<td>28</td>
<td>297 - 296</td>
<td></td>
<td></td>
</tr>
<tr>
<td>29</td>
<td>296 - 295</td>
<td>Ptolemy conquers Cyprus.</td>
<td>Sidon.</td>
</tr>
<tr>
<td>30</td>
<td>295 - 294</td>
<td></td>
<td>Tyre, Sidon, Ptolemaïs.</td>
</tr>
</tbody>
</table>

As the literary data are admitted to be uncertain, I do not think it is rash to consider that Demetrias did not hold the Phœnecian cities before late in Ptolemy's 25th year. The conquest of Cyprus and Phœnicia by Ptolemy was clearly a consequence of that success in Europe which drew the interest of Demetrias from Asia.

Having thus ascertained the dated coinage of Ptolemy from his 22nd to his 37th year inclusive, I may draw two inferences:
1. All coins of Ptolemy I. of the mints of Tyre, Sidon, Ptolemaïs, ΤΑ, ΤΠΙ, and ΠΟΙ, with the inscription ΠΤΟΛΕΜΑΙΟΥ ΒΑΣΙΛΕΩΣ, and no dates, are before the 22nd year.

2. All the coins of these mints, with the inscription ΠΤΟΛΕΜΑΙΟΥ ΣΩΤΗΡΟΣ, and no dates, or with dates either below 25 or above 40, are of a successor of Ptolemy I.

These classes I shall next notice. I may here observe that I have spoken of years of Ptolemy I., not of the Era of Philip (Aridæus). There can be little question that the use of the Era of Philip, during Ptolemy's lifetime, was simply dating from the accession of the latter to power as governor, B.C. 324. Any dates from B.C. 324, after Ptolemy's death, must be by an era, and this may be called that of Philip.

Reginald Stuart Poole.

(To be continued.)
III.

ON THE JEWISH COINS WHICH BEAR THE NAME "SIMON."

Except the short review in the Numismatic Chronicle of the new work of Dr. Levy on the "Jewish Coinage," no precise notice of his new attributions have been given to English readers. It may not, then, be uninteresting to give a brief sketch of the later Jewish coinage, viz., of those coins which De Saulcy has attributed, en masse, to Simon Bar-cochab.

As a fit introduction to the period, it will be necessary, briefly to record the discovery by M. de Vogüé¹ of coins of Eleazar the High Priest. This Eleazar, son of Simon, who must not be confounded with Eleazar, son of Ananias, had especially distinguished himself among the Zealots, having returned to Jerusalem with treasures taken from the Roman general, Cestius Gallus. He was the head of one of the great factions, having, as his opponents, John of Gischala, and Simon, son of Gioras, but after a long struggle was eventually put to death by John. The coins now attributed to him are of silver and copper. On the obverse of the silver coins the legend is אֵלֶעָזָר חַכָּם ("Eleazar the [High] Priest"), written round a vase and palm-branch; on the reverse, [בַּשָּׁנָה נֶלֶטָה לְאַרְגֶּן ("First year of the redemption of Israel"), round a cluster

¹ Revue Numismatique, 1860, p. 280, seq.
of grapes. This silver coin is of the utmost importance, as it throws considerable light on some curious copper coins which sorely puzzled Perez Bayer and De Saulcy. Indeed, the former writer conceived that the legends were composed in a secret alphabet. This, however, is not the case, as a careful examination proves that the legend has only been written backwards on either side of the palm-tree, and is precisely similar to that on the obverse of the silver coins. A similar coin to the silver one of Eleazar had already been published by De Saulcy, but without De Vogüé's specimen it would have been impossible ever to have deciphered the obverse legend. There is now no doubt that it is a similar coin. The reverse, however, is different, for it merely shows the letters ṣm within a wreath. These are, of course, part of the name of [חיים] ("Simon"). This coin is considered as a forgery by De Saulcy and De Vogüé, but cast from a genuine original, and the latter numismatist considers that the forger copied the two sides from two different coins—one of Eleazar's and one of Simon's. Levy, however, is of opinion that a coin may have existed with Eleazar's name on one side and Simon's on the other, and that the coin was struck when the two leaders were at peace, and stamped joint coins. What gives an additional importance to these coins of Eleazar is, that they make one step in advance for Old Hebrew coin palæography, adding the letter Zain to the known alphabet. There are now only wanting Teth, Samech, and Phe.

The shekels with the legend שְׁלֹשָׁה ("Jerusalem") round a tetrastyle temple, engraved in De Saulcy (pl. xi. No. 1),

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are also attributed by Levy to Eleazar, who, at the same time, suggests that they may have been struck by the Sanhedrim, who at this period possessed the highest power. They have on the obverse "First year of the redemption of Israel," a legend similar to that on the Eleazar coins, for upon other shekels, instead of רַבְשְׁלֵה, we find רַבְשֶׁל. The similar shekel of the second year, from this very fact, is not free from suspicion; indeed De Saulcy has already considered it as doubtful.

Having thus very briefly stated the coinage of one of the principal leaders of the First Revolt, we can now pass on to the mass of coins bearing the name of "Simon."

Levy has attributed coins to three Simons (I, of course, exclude Simon Maccabæus):

I. Simon, son of Gioras.
II. Simon, son of Gamaliel, and with him the Sanhedrim.
III. Simon Bar-cochab.

The coins of Simon, son of Gioras, bear types similar to those of Eleazar. They are undated and dated; the dated are of the "second year." Hence there is an objection to their belonging to this Simon, for he did not enter Jerusalem until the third year. He was, however, from the beginning, a man in great power, having collected a considerable army; and there seems no reason to doubt that, even whilst outside Jerusalem, he struck coins, similar to those struck by Eleazar in the city. As, then, no coins of Simon have been discovered with a higher date than "year two," the coins without date belong to the first year of his entry into Jerusalem ( yönelik יִרְאֶה), and those

4 De Saulcy, Num. Jud., pl. xi. No. 4; pl. xiv. No. 4.
with the year two and the legend וֹאַרְיָא רָבָּה belong to his second year, thus agreeing with the time of his government in Jerusalem, a.d. 69 and a.d. 70. Copper coins, also, similar to those of Eleazar, have been attributed to him. For brevity, I give references to De Saulcy’s plates, xii. 4; xiv. 5; xii. 9—12; xiii. 1—5; xiv. 6—9; xv. 1—4.

Simon, Son of Gamaliel, and the Supreme Authority.

Simon, son of the famous Gamaliel, “the beauty of the law,” was at the head of the Jewish Sanhedrim at the period of the revolt, and agreeably with his position bore the title of Nasi. Now there are several copper coins on which can be read distinctly שִׁמְואל פַּרְנָס (‘Simon, Prince of Israel’). They are engraved by De Saulcy, pl. xiii. No. 8, and pl. xiv. Nos. 1, 2. The first mentioned of these is the extraordinary large piece unlike any other Jewish coin. The obverse legend of these coins of the first year of this class is שִׁמְואל פַּרְנָס לְאַסְדָּא וֹאַרְיָא, whilst on those of the second we find שִׁמְּוֹא[ל] מַלְשָׁרַא וֹאַרְיָא.

Other copper coins (Cf. De Saulcy, Num. Jud., pl. xi. No. 2) are also said to bear the title Nasi, and De Vogüé has a specimen in his cabinet reading quite clearly.

To the Supreme Authority it is proposed to attribute the only two small copper coins, given by De Saulcy to the time of the revolt under Nero. They bear respectively the dates, “year two” and “year three;” for the “first year” the other copper coins of Simon Nasi sufficed, and no coins of the fourth year have yet been discovered.

Simon Bar-cochab.

We have already shown that many of the coins bearing the name Simon, and attributed by De Saulcy to Bar-
cochab, may, in all probability, belong to the Simons of the earlier revolt; and the more so, as the only authority that Bar-cochab ever bore the name of Simon, rests on the authority of the coins alone. All writers call him either Ben-Kosiba, Bar-Kosiba, Bar-Khochba, or Bar-Chochebas; and taking into consideration whether he ever really possessed Jerusalem, or whether the types of the coins were really understood symbols in the second century after the destruction of the sanctuary, it is not to be wondered at that he adopted the names and types of his predecessor, Simon, son of Gioras. In consequence Levy prefers only attributing to Bar-cochab the pieces which are re-coined.

The shekels with a star over the temple, which Levy attributes to Simon, son of Gioras, we still prefer considering as struck by Bar-cochab, as not only is it likely that there is some allusion to his name (son of a star) in this emblem, but we have never seen a piece which does not bear traces of re-striking.

I have thus very briefly called attention to this branch of Jewish coinage to show how entirely it has been remodelled by Dr. Levy. Anything like an attempt to discuss all the minute historical statements of this period would be impossible in such limited space. To those who may be interested in the Jewish coinage, I may state that I have carefully read the works of Cavedoni and Levy, and have given their opinions to English readers, in a work on "The Jewish Coinage," which shortly will be published.

F. W. MADDEN.
IV.

ON SOME ANGLO-SAXON SCEATTAS FOUND IN FRIESLAND.

In the last Number of the *Revue de la Numismatique Belge* (4th ser., vol. i. part 4, p. 393) there is a notice by M. J. Dirks of some ancient coins found in Friesland, but owing to the late period at which the *Revue* was received, there was not given the attention due to it in our last Number. On the present occasion I propose to give some account of the discovery and of the nature of the coins, as well as an abstract of the principal comments upon them contained in M. Dirks' interesting paper.

Early in March, 1863, there were found, near the village of Terwispe (commune of Opsterland, province of Friesland), in the upper soil of a field where peat is dug, a little to the south of the spot where the stream called the Koningsdiep takes the name of Boorn (*fluvius Burdo*), a number of objects in silver. Fortunately these objects were preserved, and offered to the Historical, Archæological, and Philological Society of Friesland, for their collection at Leeuwarden.

The principal part of the find consisted of 161 small silver coins (of which two were broken), and some other objects in silver, viz., a small ingot, two or three small flat pieces of silver (of which one was rolled up), and the slightly ornamental setting of a precious stone or jewel.
The whole was enveloped in *adipocere*, which is supposed to have resulted from the decomposition of a human body.

It is remarkable that the place where the discovery was made is close to where the Boorn becomes navigable, and that this river, which is mentioned by Frisian annalists as the *Burdo fluvius*, formerly flowed into an arm of the sea which once traversed Friesland, but has long since been dried up. It is a place which would suit well for an emigrant to embark and set sail for Britain in one of those frail barques in which the channel used to be crossed when this arm of the sea still existed. On examination, M. Dirks immediately recognised the coins as belonging to the class called Anglo-Saxon, such as M. C. A. Rethaan Macaré had described in 1838, in his "Verhandelingen" (*Dissertations sur les monnaies trouvées à Domburg en Zélande*), vol. i. p. 30, pl. iii. No. 65; and in 1856, vol. ii. p. 42. They had also been described by Lelewel (Type Gaulois, p. 426, pl. xii. No. 11). The type is in fact that of Ruding, pl. ii. No. 7; and Hawkins, pl. iii. No. 44, though, judging from the woodcuts given of two of the coins, even more barbarous.

On the obverse is a bearded head with long hair, or possibly radiated, between two small crosses, and surrounded by a triple circle, the middle one beaded. On the reverse is a crouching animal, variously described as a deer, a horse, or a dragon, surrounded by a similar triple circle.

M. Rethaan Macaré observed (vol. i. p. 30) that the coins found at Domburg (which also was a place of embarkation to cross the North Sea) were very like a coin engraved by Bircherod in his *Specimen antique rei monetariae Danorum*, and was inclined at first to class them among the Danish or Norwegian coins, though he afterwards came round to Lelewel's opinion that they were
Anglo-Saxon sceattas. He even conjectured that they were struck in the province of Mercia, or one of the neighbouring provinces, as a large number of them had been found mixed with coins of Kent.

Prof. Van der Chijs, of Leyden, has informed M. Dirks that some time ago he received from a student of Bolsward, a town in Friesland, some of these sceattas, also found in that province, of which he has engraved four varieties in pl. ii. Nos. 29—32, vol. ix. of his great work on the various coinages of the Low Countries. This proves that the present is not the only find of these coins which has occurred in Friesland. The question which arises is, whether these coins were struck in Britain and exported into Friesland, or struck in Friesland to be exported into Britain. M. Dirks is inclined to see in them the first coins of the Anglo-Saxons before their passage into England. Of the two finds the last was perfectly free from the admixture of any other coins, which shows that the owner could not have travelled far when he perished in crossing Friesland. As to the number of Anglo-Saxon hordes which passed through the Low Countries, the learned and interesting researches of M. P. C. Molhuysen leave no doubt. They have left traces of their passage in the names of several places in Guelderland, Overyssel, &c.—Anglo-Saxon names which in part recur in England. And doubtless the Bocerdicp, that arm of the sea which formerly traversed Friesland, was one of the shortest roads for the Anglo-Saxons embarking for Britain.

Lelewel sees on these sceattas a re-apparition of the Gaulish type; but M. Dirks regards the type as purely German or Anglo-Saxon, and considering the animal on the reverse to be a horse, cites Tacitus, Bede, Grimm, and other authorities, to show the honour in which the
horse was held by the Germans, and the probability of its being adopted as a national symbol upon their coins. He leaves it, however, for German and English numismatists to decide the original home of these coins. Thus far M. Dirks.

Whatever that home may eventually prove to be, I must for myself confess that I cannot regard the animal on the reverse of the coins as a horse, but though the three claws or tocs into which both fore and hind feet are divided preclude the possibility of its being a horse, it seems beyond the power of either naturalist or palæontologist to refer it with certainty, from the form shown on these coins, to any known genus. Mr. C. Roach Smith, who has kindly written to me on the subject of these coins, regards the animal as a hound, and judging from the character it assumes on some coins of this class, there can be but little doubt that his view is correct. In his opinion the coins were much more likely to have been struck in England than in Friesland, especially as this peculiar hound is common to all the very earliest Saxon works we have of various kinds. Mr. C. Roach Smith regards the coins as probably belonging to the seventh or eighth century; but if the Kentish sceattas of Æthilberht I., whose reign extended from A.D. 568 to A.D. 615, are rightly attributed, a still earlier date may safely be assigned them. As the case stands, however, there would, on the assumption that the sceatta (Hawk., No. 42) with the legend EDILID REX was a coin of Æthilberht I., be a gap in the Kentish series from A.D. 615 to A.D. 725, or rather 749, when the coins of Æthilberht II. come in. The attribution of the inscribed sceattas is, however, a subject which cannot be hastily discussed, and one on which a variety of opinions has been held by different numismatists. Still the use of the term sceat or sceatta
in the laws of Æthilberht I., King of Kent, proves that coins, probably such as those to which the name of sceatta has been given by antiquaries, were in circulation in England at the end of the sixth century. As has already been pointed out by Mr. Roach Smith, there were cohorts of Frisians in Britain as early as the days of Trajan and Hadrian;¹ and Pliny, lib. xxv. c. 3, suggests that the herb Britannica, “good for the squinancie and stinging of serpents,” was so called by the Frisians on account of their neighbourhood to Britain. Still, any Frisian immigrants brought over by the Romans must have become absorbed among the native population long before these coins were struck, and the reason of their being found both in England and Friesland must be sought in some other connection between the two countries.

It is of course notorious that the Frisians were among the tribes by whom, after the close of the Roman dominion, the eastern parts of Britain were peopled, but I think that a passage in Procopius (Hist., lib. iv. c. 20) will be found to throw some light upon this question; and though the author was unable to perceive that the Brittia and Britannia to which his account refers were one and the same island, yet his account of the close intimacy subsisting between the Angili, Phrisones, and Brittones—or the Angles, Frisians, and Britons—must in the main be true:—“In this [Northern] ocean lies the island Brittia, not far from the continent, but as much as two hundred stadia, right opposite to the outlets of the Rhine, and is between Britannia and the island Thule. For Brittania lies somewhere towards the setting sun, at the extremity of the country of the Spaniards, distant from the continent not less than four thousand stadia. But Brittia lies at

the hindermost extremity of Gaul, where it borders on the ocean, that is to say, to the north of Spain and Britain. . . . . Three very numerous nations possess Brittia, over each of which a king presides; which nations are named Angili, Phrissones, and those surnamed from the island, Brittones; so great indeed appears the fecundity of these nations, that every year vast numbers, migrating thence with their wives and children, go to the Franks, who colonise them in such places as seem the most desert parts of their country; and upon this circumstance, they say, they found a claim to the island. Insomuch indeed, that, not long since, the king of the Franks despatching some of his own people on an embassy to the emperor Justinian at Byzantium, sent with them also certain of the Angili; thus making a show as though this island also was ruled by him. Such, then, are the matters relating to the island called Brittia."

Procopius, who wrote this account, was born at the beginning of the sixth century, and died about the year 565. His history comes down to the year 553, and that portion of it which I have here cited is referred by the editors of the "Monumenta Historica Britannica" to about A.D. 548.

Looking at the close connection between Britain and Friesland pointed out by Procopius, and looking at the fact that these sceattas have been found in some abundance in both countries, there may be some difficulty in determining in which of them they were struck, though the probability is in favour of their mintage in Britain; but at all events I think we shall not be far wrong in assigning them to about the middle of the sixth century, and regarding them as struck by Frisian tribes, either in Britain or Friesland, rather than by the Angles.

John Evans.
On Saturday, the 24th of October, 1863, a workman employed in excavating at the corner formed by the Old Butter Market and White Hart Lane, at Ipswich, found at the depth of several feet from the surface a roundish mass, which proved to consist of silver coins, mostly in such a state of oxidisation as to break at the slightest touch. Mr. Richard S. Francis, of Ipswich, who has kindly communicated an account of this discovery to me, considers that there must have been about 500 coins in the mass, out of which some 100 or 120 only were in anything like a good state of preservation. In his opinion the deposit had been disturbed on some former occasion, for the mass adhering together was found in the midst of a quantity of rubbish which had evidently been shot down subsequently to the burial of the coins. There were fragments of three or four urns within two or three feet of the spot where the coins were found.

All the coins, as far as I have been able to ascertain, are pennies of Æthelred II. With two exceptions, they are of the type Ruding, pl. xxi. 9; Hildebrand, type B, 1, with the Hand of Providence on the reverse between the letters A and W. Two, however, had the head to the left,
like Ruding, pl. D, 35, and Hildebrand, type B, var. A. By the assistance of Mr. Francis, the Rev. J. H. Pollexfen, and Mr. Joseph Warren, I have been enabled to catalogue about 60 of the coins, which I have arranged under the different mints in the following list. Those with an asterisk affixed give the names of moneys not mentioned in Hildebrand in connection with this type.

**BATH.**

* + ÆDELSELIE M—O BAD.

**BEDFORD.**

+ OSPI MONETA BEDAF.

**CAMBRIDGE.**

* + HVNSTAN M—O LRANT.

**CANTERBURY.**

+ BOIA M—O LÆNT. (Hild. B. I. var. A.—NL of ANLLO in monogram).

+ BOIA M—O LÆNT.

+ LIFINE M—O LÆNTPA.

**IPSWICH.**

* + GODMAN M—O LYP.

+ LEOFMAN M—O LIPES. (2 specimens. One reads ÆDILRED).

+ LEORIL M—O LYPEL. (6 specimens.)

+ LEOIRIL M—O LIPES.

* + OSVLF M—O LYPESPIL.

* + PALTHERD M—O LIP. (6 specimens.)

* + PALTHERG M—O LIP. (2 specimens.)

* + PALTHERD M—O LYP.

* + PILBERT MONETA LIPIES. (Û—A on rev.)
London.
+ ÆLFGR M—O LVND.
+ ÆLFpine M_O LVND.
+ ÆDERED M—O LVND. (2 specimens.)
* + ÆDESTAN M—O LVN.
+ BEORNNVLF M—O LVND. 
+ EADPOLD M—O LVND.
+ GODPINE M—O LVNDN. (2 specimens.)
+ LOFRIC M—O LVNDONI. (2 specimens.)
+ PVLRIE M—O LVD. (Var. of PVLRIEL.)

Lymne.
* + EAĐZTAN M—O TIMA.

Norwich.
* + BRANTING MŌ NORDPIL. (ω—A on rev.)
+ LIVIN MONETA NORDPIL.
+ LIVIN MONETA NORDPIL. (ω—A on rev.)
+ MANNINE MŌ NORDPIL. (ω—A on rev.)

Rochester.
+ EADELM M—O ROFE .: (3 specimens.)

Southampton.
* + LEOFSTIG M—O HAMT.

Stamford.
* + PVLSTAN M—O STA.

Thetford.
+ OSFYRD M—O ÆOTFORD.
+ OSFERD M—O ÆOTFO.
+ SPYRLINE M—O ÆOTFORD.

Worcester.
* + HAN M—O PILERAL.

York.
* + FASTVLF M—O EOF.
* + SVNVLF M—O EEERPIL.
In looking over this list of coins the eye is at once struck with the great preponderance of those struck at Ipswich itself over those from any other mint, and such an abundance of coins of local issue is no more than might have been expected in a case of the kind. What, however, appears to me a most remarkable circumstance is this, that though we have in this hoard coins issued from no less than fourteen distinct mints, and struck by upwards of thirty different moneyers, and though there are at least seven types known of the coins of Æthelred II., yet all the coins comprised in this hoard seem to have been of one type on the reverse—that of the Hand of Providence between A and W,—and no coins of any other monarch were present. It would almost seem as if the original possessor of the treasure had been actuated by some religious motive in restricting his hoarding to coins of this particular type. But however this may have been, the prevalence of this type seems to fix the original deposit of the hoard to the first half of the reign of Æthelred II. Of his various types specified by Mr. Hawkins, the first in order would seem to be among the latest in date, as we find almost the identical type occurring among the coins of Harthacnut (Hawkins, No. 218). Another type (Hawkins, No. 204), that with CRVX in the angles of a cross, is more closely allied to the coin of Cnut with the word PACX arranged in a similar manner, than to any coins of preceding monarchs, and may therefore probably be placed towards the latter half of his reign. A third type (Hawkins, No. 207), with the cross extending to the edge of the coin, is also evidently more nearly allied to the coins of the succeeding than of the preceding kings. There remain, then, two principal types (Hawkins, Nos. 205 and 206) which may
be assigned to the early part of the reign of Æthelred II. With the first type I have little concern on the present occasion, but I may mention that it is identical with that of coins of Eadgar and Eadward II., and that we find moneyers—such as Lifinc at Ipswich, and Ædstan at Lymne—striking the same type under the earlier monarchs as they did under Æthelred II.

The type of the reverse of the coins of the Ipswich hoard first made its appearance under Eadward II., as we know from the coin formerly in the Cuff collection (Ruding, pl. C, 20), apparently struck at Canterbury. Few coins can, however, have been struck under Eadward of the type, as only this one specimen is known; but under Æthelred the type appears to have been adopted at nearly all his mints, and the commencement of its issue probably followed on immediately upon his accession, as the device is identical with that on the coin of his predecessor. On some coins, indeed, we have the hand in the attitude of benediction, much like that on some of the coins of Eadward the Elder; but this is a mere modification of the device, and I have not heard of any of this variety having been present in the Ipswich hoard.

It is much to be regretted that Ruding, in making his lists of moneyers and mints, separated the one from the other, so that he gives no information as to the names of those who had the charge of the dies at each place of coinage under the different monarchs. Hildebrand’s lists, which are infinitely superior, unfortunately supply but few names of moneyers under Eadward II.; ÆÐΣTAN at Lymne, and ÆÐELRED at London, appear, however, among them, and are doubtless the same names as are, rather differently spelt, on the coins I have catalogued.

Of the other moneyers, Leofric at Ipswich, Sunulf at
York, and Ælfgar, Ælfwine, Wulfric, Eadwold, Godwine, and Liofric at London, all seem to have remained in office until the days of Cnut, and the three latter until those of Harold I., unless possibly they were succeeded by other moneyers of the same name.

Concerning the mints, there is not much to remark, except that PILERAL seems to give a new form of abbreviation of Wigeraceaster or Wilraceaster, though PILER is a form already known. The mint at Lymne, though mentioned in Ruding (vol. i. p. 132, and elsewhere), does not appear in his account of the mints in Kent, given in vol. ii. p. 177. There can, however, be but little doubt that LMA, LIMEN, LIMAN, LIMÆ, LIMNA, LIMNV, LMIV, LIMNI, LIMENE, LINEA, which occur on coins of Edgar, Eadweard II., Æthelred II., Cnut, and Edward the Confessor, designate that place—the ancient Portus Lemanis. Its name at the present time is spelt in various ways—Lypnne, Lymne, Lyminge, &c.

Mr. Sainthill (Num. Journ., vol. ii. p. 46), in attributing coins to this mint, suggests that from the similarity of two coins—the one struck by "Leofric M-o Limna," and the other by "Leofric M-o Rosc"—probably Leofric was moneyer at both Lymne and Rochester. A comparison, however, of the moneyers' names at the two places does not bear out this suggestion, and Leofric was a name so common that it appears on coins from at least thirteen different mints of Æthelred II.

An interesting account of discoveries made on the site of the Roman castrum at Lymne will be found in C. Roach Smith's "Richborough, Reculver, and Lymne," and in the same author's "Report upon the Excavations" made there in the year 1850.

John Evans.
VI.

ACCOUNT OF A COLLECTION OF CHINESE COINS IN THE POSSESSION OF W. H. BLACK, ESQ., F.S.A. AND OF OTHERS IN THE POSSESSION OF CAPTAIN ARCHER.

[Read before the Numismatic Society, Dec. 18, 1862.]

I have once more to call the attention of the Numismatic Society to the subject of Chinese numismatics. Since the last meeting, Mr. W. H. Black has put into my hands for examination the collection of coins I now, by his permission, exhibit, and have much pleasure in laying before you the result of my investigation of them.

I will first call your attention to the ingenious manner in which these coins are kept together. A stout wire is bent at one end into a loop of considerable size, and being flattened at the other end, is there perforated. Chinese coins, as you are doubtless all aware, have large square holes in the centre. The prepared wire is passed through these holes, and the coins are effectually secured by means of a padlock passed through the perforation in the wire before mentioned. They may thus be examined in detail without difficulty, and also without the slightest danger of any of them coming off the wire, or of their being abstracted without the knowledge of the proprietor. Each coin has on it a label, on which is given the important part of the inscription on the coin, and the date is added in European figures. Mr. Black has attached a
note to the following effect:—"Sent to me from Fouchow, in China, from Thomas H. Chapman, Esq., per 'Mencius,' Capt. Williamson, and received at Mill Yard on 24th April, 1860."

The coins range in date from about the Christian era to the present time, the earliest being of Wang-Mang, who usurped the throne of China during the Han dynasty, about A.D. 30. A Pwan-Lcang coin comes next. These range from 315 B.C. to 81 A.D.; the last date seems to have been taken here.

The collection is particularly rich in coins of the Sung dynasty, A.D. 951 to 1275, the coins of but one Emperor being absent. From thence it passes at once to the Ming; but few of these, however, are in the collection, there being but a single coin of each of seven of these Emperors. It is a very remarkable circumstance that there are here no coins of the Yuen dynasty, that which comes between the Sung and the Ming; and I may add, as worthy of notice, that, in three collections that have lately passed through my hands—viz., the deposit in the statue of Buddha, that brought to the society the meeting before the last, on which I presented a report which is inserted at the end of this paper, and that now before us—each should be totally deficient in the coins of that particular dynasty, whilst earlier and later coins were present in each instance.

In the present collection there are also seventeen coins, many of which relate to those states and chiefs who, at the close of the Ming, withstood the present Tartar dynasty for several years. The labels on these have all the same dates—viz., 1628 to 1643; but many of the coins are of later date, and one earlier. Some of these coins do not occur in the Chinese numismatic works with
which I am acquainted, and, consequently, I have been unable to appropriate them. The others I have duly placed under their respective chiefs or states.

The collection finishes with coins of the seven Emperors of the present dynasty, commencing with Shun Che, 1644, and ending with Heen Fung, 1851. I use those epithets, although they are not names, but epochs, as the emperors are better known under those appellations than by their real names.

I have appended a list of these coins, eighty in number, in which I have arranged them in columns chronologically. The first column gives the name of the dynasty; the second the name by which each emperor is known after his death; the third contains the epoch; and the fourth the date. I must, however, remark, that without the original Chinese characters this list will appear obscure to the Chinese scholar, and I fear will be of little interest to ordinary readers. Nevertheless, it may have some interest as showing the general nature of a genuine collection of Chinese coins, made, as I am informed, by an eminent antiquary of that nation.

**List of the Chinese Coins belonging to W. H. Black, Esq., secured on the Wire as before described.**

The first two coins on the wire inscribed Sung Tih and Shing Yuen, are said on the labels to be "woo laou," not ancient. I do not find them in any of the Chinese numismatic works to which I have access, they are consequently unappropriated.

The coins which follow are—

<table>
<thead>
<tr>
<th>Dynasty</th>
<th>Emperor</th>
<th>Epoch</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Han</td>
<td>Wang Mang</td>
<td>Ho Tsuen</td>
<td>A.D. 29 to 30.</td>
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<td></td>
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<td>These coins</td>
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<td></td>
<td></td>
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<td>range from B.C.</td>
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<td>215 to A.D. 81.</td>
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<tr>
<td>Tang</td>
<td>Kaou Tsuo</td>
<td>Kae Yuen</td>
<td>A.D. 623 to 637</td>
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<td></td>
<td>Suh Tsung</td>
<td>Keen Yuen</td>
<td>746, 752</td>
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<tr>
<td>How Chow</td>
<td>She Tsung</td>
<td>Chow Yuen</td>
<td>942, 944</td>
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<tr>
<td>Kin</td>
<td>She Tsung</td>
<td>Ta Ting</td>
<td>About A.D. 950</td>
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<tr>
<td>Yang Woo (a state)</td>
<td>Fei Te</td>
<td>Ching Tsung</td>
<td>Id.</td>
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<td></td>
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<td></td>
<td>Yang Woo</td>
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<tr>
<td>Dynasty</td>
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<tr>
<td>Ta Tsung</td>
<td>Sung Yuen</td>
<td>A.D. 951 to 967</td>
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<td></td>
<td>Tae Ping</td>
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<td>Che Taou</td>
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<td>Shun Hwa</td>
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<td>Han Ping</td>
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<td>Teen He</td>
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<td>Seang Foo</td>
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<td>King Th</td>
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<td>Hwang Sung</td>
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<td>King Yew</td>
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<td>Che Ho</td>
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<td>Kea Yew</td>
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<td>Ming Taou</td>
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<td>Teen Shing</td>
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<td></td>
<td>Yung Tsung</td>
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<td>1004 „ 1007</td>
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<td>He Ping</td>
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<td>Hea Ning</td>
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<td>1008 „ 1085</td>
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<td>Yuen Fung</td>
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<td>Yuen Foo</td>
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<td></td>
<td>Yuen Yew</td>
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<td>1086 „ 1100</td>
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<td>Shing Sung</td>
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<td></td>
<td>Ta Kwan</td>
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<td></td>
<td>Hwuy Tsung</td>
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<td>1101 „ 1125</td>
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<td>Seun Ho</td>
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<td>Ching Ho</td>
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<td>Tsung Ning</td>
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<td>Shaou Hing</td>
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<td>1128 „ 1163</td>
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<td>Keen Yen</td>
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<td>Hea Tsung</td>
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<td>Keen Tso</td>
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<td>1164 „ 1190</td>
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<td>Shun He</td>
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<td></td>
<td>Shaou He</td>
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<td>1191 „ 1195</td>
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<tr>
<td>Nan, or Eastern Sung</td>
<td>Ning Tsung</td>
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<td></td>
<td>Kea Ting</td>
<td></td>
<td>1196 „ 1225</td>
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<td></td>
<td>Kea Tae</td>
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<td></td>
<td>Kae He</td>
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<td></td>
<td>King Yuen</td>
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<td></td>
<td>Shun Yew</td>
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<td></td>
<td>Hwang Sung</td>
<td></td>
<td>1226 „ 1265</td>
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<td></td>
<td>Chaou Ting</td>
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<td></td>
<td>King Ting</td>
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<tr>
<td>Ming</td>
<td>Too Tsung</td>
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<td>1266 „ 1275</td>
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<td></td>
<td>Han Shun</td>
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<td></td>
<td>Tae Tsoo</td>
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<td>1367 „ 1397</td>
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<td></td>
<td>Hung Woo</td>
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<td></td>
<td>Ching Tsoo</td>
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<td>1402 „ 1423</td>
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<td></td>
<td>Yung Yo</td>
<td></td>
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<td></td>
<td>Shu Tsoo</td>
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<td>1521 „ 1565</td>
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<td></td>
<td>Kea Tung</td>
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<td></td>
<td>Shin Tsung</td>
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<td>1572 „ 1619</td>
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<td></td>
<td>Wan Leih</td>
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<td></td>
<td>Kwang Tsoo</td>
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<td>1620</td>
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<td>Tae Chang</td>
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<td></td>
<td>He Tsoo</td>
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<td>1621 „ 1627</td>
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<td></td>
<td>Teen Ke</td>
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<td></td>
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<tr>
<td></td>
<td>Wae Tsoo</td>
<td></td>
<td>1628 „ 1643</td>
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<tr>
<td></td>
<td>Tsung Ching</td>
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</tbody>
</table>

At the close of the Ming dynasty, many chiefs and states withstood the Tartars for many years. The next seventeen coins, with one exception, were struck during that period, or about that time. The labels on them
refer the whole of them to the same dates as the last—viz., 1628 to 1643. Many of them are, however, of later date. I am unable to appropriate the whole of these, as some of them do not occur in the Chinese works to which I have access. Such as I have been able to identify are referred to the several chiefs and states by whom they were struck.

**DYNASTY** | **CHIEF OR STATE** | **EPOCH** | **DATE**
---|---|---|---
The Korea | Hwan Yung | 1605 to 1623 | 1625 to 1623
Unappropriated | | | 1625 to 1623
Le Hwuy, in Cochin China | King Tung | | 1625 to 1623
Woo She Fan (Chief) | Hwuy Hwa | | 1625 to 1623
Woo San Kwei | Chaou Woo | | 1625 to 1623
"Fuh Wang, in Ying Teen" | Le Yung | | 1625 to 1623
Yung Ming Wang, in Kwang Tung | Hung Kwang | | 1625 to 1623
Tang Wang, in Fuh Keen | Lung Woo | | 1625 to 1623
King Tsing Chung (Chief) | Yu Min | | 1625 to 1623
Chang Heen Chung | Ta Shun | | 1625 to 1623
She Tao | Shun Che | 1644, 1661 | 1644, 1661
Shiu Tao | Kang He | 1662, 1722 | 1662, 1722
She Tsung | Yung Ching | 1723, 1735 | 1723, 1735
Keen Lung | 1736, 1795 | 1736, 1795
Kea King | 1796, 1820 | 1796, 1820
Taou Kwang | 1821, 1850 | 1821, 1850
Heen Fung | 1851, 1860 | 1851, 1860

There are altogether 80 coins.

I have also carefully examined the Chinese coins forwarded to the society by Captain Archer, and have much pleasure in laying before you an account of them. The earliest are those termed Taou (knife) and Poo. One of these Taou coins (the long one) appears to be genuine; the short and thick one is possibly a cast. The former is of considerable antiquity, possibly one or two hundred years before the Christian era. The latter is referred by
Chinese authors to Wang Mang, who usurped the throne during the Han dynasty, and occupied it at the commencement of the Christian era. The coins called Poo are also referred to the same Emperor. There are four specimens of these, possibly casts. There is also a round coin of Wang Mang marked "Ta Tsuen Woo Shih." There are four round coins marked "Pwan Leang," and one "Woo Choo." These are also of great antiquity, and are as early, if not earlier, than those just mentioned.

The remaining coins are also round, and are as follows:

<table>
<thead>
<tr>
<th>Dynasty</th>
<th>Emperor</th>
<th>Epoch</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chin</td>
<td>Wan Te</td>
<td>Poo Tuen</td>
<td>A.D. 555</td>
</tr>
<tr>
<td>Lin Sze Hung (a state)</td>
<td>Shin Tsung</td>
<td>Tae Ping</td>
<td>About A.D. 580</td>
</tr>
<tr>
<td>Sung</td>
<td>&quot;</td>
<td>Yuen Fung</td>
<td>A.D. 1068</td>
</tr>
<tr>
<td>&quot;</td>
<td>Hway Tsung</td>
<td>Shing Sung</td>
<td>1101</td>
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<tr>
<td>&quot;</td>
<td>&quot;</td>
<td>Ching Ho</td>
<td>&quot;</td>
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<tr>
<td>&quot;</td>
<td>Fci Te</td>
<td>Tsung Ning</td>
<td>1126</td>
</tr>
<tr>
<td>Kin</td>
<td>&quot;</td>
<td>Ching Sung</td>
<td>1126</td>
</tr>
<tr>
<td>Ming</td>
<td>Ta Tssoo</td>
<td>Ta Chang</td>
<td>1370</td>
</tr>
<tr>
<td>&quot;</td>
<td>He Tsung</td>
<td>Teen Ke</td>
<td>1621</td>
</tr>
<tr>
<td>&quot;</td>
<td>Hwae Tsung</td>
<td>Tsung Ching</td>
<td>1628</td>
</tr>
<tr>
<td>Tsing</td>
<td>Shin Tssoo</td>
<td>Kang He</td>
<td>1660</td>
</tr>
<tr>
<td>&quot;</td>
<td>&quot;</td>
<td>Heen Fung</td>
<td>1851</td>
</tr>
</tbody>
</table>

John Williams.
VII.

ANCIENT INDIAN WEIGHTS.

The attention of archaeologists has recently been attracted to the weights and measures of ancient nations by the elaborate work of M. Queipo,\(^1\) and the less voluminous, but more directly interesting article of Mr. R. S. Poole, on the Babylonian and other early metrologies.\(^2\) At the present day, when ethnological inquiries engross such an unprecedented share of public notice, any parallel study—that may contribute by material and tangible evidence to check erroneous or suitably aid and uphold sound theories, should be freely welcomed, however much its details may threaten to prove tedious, or the locality whence its data are drawn may be removed beyond the more favoured circles of research.

The system of Indian weights, in its local development, though necessarily possessing a minor claim upon the consideration of the European world, may well maintain a leading position in the general investigation, on the ground of its primitive and independent organisation, and the very ancient date at which its terms were embodied and

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defined in writing; while to numismatists it offers the exceptional interest of possessing extant equivalents of the specified weights given in the archaic documentary record, Sanskrit literature, under the regained faculty of interpretation acquired by Western scholars, proves to have preserved in the text of the original code of Hindu law; as professedly expounded by Manu, and incorporated in the "Mānava Dharma Sāstra." The positive epoch of this work is undetermined; but it confessedly represents, in its precepts, a state of society considerably anterior to the ultimate date of their collection and committal to writing; while the body of the compilation is assigned, on speculative grounds, to from B.C. 1280 to B.C. 880.

3 I trust that European scholars will not imagine that I desire to ignore Megasthenes' statement, that the Indians had "no written laws." (Strabo, xv. c. i. § 53.) This is, indeed, precisely the testimony—seeing the source from whence it was derived—we should expect from what we now know of Brahmanical policy. As to the addition "who are ignorant even of writing," this ridiculous assertion had previously been nullified by the more accurate information of Nearchus (Strabo, xv. c. i. § 67), and is further conclusively refuted by the incidental evidence contained in the remarkable passage in the same work where it is stated, "At the beginning of the new year all the philosophers repair to the king at the gate, and anything useful which they have committed to writing, or observed tending to improve the productions of the earth, is then publicly declared." (xv. c. i. § 39).

4 Max Müller's "Sanskrit Literature," pp. 61, 62. "The code of Manu is almost the only work in Sanskrit literature which has as yet not been assailed by those who doubt the antiquity of everything Indian."

Professor H. H. Wilson, though hesitating to admit the high antiquity of the entire bulk of the composition, was fully prepared to assign many passages to a date "at least" as early as 800 B.C.—Prinsep's "Essays," i., note, p. 222. See also Professor Wilson's translation of the "Rig Veda Sanhitá," i. p. xlvii.

M. Vivien de St. Martin places Manu under "la période des
It is a singular and highly suggestive fact that numismatic testimony should have already taught us to look for the site of the chief seat of ancient civilisation in northern India, to the westward of the upper Jumna—a tract, for ages past, relatively impoverished. For such a deduction we have now indirect, but not the less valuable historical authority, derived in parallel coincidence from the comparative geography of the Vedic period, and from the verbatim text of Manu, the integrity of which seems, for the major part, to have been scrupulously preserved.

The most prolific field among the favoured resorts of our native coin-collectors, in olden time, chanced to be the exact section of the country constituting the Brahmacarī of the Hindu lawgiver; and Thaneswar—since so celebrated in the annals of the land, as the battle-field of successive contending hosts—contributed, at its local fairs, many of the choicest specimens of the inventive currencies. In this region the Aryans appear to have almost lost their separate identity, and to have commenced the transitional process of merging their ethnic individuality amid the resident population, though still asserting religious and incidentally political supremacy. Such a state of things seems vividly shadowed forth in the ethnological definitions preserved in Manu; and it may possibly prove to be more than a mere coincidence, that the geographical distribution of the limits of "Brahmarshi, as distinguished from Brahmacarī," in the same passage, should so nearly be identical with the general boundaries I have already traced, from independent sources, for the spread of the


As I have claimed for the Pre-Aryan Indians the independent development of an alphabet specially contrived for, and adapted to, their own lingual requirements, similarly it can be shown, from as valid internal indications, that they originated, altogether on their own soil, that which has so often proved a nation’s unassailable heritage of its indigenous civilisation—a system of weights and measures, which retained its primitive identity in the presence of the dominant exotic nationality. It is indisputable that the intrusive Aryans, at whatever period their advent is to be placed, met and encountered a people, already dwelling in the land, of far higher domestic civilisation and material culture than themselves. Whether their eventual supremacy was due to undiminished northern energy, animal physique, or mental subtlety, does not concern us at present; but independent of the inner-life evidences to that effect, a parallel inference might be drawn from the indirect data of the contrasted tenor of the hymns of the Rig Veda, while indicating a crude social condition, refer almost exclusively to the country of the Seven Rivers; whereas Manu, at a date but moderately subsequent, associates the far higher progress manifested in the body of the work

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7 “Journal As. Soc. Bengal,” 1862, p. 49; Max Müller’s “Rig Veda,” preface to text, iv. pp. xxv.—xxxiv. “The traditional position of the solstitial points, as recorded in the Jyotishta,” is calculated by Archdeacon Pratt to refer to 1181 B.C., and by
with a more easterly seat of authority, and while asserting no community with things or people beyond or to the westward of the Saraswati, arrogates for the existing representatives of the Aryans a dominance over kindred kingdoms extending, in the opposite direction, down the Ganges to Kanauj. But, in demanding credence for the simple gift of invention arising out of manifest wants among the already thrice commixed, and in so far improved local inhabitants, as opposed to the Aryan assumption of the introduction of all knowledge, I am by no means prepared to contend that the domiciled races gained nothing in return. The very contact of independently-wrought civilisations, to whatever point each had progressed, could not fail mutually to advantage both one and the other; the question to be asked is, which of the two was best prepared to receive new lights, and to utilise and incorporate the incidental advantages within their own body politic? The obvious result in this case, though denoting the surrender by one nation of all their

the Rev. R. Main to 1186 B.C. See also p. lxxxvii. on the subject of Bentley's date, 1424—5 B.C.

For speculative dates concerning the Vedas, see also Max Müller, "Sanskrit Lit.," pp. 244, 300, &c.; Wilson, "Rig Veda," i. 47, ii. 1; St. Martin, p. xix.; M. Barthélemy St. Hilaire, Journal des Savants, 1861, p. 63; Dr. Martin Haug, "Aitareya Bráhmana," Bombay, 1863; Goldstücker, "Páñini," p. 72, &c.

"We have therefore, according to the views just summarily expounded, four separate strata, so to speak, of the population in India:—1. The forest tribes . . . who may have entered India from the north-east. 2. The Drávidians, who entered India from the north-west. . . . 3. The race of Scythian or non-Aryan immigrants from the north-west, whose language afterwards united with the Sanskrit to form the Prakrit dialects of Northern India. 4. The Arian invaders." . . .—Muir's "Sanskrit Texts," ii. p. 487. See also Caldwell's "Drávidian Grammar."
marked individuality, by no means implies that they did not carry with them their influence, and a powerful one moreover, and affect materially the character of the people among whom, at the end of their wanderings, they introduced a priestly absolutism, which has progressively grown and increased rather than lost power till very recently over all India.

But here again a most important query forces itself upon our consideration. The Aryans are acknowledged to have been in a very barbarous state on their first entry into the land of the Sapta Sindhu. It is not known how long a period they consumed in traversing six out of the seven streams, or what opportunities may have been afforded for social improvement during the movement; but even by their own showing in the sacred hymns of the Rig Veda, the Aryans, when they had reached the banks of the Saraswati, were still but very imperfectly civilised. The Dasyus, or indigenous races, with whom they came in contact in the Punjab, may well also have been in a comparatively undeveloped stage of national progress; while the inhabitants of the kingdoms on the Jumna seem to have been far advanced in civil and political refinement. Is it not, therefore, possible, if not probable,

9 St. Martin, p. 91.
10 Professor Wilson while speaking of the ultimate self-development of the Aryans in the Punjáb, remarks, "It [is] indisputable that the Hindus of the Vādīk era had attained to an advanced stage of civilisation, little, if at all, differing from that in which they were found by the Greeks at Alexander's invasion, although no doubt they had not spread so far to the east, and were located chiefly in the Punjáb and along the Indus."—"Rig Veda," ii. p. xvii. I am inclined to question this latter inference; I do not think the civilisation evidenced in the text of the "Rig Veda" by any means equal to that discovered at the advent of the Greeks; indeed, it would be an anomaly that the Aryans, while occupied in pressing their way onwards, in con-
that when the Aryan flint, at the end of its course, struck against the Indian steel, sparks were emitted that flashed brightly on the cultivated intellects of a fixed and now thoroughly organised and homogeneous nation, whose leading spirits quickly saw and appreciated the opportunity afforded in the suggestion of a new religion, that was capable of being evolved, by judicious treatment, out of the rude elemental worship, aided forcibly by the mystification of the exotic and clearly superior language of the Aryans, which came so opportunely in company? 11 The narrow geographical strip, to which the promoters of this creed confined the already arrogant priestly element, intervening between the two nationalities, would seem to savour more of an esoteric intention than of any natural result of conquest or of progressive power, achieved by the settlement of an intellectually higher class. That the Aryans should be able so completely to divest themselves of their national entity and leave no trace behind them, would be singular in itself; but the concentration of all god-like properties on a mere boundary line, so much insisted upon as Brahmanism grew and pushed its forces downwards into the richer countries of Hindustan, while it ignored both the land of the nativity of its votaries and

stant hostility with the local tribes, should have made a proportionately greater progress in national culture than they did in the subsequent six or seven centuries of fixed residence in their new home within the five rivers.

11 A late writer in the Westminster Review (1864, p. 154), has justly remarked that the 1026 incoherent hymns of the “Rig Veda” constituted but a poor stock in trade whereon to found a new religion. Nor do the Soma “inspired” Rishis by whom they were “seen” appear, from the internal evidence of their crude chants, to have possessed mental qualifications such as should have been equal to the origination of the higher intellectual structure of Brahmanism.
the site of their later more advantageous domestication, forms a fair subject for present speculation and future deliberate investigation. But this in itself is a matter only incidental to my special subject, and I return to the question, that if the Aryans were so far instructed on their first immigration as to bring with them, or subsequently to import and amplify, the Phœnician alphabet, and similarly to secure its transmission, even as a secondary system of writing, over all the country of the Brahmarshis, it would be rash to attempt to place a limit on the amount of Chaldean or other western sciences that may have accompanied these cursive letters, which, either directly or indirectly, travelled eastward from the borders of Mesopotamia to the banks of the Ganges. And clearly, if the grammarian Pâṇini's age has been rightly determined by his special modern commentator, Bactrian writing, or Yavanâni-liṭi, must have been freely current at Taxila at and before B.C. 543, even as it subsequently became the ruling alphabet in those parts, so as to appear as the Inscription character under Asoka (B.C. 246) in the Peshâwar valley, and to hold its own as the official method of expression in concurrence with the local Pali as low down as Mathura up to a much later period. Under

12 We have indirect evidence to show that this style of writing obtained very early currency in association with the monumental cuneiform. I assume that wherever, in the ancient sculptures, we see two scribes employed—the one using a style and marking a clay tablet, the other writing upon a flexible substance—that the latter is using cursive Babylonian, or what has since been conventionally recognised as Phœnician.


these evidences of the spread of Aryan civilisation in India, there will be little or no difficulty in admitting that much of what has hitherto been esteemed as purely indigenous knowledge, may, even thus early, have been improved and matured by the waifs and strays of the discoveries of very distant nations, without in any way detracting from or depreciating the independent originality of local thought, or the true marvels India achieved unaided by foreign teaching.

In illustration of the preceding remarks, and as the necessary definition of the boundaries of the kingdom to which our initial series of coins refer, I transcribe in full a translation of the original passage from Manu.

Manu, ii. 17. 15 “Between the two divine rivers, Saraswati and Drishadwati [Chitang], lies the tract of land which the sages have named Brahmaparta, because it was frequented by gods. 18. The custom preserved by immemorial tradition in that country, among the four pure classes, and among those which are mixed, is called approved usage. 19. Kurukshetra [modern Dehli], Matsya [on the Jumna], Panchala [Kanyakubja, Kanauj], and Surasena [or Mathura], form the region called Brahmarshi, distinguished from Brahmaparta. 20. From a Brahman who was born in that country, let all men on earth learn their several usages. 21. That country which lies between Himawat and Vindhya, to the east of Vasishana [where the Sarasvati disappears in the desert 16] and to the west of Prayaga [Allahabad], is celebrated by the title of Madhyadesa [or the central region]. 22. As far as

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the eastern and as far as the western oceans, between the two mountains just mentioned, lies the tract which the wise have named Aryavarta [or inhabited by respectable men]. 23. That land on which the black antelope naturally grazes is held fit for the performance of sacrifices; but the land of Mlechhas [or those who speak barbarously] differs widely from it. 24. Let the three first classes invariably dwell in those before-mentioned countries; but a Súdra, distressed for subsistence, may sojourn wherever he chooses." 17

It is reasonable to infer that, as a general rule, all schemes of weights among an isolated people, initiating their own social laws, should preferably be based upon some obvious unit of universal access, rather than upon any higher measure of weight, which might naturally result, under authoritative legislation, from progressive increments on the lower basis. So that, in testing the intentional ratios of early times by the extant money designed in accordance with the contemporaneous tables, it will be safer to proceed from the lowest tangible limit of the scale, in preference to accepting any superior denomination as a standard whence to reduce, by division, the component elements involved. The intuitive unit of

17 Mr. Muir has given us a new translation of this celebrated passage, which, as it differs from the above in the introductory portion, I annex in a separate note.

"The tract, fashioned by the gods, which lies between the two divine rivers, Sarasvatí and Drishadvatí, is called Brahmávartta. The usage relating to castes and mixed castes, which has been traditionally received in that country, is called the pure usage. The country of Kurukshetra (in the region of modern Dehli), and of the Matsyas (on the Jumna), Panchálas (in the vicinity of modern Kanauj), and Súrasenas (in the district of Mathurá), which adjoins Brahmávartta, is the land of the Brahmarshis (divine Rishis)."—Sanskrit Texts, ii. p. 417.
weight, among an imperfectly formed agricultural community, would naturally be the most generally available and comparatively equable product of nature; in the form of seeds of cultivated or other indigenous plants; and in the Indian instance we find, after some definitions of inappreciable lower quantities, the scale commencing with a minute poppy seed, passing on to the several varieties of black and white mustard seed, barley-corps, and centring in that peculiarly Indian product, the Rati, or seed of the wild Gunja creeper, Abrus precatorius [Sanskrit, Krishnalu], which forms the basis of all local weights, and whose representatives of modern growth still retain their position as adjuncts to every goldsmith’s and money-changer’s scales. Next to the rati in ascending order comes the Másha, which in its universal acceptance has almost achieved the title to be considered as a second unit or ponderable standard, and, as such, its name now primarily signifies “an elementary weight;” but on reverting to its earlier equivalent meanings it would seem that the term, in its original static sense, like the whole of the weights hitherto quoted, referred to another of Nature’s gifts, the seed of the Indian-bean (Phaseolus radiatus), which, like the rati, claims especially an Indian habitat as an extensively cultivated plant; and, to complete their associate identities, the bean as at present raised would seem to correspond with the weight assigned to it nearly 3,000 years ago, and to average about the amount of five ratis. The next advance upon the másha is, in the gold table, a swarna, a word meaning gold itself, and which probably implies in this case the particular divisional quantity of that metal which in earlier times constituted the conventional piece or lump

18 Wilson’s “Glossary of Indian Terms.”
19 Wilson’s “Sanskrit Dictionary.”
current in commerce. While the silver increment on the māsha is designated by the optional title of purána, or old, which may be supposed to allude to the, even then, recognition of this measure of value as emanating from high antiquity; and it is precisely the required amount in corresponding ratis of silver incorporated in the earliest extant prototype of coins that I am now about to exhibit. The silver satamána also derives its name from the vegetable kingdom, meaning in the original, 100 mánas, or seeds of the Alocasia Indica; when the precise plant, and the locality whence the early standard was obtained, are satisfactorily determined, the return will probably be found to accord with the required 100 mánas, = 320 ratis, or the identical weight to which the gold pala or nishka corresponds.

I need not follow the nomenclature of the larger divisions of weights in the joint tables, but before closing the inquiry I would revert for a moment to the leading point I desire to establish, that the Indians were not indebted to the Aryans for their system of weights; the latter, in fact, when tried by the test of the hymns of the “Rig Veda,” would seem to have been very ill versed in the Flora Indica, an extensive knowledge of which was clearly necessary for, and is evidenced in, the formation of the scale of proportions. Indeed, although the Vedic Aryans often invoked their gods to aid their agriculture, the result so little availed them that their efforts at cultivation were apparently confined to barley, in the raising of which even they do not seem to have been always successful.\(^{20}\)

The next question to be examined is the distribution of the arithmetical numbers whereby the process of

multiplication was conducted. Mr. Poole has laid it down as a law for Mesopotamian metrology that, "all the older systems are divisible by either 6,000 or 3,600. The 6,000th or 3,600th part of the talent is a divisor of all higher weights and coins, and a multiple of all lower weights and coins, except its 3 rds." 

The sixes and sixties of the banks of the Euphrates find no counterpart to the southward of the Sewalik range beyond the inevitable ten and the included five. The system, like all else pertaining to it, had its own independently devised multiple, the four. Whether the first suggestion of this favourite number was derived from the four fingers of the hand, four-footed beasts, or the higher flight of the four elements, we need not pause to inquire, but the Indians have at all times displayed an unprecedented faculty for figures, and were from the first able to manipulate com-

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21 Mr. Poole has favoured me with the subjoined revised list of ancient metric systems:—

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Hebrew Gold (double)</td>
<td>1,530,000</td>
<td>100 ÷ 100 = 132 gr.</td>
<td>220 shekel.</td>
<td></td>
</tr>
<tr>
<td>Silver</td>
<td>660,000</td>
<td>100 ÷ 300 = 220</td>
<td>132.2 [120.7] 84.6 siglos.</td>
<td></td>
</tr>
<tr>
<td>Babylonian (full)</td>
<td>330,930</td>
<td>120 ÷ 120 = 266.4</td>
<td>132-2</td>
<td>220</td>
</tr>
<tr>
<td>lesser</td>
<td>479,520</td>
<td>120 ÷ 120 = 133-2</td>
<td>129 Daric.</td>
<td>140</td>
</tr>
<tr>
<td>Persian Gold</td>
<td>300,590</td>
<td>100 ÷ 100 = 133-2</td>
<td>129 Daric.</td>
<td>140</td>
</tr>
<tr>
<td>Egyptian</td>
<td>840,000</td>
<td>100 ÷ 100 = 133-2</td>
<td>129 Daric.</td>
<td>140</td>
</tr>
<tr>
<td>Âeginetan</td>
<td>660,000</td>
<td>100 ÷ 100 = 110</td>
<td>110</td>
<td></td>
</tr>
<tr>
<td>Attic (commercial)</td>
<td>598,800</td>
<td>100 ÷ 100 = 99-8</td>
<td>92-3</td>
<td></td>
</tr>
<tr>
<td>(lowered)</td>
<td>558,800</td>
<td>100 ÷ 100 = 93-1</td>
<td>92-3</td>
<td></td>
</tr>
<tr>
<td>(Solonian)</td>
<td>430,200</td>
<td>100 ÷ 100 = 71-7</td>
<td>67-5</td>
<td></td>
</tr>
<tr>
<td>(ditto double)</td>
<td>860,520</td>
<td>100 ÷ 100 = 71-7</td>
<td>67-5</td>
<td></td>
</tr>
<tr>
<td>(ditto lowered)</td>
<td>465,000</td>
<td>100 ÷ 100 = 67-5</td>
<td>64-5</td>
<td></td>
</tr>
<tr>
<td>Euboeic</td>
<td>387,000</td>
<td>100 ÷ 100 = 64-5</td>
<td>64-5</td>
<td></td>
</tr>
</tbody>
</table>

Egyptian Copper. A. 1400 gr. = 1 Men. Hebrew Copper. 250 gr. (?). B. 700 = 5 Ket. C. 280 = 2 " D. 140 = 1 " E. 70 = ½ "

licated arithmetical problems, and especially delighted in fabulous totals; but with all this they have ever evinced their allegiance to the old 4, which we find in its place of honour in the earliest extant writings and inscriptions. As the nations of the West, to meet their own wants, speedily produced a separate symbol for *five*, and abbreviated the five perpendicular strokes of the Phœnician into <. The Indians, apart from their indigenous Pâli signs for 4, simplified the tedious repetition of the four lines the Bactrian writing had brought with it from Mesopotamia into a cross like a Roman X, which was doubled to form eight, while they left the five utterly uncared for, to follow in a measure the original Phœnician method of IX, or 4 plus 1 = 5. Of course the Indian table of weights had in practice to have its lower proportionate atoms accommodated to the weights actually pertaining to the seeds in each instance, but the higher gradations are uniformly grounded upon fours and tens; and to show how distinctly the idea of working by fours was fixed in the minds of men, we find the gradational system of fines in Manu (viii. 337) progressively stated as "8, 16, 32, 64." So much for the antiquarian evidences, and to prove the custom at the other extreme of the chain of testimony and its survival within a nation of almost Chinese fixity, it may be asserted that the whole vulgar arithmetic is primarily reckoned by *gandas* = "fours," and in the modern bazars of India the unlettered cultivator may frequently be seen having a complicated account demonstrated to him by the aid of a series of fours, represented,

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as the case may be, by cowrie-shells, or grains of pulse. I pass by other elements of calculation, such as the favourite $84 \times 12$ which might bring me into contest with the astronomers, and content myself with resting this portion of my case on the coincidences already cited, as I conclude the most ardent upholder of Aryan supremacy can hardly arrogate for that ethnic division of the human race any speciality in *fours*.

I now proceed to quote the passage from Manu defining the authorised weights and equivalents of gold and silver, which I have cast into a tabular form as more readily explanatory of the text, and as simplifying the reference to relative scales of proportion.

viii. 131. "Those names of copper, silver, and gold [weights] which are commonly used among men for the purpose of worldly business, I will now comprehensively explain. 132. The very small mote which may be discerned in a sunbeam passing through a lattice is the first of quantities, and men call it a *trasarenu*. 133. Eight of those *trasarenus* are supposed equal in weight to one minute poppy-seed (*ākhyā*), three of those seeds are equal to one black mustard-seed (*rāja sarshapa*), and three of these last to a white mustard-seed (*gaura-sarshapa*). 134. Six white mustard-seeds are equal to a middle-sized barley-corn (*yava*), three such barley-corns to one *krishnala* [raktika], five *krishnalas* of gold are one *māsha*,

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25 See an admirable essay on this number, under the head of "Chourasee," in Sir H. M. Elliot's "Glossary of Indian Terms," Agra, 1845.

26 M. Pictet, who has so laboriously collected all and everything pertaining to the Aryans, in his "Paléontologie Linguistique," does not even notice the number!—"Les Origines Indo-européennes," Paris, 1863, p. 565.
and sixteen such máshas one swarna. 135. Four suvarnas make a pala, ten palas a dharana, but two krishnalas weighed together are considered as one silver máshaka. 136. Sixteen of those máshakas are a silver dharana, or purāna, but a copper kársha is known to be a pana or kárshápana. 137. Ten dharanas of silver are known by the name of a satamána, and the weight of four suvarnas has also the appellation of a nishka.”

**Ancient Indian System of Weights (from Manu, cap. viii. § 134)**

<table>
<thead>
<tr>
<th>Silver</th>
<th>2 ratis = 1 másha.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>32 ” = 16 ” = { 1 dharana,</td>
</tr>
<tr>
<td></td>
<td>or purána.</td>
</tr>
<tr>
<td></td>
<td>320 ” = 160 ” = 10 ” = 1 satamána.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Gold</th>
<th>5 ratis = 1 másha.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>80 ” = 16 ” = 1 suvarna</td>
</tr>
<tr>
<td></td>
<td>320 ” = 64 ” = 4 ” = { 1 pala, or</td>
</tr>
<tr>
<td></td>
<td>nishka.</td>
</tr>
<tr>
<td></td>
<td>3200 ” = 640 ” = 40 ” = 10 ” = 1 dharana.</td>
</tr>
</tbody>
</table>

**Copper.**

**Kárshápana.**

As there are some obscurities in the detail of the weights given in Manu, I have referred to the next succeeding authority on Hindu law, the Dharma-Sástra of Yájñavalkya, whose date is variously attributed from a

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27 “Hindu Law, or the Ordinances of Manu,” by G. C. Haughton, London, 1825, and works of Sir W. Jones, London, 1799, vol. iii. Haughton’s translation has been modified as above by my friend, Mr. J. Muir.

28 Mr. Muir has communicated to me the following note on the copper weight. “Kulláka Bhatta (the Sanskrit Commentator on Manu), explains that lexicographers declare a Kárshika or Kársha to be the fourth of a pala.” But 5 Krishnalas or Raktikas being equal to a Másha, and 16 máshas = 1 suvarna, and 4 suvarnas = 1 pala; a pala will equal $5 \times 16 \times 4 = 320$ krishnalas, and a kársha being $\frac{1}{4}$ of a pala, will equal $\frac{320}{4} = 80$ krishnalas.
period shortly before Vikamáditya, or B.C. 57 to 50 A.D. 29
His tables are nearly identical with those already quoted, 30
one unimportant but reasonable variant being the assign-
ment of three white mustard seeds instead of six to the
barley-corn. There are some apparent contradictions and
complications regarding palas and suvarnas, and no addi-
tional information respecting the weight of the copper-
measure of value, which is described in Dr. Roer's trans-
lation as vaguely as in Manu, "a copper pana is of the
weight of a kársha," and as the English commentator
justly observes, the tables "by no means satisfactorily
define the intrinsic weight and signification of the Pana,
which as the measure of pecuniary penalty" would
naturally be of the greatest importance. It is to be
remarked that neither Manu nor Yájnavalkya refer in any
way to the Cowrie-shell currency, which was clearly in
these days a seaboard circulation; nor is any mention
made of the Tola, which subsequently plays so leading a
part in Indian metrology. So much for the weights and
their relative proportions *inter se.* I shall defer any
examination of the corresponding equivalents in the
English standard till I can apply the results to the extant
coins of the period.

29 Lassen, "Ind. Alt.," ii. 374, 470, 510. Dr. Roer, "Yájna-
valkya," Calcutta, 1859, p. 11; M. Müller, "Sanskrit Lit.,"
330; Stentzel (2nd Cent. A.D.)
30 Sec. 632. Five krishnala berries = 1 másha, 16 máshas
= 1 suvarna. "Sec. 363. A pala is 4 or 5 suvarnas. Two krish-
nalas are a silver másha; 16 of the latter a dharana. Sec. 364.
A satamána and a pala are each equal to 10 dharanas; a nishka
is 4 suvarnas." * * * Note. In the corresponding slokas of
Manu, 10 palas are said to be equivalent to 1 dharana. We
can only reconcile this by supposing Manu to refer to a gold
pala, and Yájnavalkya to a silver pala. The Sanskrit com-
mentator adds, under Copper, 4 kárshas = 1 pala, 1 pana =
kársha, i.e. ½ pala.
Before taking leave of this division of the subject, I am anxious to meet, in anticipation, an objection which may possibly strike philologists as hostile to the general position I have sought to maintain in this paper; inasmuch as it may be held that the fact of the several divisions of the static tables being expressed in Sanskrit words, should, *prima facie*, imply that the Sanskrit-speaking "Aryans" originated the system upon which the gradational scales were based. But it must be remembered that the entire work from whence these data are derived is written in the Sanskrit language, its very exotic character justifying the inference that it was so embodied, not with a view to vulgar use, but for the purposes of a superiorly educated or, more probably, of an exclusive class. Moreover, it is to be borne in mind that the speech itself, though foreign, had for many centuries been partially introduced into the land, and constituted the chosen means of expression of the dominant religious and occasional temporal authority. But apart from these considerations there remains to me the more comprehensive question as to how much of the Sanskrit tongue of our modern dictionaries, at this time undergoing the process of formation and maturation on Indian soil, was indebted to the local speech? It can be shown from sound palæographic, as well as from philological testimony, that the intermingling Aryans borrowed Dravidian letters to improve their *then* imperfect alphabet,\(^1\) adopted Dravidian words till lately classed as Aryan,\(^2\) and as we have seen, by the inherent evidence of the Bactrian character, appropriated a very


large amount of Indian Páli design in the mechanical construction of the vocalic and other portions of their needfully amplified Semitic writing.33

I had written thus far, with growing doubts about the universality of the Indo-Germanic speech in India, when it occurred to me to inquire if Drávidian roots might not throw light upon the clearly misunderstood meaning of the passage in Manu, defining the value of a copper kárshápana. The result has more than answered my expectations, as I find the Tamil kásu,34 corruptly "cash," described as "coin, money in general," and among the details it is mentioned that ponakásu, vennikásu, and pettalaikásu still exist as the vernacular terms severally for gold, silver, and copper coins, while the corresponding verb kásadikka primarily means "to coin." With these hints a new and intelligible translation of the verse in question may be proposed, to the effect that a "kárshápana is to be understood (to be) a coined copper pana." If this interpretation will stand criticism, we have indeed the new phase of the Indian monetary system, that the earliest Sanskrit authority, on such subjects, extant, dating between 1280 and 880 B.C., recognises as an ordinary fact the institution of coined money, while the context proves how much of Drávidian civilisation still remained in the Upper provinces, and how little competent subsequent Sanskrit commentators on Manu's text were to appreciate anything beyond their own confined views and conventional teachings.

(To be continued.)

34 Wilson, "Glossary of Indian Terms," sub voce.
VIII.

MARKING NOT MILLING.

[Read before the Numismatic Society, March 19, 1863.]

There is nothing which requires greater caution than the credence we give to traditionary information.

Ignorance or misconception confers a delusive colouring to facts, which are believed until they become perpetuated as popular errors, by finding their way into print, and thus being circulated by some fancied authority, are adopted by the historian without inquiry as to their truth or origin.

In vol. xviii. p. 173 of the Numismatic Chronicle, Mr. G. Sparkes, a correspondent, says:—“In all sciences, numismatics included, precision of language is most essential. Everything should have a name, and each word should signify only one thing.

“What then is the proper term for that part of a coin which is usually either milled or inscribed?”

“It is commonly called the ‘edge’; but this expression has also another meaning, for it is often applied to the circumference of the surface of the coin.”

As this appeared amongst the débris of “Miscellanea,” there was no response.
I have been induced to make these preliminary observations in consequence of the repeated use of the terms "milling," "edge milled," "edge engraved," "milled on the edge in straight lines," "milled on the edge with oblique lines," "edge milled with a leaf pattern," repeated "o'er and o'er again," by the Rev. H. Christmas, in his admirable papers on the "Copper Coinage of the British Colonies in America," and the "Irish Coins of Copper and Billon," in Vol. II. of the New Series of the Chronicle.

I take the occasion (because it is the most recent) to enter my protest against the use of those terms as applicable to the device, whatever it may be, upon the edges of any coins.

A popular delusion is to be regretted under any circumstances; but when a Society, amongst whose members are enrolled the highest authorities connected with the science it is the object to elucidate and promote, permits an error to be promulgated in its own Journal, I feel it is necessary to call attention to the subject, and, so far as is practicable, set the matter at rest in the numismatic world, whatever be the result amongst the "outer barbarians."

It is immaterial to my purpose whether the Frenchman, Eloye Mastrelle, introduced into the Mint, in the Tower of London, the "mill and screw" in 1561, or not.

The old process of coining by the hammer consisted, first, in flattening the bars of gold or silver upon iron anvils to the required thickness; from those plates planchets were cut, which, when adjusted, &c., were impressed with the device upon the coining irons or dies by means of the hammer.

This method continued until the 14th Charles II., A.D. 1662, when the "flattening-mill," for rolling the bars to any
specific gauge, and the "coining press," worked with a fly bar by means of a screw, gave the impression from the dics.

In addition to the flatting-mill and coining-press, there was also a "cutting-engine," which, by force of a screw, cut out the round blanks from the strips of metal that had been milled. The blanks, after being annealed, adjusted to weight, &c., were taken to the "marking-room," where, in strict privacy (enforced by an oath), any lettering, figure, graining, or marking upon the edges was done by the moneyers only.

That process never was called at the Mint by any other term than "marking," and has no relation or connection whatever with "milling," which is purely and simply the reduction of the bar or ingot of metal to a plate, and next to a strip or ribbon.

By stat. 9 Wm. III., c. 2, the currency of all hammered silver coin was prohibited after January, 1697. And all the hammered gold coin that remained in circulation was prohibited by stat. 6 Geo. II., c. 25, sec. 19 (1732).

By stat. 8 & 9 Wm. III., c. 26, sec. 1, it was enacted, "That after the 15th of May, 1697, no smith, engraver, &c., shall knowingly make or mend, or begin or proceed to make or mend, or assist in the making or mending, of any (Puncheon, &c. &c.) edger or edging tool, instrument, or engine, not of common use in any trade, but contrived for marking of money round the edges with letters, grainings, or other marks or figures resembling those on the edges of money coined in his Majesty's Mint; nor any press for coinage, nor any cutting engine, for cutting round blanks by force of a screw out of flatted bars of gold, silver, or other metal, &c."
The offences were made high treason, and every offender upon conviction was "to suffer death."

I had some hesitation to cite a judicial decision as to what was considered milled money within the statute of William. Finding, however, in the Numismatic Journal, vol. i. p. 267, the full report of a trial arising out of another popular error (which supposes a farthing of Queen Anne to be of enormous value), I avail myself of the precedent to inflict upon you the case of "James Bunning, alias Pendegrast, who was tried at the Old Bailey September Sessions, 1794, for putting off to J. P., nine pieces of false and counterfeit milled money and coin, each counterfeited to the likeness of a piece of legal and current milled money and silver coin of the realm called a shilling, at a lower rate and value than the same did by their denomination import, and were counterfeited for," &c.

"The fact of knowingly putting off, &c., was fully proved; but it could not be proved that the money had any marks of milling upon it. The prisoner being convicted, the objection was referred to the judges, who all held the conviction right."

Milled money is so called to distinguish it from hammered money; and all the money now current is milled, i.e., passed through a mill or press to make the plate out of which it is cut of a proper thickness; though by a vulgar error it is frequently supposed to mean the marking on the edges, which is properly termed graining or marking. The judges therefore thought it unnecessary that the counterfeit money should appear to have been milled, for, considering milled-money as one word (as if written with a hyphen), and descriptive of the money now current, if the counterfeit resemble the money, which if genuine, would have been milled, it is enough.
From 1815 to the present time, the marking upon the edges has been done by means of an *engrailed collar* placed upon the neck of the lower die, so that by one blow of the press the coin is completed. Though this mode of marking the edges is a modern invention, on a reserved case in 1825 it was decided by all the judges to be within the Act of William III., and the prisoner was executed at Stafford.\footnote{This was the case of Theodore Moore, a notorious coiner. When apprehended, many hundred silvered blanks, intended for half-crowns and shillings, were seized; but the only unlawful instruments in his possession, upon which to sustain a charge by indictment, were *steel collars engrailed*, for the purpose of “marking money upon the edge,” and applicable to the blanks found. Great efforts were made at Birmingham for the defence—medals in various metals were struck from *old dies*, and their edges engrailed by means of what is technically called by the makers, &c., “*a knurling tool.*” These are small steel cylinders, with various devices sunk on their edges. When used, they are put into a socket and held by the hand forcibly against the article to be knurled—which is fixed in a lathe—they are especially used by mathematical instrument makers, for the edges of screws, telescope slides, &c., and universally by workers in metal for ornament as well as use. It was a clumsy contrivance, and too transparent to deceive. The late Sir Edward Thomason, and other medallists, proved that any graining upon a medal would alter its character and destroy its value—that the instrument used at the Mint for making the edges of coins, never had been used in any trade at Birmingham, and was unknown.}

An instrument somewhat similar in principle to the old edging tool is still in use, but instead of marking, *it smooths and turns up the edges* of the blanks, making them slightly concave; and thus when struck by the dies the protecting edge on the verge of the coins, as well as the beading within it, is rendered more perfect.

E. J. Powell.
IX.

PROPOSED COINAGE FOR PORT PHILLIP, AUSTRALIA, IN 1853.

I have much pleasure in calling attention to four curious pattern pieces in gold, struck in the year 1853, when it was proposed to erect a separate mint for Port Philip (Melbourne), in South Australia. They cannot indeed be considered as specimens of art, but they will serve hereafter as an interesting record of what the most prosperous colony England has ever founded intended as the type of their national coinage.

They may be described as follows:

1. **Obv.**—PORT PHILLIP. AUSTRALIA in sunk letters on the circumference of the coin on a surface previously engine-turned. In the field, a kangaroo, seated to right, and underneath, 1853.

2. **Rev.**—PURE AUSTRALIAN GOLD. TWO OUNCES engraved (as on the obverse) on surface previously engine-turned. In the field; 2, on which has been stamped, in small letters, TWO OUNCES. The edge of the coin is milled.

*N* Size, 10.
2. *Obv.*—Same as last.
   *Rev.*—PURE AUSTRALIAN GOLD . ONE OUNCE. In the field, 1, on which is stamped in small letters, ONE OUNCE.
   _N._ Size, 7⅛.

3. *Obv.*—Same as last.
   *Rev.*—PURE AUSTRALIAN GOLD . HALF OUNCE. In the field, ½.
   _N._ Size 5⅛.

4. *Obv.*—Same as last.
   *Rev.*—PURE AUSTRALIAN GOLD . QUARTER OUNCE. In the field, ¼.
   _N._ Size 4⅝.

These pieces are all now preserved in the British Museum; and I am informed by Mr. William Morgan Brown, from whom they were purchased during the last year, that twenty-seven sets were originally struck, and that of these all have been melted down, except one which is preserved at Melbourne, and the one which I have described above.

I may remark that the type of the Kangaroo is not wholly new, as there is in the National Collection a shilling token of Van Dieman’s Land, on which it also occurs. This token, which is probably scarce, may be thus described:

*Obv.*—TASMANIA. 1823. In the field, kangaroo, seated to right, but looking back.

*Rev.*—MACINTOSH AND DEGRAVE’S SAW MILLS. In the field, ONE SHILLING TOKEN. The edge is plain, but the legend on each side is surrounded by a circle of dots.
   _R._ Size, 6⅛.

The workmanship of this token is good, and much superior to that of the patterns above described. I suspect that it is of English origin, and, not improbably, a product of the Soho Mint. It was purchased in 1848 from a dealer in the City.

W. S. W. VAUX.
X.

KENTISH TOKENS OF THE SEVENTEENTH CENTURY. (Continued.)

FAVERSHAM.

PLATE P.

The town and port of Faversham, long associated with gunpowder and oysters, is situated on a navigable arm of the Swale, in one of the most fertile parts of the highly cultivated county of Kent, nine miles from Canterbury, and forty-seven from London.

The very numerous and varied Roman and Saxon remains which have been and are still frequently met with in its neighbourhood, show that the former people soon availed themselves of the advantages of so favourable a locality, adjoining the Watling Street, and the nearest harbour to Canterbury, to erect suitable dwellings for those employed in their commerce.

Under the Saxon Government it is also evident that it was something more than a small fishing town.

Stephen was greatly pleased with it, erected the Abbey of Faversham, and was interred within its walls.

The inhabitants of the town were among the earliest to aid their business transactions by the use of tokens.

Jacobs, in his "History of Faversham, 1774," writes—"In 1648, the making of private traders’ tokens, commenced in London, and this year, 1649, and the succeed-
ing ones, the example was followed by great numbers of our townsmen, even so low down as by the common porter’s deputy, the backer of corn from the quays to the vessels in the creek, and continued until 1669; none of a later date having come within my observation."

The present greatest known number of these tokens is fourteen, all of which are engraved on the accompanying Plate.

No. 1 is the halfpenny of George Allen, 1666. The device a horse shoe; on the reverse, "in Feaversham his half peny."

The year in which this token was issued was one of sorrow for Faversham. The town was visited by the plague; and it is further recorded that five women died in childbed, and were buried within a week.

George Allen was Mayor of Faversham in 1680.

No. 2 has the very early date of 1649, and on the obverse a full-faced bust of a female, crowned, certainly intended for the Mercers’ Arms, the word “Mercer” being added to the issuer’s name. On the reverse is, “in Feversham 1649,” and in the field the Grocers’ Arms.

The corporation of Faversham, at the request of the tradesmen, May 22nd, 1616, established a fellowship and society by the name of the Company of Mercers; made several rules for the better regulation of the tradesmen and artificers within their jurisdiction; and appointed a master, two wardens, and eight assistants, to constitute a court to elect persons to the freedom, the admission to which was ten pounds.

No. 3.—The device, a buck, in a very proud or buckish attitude, is intended as a rebus on the issuer’s name, “William Buck 1669 in Feversham, his half peny.”

The bearers of this name were a considerable family in
Faversham. In 1751, Elizabeth, the wife of Thomas Buck, gentleman, was buried in Faversham church; and in 1761, Susan, second wife of Thomas Buck, was placed in the same edifice.

The name does not occur among the present inhabitants.

No. 4.—The unusual form of this token is worthy of notice. "Phillip Butler" was evidently an advocate for square dealing. The device is a crown under a rainbow. The reverse has, in five lines, "of Feversham his half penny 1669."

The engraving is from a cast taken from the exceedingly rare token in the Bodleian Library.

The wife of Philip Butler was buried in Faversham church, 1676.

No. 5.—The farthing of "R. E. C. in Faversham 1651 at the Queene Armes." The Arms of England and France, quarterly.

No. 6.—"John Cleare 1666, an arched crown, "of Feaversham his half peny."

No. 7.—John Ellis, on "his halfpeny," wrote himself "Backer in Feversvm 1667;" and had for his device a wheat sheaf, from which, and the varied spelling of the period—evidenced even in this example in the orthography of the town, "Feversvm"—it might be inferred he was by trade a baker; but from the quotation from the "History of Faversham," given above, it seems pretty evident he was the man "so low down as the common porter's deputy, the backer of corn from the quays to the vessels in the creek."

No. 8.—"Robert Hogben," three tuns (the Vintners' Arms) "in Feversham his half peny." From one of the oldest taverns in Faversham—the Three Tuns—still standing near Tanner's Green, at a short distance from the
water that supplies the powder-mills at the lower part of
the town, approaching Davington Hill.

The old town-hall and gaol stood in Tanner's Green.
The name Hogben is common among the present inhabi-
tants.

No. 9 has the very familiar device, the Grocers' Arms,
around which are the letters W. I. K., and "William
Knight 1666;" on the reverse, "his halfpenny in
Feaversham."

No. 10.—"James March" also adopted the Grocers'
Arms for "his halfpenny," with the letters I. A. M., cir-
culated "in Feversham in Kent 1669."

No 11 has an eccentric rendering of the issuer's name,"Pore Ned 1667 his halfpenny in Feversham in Kent."
"Ned" was probably a gardener—indicated by his device,
a tree, the cherry tree, still extensively cultivated in that
part of the county.

The annals of Faversham record that in "1545 King
Henry VIII. lay here one night, and was presented with
two dozen of chekins and a sieve of cheris."

No. 12 is octagonal, and has on the obverse, in five
lines, "John Pierce in Feversham 1667." The fish is
intended for a dolphin. The old house in Preston Street,
from which this token was issued, is still named "The
Dolphin," and ranks as the second tavern in Faversham
at the present day.

No. 13.—This was issued from the same tavern as No. 5,
above described, and from it we learn that Robert Preston
was proprietor of the "Queens Armes in Feversham
1664." The crowded letters across the field are a careful
representation of those on the token.

The "Queen's Arms" had a distinguished though
unwilling visitor in the year 1688, when James II. was
intercepted in his endeavour to leave the country, and was brought into Faversham by some sailors of that town.

The following account of this event was written in 1688 by Captain Richard Marsh, who took an active part in the detention of the king, and was published ninety years since in Jacob's "History of Faversham."

"December 11th, being Tuesday, diverse stage coaches were going to Canterbury; when they came to Boughton Street, the persons therein, hearing that Canterbury gates were shut, and the inhabitants of the city in arms, they resolved to retreat; one of which coaches came into Faversham, being Sir Thomas Jenner's, and himself in it, who was then judge of the common pleas, with esquire Graham, one of the commissioners of excise, and esquire Bourton; they would have hired a vessel here to have carried them over to France, but we retained them prisoners here, as justly suspecting they were flying from justice.

"Whilst we were securing these, the Ospringe men stopped five other coaches, and sent to town for a stronger guard; at which the people ran with great alacrity and cheerfulness, and brought them prisoners into Faversham; only one coach escaped their hands at Ospringe, and drove hard on to Sittingbourne. I was one that followed them, with esquire Ricard, Mr. Napleton, and Mr. Edwards, and examined them at Sittingbourne, in which we took father Obadiah Walker, father Poulton, a Popish schoolmaster at Hackney, and Mr. Sign, quartermaster in Sir Edward Hales' regiment, which person was appointed to be a servant to the said Obadiah Walker, and conducted them all to Faversham that night, and sent three expresses to Canterbury, Ashford, and Maidstone, to alarm the country as they went, for speedy supplies, for fear of a rescue, which we had the next day. While that every man was thus employed to take criminals, in pursuance to the Prince of Orange's third declaration, we heard of Sir Edward Hales being about Elmy in order for his escape.

"The Faversham sailors observing a vessel of about thirty tons, lying at Shellness to take in ballast, resolved forthwith to go and board her; they went in the evening with three smacks, and about forty men, and three files of musqueteers of Faversham band, all well appointed, of which they made William Amis, sometime master of a vessel, their captain; in the cabin of which vessel they seized three persons of quality, of whom
they knew only Sir Edward Hales; from which three persons they took three hundred guineas," and brought them afterwards on shore beyond Oure, at a place called the Stool, on Wednesday, December the twelfth, about ten o'clock in the morning, where met them Sir Thomas Jenner's coach, with about twenty gentlemen of the town on horseback, and brought them into the Queen's Arms in Faversham. I, standing by the coach, seeing the king come out, whom I knew very well, was astonished, and said, 'Gentlemen, you have taken the king a prisoner; which wrought great amazement amongst them all. Then the gentlemen owned him as their sovereign. Then the king expressed himself in this manner to one of the clergy:—
'I see the rabble is up, and I must say with the psalmist, that God alone can still the rage of the sea, and the madness of the people; for I cannot do it,' said the king; 'therefore am I forced to fly.' Then the king ordered the money that was taken from them to be divided amongst them that took him. The king wrote a letter to the Earl of Winchelsea to come to him, and let him know that he was at Faversham in the midst of his enemies; at which my lord came from Canterbury that night, which much gladded the king that he had now one with him that knew how to respect the person of a king and to awe the rabble; for those brutish, unmanly sailors had carried themselves very indecently towards him.

"The king desired much of the gentlemen to convey him away at night in the custom-house boat, and pressed it upon their consciences, and told them that if the Prince of Orange should take away his life, his blood would be required at their hands, and that now it was in their power to release him, but shortly it would be out of their power to do him good. The gentlemen would by no means admit of it, saying they must be accountable for him to the Prince of Orange, and it would be a means of laying the nation in blood. He was carried from the Queen's Arms to the mayor's house, which was Captain Thomas Southouse's, which is the house that our observator now lives in, in Court Street, where he continued under a strong guard of soldiers and sailors until Saturday morning following, ten o'clock."

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1 In addition to the money, the king was also robbed of two gold medals, one on the birth of the Pretender, the other on the birth of Charles II. The first was, in 1774, in the cabinet of Thomas Knight, Esq., of Godmersham; the other in that of Mr. John White, merchant, of London. Both were procured from the reduced son of that Amis who was captain of the crew.
No. 14 is without a date, and has "Francis Waterman (the Mercers' Arms) in Faversham. F.S.W." The spelling of the town on this example is the fifth variation in the number described. Francis Waterman was free of the Mercers' company at Faversham, mayor of the town in 1665, and again in 1681. On the reverse of the token is the letter S, the initial of his wife's name—Sarah, wife of Francis Waterman, was buried in Faversham church 1694; and Francis Waterman in 1707 was buried in the same sacred edifice.

H. W. Rolfe.

(To be continued.)
NOTICE OF RECENT NUMISMATIC PUBLICATIONS.

In No. 6 (November and December) of the Revue Numismatique for 1863 there are the following articles:—

In the Bulletin Bibliographique are notices of M. Sambon's work, "Recherches sur les anciennes monnaies de l'Italie méridionale," by M. de Witté; and M. Sabatier's work, "Description générale des monnaies Byzantines frappées sous les Empereurs d'Orient," by M. A. de Barthélémy.

In the Chronique is an account of a find of denarii in the forest of Compiègne, with some additional information relative to Domitia Lucilla, by M. A. de Longpérier, and some account of the new coinage for Strasbourg and Germany.

In the Nécrologie is a notice of the late M. l'Abbé Greppo.


We are happy to have to announce the publication of this work, of the contents of which we subjoin an abstract. It is divided into sixteen chapters, and the plates arranged in two series, the first lettered A to I, representing the uninscribed, and the second numbered I. to XVI., the inscribed coins. In the first chapter—Bibliography—the author enumerates the various works and treatises which have appeared upon the subject of British coins, and cites the different opinions which have been held concerning them. In the second chapter he enters into the question of the date and origin of the Ancient British coinage, and in the third describes the general arrangement adopted in the work. The next four chapters are devoted to the uninscribed coins in gold, silver, copper, and tin, of which all the known types which there are reasonable grounds for regarding
as British, are described and engraved. In Chapter VIII, an account is given of the class of coins usually found in the Channel Islands, which, though not strictly speaking British, are not unfrequently discovered in this country. The ninth chapter is introductory of the series of inscribed coins which the author assigns to various districts in Britain. Of the coins of the Western District, which are treated of in Chapter X., the principal inscriptions are BODVOC, CATTI, COMVX, VORIO-AD (?) and SVEI—Antedrigus being the only name of a prince which can be determined with any approach to certainty. To the South-Eastern district are assigned coins possibly of Commius, and two of his sons, Tinc[omnumus], and Verica, or Virica. His third son, Eppillus, appears to belong to the Kentish district, where also reigned princes of the names of Dubnovellanus, Vose[nos], and Amminus. The coins inscribed CRAB, are described among those of this district, though possibly belonging elsewhere. In Chapter XIII are described the coins of the Central district, viz., those of Andoco[mini], Tasciovanus, Epaticcus, and Cunobelinus. This interesting and important series occupies eight of the plates, and the descriptions fill upwards of 130 pages of the letterpress. A short chapter (XIV.), is devoted to some coins on which unfortunately the legends cannot be accurately determined, but which appear to belong to the districts before described. The two last chapters in the book are devoted to the coins of the Eastern district, or those of the Iceni, including the coins of Aidedomaros, and those of the Yorkshire district, or of the Brigantes. In the case of these two districts, the inscribed and uninscribed coins have been arranged together. An abstract of the medallic history of each chieftain and district is given in the introductory chapters, and in the notices prefixed to each of the various classes of coins. The work forms a handsome volume, and the plates are engraved in Mr. Fairholt’s best style.

“Die Syracusanischen Stempelschneider, Phrygillos, Sosion und Eumelos,” by Franz Streber. (4to., pp. 26. Munich, 1863.) In this interesting contribution to the history of Greek medallic art, Dr. Streber’s object is to correct some errors in the list of those marvellously skilful engravers of antiquity whose names are preserved on the masterpieces issued from the Sicilian mints, and to add some other names to it. From the evidence he adduces from coins in the Munich cabinet and elsewhere, it appears that the names Nonklides, Kyrillos, and Sosis, given by Raoul-Rochette and Leake, must be erased from the list of Syracusan engravers, and those of Phrygillos, Sosion, and Eumelos inserted; and, further, that those artists were contemporaries of Euklides, Eumenos, Euthymos, Evacnetos, and Kimon.
MISCELLANEA.

THE LATE COLONEL LEAKE’S COLLECTION OF GREEK COINS.
—We are glad to be able to congratulate the University of Cambridge on the acquisition of the collection of coins and antiquities formed by the late Colonel Leake. The outlay of so large a sum as that involved in the purchase, provoked, of course, considerable discussion among those interested in the administration of the funds of the University; but the careful and judicious Report of the Syndicate appointed to examine into the question seems to have carried due weight with it, and at a congregation, held on the 25th of February last, a grace passed the Senate, by a majority of 94 against 14, for the purchase of the collection for £5,000 out of the Fitzwilliam Fund. The Master of Trinity (Dr. Whewell) was among those who opposed the purchase, and issued a paper of reasons for voting against it, which was ably answered by the Rev. Churchill Babington. We must confess to some surprise at finding the former gentleman, who has for many years been a Fellow of the Society of Antiquaries, speaking of scholars and antiquarians as if the latter were never nouns substantive.

THE JEWISH COINAGE.—We see announced as shortly ready for publication, “The History of Jewish Coinage, and of Money in the Old and New Testament,” by Frederic W. Madden, M.R.S.L. The work will be comprised in one volume, royal 8vo., with 244 woodcuts, and a Plate of Alphabets, by F. W. Fairholt, F.S.A.

SALE OF COINS.—The collection of English coins formed by the Rev. Henry Christmas, M.A., F.R.S., was dispersed by Messrs. Sotheby, Wilkinson, and Hodge, on the 1st February, 1864, and five following days. The collection consisted of 992 Lots, which produced £1,261 15s. 6d., and the undermentioned pieces are selected as deserving of notice. Lot 27. Coenwulf; rev., DΟΔΕΛ, or perhaps, PΟΔΟΔΕΛ with a long cross after the L, a circle enclosing a pellet, four lines issuing from it, unpublished, but not unique—£2 14s. 6d. Lot 33. East Anglia. Ethelward; obv., cross with wedges in the angles; rev., ΑΕΔΕΛΗΕΛΜ. Cross with crescents in the angles; from the Croydon find—£3 17s. 6d. Lot 35. Ethelstan; obv., cross and pellets; rev., ΜΟΝ. ΜΟΝΕΤ, plain cross; from the Croydon find—£3 4s. Lot 47. St. Eadmund; obv., SC. EADMVΝΒΕ. REX. MAR (?) rev., DEEΕΕΜΥΝΕΙ. MONΕΤΑ., small cross. If the title of Martyr has not been ingeniously altered from INR, then it is, as the catalogue states, a “remarkable coin”—
£2 13s. Lot 162. Ecgbeorht (sole Monarch); obv., ELBEVRHT. King's head to right; rev., $PEFNV. MO. Monogram of the king's name, composed of the following letters:—$LBO$R. 
XI.

THE COPPER COINAGE OF THE ACHÆAN LEAGUE.¹

I doubt if coins have in any instance handed down to us a more vivid and compendious illustration of a great national movement than that furnished by the federal town series of the Peloponnesus. These coins are rude when compared with those masterpieces of art, the tetradrachms of federal Chalcidice, or of Amphipolis; while the League coinage of Stymphalus shows poorly beside its magnificent præ-Achæan didrachm. Still the numismatist should look more to the historical importance of coins than to their artistic beauty, however much his inclinations may lead him in the opposite direction.

The effect of the Achæan League was to introduce an identity, so says Polybius,² of laws, weights, measures, and

¹ This paper occupies precisely the same ground as Sestini's Essay, which has become rather scarce and expensive. Besides, the comparison for a moment of Mr. Fairholt's plates with those of Sestini, will render any further apology unnecessary. Last, of the thirty-two towns of which I engrave copper coins in this paper, Sestini has only engraved twenty in his Essay, and one other in his description of the Fontana Museum.

² ii. 37. On all details and questions about the coinage of the Achæan League I have entered more fully than the limits of the present paper will allow me to do in an "Essay on Greek Federal Coinage," Macmillan, 1863. On some few points, how-
coinage, throughout the whole Peloponnesus. We can best appreciate the vitality of such a confederation when we see great states like Corinth and Lacedæmon, coining, merely as equal members of a League, with half villages like Pæge and Gortys. Still, I am tempted to think, though this is delicate ground, that we must not stretch the words of Polybius to mean that the local civic currencies ceased in the larger states during the Achæan League. Corinth, for instance, would pay her federal taxes in coin of the League type, but would trade beyond Peloponnesus with her old didrachmic currency. There are also strong indications of a contemporaneous civic and federal currency at Patraë, and, strangely enough, at Ægium; but I hope on some future occasion to enter more fully into this question, which is merely collateral to the subject of the present paper, and one, besides, of extreme difficulty.

To the historical numismatist the Achæan copper coinage is everything, the silver coinage very little.

On the copper we get the particular coining city's name in full, preceded by the name of the Achæans collectively, ΑΧΑΙΩΝ ΑΡΓΕΙΩΝ—ΑΧΑΙΩΝ ΤΕΓΕΑΤΑΝ.

The obverse bears a magistrate's name, nearly always at full likewise; such, for instance, as ΑΡΧΙΠΠΟΣ-ΧΑΙΡΕΑΣ. This, I believe, represents the head local ever, I shall advocate views in this monograph rather opposed to what I have there said.

3 The city name is always fragmentary on the federal silver, except Ægium; the magisterial name is abbreviated likewise, except in one case at Ægium, and generally at Elis. Sometimes a symbol represents the city name. The elements of confusion in this series are overwhelming. The main difficulty is, which letters stand for the town, which for the magistrate. Again, two or three magistrates' names seem to occur on some coins, or perhaps those of the magistrate and his father,
magistrate, and not the president, or League strategos, for the time being. The types, which bear reference to Pan-Acadian worship, and represent the federal deities, are described below.

The one really important historical discovery of late years, which Mr. E. A. Freeman has made by studying the coins of the Acadian League, is to supply the hitherto unknown names of the Arcadian townships which it was part of the policy of Philopæmen to erect into independent states, as counterpoises to the inordinate power of Megalopolis. These are, Alipheira, Asca, Dipyæa, Gortys, Pallanteum, Thisoa. But history does not tell us that a similar policy must have been pursued towards Pagæ, the port of Megara, and Elisphasia (Polyb., xi. 11), a deme of Mantinea. The existence of a federal coinage of each must however prove this interesting fact. To these eight townships of Philopæmen, perhaps Corone may be added; but the federal coin of this place requires a special notice, as does that of Asine.

I conceive that there is no reason to doubt that the town Corone, which struck this coin, lay to the south of the Messenian capital. I fancy, also, that the legend of this coin settles the discrepancy between Plutarch and Livy. The loyal Messenian borough, the relief of which during the revolt of Messene cost Philopæmen his life, is mentioned by Plutarch (Phil. 18), as κώμην τῆν καλομείνην κολωνίδα; but in Livy (xxxix. 49), the passage runs as, "ad præoccupandam Coronen." We may further deduce that Corone was either then already an independent

as is so commonly the case on Greek coins. The symbol attributions are the most satisfactory; the letter attributions, unless they can hereafter be classed by collateral evidence of large finds, must always go for very little.
canton, or subsequently enfranchised by Lycortas. In either case the same policy of neutralising the local prominence of Messene would be indicated; and, in the case above, the federal general would strain every effort to relieve a loyal township against its revolted mother-town, however insignificant that township were, if only to show the other petty cantons, erected on similar policy through the Peloponnesus, that, while loyal, the central authority of Aegium would support them to the utmost.

Viewed geographically, the coin of Corone is quite an outlier in our League series. The fabric of this coin is typically South-Arcadian, and bears the strongest affinity to the federal coins of Phigalia, and in some degree to those of Megalopolis. These are its next Arcadian neighbours in the League. To the federal coinage of Messene there is no resemblance in fabric; though Messene is geographically interposed between the three towns.

The one troublesome town in our League series, as regards the geographical position, is Asine. Is it the Argeian, the Messenian, or the Laconian Asine? I incline, myself, to the Argeian Asine, from the fact of these federal coins resembling in fabric those of Sicyon and Argos. Had such pieces been struck by the Messenian Asine, which lies near Corone, lower down the coast, one would expect some affinity in fabric to the federal coinage of Corone, or at any rate to that of Messene. This is however not the case. The Laconian Asine, or Las, is too much isolated in its removal from all other League towns in my list to compete in probability of attribution with the two former towns. I must remark that I am only speaking here of the federal coinage of a certain Asine. There is no necessity that the Asine which strikes under the family of Severus should be the same as the League Asine. Colonel
Leake made the Asine of Severus, Messenian, because Pausanias had mentioned that the Argeian Asine was in ruins at his time. The discovery lately of an autonomous coinage of Tiryns, certainly pre-Achaean, of which town Pausanias had spoken in similar terms, shows us that such a dictum proves very little against actual numismatic evidence.

In arranging the plates which illustrate this paper, my object has been to engrave a single federal coin of each Achaean city, and to furnish moreover a reference where each such engraved coin may be found, for the convenience of future verification. In only two instances have I copied engravings, and not a coin or a coin impression. The difficulty of getting together a series of all the known Achaean towns, has placed me under great obligations to the directors of the numismatic departments in the public collections of London, Paris, and Vienna. Among private collectors, the Rev. Churchill Babington, Baron Prokesch-Osten at Constantinople, and Mr. E. Wigan, have afforded me most valuable materials and assistance. Want of space compels me to be more brief in my acknowledgments to these gentlemen than they deserve. Above all, Mr. Fairholt has spared no pains upon what I am convinced were three most difficult plates, and without which this paper would be worthless.

I regret that many of my magisterial names should be of so fragmentary and uncertain a character. It is safer, however, to read too little than too much. When this subject becomes better known, many additions and corrections will be made to my list both of towns and magistrates. Federal coins of several cities, which we know were included in the League, will come gradually to light, such as Orchomenos, Cleitor, Leontium, Lepreum, &c.
A very brief comparison of this present list of cities which have left federal coins, with that of Sestini, will testify that this series is not nearly yet complete.

The normal copper type of the Achæan League is to be understood to occur on each coin of this monograph, unless when it is specified that the particular coin varies somewhat from it. This type is as follows:

*Obv.*—Zeus Homagyrins standing naked to left, holding in his right hand a small winged Victory, which stretches a wreath to the right. On this side the magistrate’s name, nearly without exception, occurs, reading either across the field or vertically; in either case the figure of Zeus generally divides the name.

*Rev.*—Demeter Panachaia seated to left. In her right hand a wreath, in her left a long sceptre. On this side the name of the particular coining city is inscribed, preceded by the name of the Achæans collectively; thus ἈΧΑΙΩΝ ἈἸΓΙΕΩΝ, ἈΧΑΙΩΝ ΚΟΠΙΝΘΙΩΝ. Any additional letters, symbols, or deviations from this type will be specially mentioned with each particular coin.

The number of each city corresponds with the number of its engraved coin in the Plate. The date, or approximate date, of its League incorporation follows its name. The cities are arranged as they joined the League, its oldest members first, its latest last.

1. ἈΕΓΙΟΥ. B.C. 275.

*Obv.*—ἩΡΑΚΛΙ vertically and divided.

*Rev.*—ἈΧΑΙΩΝ ἈἸΓΙΕΩΝ. Engraved. My collection. Also Sestini.

*Obv.*—ΜΟΚΡΙΩ vertically and divided.

*Rev.*—ἈΧΑΙΩΝ ἈἸΓΙΕΩΝ. Electrotype from Col. Leake’s collection.

Both the ethnic legends read from the head of the Demeter to the right. The legend in other cases reads usually from
the feet of the Demeter to the left. The fabric of these two coins is much ruder than would be expected for the coinage of the assembling city of the League; especially when places like Pellene and Ægeira have left us such comparatively fine federal coins.

There is a federal coin of Ægium in the Leake collection with the name ΑΡΧΙΠΠΟΣ.

Sestini records a fragmentary name of a magistrate of Ægium, ΚΙΡΟΜ. The names of the authenticated magistrates, if restored at full, would be Moerion, Heracleios, and Archippus. These, as all subsequent restorations and completions of magistrates’ names, must be accepted merely as provisional.

We get also a magistrate, ΑΡΙΣΤΟΔΑΜΟΣ, from one exceptional silver federal coin of Ægium, which is not uncommon.

2. ÆGEIRA. B.C. 275.

Obv.—ΔΥΣΑΝ to right.

Rev.—ΑΧΑΙΩΝ ΑΙΠΙΡΑΤΑΝ. Engraved. Mr. E. Wigan’s collection.

Both in workmanship and preservation the finest copper League coin I have ever seen.

Two similar in my collection, with their reverse legend quite clear, but no magistrate decipherable.

Another, in Mr. C. Babington’s possession, reads ΑΕ or ΑΕ to the left of the obverse. Sestini gives a name like ΧΙΩΑ?

Tegea and Ægeira, among League cities, inscribe themselves ΤΕΓΕΑΤΑΝ and ΑΙΠΙΡΑΤΑΝ.

The federal silver of Ægeira gives us ΚΑΛΛΥ (ΚΟΣ) and ΛΑΚΙ (ΒΥΑΔΗΣ). The name on the engraved coin is probably Lysander.

3. PELLENΕ. B.C. 275.

Obv.—ΑΡΧΕΜΑ vertically to right; XI. to left.

Rev.—ΑΧΑΙΩΝ ΠΕΛΛΑΝΕΩΝ.

In my possession. Engraved.

Another of my own similar, but thicker, and of worse workmanship. Also in the Bibliothèque, Paris. Leake, &c.
Obv.—ΘΑΝΙΠΠΟΣ. vertically. Last three letters to left.
Rev.—ΑΧΑΙΩΝ ΠΕΛΛΑΝΕΩΝ. Leake collection. Also Sestini.

The city in League times always calls itself Pellane. The coins are of fine fabric.

4. SICYON. b.c. 251.

Obv.—ΑΝΤ (apparently) in monogram to left. (See Plate.)
Rev.—ΑΧΑΙΩΝ ΞΙΚΥΝΙΩΝ. British Museum. Engraved.

Another similar, in the British Museum, with the monogram \( \Sigma \) placed as in the former. Another of my own, and one of Mr. C. Babington's, of very rude workmanship.

The coins of Sicyon do not seem to bear a magistrate's name, except in monogram. Sestini's coin, with ΦΑΗΝΟϹ, is probably not of Sicyon, but Argos.

(During the intermediate period out of the League.)

Obv.—ΧΑΙΠΕΑΣ to right.
Rev.—ΑΧΑΙΩΝ ΚΟΠΙΝΘΙΩΝ. Engraved. British Museum.

Obv.—ΚΡΑΤΙΝΟΣ.
Rev.—ΔΑΧΑΙΩΝ ΚΟΠΙΝΘΙΩΝ. Mine. In fine preservation.

Obv.—ΕΡΜΟΚΡΑΤΗΣ.
Rev.—ΑΧΑΙΩΝ ΚΟΠΙΝΘΙΩΝ. British Museum. Two, one in very fine preservation. (The mistaken Ceryneia coin.)

The error of attributing League coins hitherto to Ceryneia is apparent on comparing these three coins. In the British Museum coin the Θ of ΚΟΠΙΝΘΙΩΝ is written like an omicron, closed at the side (see Plate) by two thinner ends. In my coin the Θ is written precisely like an inverted Q, with a long tail. The strange form of the Θ in all these cases has made numismatists read ΚΟΠΙΝΘΙΩΝ first, and as in the one British Museum specimen the first omicron is very small, they then changed it into an alpha, thus,
KAPINOION. Even this, however, is not the correct ethnic of Ceryneia. The magistrate in Sestini's coin is ΕΡΜΟΚΡΑΤΗΣ likewise, and leaves no doubt that the coin really belongs to Corinth.

6. Megara. b.c. 243-223. b.c. 204-146.
(Out of the League during the intermediate period.)

Obv.—ΑΘΩΝΑ to right vertically.

Rev.—ΑΧΑΙΩΝ ΜΕΤΑΡΕΩΝ, but with the former word to the right, the latter to the left; below the throne, three or four indistinct letters, one perhaps Δ, another Ω. Engraved. Imperial collection, Vienna.

Mionnet gives the name ΗΜΙΠΙΑ (?) on a federal coin of Megara. The League silver (British Museum) gives us ΔΟΡΟΝ(ΙΔΑξ), which name perhaps is to be completed thus.

The magistrate is probably to be completed Athanagoras on the engraved coin.


Obv.—ΑΧΑΙΩΝ vertically to right.

Rev.—To right, ΕΙΙΔΑΥΠΕ(ΩΝ). To left a magistrate's name of about seven letters, indistinct. Engraved. Bibliothèque, Paris.

The position of the ΑΧΑΙΩΝ on the wrong side of the coin is noteworthy in this instance, and entirely exceptional. Sestini mentions, but does not engrave, what is probably the same type of Epidaurus. His coin agrees in the obverse position of the ΑΧΑΙΩΝ. He reads the first three letters of the magisterial name ΔΑΜ, but I cannot trace anything like these letters on the Paris coin.


Obv.—ΘΕΟΣΕΝΟΣ (?) across the field, or perhaps ΘΕΟΣ-

ENOT (?)

Rev.—ΑΧΑΙΩΝ ΗΠΑΙΕΩΝ. Engraved. British Museum.

Two similar in my collection.

On all three coins the ethnic and League inscriptions are very clear, but in no case is the magisterial name satisfactory. The British Museum coin is the best.

Nothing legible on the obverse.

The K is so small in the inscription, that this coin has been given to an imaginary Leone.


Obv.—No legend.
Rev.—ΑΧΑΙΩΝ ΣΤΥΜΦΑΛΙΩΝ. Engraved.

In my possession. The coin is smaller and thicker than usual. Sestini gives a coin of this city with the name ΕΠΑΤΟΣΙΟ(Σ).


Obv.—... ΝΑΣΤΑ.
Rev.—ΑΧΑΙΩΝ ΦΕΝΕΩΝ. In my possession. Engraved.

Obv.—ΑΝΑΣΤ... 
Rev.—ΑΧΑΙΩΝ ΦΕΝΕΩΝ. Baron Prokesch-Osten, Constantinople.

Both coins are evidently of the same type. The magistrate’s name is probably ΑΝΑΣΤΑΣΙΟΣ.


Obv.—(Μ)ΥΛΙΧΟΣ vertically right and left.

Mr. Babington has another coin of the same type in greatly inferior condition.

Sestini gives two coins with name ΜΠΩΝ, and another doubtfully countermarked.

Mr. Babington, whose kindness in furnishing me with assistance and materials for the present monograph has been extreme, suggests that all the League coins generally given to
Aleia may belong to Elis. He instances a coin in Capt. Graves’s sale catalogue, there described as reading ΑΧΑΙΩΝ ΑΛΕΙΩΝ, not ΑΛΕΙΩΝ. From several classical authorities which Mr. Babington has quoted to me, it is evident that this distinction of ΑΛΕΙΟΣ as equal to ΗΛΕΙΟΣ, and contrasted with ΑΛΕΟΣ, the adjective form of Alea, can be amply supported. Mr. Babington’s case is certainly a very strong one; and when I have seen Capt. Graves’s coin, and verified the reading ΑΛΕΩΝ, I shall have no hesitation in altering my present attribution. Another important point will be to compare the fabric of the ΑΛΕΩΝ coin with those reading ΑΛΕΙΩΝ. The fact of no federal copper of Elis existing is not much by itself, for neither are there any of Lacedæmon, and both these states joined the League very late (B.C. 192 and 191). Now Aleia had been more than forty years already in the League when these joined.

13. THELPUSA. Between B.C. 240-235.

*Obv.*—ΧΑΡΑΞΜΑ, in front XI.


This coin is not given in Sestini’s League monograph, and I have been obliged to reproduce a wretched engraving from his description of the Fontana Museum. Perhaps this case, and that of Hermione, may, by contrasting Mr. Fairholt’s engravings with those of Sestini, justify me with the numismatic public for re-engraving this series. We know that Thelpusa was a League town, therefore it must have struck federal coins; and, though I have never seen this piece, I have no reason to doubt it. The case is different with Eva, of which we know nothing under the League; therefore I have refused Sestini’s coin of this last admittance into my list until I have personally verified it.


As Antigoneia, after B.C. 222.

*Obv.*—XI to left.


This highly interesting coin must have been struck after B.C. 222, as in this year Mantineia changed its name in honour of Antigonus 2nd Doson. The old name was resumed in imperial times. The XI occurs besides the magistrate's
name Archelas on Pellene. We have just seen it in a similar position on the Thebaspian coin. I cannot attempt to explain it.

This coin of Antigoneia, like others which I have here described, is what numismatists would call unique. I am always very unwilling to call a coin "unique" or "unpublished"; as, in three cases out of four, the former term becomes false in a few years' time, and the latter is false already.


*Obv.*—No legend.

*Rev.*—ἈΧΑΙΩΝ ΜΕΓΑΛΟΠΟΛΙΤΩΝ to right, ΑΠ (?) in monogram, below . . . ΝΥΣ. Engraved. Imperial Collection of Vienna.

This is the identical coin quoted, but not engraved, by Sestini. The name below he reads ᾿ΗΝΟΣ, and he may be right, but I cannot venture to read as much. Moreover, the last letter but one looks to me more like upsilon than omicron. If this be a magistrate's name, its position is most anomalous; that the monogram should co-exist with this name is also strange.

The coin of Megalopolis in Col. Leake's collection is in a very bad state, though probably rightly attributed.

16. Hermione. B.C. 233?

*Obv.*—No legend.

*Rev.*—To left ΕΠΜΙΟΝΕΩΝ, to right ΑΧΑΙΩΝ. Engraved and copied from Sestini, pl. 2, 18.

This is the only instance in which I have had recourse to Sestini's plates in his Essay on the League. I have never seen a federal coin of this town. All my other coins, except this and that of Thelpusa, are copied either from the coins themselves, or from impressions of them.

The legend on this coin reads contrary to the normal direction.

17. Argos. B.C. 228.

*Obv.*—No legend.

*Rev.*—ἈΧΑΙ . . . to left, ΑΠΕΙΘΩΝ to right. Between the wreath and the head, in a straight direction,
XAPI (?); above this V (this last symbol may belong to the X, and may be read XV. API. Again, the X may be a Φ). Below the arm ΩΓ'. Engraved. Col. Leake's collection.

Another, precisely similar, in my collection, in worse preservation, bears however the really important part, the ΑΡΓΕΙΩΝ, very clearly, and better than the Colonel's coin.

Sestini has evidently engraved (pl. 1, 2) another coin of this very type and city, but he makes ΑΡΓΕΙΩΝ into ΑΡΓΕΙΑΣ, a magistrate's name, thus producing a purely federal coin with no city specified. No instance of this have I ever seen. There is, however, no doubt about ΑΡΓΕΙΩΝ. The other letters are extremely obscure and anomalous. Sestini says nothing of their occurrence in his description of this coin, but on his plate he would apparently read ΧV, ΩΝ, ΩΓ. Until a specimen of this type, in first-rate preservation, comes to light, no explanation can be offered with any assurance. Colonel Leake, strangely enough, does not notice these additional letters in his text description of his collection in the Num. Hellen. The ill-preserved coin which Sestini engravest as of Sicyon (pl. 3, 30), with ΦΑΝΗΝΟΣ, may possibly be the same, as Mionnet quotes a League coin of Argos reading thus. The Rev. Churchill Babington possesses a League coin of Argos on which he reads ΦΙΑΝΗΝΟΣ. Mionnet gives a name ΠΑΚΑΖΙ? (sic.).

18. Phlius. b.c. 228.

Obv.—ΠΑΣΩΝ to right vertically.

Rev.—ΑΧΑΙΩΝ ΦΑΕΙΑΣΙΩΝ. Engraved. Leake collection.

Sestini engraves a similar coin, and gives one on which he reads a fragmentary name of a magistrate, ΚΑΛΙΦ... This coin has been misread for a League piece of Psophis. The Rev. Churchill Babington informs me that he possesses a League coin apparently of Phlius, which seems to read ΔΑΣΚΩΝ.


Obv.—ΠΕΛΛΑΝΗΑΣ.

NUMISMATIC CHRONICLE.

Obv.—ΚΑΛΑ . . . ?
Rev.—ἈΧΑΙΩΝ ΚΑΦΥΕΩΝ. Rev. C. Babington. Also in my collection.

20. TEGEA. B.C. 222.

Obv.—ΚΟΡΙΕΣΑΣ. across the field.
Rev.—ἈΧΑΙΩΝ ΤΕΓΕΑ . . perhaps a letter or monogram to the left. Engraved. British Museum. Also Sestini.

Obv.—ΤΙΑΚΩΝ to right.
Rev.—ἈΧΑΙΩΝ ΤΕΓΕΑΤΑΝ. In my possession.

Obv.—ΠΑΣΩΝ.
Rev.—ἈΧΑΙΩΝ ΤΕΓΕΑ. In my possession.

The Rev. C. Babington has a coin reading (Θ)ΡΑΣΕΑΣ. of this city, under the League.
Mionnet gives a doubtful name, ΧΙΝΑΣΕΑΣ (?).
Sestini publishes a coin reading ΙΣΜΙΑΣ.
A federal silver coin in the British Museum reads ΕΥΑΠΕΙ-(ΤΟΣ), in two lines.

21. PAGAE. B.C. 208?
(On the second incorporation of Megara probably.)

Obv.—ΧΑΡΜΙΔΑΣ vertically to right.
Rev.—ἈΧΑΙΩΝ ΠΑΓΑΙΩΝ. Engraved. British Museum. Also Leake collection.

Sestini publishes this type, and engraves a coin reading ΔΥΜΑΔΑΣ.

22. PHIGALIA. B.C. 208 or 196.

Obv.—ΚΑΕΟΔΙΚΟΣ vertically to right and left.
Rev.—ἈΧΑΙΩΝ ΦΙΓΑΛΕΩΝ. Engraved. In my possession, with another similar. The first very finely preserved.

Sestini’s coin, pl. 3, 26, seems very doubtful. The countermark, which, if true, must be Messeian, would be interesting, could the coin be examined. Mionnet gives ΚΛΕΑΡΧΟΣ? of
this town. There is possibly some confusion with Corone, where this name occurs. There are strong analogies of fabric between the federal coins of Phigalia, Corone, Thisoa, and Megalopolis.

23. Asine. Date doubtful.

*Obv.*—(T)IMOK(PARTHΣ).


*Obv.*—Legend uncertain, but different from preceding.

*Rev.*—... ΑΣΙΝΑΙΩΝ. Rev. C. Babington.

24. Elisphasia. b.c. 193?

*Obv.*—No legend.


25. Alipheira. b.c. 193?

*Obv.*—(Δ)ΥΣΙΜΑ across the field. Below Υ . Ε . Σ. (?)


26. Asea. b.c. 193?

*Obv.*—ΞΕΝΙΑΣ.

*Rev.*—ἈΧΑΙΩΝ ΑΣΕΑΤΑΝ. Engraved. In my possession. Also fine specimens of the same in Mr. E. Wigan's and the Rev. C. Babington's collections.

Sestini gives the name ... ΔΑΠΟΧ? The supplement of Mionnet, ΠΕΜΠΑΝ.

27. Dipæa. b.c. 193?

*Obv.*—ΔΑΣΙΑΣ.

28. Gortys. B.C. 193?

Obv.—No legend.


A similar coin, published by Baron Prokesch-Osten in his "Inedita," is there given as reading ΔΑΧΙΩΝ ΚΟΡΤΥΝΙΩΝ.

29. Pallanteum. B.C. 193?

Obv.—ΠΠΠΑΡΧΟΣ.


This is also Sestini’s identical coin.

30. Thisoa. B.C. 193?

Obv.—ΠΟ ΛΥ, ΗΡ . . ΗΣ (?) across the field in two lines.

Rev.—ΔΑΧΙΩΝ ΘΙΣΟΑΙΩΝ. Engraved. In my possession. Two specimens.

The magistrate’s name is very doubtful. Sestini reads two varieties of no doubt the same type, as ΜΟΛΥΜΠ . . ΜΟΣ and ΠΟΛΥΜΗΡΗΣ severally. No doubt this is something near the truth. The federal coins of Thisoa are of a strange ungainly fabric.


Obv.—ΔΕΞΙΑΣ.

Rev.—ΔΑΧΙΩΝ ΜΕΣΣΑΝΙΩΝ. In the Leake collection and mine. Engraved.

Sestini gives coins with ΕΥΝΕΜΗΣ, ΑΡΓΕΙΑΣ, ΠΑΝΤΙΣΟΣ, and a monogram. The magistrate on the coin we engrave is also found on probably contemporaneous civic coins of Messene.

32. Corone. B.C. 184?

Obv.—ΚΛΕΑΡΧΟΣ(ΟΣ).

Rev.—ΔΑΧΙΩΝ ΚΟΡΩΝΑΙΩΝ. Engraved. Imperial collection of Vienna, and in my possession.
Sestini engraved this coin from Vienna, and renders the obverse ΚΑΕΑΡΧΟΥ. Θ. I think it is safer only to read as far as above. The genitive is never found, as far as my experience goes, on the Achæan coinage. My coin of Corone is precisely the same as the Viennese, but not so good. Sestini gives another coin of Corone with the name ΑΝΔΡΙΝΑΣ.

Corone ends the copper series of the League. Sestini gives also federal coins of Ceryneia, disposed of under Corinth, and of Eva. He calls it "Arcadie," but Eva, if it coined at all, is to be placed in the Thyreatis; it is not likely to have had any connection with Mount Eva. Without denying that such a coin may exist, I prefer not to copy Sestini's very doubtful drawing of this coin.

Sestini publishes a federal copper coin which he conceives is struck by the League generally, and belongs to no determinate city. Such a coin I have never seen. Without positively denying its existence, I shall merely copy the description without comment.

*Obv.*—ΑΝΤΑΝΔΡΟΣ.

*Rev.*—ΑΧΑΙΩΝ ΚΑΛΛΙΣΤΑΤΑ. Sestini, pl. 1, 1.

Sestini places another coin in this category, which is evidently the League coin of Argos described above.

The Rev. Churchill Babington has a federal coin with a magistrate's name ΘΕΩΝ, but the city is uncertain. I have one with ΝΙΚΙΑΣ (?) and ΑΧΑΙΩΝ . . . ΡΕΩΝ, which I am tempted to give to Patrae. The coin is evidently new, but it is safer not to publish it. It is of northern Peloponnesian fabric. Mionnet gives us ΤΙΜΟΚΛΕΟΣ with the city name effaced.

**Silver Coins.**

I propose to engrave a single specimen of the federal coinage of five towns severally, which we know must have
coined under the League, but of which no copper coins have as yet been discovered. It will be seen that the silver attributions are none of them certain like the copper, but only probable. The coins engraved are scarcely any of them rare, so that no special reference need be given as to where they are to be found.

I. PATRÆ. b.c. 280.

Obv.—Head of Zeus.
Rev.—Monogram of Achæa. II A (retrograde) above a dolphin.

II. Dyme. b.c. 280.

Obv.—Head of Zeus.
Rev.—Monogram of Achæa. Above Δ Y (retrograde). To right monogram. Below, a thick-bodied fish, perhaps a thuny.

III. TRÆZEN. b.c. 243.

Obv.—Head of Zeus.
Rev.—Monogram of Achæa. On either side Δ, I, below a trident.

IV. LACEDÆMON. b.c. 192.

Obv.—Head of Zeus.
Rev.—Monogram of Achæa. Above probably ΔA in monogram. To right and left the bonnets of the Dioscuri; below EY.

V. ELIS. b.c. 191.

Obv.—Head of Zeus. EΠΙΝΙΚΟΣ.

Elis and Ægium strike the only federal silver coins which bear, like the copper, a magistrate's name at full. The silver
COINS OF THE ACHÆAN LEAGUE.
COINS OF THE ACHÆAN LEAGUE.
federal series of Elis gives us also ΚΑΛΙΠΠΟΣ (B.M.) ΚΑΜΑΙΩΝ (B.M.) ΘΡΑΣΥΛΕΩΝ (B.M.) ΔΙΟΜΕΝΙΟΣ (B.M.)

The following names and fragments of names are on Mionnet's authority, ΝΙΚΙΑΣ . ΠΑΝΤΙΣΟΣ . ΥΡΩΚΥΛΟΥ (? ) ΑΔΜΑΙΩΡΑ (? )

Cousinery has given federal silver coins of Ἀεgin, but this attribution is most problematical.

J. LEICESTER WARREN.

Note.—I shall feel much obliged to any numismatist who will kindly transmit to me impressions of any coin verifying or correcting the more doubtful magisterial names in this paper. Of any new copper coin of the League I shall be, of course, glad to receive the particulars.
ON SOME GOLD ORNAMENTS AND GAULISH COINS FOUND TOGETHER AT FRASNES, IN BELGIUM.

By the kindness of Mr. C. Roach Smith, I have to exhibit this evening, in his name, photographs of some remarkable ornaments in gold, which have lately been found in Belgium, associated with a number of Gaulish coins. M. Renier Chalon, to whom Mr. Roach Smith is indebted for the photographs, has given a short account of the discovery in the last number of the *Revue de la Numismatique Belge*, from which I extract the following particulars.

Some workmen, digging up the root of a tree, in a wood at Frasnes, near Tournay, belonging to the Comte de Lannoy, came upon a number of Gaulish gold coins, and three curious ornaments in gold. The coins, which appear to have been at least thirty in number—or as a subsequent account from M. Chalon states, eighty—were all of them of the common type, with the plain convex obverse, and with the rude horse, with a pellet beneath, upon the concave reverse. The varieties in this type consist principally in the different manners of ornamentation of the exergual space, and the three coins in the photograph show the three principal varieties which were present in the hoard. The ornaments, which together with the reverses of the coins are engraved in Plate V., consist of—
GOLD ORNAMENTS AND COINS FOUND AT
1. A ring, nearly 1½ inch in diameter, with a continuous ornament on its external face, formed of small globules of gold soldered together in clusters. The ring is too large for the finger, and too small to have been worn as a bracelet.

2. A circle (bracelet?), formed of a tube of gold, consisting of several pieces, fitting one into another, rather slight, and with no other ornament than two continuous flattened balls, which seem to terminate the two ends of the ring at the place where they meet.

Lastly. A large ring, about 8 inches in diameter, formed of a tube, about 1¼ inch in diameter, of gold as thin as a sheet of tin plate. This tube, which was broken in two places by the workmen, is filled inside with a very hard cement, in the centre of which is a small rod of iron. Though originally a continuous ring, there are two flattened balls, which give it the appearance of being penannular, and on either side of these there are repoussé ornaments, in high relief and of beautiful design. Round the centre of the plain part of the ring is a collar with a beaded ring at each end, and with embossed ornaments in the middle.\(^1\) It is very remarkable that the central device of the ornament at the ends of the torque, that around which all the waved ridges are made to cluster, appears to be a bull's head, with large eyes, open nostrils, and curling horns. The frequent occurrence of the head of the ox in British barrows was commented upon by the late Mr. Bateman,\(^2\) who regarded it as going far to prove the existence of some peculiar superstition or rite, of which no notice has reached modern times. Its frequent

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\(^1\) There is a torque of nearly the same character in the museum of the Royal Irish Academy—No. 290.

\(^2\) "Ten Years' Diggings," p. 130.
appearance upon British<sup>3</sup> coins, where it is represented above the horse, and on Gaulish<sup>4</sup> coins, where it either forms the principal type, or comes in as an accessory, seems to point to some superstitious reverence attaching to the bucramium.

But the principal feature of interest that attaches to this find consists, as Mr. Roach Smith observes to me, in the fact, that these early Celtic coins give an "approximate date to the ornaments, which, though usually termed Gaulish or Celtic, belong to a class hitherto, for want of some such key, not fully understood. But here we seem to get a little light. It is similar to that afforded by the Gaulish hog upon the Goodrich Court shield. Such associated little facts are worth a wilderness of theories. Thus we see how perfection in one art can be allied to gross incapacity in another. Who could have believed that a people capable of making such torques and bracelets could have so failed in engraving dies for coins? They must have been illiterate and incompetent beyond their specialities—ornaments for the person or the horse,—works we know that many barbarous peoples often excel in." Mr. Franks, who, more than any one, has paid attention to this particular class of antiquities, has bestowed upon them the name of Late-Celtic,<sup>5</sup> and is inclined to assign them in this country to a period extending from about 200 to 100 B.C.<sup>6</sup> down to the close of the first century after Christ. Among other facts in support of this opinion is the discovery at Tiefenau,<sup>7</sup> near Berne, in 1849,

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<sup>3</sup> Evans, pl. iv., 10, 13; v., 8, 9, 13, &c.
<sup>4</sup> Lelewel, pl. vi., 27; vii., 73; ix., 9, &c.
<sup>5</sup> "Hors Ferales," p. 172.
<sup>6</sup> Ib., p. 189.
<sup>7</sup> Bonstetten, "Supplément au Récueil des Antiquités Suisses."
of a number of iron swords and spear-heads, portions of coats of mail, horse-trappings, fragments of chariots, and numerous other objects, some with ornaments of a similar character to those on the objects from Frasnes, associated with Gaulish coins, probably dating from 200 to 100 years B.C. Mr. Franks's remarks upon the difference in the art displayed upon different objects of the same period are singularly applicable to the present instance. "It must be remembered that considerable skill in some branches of industry is not inconsistent with great barbarity in other respects: the instant that the ancient Celtic metallurgist attempts to produce the figure of a man or animal, his work becomes grotesque and rude in the extreme, while he succeeds in designing and executing very elaborate patterns with inimitable skill and grace."

The discovery to which I am now calling attention corroborates Mr. Franks's statement not only upon this point, but also with regard to the age of the objects; for it may be fairly assumed that the torque, bracelet, and ring must be of the same period, at all events within a few years, as the coins found with them; and as these are imitations, though barbarous, of the Philippus, they cannot date earlier than 300 B.C., nor later than the conquest of Northern Gaul by Julius Caesar, say B.C. 53, when the native coinage may be presumed to have ceased. We must, however, now see whether some closer approximation cannot be made to the date of these coins, which are found not only in Belgic Gaul but in Britain. They belong in fact to the class represented in Ruding, pl. i., 1, 3, and 4, or to the first class into which I have divided the coins I have described under pl. B, No. 8, in my account of the coinage of the Ancient Britons. I have there shown that they must have been copied from a
prototype which had or ought to have had the laureate bust derived from the Macedonian Philippus on its obverse, but which had from wear either of the die or coin become obliterated. The inference from this is, that the coins were struck at a time so long subsequent to the introduction of the original prototype—the Gaulish imitation of the stater of Philip II.—that on many coins all trace of the original head of Apollo had become lost; and as it was no longer necessary to preserve any traces of it, "natural selection" led to the adoption of the plain convex obverse in its stead. I have, however, shown the probability that the earlier coins with the wide-spread head of Apollo do not date earlier than from 200 to 150 B.C., and these coins are indisputably of considerably later date. Their weight is usually not more than 96 grains, and taking into account that the coins with the wide-spread bust weigh sometimes as much as 120 grains, and that the standard weight of British coins during the inscribed period was about 84 grains, it is probable that these uniface coins are nearer in date to the inscribed than to the coins with the wide-spread bust. The difference between 120 grains and 84 grains is 36 grains, while between 96 grains and 84 grains it is only 12 grains, or just one-third as much. Assuming that the diminution in weight was constant, these uniface coins would have been struck at the time when two-thirds of the period between the issue of the earlier and of the later coins had elapsed. Taking 150 B.C. as the date of the earliest uninscribed British coins, and that of the earliest inscribed coins as about 45 B.C., we should arrive at the date of B.C. 80 for these coins with the plain obverse. The coins with the wheel instead of the pellet below the horse, of which such a large number were found at Whaddon Chase, weigh
usually about 90 grains, and belong, as I have attempted
to show, to a rather later period than these, viz., to about
B.C. 60 to 55.

But there is another circumstance which tends to fix the
date of these coins found at Frasnes to about the period
of B.C. 80, or even a little later—I mean the fact that
they are found both in Britain and in Belgic Gaul. The
existence of a type of this kind, so commonly found both
in this country and on the continent, points to a time
when the intercourse between the two was of the closest
kind, and may well justify us in assigning them to the
period when the connection between the Belgic tribes which
had emigrated into Britain was still maintained with the
parent tribes, and when so many of them were still sub-
ject in connection with other Gaulish tribes to Divitiacus,
the prince of the inland continental tribe of the Suessiones.
This, says Cæsar, writing in B.C. 57, was the case, "nostrâ
etiam memoriâ," a term well applicable to a state of
things existing some twenty years before, or to B.C. 80,
the period to which, from other circumstances, I have
been inclined to attribute the objects found at Frasnes.
But though I have thus attempted to assign an approxi-
mate date for the issue of these coins, I do not wish it to
be understood that I consider them to have been struck
during only a limited period. On the contrary, from their
numbers, their range in weight, and the fact that their type
is so simple as hardly to be susceptible of any farther modi-
fication, I am of opinion that their issue may have extended
over a period embracing probably about half a century,
commencing it may be some few years before the date
I have mentioned, and not terminating, in this country at
least, until a few years after the invasion of Julius.

John Evans.
XIII.

ON THE TYPE OF THE FIRST ANGLO-IRISH COINAGE.

The subject of this communication is the type on the obverse of the silver halfpennies coined by "John, Earl of Morton and Duke of Cornwal, born in 1166, who was the fourth [fifth] son of Henry II. The king, when this young prince was in his twelfth year, made him Lord of Ireland, and sent him over, A.D. 1177."\(^1\)

Simon's statement that John was sent to Ireland in the twelfth year of his age is made on the words which are in italics, in the following quotation from Selden:—

"In the annals of Ireland, we read that Joannes filius regis dominus Hibernie de dono patris, venit in Hiberniam anno aetatis sue duodecimo (which was the thirteenth year from the first entrance of Henry II.) ; and in confirmation of his title, Pope Urban III. sent him a crown of peacock's feathers."\(^2\)

The annals of the Four Masters, Grace, Clyn, Matthew Paris, and other chroniclers, as also Sir James Ware, all agree that John first came to Ireland in the year 1185,

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1 Simon on Irish Coins, ed. 1749, p. 11.
"which was the thirteenth year from the first entrance of Henry II."

Selden does not refer to any particular Irish annals, but his allusion to the English invasion in 1172, and the confirmation by Pope Urban, elected 25th November, 1185, of John's title to the Lordship of Ireland, corrects the error in the quotation which misled Simon, respecting John's age on his first visit to Ireland; but it was in the twelfth year of his age that his father made him Lord of Ireland, "As we find in Brampton at the year 1177, the same year the king came to Oxfenford, and in a general council there held, made his son John, king in Ireland, by grant and confirmation of Pope Alexander. So Hoveden."³

Selden also quotes Hoveden, and says that "some of the antients" contemporary with Henry II. use the words regnum or dominium regni Hiberniae.

John, as Lord of Ireland, exercised his full powers, not only during the life of his father, as appears from charters, the originals of some of which are still preserved, but also during the reign of his brother Richard, for he granted a charter to the citizens of Dublin in 1192. "Apud London, regni Richardi regis Anglie anno tertio, die quarto decimo Maii."⁴

While he was Lord of Ireland, he coined halfpennies in Dublin and Waterford, and probably in other places, as a few of his halfpennies have on their reverse the words ON REN and ON RIL, which have not yet been identified with any city or town in Ireland. After he became king, he coined pennies, halfpennies, and farthings of a

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³ Ware's "Annals of Ireland," ed. 1705, p. 8.
new type, "ad pondus numismatis Angliae," at his Irish mints in Dublin, Limerick, and Waterford.

My purpose at present is not to describe the numerous coins which bear the name of John, but to endeavour to remove all doubt respecting the type on the obverse of the halfpennies, which were first described by Simon as "having on one side his head full-faced, with a diadem, or crown of five pearls, and this inscription, IOHANNES DOM. Johannes dominus." The head, or rather the full face on these coins, fills the entire space inside the inner circle, and bears some resemblance to the pictorial representation of the sun on sign-boards, or to the "man in the moon." Besides a fillet of pearls, rarely five in number, or a diadem, as Simon terms it, there are on many of the coins thin curved lines above the fillet, and at each side of the face, which seem to be intended to represent hair. Others which have the fillet well marked have not any curved lines or hair. In one particular all these coins are alike—they do not exhibit the slightest indication of a neck under the head.

The halfpennies engraved in Mr. Sainthill's "Olla Podrida," which are supposed, with much probability, to have been struck in England by John, "during his brother Richard's absence in Palestine and Austria," have the name IOHANNES only, with side face and neck inside but not filling the inner circle.

John's title, "Dominus Yberne," the places of mintage, Dublin and Waterford, the different forms of the cross on the reverse, which indicate two coinages, the names of three moneyers, and the peculiarities of the type on the

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5 Matthew Paris, s.a. 1210. 6 Irish Coins, p. 11. 7 Vol. i. pl. xxi. figs. 23 and 24.
obverse, are all exhibited in the following engravings of three of his coins.\(^8\)

1

\[\text{Obv. + IOHANNES DOMIN\textsuperscript{9} Y\textgreek{b}R'.}\]
\[\text{Rev. + NORMAN: ON: DW\textgreek{l}I. Weight 10 grains.}\]

2

\[\text{Obv. + IOHANNES DOM.}\]
\[\text{Rev. + HVGH ON DW\textgreek{l}. Weight 10 grains.}\]

3

\[\text{Obv. + IOHANNIS DOMI.}\]
\[\text{Rev. + WILL ON WAT\textgreek{l}. Weight 11\textperiodcentered 5 grains.}\]

From the words “his head full-faced,” in Simon’s description of the halfpenny, it is evident he believed that the face was intended to represent John’s portrait, an opinion which does not appear to have been questioned until the year 1839, in a communication to the Numismatic Chronicle, with the signature L. Y. H.\(^9\)

\(^8\) The woodcuts in this paper were engraved by Miss Baily, a pupil in the “Queen’s Institution for the Employment of Educated Women, Dublin.”

\(^9\) Vol. ii. p. 187. These are the final letters of the name Daniel Henry Haigh, to whom the authorship is correctly attributed by Mr. Akerman in his communication to the Society of Antiquaries in 1844, to be noticed presently. It is due to Mr. Haigh to establish his right to priority in elucidating the type of John’s coins.
The evidence adduced by Mr. Haigh is as follows.—
"In the 20th plate of a work, entitled 'Monnaies des Évêques, des Innocens, &c.,' two curious medals are engraved (44 A and 44 B), of nearly contemporary execution with the coins in Simon's second plate, Figs. 38 to 42; and on comparison of these with the latter of the medals especially, the exact correspondence of the types appears very striking. The explanatory note (page 89), contains some pertinent remarks, showing that the moon, as well as the morning star, were emblems of St. John the Baptist; since, as the moon, in the absence of the sun, reflects his light, and testifies of his existence, so it was said of St. John, 'that he was sent to bear witness of the light.' So, also, the Baptist was represented as the morning star, the forerunner of the 'Sun of Righteousness,' being designated by Christ himself as 'a burning and a shining light.'"

"Hence, it appears, that the various devices which occur on the money of King John, were typical of the office of St. John the Baptist."

The inference from the preceding observations is, that the device of the full face represents one of the heavenly bodies, and that it is only typical.

Mr. Charles Roach Smith exhibited at the meeting of the Society of Antiquaries, in London, the 11th of January, 1844, a "fibula, or brooch, of lead or latten," which was found in the river at Abbeville, in France.

This fibula has in the centre a full-faced human head, around which is the legend, + ΑΩΕΩΩ : SINGVΩ : FAHIQ : BΩATI : IOHIS : BAPTIST η :

Mr. Akerman, in a letter addressed to Sir Henry Ellis in reference to this fibula, merely reiterates the substance of Mr. Haigh's remarks, and concludes that "there can
scarcely be a doubt that the full face on the halfpenny of John is intended to represent that of the Baptist.”

In the Archæological Album, published in 1845, there is an article on the "Feast of Innocents," which is illustrated with engravings of "a sort of money struck in lead" by the Bishops of the Innocents, copied from the work published by Dr. Rigollot in Paris, in 1837, and already referred to by Mr. Haigh.

In a note, page 166, the editor, Mr. Thomas Wright, says, "The pretended head of St. John the Baptist was a great object of pilgrimage in the cathedral of Amiens." Two of the signs of this relic, apparently as old as the thirteenth or fourteenth century, are engraved in our Plate; the first (fig. 7), in which the priest appears showing the face of St. John, has the inscription + HIC EST SIGNVM FADQI BEATI IOHANIS BAPTISTAE; the other (fig. 8), represents the face itself, and has his inscription, + SAIN: IDHAN BADIDPA : DAQIQS.

The face on fig. 7 is small, like that on John's coins,

but fig. 8, which is here accurately copied, bears a very

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11 The head of the Baptist is said to have been brought to Amiens after the taking of Constantinople in 1204.—Butler's "Lives of the Saints."
striking resemblance to a magnified view of a full-faced halfpenny.\textsuperscript{12}

Any doubt respecting the meaning of the full face on John's coins, which remained after the publication of Mr. Akerman's letter on the fibula found at Abbeville, and the engraving of the Amiens sign of the Baptist, has been removed by the discovery in the year 1858\textsuperscript{13} of an unique piece of silver now first published.

\textit{Obr. + QAPYT IOHANNIS}, with full face, very like John's halfpenny, fig. 2, p. 105. The Irish or Saxon \textit{\textcopyright} occurs also on three of De Curey's farthings from the same hoard.

\textit{Rev. + ON OQ . . . . DVN}, in the centre a double cross and four annulets, like the halfpenny, fig. 2, p. 105. Weight, 10.9 grains.

If this piece, which was found along with more than three hundred of John's coins, was intended to pass as money, its current value, according to its weight, was a halfpenny.

Though now "there can scarcely be a doubt" that the head on John's halfpennies is that of the Baptist, some arguments may be adduced to show that John was not likely to place his own portrait on his Irish coins while he was only Lord of Ireland.

Mr. Haigh remarks "that as Henry II., on his accession, had established the privilege of coining, which several

\textsuperscript{12} See also Forgeais' "Plombs Historiés trouvés dans la Seine," 2\textsuperscript{me} série, p. 98.

\textsuperscript{13} Numismatic Chronicle, N.S., vol. iii. p. 149.
of the barons enjoyed [during the reign of Stephen], it was hardly to be expected that he would, though so indulgent a father, allow his own son to place his own portrait on his money" while he was only Lord of Ireland. See also Ruding, Svo. edit., vol. ii. p. 23.

John, when he became king, appears to have been as jealous as his father respecting the prerogative of coining money, for in the year 1207 he prohibited, under severe penalties, the currency of any, except "monetam nostram Hibernie, quoniam cam per totum regnum currere volumus." 14

The words "totum regnum" seem to imply that John's Irish money was to be current in England, further evidence of which is, that in the year 1205, forty marks, or 6,400 "de denariis Hibernie," were conveyed from place to place in England—"Rex Baronibus, &c., Comptate Roberto de Veteri Ponte id quod rationabiliter posuerit in cariagis qudraginta in de denariis Hibernie a Notingehusque Exonæ et in balistris nostris cariandis a Notingham usque Norhæ. T meipso apud Marleb, xxvii. die Maii."—Rot. Claus An 70 Johann in Turre Lond., p. 34, b.

The only question which remains for consideration is, Why was the head of St. John the Baptist placed on the first Anglo-Irish coinage?

Mr. Haigh conjectures, "Whether the king was born on the festival of St. John [24th of June], and in consequence received his name, and regarded him as his patron saint, we know not now; and on that point the chronicles of that age are silent." He shows from Matthew Paris, that King John entertained a peculiar veneration for the

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\begin{figure}
\centering
\includegraphics[width=0.5\textwidth]{coins.png}
\caption{Obr. + \textit{CAPVT IOHANNIS}, with full face, very like John’s halfpenny, fig. 2, p. 105. The Irish or Saxon \textit{c} occurs also on three of De Curcy’s farthings from the same hoard.

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saint, and concludes by saying, "To these instances, I could add others from various sources, of important expedi-
ditions undertaken by the king on the same festal day."

The remarkable similarity of the head on the sign
struck at Amiens, to that on John’s coins, suggests the
inquiry—Is there any possibility of the piece with the
legend CAPVT IOHANNIS being a pilgrim’s sign?

From a passage in Giraldus Cambrensis, who was a
contemporary (in his youth) with Thomas à Becket, in
which he describes himself and his companions as coming
from Canterbury to London, "cum signaculis B. Thomæ a
collo suspensis," it appears that at that early period
the custom prevailed of pilgrims to the shrines of saints
bringing back with them signs, to show that they had
visited the places indicated by the devices they bore.

Mr. C. R. Smith exhibited, at a meeting at Canterbury,
a round leaden brooch, with a mitred head in the centre,
and the legend + CAPVT ΤΗΟΩΔ. This sign was found
in the Thames, at London, and is represented in the
following cut, the size of the original, copied from the
engraving in the Archaeological Album, 1845, p. 21.

\[ \text{There is no evidence on record, or even a tradition, that}
\text{pilgrimages were performed in the twelfth century to any}
\text{shrine dedicated to the Baptist in Ireland; nor is there} \]

\[ 18 \text{ De reb. a se gestis ap Angl. Sacr., vol. ii. p. 481.} \]
any example known of a pilgrim's sign made of silver. The absence of a loop or a hole by which this piece could be suspended from the neck, or of a pin by which it might be worn as a brooch, shows that it was not a pilgrim's sign. Moreover, the supposed head of the Baptist was not brought to Amiens until after the taking of Constantinople in 1204, nineteen years subsequent to John's first visit to Ireland. King John visited Ireland a second time in the year 1210, but the type of the piece under consideration, and the style of the workmanship, resemble John's first coinage.

There is no occasion to give any evidence of the veneration in which saints have been held in Ireland from an early period, further than to show that St. John the Baptist was venerated almost to an equality with St. Patrick, the Apostle of Ireland.

St. John the Baptist and St. Patrick were joint patrons of Armagh, as appears from various entries in the registers of that see.

In a letter of indulgence, dated at Athirde (now Ardee, in the county of Louth), 15th May, 1406, entered in the original registry of Nicholas Fleming, Archbishop of Armagh, preserved in the registry office among the records, the following words occur:—"De Dei omnipotentis suæ—que præcelsæ genetricis Marie, ac Sanctorum Johannis Baptistæ, et Patricii patronorum nostrorum, ac omnium Sanctorum, misericordia, et auctoritate confisi, quadraginta dies indulgenceæ concedimus per præsentes."16

About the year 1140, the Priory of St. John the Baptist, at Tuam, was founded by O'Connor, King of Ireland.17

16 Gent. Mag., April, 1860, p. 333.
17 Archdall, Monast. Hibern., p. 298.
In 1183 the Priory or Hospital of St. John the Baptist, at Downpatrick, was founded by John de Curcy.\(^{18}\)

In 1188 the Priory of St. John the Baptist, Dublin, was founded by Alured du Palmer.\(^{19}\)

In the beginning of the year 1200, the Hospital of St. John the Baptist was founded at Nenagh, in the county Tipperary.\(^{20}\)

St. John the Baptist was the patron saint of the parish of Castletown, in the county Louth, and the following inscription is round the border of the slab covering the altar in the chapel at Castletown:

"Sir Walter Bellew, Priest, erected this Altar in honor of St. John the Baptist, the first of January, Anno Domini 1631.\(^{21}\)

These few examples, together with the number of holy wells dedicated to St. John, at which people annually assemble, and the existing custom of lighting bonfires throughout Ireland on the eve of St. John's Day, the 24th of June, prove that the Baptist was venerated in Ireland previous to the English invasion in 1172, and up to the present time.

The imperfection of the legend on the reverse of the piece with the words, "Caput Johannis," is much to be regretted, for if it was intelligible, some clue might be given to a definite appropriation of the purpose for which it was struck.

De Curcy, who had acquired great power in the north of Ireland at the time of John's first visit, placed on his

\(^{18}\) Archdall, p. 117, and Ware's "Annals," s. a.

\(^{19}\) Whitelaw and Walsh's "Hist. of Dublin," vol. i, p. 158.

\(^{20}\) Archdall, p. 670.

\(^{21}\) D'Alton and O'Flanagan's "Hist. of Dundalk," 1864, p. 274.
own coin the cross of St. Patrick, one of the patron saints of Armagh, which cross also appears on the Downpatrick and Carrickfergus farthings, coined about the same period.\textsuperscript{22}

The only conjecture I can offer, on a subject so obscure, is, that the head of the Baptist, the joint patron of Armagh, was placed on the silver halfpenny, which was probably struck at some place where a priory or hospital was dedicated to the saint, or perhaps with the view of reconciling the natives to the new and first money coined in Ireland by their invaders.

\textsc{Aquilla Smith.}

March 28th, 1864.

\textsuperscript{22} Numismatic Chronicle, N. S., vol. iii., pl. iv.
I concluded the first portion of this article with a suggestive rectification of the reading of a passage in Manu, tending to prove that coined money was in use at the period of the compilation of the text of India's earliest lawgiver. Any question that might have remained on this subject may be satisfactorily set at rest by the testimony of the published Sanskrit version of Yajnavalkya\(^1\) the commentary on which, known as the Mitákshara, defines the Kárshika as "measured by a Kársha" (Karshononmita); while the copper Kársha itself is described as Támrusya Vikára, or "copper transformed," i.e., worked up from its crude metallic state into some recognised shape.\(^2\) This proves, in the one case, that the interpretation of the term Kársha, as a coin, or fabricated piece of whatever description, is fully authorised; and, in the other, that the copper Kárshápana, as Manu's text would imply, constituted the ready referee of weight, which its general currency as a coin of the period was calculated to ensure. Indeed it is curious

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\(^1\) Mitákshara, i. 364.

\(^2\) Professor Wilson missed the full force of this explanation in adhering to the old translation of Manu—where "Kársha or Pana" are given.—"Ariana Antiqua," p. 404; Prinsep's "Essays," i. 53, note.
to note how near an adherence to very primitive customs this state of things discloses, in that the original idea of the use of definite and subdivided weights of metal for commercial purposes is still so closely identified with the secondary function these fixed units had come to fulfil in the guise of money, as circulating measures of value, while they retained their hereditary acceptance as bases of ponderosity.\(^3\) This duality of function remained so essentially associated in the minds of the people, that the revised scales of weights of the British Government, in compliance with local predilections, were adapted and adjusted under a similar system,—the current *Rupee* recommending itself as the initial datum and "foundation of the *Ser* and *Man,*"\(^4\) and as the criterion and handy test of the higher weights.

To the most casual inquirer, perusing the precepts and enactments embodied in the Statutes of *Manu*, the existence of some conventional means of meeting the ordinary wants of commerce and exchange, incident to the state of society therein typified, would be, so to say, self-evident. The scale of fines, the subdivisions of the assessments of tolls, the elaboration of the rates of interest, and even the mere buyings and sellings adverted to, so far in advance of any remnant of a system of barter,

\(^3\) An early example of the use of the *Kársha* as a weight is given in the *Buddhist Legends* (Burnouf, *Introductory Hist. Bud.*, p. 258), where one *Kársha* weight of sandal wood is stated to have cost "500 Kárhápanas." The custom of employing current coins as measures of weight appears to have become subsequently so much of a recognised system in Hindustán, that Sikandar bin Bahlol extended their metric functions into tests of measures of length—41½ diameters of his copper coins being assigned to the *Gus* or local yard.—*Num. Chron.*, xv. 164.

\(^4\) Prinsep’s *Useful Tables*, ii. 95, 104-6; "*Jour. As. Soc., Bengal,*" 1884, *Appendix*, p. 61, &c. See also "*Jour. As. Soc., Bengal,*" i. 445.
would necessitate the employment of coined money, or some introductory scheme of equable divisions of metal, authoritatively or otherwise current by tale,\(^5\) without the need of weighing and testing each unit as it passed from hand to hand. We need not attempt to settle the correct technical definition of coined money, or what amount of mechanical contrivance is required to constitute a coin proper,—it is sufficient to say that we have flat pieces of metal, some round, some square or oblong, adjusted with considerable accuracy to a fixed weight, and usually of an uniform purity, seemingly verified and stamped anew with distinctive symbols by succeeding generations, which clearly represented an effective currency long before the ultimate date of the engrossment of the Laws of Manu. The silver pieces of this class, the Puránas, are found in unusual numbers, and over an almost unlimited extent of the entire breadth of Hindustán: from the banks of the sacred Saraswati; under eighteen feet of the soil which now covers the inhumed city of Behat;\(^6\) down the Ganges to the sea; on the eastern and western coasts; and in the "Kistvaens" of the ancient races of the Dakhin.\(^7\) That the silver coins should have been preserved to the present time, in larger numbers than their more perishable and less esteemed copper equivalents, was to be expected, especially looking to the reconversion of the latter

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\(^5\) One example may suffice. "The toll at a ferry is one paná for an empty cart; half a paná for a man with a load; a quarter for a beast used in agriculture, or for a woman; and an eighth for an unloaded man."—Manu, viii. 404.

\(^6\) "Jour. As. Soc., Bengal," iii. 44. Prinsep's "Essays," i. 73. For range of localities, see also A. Cunningham, "Bhilsa Topes," p. 354.

into newer dynastic mintage, and their proverbial absorption for the construction of domestic utensils. But with all this, the relative proportions of each, which reward modern collectors, would seem to indicate that of the joint currencies, the silver issues must have already constituted a large measure of the circulating media of the day; and this evidence is by no means unimportant, as showing that while the standard of value was, from the first, copper, the interchangeable rates of the two metals must have been in a measure recognised while these imperfect currencies were in the course of formation and reception into the commerce of the country.

The tenor of the entire text of Manu conclusively demonstrates that the primitive standard of the currencies of the Indians, like that of the geographically less isolated, though equally independent originators of their own proper civilisation, the Egyptians, was based upon copper, a lower metal, which, however it may astound our golden predilections of modern times, was clearly in so far preferable in the early conception of interchangeable metallic equivalents, that it necessarily constituted the most widely distributed and diffused representative of value, brought home to the simplest man's comprehension, and obviously in its very spread the least liable to sudden fluctuation from external causes, such as would more readily affect the comparatively limited available amounts of either of the higher metals. Hence, in remote ages, under an imperfect philosophy of exchange, copper may be said to have been

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8 Col.-Stacey's collection contributes 373 silver coins of this class to 30 copper pieces ("Jour. As. Soc. Bengal," vol. xxvii. p. 256; 1858). The British Museum cabinets show 227 silver against 2 copper punch coins. Of the former 57 are round; the rest are square, oblong, or irregularly shaped.
the safest and most equable basis for the determination of all relative values; and so well did it seemingly fulfil its mission in India, that as civilisation advanced with no laggard pace, and foreign conquest brought repeated changes of dominant power, and whatever of superior intelligence may have accompanied the intrusive dynasties, the copper standard continued so much of a fixed institution in the land, that it was only in Akbar's reign (A.D. 1556—1605)\(^9\) that it even began to lose its position as the general arbiter of all fiscal and mercantile transactions. With the accumulated increase of wealth, its cumbersome volume made an opening for the silver Rupee, which established itself permanently in its place, and as time went on, gold Muhars had an exceptional and temporary acceptance; but, like the rupees of Akbar, they were left to find their own level in the market, as certain inexperienced servants of the East India Company discovered, to their astonishment, to be still the ruling idea of the community at large, when they once incautiously declared gold a legal tender.\(^10\)

\(^9\) The revenues of Akbar's magnificent empire were all assessed in Dâms, a copper coin weighing about 324 grains [N. C., xv. pp. 163—172]. The total demand of the state in A.D. 1596 is given as 3,629,975,5246 dâms. The payments in kind, in the province of Kashmir, are all reduced into equivalents in dâms, and the single exception to the copper estimate occurs in the Trans-Indus Sarkâr, of Kandahâr, where the taxes were collected in Persian gold Tomâns and Dînârs [Gladwin's "Ayín Akbari," ii. pp. 3, 107, 110. See also i. pp. 2, 3, 4, 35, 37, 39]. I do not lose sight of the fact of the long-continued use of an intermediate mixed silver and copper currency which filled in the divisions between, and co-existed with higher and lower coinage of unalloyed metals [N. C., xv. pp. 153, 163; Prinsep's "Essays," Useful Tables, p. 71]. Dâms, like the old Kârsha, were also occasionally used as weights (See Ayín-Akbari, i. 307).

\(^10\) Sir James Steuart, "The Principles of Money, &c., in
I have already extracted from the ancient Sanskrit code the contemporaneous definition of the weights of metal in use "for the purpose of worldly business." I will now examine how much of an approximation to the conventional notion of a money currency had been reached at the period of the composition of the Vedas and other archaic writings.

Professor Wilson was under the impression that he had discovered a reference to coined money in the Vedas, where, in the enumeration of the gifts bestowed upon the Rishi Garga, mention is made of "ten purses" of gold;\(^{11}\) unfortunately, the contents of these "purses, bags, or chests," or whatever may have been the intentional meaning of kosayîh in this place, do not figure in the original text of the hymn, but form part of the conjectural additions of the commentator Sâyana.\(^{12}\) As such, it is useless to speculate further on the passage; but the words dasa hiranya pîndân, "ten lumps of gold," in the succeeding verse, seem to have a much more direct bearing on the general question, and would almost in themselves establish a reckoning by tale. Had the text merely confined itself to the expression "lumps of gold" in the generic sense, crude and undefined fragments of metal might have been understood; but the deliberate enumeration of ten horses and ten lumps of gold,\(^{13}\) would seemingly

\(^{11}\) "Rig Veda Sanhitā," iii. pp. xvi. and 474.

\(^{12}\) "Rig Veda," text, vol. i. p. 699; Max Müller. See also Wilson, "R. V. S.," i. p. xlix. and iii.; and note 4, page 474.

\(^{13}\) "Rig Veda Sanhitā," iv. Ashtaka, 7th Adhyāya; "Sūkta," xlvii. verse 23—"I have received ten horses, ten purses, clothes, and ample food, and ten lumps of gold, from Divodásā." I should prefer the substitution of "cakes or balls" of gold
enforce the conclusion that those lumps were fixed and
determined sections of the metal of habitually recognised
value, or precisely such divisional portions of gold as we
see in the parallel cases of the silver and copper of which
Manu speaks, and whose extant survivors find a place in
our medal cabinets.

In addition to this allusion to what I suppose to have
been Suvarnas, the Vedas, on two occasions, distinctly
name the Nishka. The first reference to this money-
weight is to be found in a hymn by that most mercenary
Rishi, Kakshivat,14 devoted to no deity, but to the glorifi-
cation of a mundane prince dwelling on the Indus,
whose beneficence is eulogised, in an extended play upon
the number of his gifts, among which the Rishi confesses
to having "unhesitatingly accepted 100 Nishkas, 100
vigorous steeds, and 100 bulls;" evidencing, as in the
previous instance, a numerical computation by pieces of
recognised value—much in advance of the primitive test
of scales and weights. Again, in a subsequent Sákta,
Gritsamada, a Rishi of some celebrity,15 in addressing
the divinity Rudra, says, "Worthy thou bearest arrows
and a bow; worthy thou wearest an adorable omniform
necklace."16

The mediaeval scholiast substitutes the word hára, a
necklace, for the Nishka of the original text,17 an inter-

for the "lumps" of the translator. Mr. W. Elliot mentions
that "the Canarese gulige (Sanskrit gūtiṣa) was the ancient
name of a class of small spherical coins." See figs. 3, 4, 5,
pl. vii., vol. iii., "Madras Journal" (1858). Whence, also, the
gold Aidal Gulkah (Gutká) of the "Ayn-Akbari," i. p. 32.
14 Wilson, "Rig Veda Sanhita," ii. p. 17. See also i. 312,
316, &c.
15 Wilson, "Rig Veda Sanhita," ii. p. 207.
17 Max Müller, "Rig Veda," text, ii. p. 579.
pretation which is followed by the modern translator. It would seem that one of the derivative meanings of the word *Nishka*, as in the parallel instance of *Dínāra*, came in process of time to apply to “an ornament of the neck,” the component elements supplying the designation in either case. From the passage in question we may reasonably infer that the *Nishka* of the Vedas had, even then, attained so much of a definite and unvarying form, and partial ornamental fashioning, as to be suitable for decorative purposes in its current shape; a deduction which would further imply that the piece itself was understood, or admitted to be of a constant and uniform make, and that, in effect, it carried its description in its name.

It is a question whether it is not also necessary to amend the translation of the adjective, *Viswa rūpa*, from “omniform,” to the more intelligible “pervaded,” or covered “with forms” or symbols, a rendering which

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19. This singularly accords with Burnouf’s “Dínāras marqués de signes” (*lakshanāhatam dināra dvayam*), two dināra impressed with symbols. A difficulty has been felt about the supposed Latin origin of the word *Dínār*; but, if the passage quoted truly represents the fabric of the earlier mintages, it does not matter what term the recorder or translator applied to the piece itself; he may well have used the conventional word of his age for gold coin without damaging the authenticity or antiquity of the legend, or losing sight of the character of the old type of money he was then describing, and which must have been still abundant in the land. But apart from this, Colebrooke, in his Algebra of the Hindus (p. cxxxiii.), has affirmed that *Dínár* “is a genuine Sanskrit word,” the derivation of which Professor Goldstücker explains by *di* (preserved in *dīdī* and kindred with *dīv, dīp*), hence the participle *dīna*, “shining,” with the affix *āra*, implying “pre-eminence.” As regards the term *Nishka*, Max Müller has thrown out a suggestion that it may be in some way associated with the name of the Indo-Scythian king *Kauishka* ("Sanskrit Literature," p. 332). Professor Goldstücker, on the other hand, thinks that the word may
would singularly accord with the state in which we find the silver money of the period. Should any difficulty be felt at the supposition of the adornment of a god with so obvious a work of man's hand, it may be said that bows and arrows are scarcely divine weapons; but the inherent tendency of lightly-clad, imperfectly domiciled races to wear on their persons their more valuable and easily portable wealth, would naturally suggest the notion that the deities followed a similar practice; and the expression instructs us that the people among whom it was uttered were in the habit of hanging round their necks sections of the precious metals, even as their successors in the land for ninety generations have continued to do; having thereby, in many instances, undesignedly preserved to history the choicest and most interesting numismatic memorials of olden time.

Dr. Weber has collected from the Sutras and later Vedic writings, a number of references to money weights, the most interesting of which are the notice of the silver Satamána by Kátyáyana (xx. 2, 6), and the mention of a "yellow-gold satamána" (hiranyam swarnam satamánam) in the Satapatha Bráhmaṇa (xii. 7, 2, &c.), showing that the term satamána, which is given by Manu exclusively as a weight of silver, had come to be used indifferently with its coincident metric denomination, the Nishka, which, in earlier times, specially implied measure of

be satisfactorily derived from mis, "out," and ka, "splendour" (from kan, "to shine"). Nishka occurs in Páṇini, v. 1, 20; v. 1, 30; v. 2, 119.


gold. The quotation of *Suvarna Salākāni* from the Sruti, is also of importance, the *Salāka* identifying the gold piece directly with the parallel issue of silver, the residuary specimens of which retain the name to this day in the South of India.

Having obtained from the Vedas themselves so much of an indication of the use of circulating monetary weights at the very early period to which those hymns are now admitted to belong, my task in proving an obvious advance upon the rudimentary phase of the science of money, under Manu, will be simple; especially as so much has already been incidentally brought forward, tending to dissipate any remaining doubt as to the existence of a *coined* copper currency much anterior to the epoch when the customs and usages of preceding ages had to be acknowledged as the practical basis of, and, as far as might be, conciliated in the new code which was to make Brahmanism absolute. As I have already stated, there is no direct evidence to show what technic art had achieved in those days, or what form or finish was given to the current money; but, as with the copper, so with the divisional parts of gold and silver, in the table quoted from Manu (viii. 131—137), their classification repre-

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21 See also the quotation from “Yájnavalkya,” section i. sl. 364; Num. Chron., 1864, note, p. 56.
22 Mádhava in Kálanirnaya.
23 Walter Elliot, “Madras Journal of Lit. and Science,” 1858, p. 224. *Salāku* (Telugu), “A dent or mark on a coin denoting its goodness.”—Wilson, “Glossary.” The leading meaning of the Sanskrit *Salākā* is given as a dart, an arrow; one of its derivative meanings is “an oblong quadrangular piece of ivory or bone used in playing a particular game; a domino.”—Wilson, “Sanskrit Dictionary.”
24 “No greater crime is known on earth than slaying a Bráhman.”—Manu, viii. 381.
sents something more than a mere theoretical enunciation of weights and values, and demonstrates a practical acceptance of a pre-existing order of things, precisely as the general tenor of the text exhibits these weights of metal in full and free employment for the settlement of the ordinary dealings of men, in parallel currency with the copper pieces, whose mention, however, is necessarily more frequent, both as the standard and as the money of detail, amid a poor community. Their use in the higher totals would seem to refer to an earlier stage of civilisation, or to a time when the interchangeable values of the different metals were less understood and even more imperfectly determined. There is no attempt to define these relative values, and the omission may, perchance, have been intentional; though some such scale would soon settle itself by custom, and the lawgivers may wisely, in their generation, have abstained from attempting, like our own statesmen, to fix the price of gold for all time, or to give permanency to an ephemeral balance, or otherwise to swerve from the ancient simplicity of their own copper standard. Neither need there be any distrust of the contrasted passages, as representing different stages of national advancement. The collection of a code of human laws would necessarily embrace the progress and practical adaptations of many generations of men, the older formulæ being retained in the one case, side by side with the more recent enactments and their modified adjuncts. In a compilation of this kind, the retention of such apparent anomalies would indeed be a negative sign of good faith; and as we have to admit considerable uncertainty as to the exact epochs of the origin, application, and classification of these laws, and a still greater margin of time to allow for their versifi-
cation and ultimate embodiment in writing, it would be as well not to lay too much stress upon their internal evidence, when all the deductions we need can be established from external testimony.

The next contribution to the history of coinage in India is derived from the unpromising source of the Grammar of Pānini, in the text of which pieces of money in a very complete form are adverted to. That nominal terms should appear in the grammar of a people would, at the very least, imply that the object designated had attained extensive local recognition. Without touching the higher ground, as to how soon in a nation’s linguistic progress fixed grammatical definitions may become a religious, intellectual, or material need, it cannot but be conceded that if the name and description of a coin find a place among rules for the formation of words, this should be evidence sufficient to prove that such a product of mechanical art must long have passed into the dealings and commercial life of the nation at large, before

25 Professor Goldstücker has been so obliging as to examine Pānini for references to coins, and to furnish me with the following note on the subject:—

"That Pānini knew coined money is plainly borne out by his Sūtra, v. 2, 119, rūpād āhata. . . where he says, ‘the word rūpya is in the sense of “struck” (āhata), derived from rūpa, “form, shape,” with the taddhīta affix ya, here implying possession; when rūpya would literally mean “struck (money), having a form.”’ Kātyāyana and Patanjali make no observation on these words, but the Kāsikā-vṛtti says that ‘form’ here means ‘the form or shape of a man which was struck on it;’ and considering that rūpa, ‘form,’ is in this Sūtra used without any addition—or emphatically, the ellipsis of purusha, ‘man’—is perfectly natural and justified. As to the date of the Kāsikā-vṛtti, nothing positive is as yet known of it; it is certain, however, that it is much later than the Mahābhāshya; but even without its interpretation, I hold that no other sense than that put by it on this Sūtra could rationally be attributed to it."
it could have become incorporated in the conventional speech, and been sanctioned in the schools.

Admitting these inferences, it remains to decide upon the date of the grammarian himself. Professor Goldstücker conceives that he has lately obtained most important confirmatory testimony that Panini lived before Buddha Sakyamuni (B.C. 543). Accepting this period for the record in writing of the passage in question, I am satisfied to leave the limit of the anterior currency of the coins open to discussion.

The allusions to money in the sacred literature of Sakyamuni are so frequent, in comparison with their rare occurrence in the Vedic writings, as to have led one of our modern inquirers to infer that the Buddhists understood and employed the art of coining long before their Brahman adversaries; a more simple and satisfactory reason may be assigned for the apparent data, in the fact that the Vedas and their supplemental rituals refer to an ideal polytheism, while the Buddhist scriptures are based on the personal biography of a man living in the flesh among the people of India, whose manners and customs are thus incidentally portrayed. So that the Vedas proper furnish but few references to money, and Manu confines his notices to the formal letter of the law, though that brings within its circle even the definition of the lowest rate of wages, which is fixed at one pana a day, with an

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26 While on the subject of dates, I may mention that since the publication of the earlier portion of this article, a paper has been presented to the R. A. S., by Dr. Whitney, "On the Jyotisha Observation" (adverted to in Note 7, p. 48, Num. Chron., n.s. vol. iv.), questioning the accuracy of the results of previous calculations. The utmost possible limit of error, however, is admitted to lie between 1120 and 1187 B.C., instead of within the 1151 and 1186 B.C., already quoted.

allowance of grain, &c. (vii. 126). The Buddhist legends, on the other hand, abound in illustrations of everyday life, including commercial dealings, charitable donations and distributions; and in one instance they have preserved a record of the quaint item, that the Anonyma of her day, in the ancient city of Mathurā, estimated her favours at 500 purānas (about £16). Burnouf, who cites this anecdote, has further collected in his "Introduction à l'Histoire de Buddhism," numerous passages mentioning suwarnas, purānas, kakini (ratis), and kārshāpanas, and among other things he reproduces a tale which exemplifies the curious custom of the women of the period indulging in the habit of ornamenting the skirts of their garments with kārshāpanas. The notice of Dīnuṣa has already been referred to, but the most important passage under the numismatic aspect, in the Buddhist literature, is to be found in the text of the "Mahāwanso," where it is stated that the Brāhman Chānākya, the adviser of Chandra Gupta, "with the view of raising resources, converted (by recoinage) each kahāpana into eight, and amassed eighty kotis of kahāpanas." If the Buddhist legends are to be taken as in any way correct exponents of the state of civilisation at the period to which they professedly refer, it is clear that the act of

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28 Pp. 91, 102, 103, 146-7, 236, 238, 243, 245, 258, note 329, note 597. 29 Ibid, 423. 30 Turnour's "Mahāwanso," Ceylon, 1887, p. xl.; and M. Müller, "Sanskrit Lit.," 289. The Ceylon writers wrote according to their own lights, as unlike the people of India Proper, who seem to have reserved the term Kārshāpana for the copper coinage. The inhabitants of Ceylon and the Western coasts appear to have coined both gold and silver into Kārshāpanas, Māšhas, and other established weights, though the generic term Kārshāpana in books and inscriptions usually indicates copper coin in the absence of any specification to the contrary.
recoining, and by conversion and depreciation making each kārshāpana into eight, would imply unconditionally, not only that the art of coining had reached its most advanced stage, but that the ideas and customs of the country had been already trained by long usage to identify the regal stamp with the supposed assurance of fixed intrinsic value—a fallacy that was very early taken advantage of by the ruling powers. For, while the primitive currencies which bear no royal impress were endowed with, and retain to the present, a remarkable uniformity of weight, and fineness of metal, as in the very nature of things it was necessary for them to be full measure, that they might exchange against full measure in return; on the other hand, from the moment true coins, in our modern sense, make their appearance, irregularity accompanies them, so that in the Indian series, in one of the first completely fashioned mintages, that of the silver Behat type, bearing the name of Kunanda, the weights of fully-stamped well-preserved specimens vary from 29 to 38·2 grains.

The Ceylon annals casually illustrate the subdivisions of the kārshāpana, as they may be inferred to have existed under Manu (viii. 404), in the descending scale as 1, ½, ¼, ⅛. The Bhikkhus of "Wesáli" (Bassahr, north of Patna) asking alms, in 443 B.C., say, "Beloved! bestow on the priesthood either a kāhāpan, or half, or a quarter of one, or even the value of a mása." Without insisting upon this last, which would constitute ⅛ of the kārshāpana, I may notice once again the permanency of Indian institutions in the fact that Akbar’s

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copper coins were retained under the original and simple division of 1, \(\frac{1}{2}\), \(\frac{1}{3}\), \(\frac{1}{5}\), in the presence of, and association with, the most curious complications of the weights and values of the currency of the precious metals.

There is little else that will immediately serve our purpose in the notices of Ceylon coins. Nor do the more promising inscriptions of the Western Caves throw any particular light on the primitive coinages of Northern India. They contain numerous records of donations of kāhāpanas, and in one place notice a Kāhāpana Sāla, or Hall for the distribution of kārshāpanas. Hūns and Padikas are often mentioned, and special respect seems to have been shown to a currency called by the local name of Nāndigera.

In attempting to ascertain the relation of the weights of ancient and modern days, and to follow the changes that time and local custom may have introduced into the static laws of India, the capital point to be determined is the true weight of the rati, as it was understood and accepted when the initiatory metric system was in course of formation. Two different elements have hitherto obstructed any satisfactory settlement of the intrinsic measure

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33 "Ayín-Akbari," i. 36.
34 Other references to money are to be found, "Maháwanso," pp. xlii., 10; Spence Hardy, "Manual of Buddhism," pp. 119, 218, 219.
35 "Bombay Jour. Royal Asiatic Soc.," 1853; Dr. Stevenson's "Kanheri Caves, Inscrip." No. x. p. 9, and the revision by Mr. E. W. West in 1862, p. 1, et seq. See also "Násik Cave Inscriptions," 1853, p. 3; and "Sahyádri Inscriptions," 1854, p. 1.
36 The mention of Húns thus early is of some value in this inquiry, as showing the age of the name, associated with the near coincidence of its authorised weight with that of the old Purāṇa. Mr. Elliot derives the word from pon, "gold," Canarese honna. The Varāha, or modern Pagoda, being merely a double honna of 32 gunjas.
of this primary unit—the one, the irregularity of the weight of the ānja seeds themselves, which vary with localities and other incidental circumstances of growth; the other, the importance of which has been rather overlooked, that the modifications, in the higher standards introduced from time to time by despotic authority, were never accompanied by any rise or fall in the nominal total of ratis which went to form the altered integer. From these and other causes the rate of the rati has been variously estimated as 1·3125 grains, 1·875 grains, 1·953 grains, and even as high as 2·25 grains.

We have Manu’s authority for the fact that 32 ratis went to the old silver dharana or purāna, and we are instructed by his commentator, in a needlessly complicated sum, that the kārsha was composed of 80 ratis of copper. We have likewise seen that this kārsha constituted a commercial static measure, its double character as a coin and as a weight being well calculated to ensure its fixity and uniformity in either capacity within the range of its circulation. I shall be able to show that this exact weight retained so distinct a place in the fiscal history of the

37 Colebrooke, As. Res. v. 93.
38 Sir W. Jones, "As. Res.," ii. 154, "Rati=1½ of a grain." Prinsep, U. T. (180+96); Jervis, "Weights of Konkan," p. 40; Wilson, "Glossary," sub voce Rati. Col. Anderson, working from Akbar’s coins, which were avowedly increased upon the old ratios, made the rati 1·94 (Prinsep’s “Essays,” ii., U. T., p. 22). We need have no further difficulty about Shīr Shāh’s or Akbar’s coin weights now that we know the bases upon which they were founded. Indeed, the determination of the true value of the kārsha enables us to explain many enigmas in the numismatic history of India: why and whence Mohammed bin Tughlak adopted his new 140 grain standard; why the unequally-alloyed billon coins of Fīroz and others were all kept at one determinate weight, &c., &c.; N. C., xv. 136, and notes, pp. 153, 163.
metropolis of Hindustán, that in the revision and readjustment of the coinage which took place under Muhammad bin Tughlak, in A.D. 1325, this integer was revived in the form of silver coin, and was further retained as a mint standard by his successors, till Shír Sháh remodelled the currency about the middle of the sixteenth century. In the same way I have already demonstrated in this journal, in illustration of an independent question, that a coin retaining with singular fidelity the ponderable ratio of the ancient purána, was concurrent with the restored kársha under Féroz Sháh (A.D. 1351—1388) and other kings. And to complete the intermediate link, I may cite the fact that when the effects of Greek and Scythian interference had passed away, the 32-rati Purána reappeared in the Punjáb and Northern India, as the silver currency of the local dynasty of Syála and Samanta Deva, and furnished in its style and devices the prototype of the Dehli Chóhán series of "Bull and Horseman" coins, the Dillíwálas, which were retained, undisturbed in weight, by the Mohammedans, in joint circulation with the silver double Dirhams of 17½ grains, of their own system.

Extant specimens of Syála's coins in the British Museum weigh 54½ grains and upwards. If this double series of weights, extending over an interval of time represented by 24 or 25 centuries, and

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31 Num. Chron., xv., notes, pp. 138, 153, &c. In the minor subdivisions, the 34½ and 17½ of coins Nos. lix. and lx., p. 165, singularly accord with the weight required for the ½ and ⅛ kársha.
32 J. A. S. Bengal, iv. 674; J. R. A. S., ix. 177; Ariana Antiqua, p. 428; Prinsep's Essays, i. 313.
33 N. C., xv. 136; Prinsep's Essays, U. T., p. 70.
narrowed to an almost identical locality; are found not only to accord with exactitude in themselves, but to approach the only rational solution of the given quantities, the case may be taken as proved.

The ancient purána hall-marked silver pieces range as high as 55 grains; copper coins of Rámadatta 43 are extant of 137·5 grains; and other early coins of about 70 grains; while in parallel exemplification the later standard weights, under the Mohammedans at Dehli, are found to be 56 and 140 grains. Hence—

\[
140 \div 80 \text{ ratis} = 1.75 \text{ grains.} \\
56 \div 32 \quad ,, = 1.75 
\]

and this is the weight I propose to assign to the original rati; there may be some doubt about the second decimal, as we are not bound to demand an exact sum of even grains, but the 1.7 may be accepted with full confidence, leaving the hundreth at discretion, though from preference, as well as for simplicity of conversion of figures, I adhere to the 1½. Under this system, then, the definition of each ancient weight by modern grains will stand as follows:—

<table>
<thead>
<tr>
<th></th>
<th>1 Māsha</th>
<th>2 Ratis or</th>
<th>3.5 grains.</th>
</tr>
</thead>
<tbody>
<tr>
<td>SILVER</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>1 Dharana, or Purāna</td>
<td>320</td>
<td>56.0</td>
</tr>
<tr>
<td></td>
<td>1 Satamāna</td>
<td>320</td>
<td>500.</td>
</tr>
<tr>
<td></td>
<td>1 Māsha</td>
<td>5</td>
<td>8.75</td>
</tr>
<tr>
<td></td>
<td>1 Suvarna</td>
<td>80</td>
<td>140.</td>
</tr>
<tr>
<td>GOLD</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>1 Pala, or Nishka</td>
<td>320</td>
<td>500.</td>
</tr>
<tr>
<td></td>
<td>1 Dharana</td>
<td>3200</td>
<td>5000.</td>
</tr>
<tr>
<td>COPPER</td>
<td>1 Kārsha</td>
<td>80</td>
<td>140.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Subdivisions of Kārsha</td>
<td>( \frac{1}{4} )</td>
<td>20</td>
<td>35.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>( \frac{1}{6} )</td>
<td>10</td>
</tr>
</tbody>
</table>

MILLING not MARKING.

In the March number of the Numismatic Chronicle, a paper by Mr. E. J. Powell appears, entitled "Marking not Milling," in which the author objects to the use of the term "milling" by Numismatists as expressing the indentations on the edges of our coins. As his remarks are rather peculiar, I may be allowed to quote them at large. After some preliminary observations, in which he mentions the opinion of Mr. G. Sparkes as to the use of proper terms in numismatics, he goes on to say—"I have been induced to make these preliminary observations in consequence of the repeated use of the terms 'milling,' 'edge milled,' 'edge engraved,' 'milled on the edge in straight lines,' 'milled on the edge with oblique lines,' 'edge milled with a leaf pattern,' repeated 'o'er and o'er again' by the Rev. H. Christmas, in his admirable papers on the 'Copper Coinage of the British Colonies in America,' and the 'Irish Coins of Copper and Billon,' in Vol. II. of the new series of the Chronicle.

"I take occasion (because it is the most recent) to enter my protest against the use of those terms as applicable to the device, whatever it may be, upon the edges of any coins.

"A popular delusion is to be regretted under any cir-
cumstances, but when a society, amongst whose members are enrolled the highest authorities connected with the science it is its object to elucidate and promote, permits an error to be promulgated in its own journal, I feel it necessary to call attention to the subject, and, so far as is practicable, set the matter at rest in the numismatic world, whatever be the result amongst the ‘outer barbarians.’”

I have given the author’s observations word for word; and, in my opinion, we have in them an imputation of the want of accurate knowledge as to the correct application by numismatists in general of a certain, as hitherto considered, well understood numismatic term.

As the word “milling” has been applied by writers on numismatics and others to express those indentations we see on the edges of our coins, from the time of the introduction of the process for producing them, about 200 years ago, until the present time, without the propriety of the appellation having, as far as I can learn, been disputed before, I felt greatly astonished on reading this paper to find that we had been all along so much mistaken in the application of this term, and consequently considered it a duty incumbent on me to institute some inquiry as to how far Mr. Powell was justified in making such an assertion.

In order to show the prevalence of the generally received acceptation of the term, I will call attention to one or two instances of the use of the words “milling” and “milled,” in their usually accepted sense, in works of credit, and also by individuals not numismatists.

On reference to Ruding’s “Annals of the Coinage,” ed. 1840, vol. i. p. 67, I find that in the year 1561 a new apparatus for coining was introduced, called the “mill
and screw." This was the application of certain machinery to produce the impression on the blank, instead of the old process of hammering, and money struck with this apparatus was called "milled money," in contradistinction to "hammered money." The advantages were greater certainty and accuracy in the production of the impression, and also greater regularity in the shape of the coin. After a few years this process was discontinued, possibly on account of the greater expense attending its application, and the old method of hammering was still continued until the 14th Charles II., 1662, when it was finally laid aside, and the mill and screw again introduced. Hammered money was called in in 1696, and none but that produced by the new process allowed to be current. This method, variously modified, has continued to the present day.

Speaking of the markings on the edge, Ruding, in his first vol., p. 68, after some remarks on the production of inscriptions on the edges of coins, &c., says, "As it is scarcely practicable to impress a legend upon the rim of the smaller coins, a graining has been devised for their outer edge. This, which is generally known by the technical term 'milling,' was first used in 1663." He goes on to describe various forms of this milling, as straight, angular, &c., which were adopted at different times, and then says, "The whole operation of milling is yet kept a profound secret in the mint, all those who are entrusted being sworn not to discover it." Here, then, we find the process distinctly termed "milling" by a most eminent numismatic author.

In the supplement to the 4th, 5th, and 6th editions of the "Encyclopædia Britannica," Edinburgh, 1824, in an article on coinage, in which the process of coining is
minutely detailed, after describing the production of the blanks, and their subsequent preparation for striking, we read thus:—"When dried . . . they are in a state for the two next processes, which are the milling and the coining and stamping. The operation of milling is to be performed round the edge to prevent their being clipped or filed." The machine by which this milling is produced is then described as consisting of two parallel metal bars in a frame, the one moveable and the other fixed, on the edges of which bars the pattern is cut. The coin to be milled is placed edgeways between these bars. The upper bar is then moved forward by means of a handle connected with a rack and pinion, the coin rolling forwards with it, and thus the pattern is impressed on its edge. Figures explanatory of this apparatus are also given.

Here we have another instance of the application of the word "milling" in its usually understood sense, and also a description of the "mill" employed to produce this milling, in a work of credit not strictly numismatic.

Let us now inquire whether the terms "milling" or "milled," implying the indentations on the edge of an object, are in use by other persons not numismatists. Mathematical instrument makers, Opticians, Engineers, and others, make great use of screws with heads, on the edge of which are markings agreeing perfectly with the "milling" on the edge of our coins. These screws are termed by them "milled headed screws," and the markings are termed the milling. The tool by which this is produced is, however, entirely different from that employed to "mill" the coins. The application of this term is not recent, for in Adams' "Essay on the Microscope," 1787, we have the description of a microscope fixed by means of
a "milled" screw; and an instrument maker being applied to for a "milled headed screw," would produce the article required without hesitation.

I cannot at present ascertain when the word "milling" or "milled," as applied in the usual sense, was first employed; but I find in an account of the Mint, in a work entitled "London and its Environs Described," 1761, vol. iv. p. 350, after a description of the process of stamping the coin, these words—"The gold and silver thus stamped are delivered to be 'milled' round the edge, the manner of performing which is a secret never shown to any body."

Many other examples might, without difficulty, be produced, showing the constant use of these terms, milling and milled, in the usually understood sense; those given are sufficient to show that so far from the term "milling" not being the proper one for describing the peculiar mode referred to of marking the edge of a coin or other object, it appears to be that which has been from a very early period, and is still, employed by writers and artisans to express those indentations on the edge of an object which we, in common with them, understand by the words "milling" or "milled."

Let it, however, be distinctly understood that my object is not to enter into the strict legal application of the term, but only to show its universal employment by writers and others for a long period of years.

I may also observe that "mill," as a generic term, is applied to almost all machines employed not merely to grind, bruise, crush, or squeeze, but for any other purpose for which machinery can be used, whether moved by the hand or any other power. Thus we have hand-mills, water-mills, wind-mills, saw-mills, flattering-mills, paper-
mills, cotton-mills, powder-mills, oil-mills, &c., &c. I may also add, that lexicographers inform us that to mill money is "to coin or stamp it by means of a mill." I shall not enter into the correctness of this interpretation of the word "mill." Shakespeare, in his "Merry Wives of Windsor," speaks of "seven groats in mill sixpences." Locke, in his tract on the Lowering of Interest, mentions "four milled crown pieces" and "twenty milled shillings." Hatton, in "The New View of London," 8vo. 1708, states, that in 1696 the hammered money was called in, on account of its having been so much counterfeited and clipped, and recoined into "milled" money. And Horace Walpole, in his "Anecdotes of Painting," mentions Blondeau as having received a grant, among other things, for his new invention for coining gold and silver with the mill and press.

It is perhaps absolutely impossible at the present time to discover the exact nature of this early machinery, known as the mill and screw. The "screw" was, without doubt, similar in principle to the apparatus still employed in striking medals; but it is not clear what the mill was; and there appears to be considerable ambiguity in the application of the word "milled," as characterising a particular kind of money, which it would be well to clear up if possible. In one of the coin notes in Rapin's "History of England," fol. 1748, is an account of the "milled upon the edge" money of Charles II., of which money, the Rose Crown is figured and described as being "milled upon the side." The milling here is upon the face of the coin, close to the extreme edge, and consists of lines closely resembling in character the indentations on the edge or rim of the coin, known as "milling," and undoubtedly intended for the same purpose, viz., the pre-
vention of filing or clipping. Milled money, so frequently referred to, appears therefore to have been so called, in contradistinction to money not having these markings thus produced by the mill; and from this we may infer with great probability that the "mill" was a peculiar instrument used to produce these appearances, and hence the term "milled money" was applied to coins marked by this machine. I may also add that the coin just referred to is described as having the inscription "Decus et Tutamen" on the edge or rim. It would perhaps be desirable, if inquiry could be made, whether in the archives of the Mint there exists any intelligible description of the apparatus introduced in 1662 by Blondeau, under the name of the "mill and screw." If so, this would satisfactorily settle the question as to the nature and use of the mill referred to.

I have now very briefly to call attention to another assertion in Mr. Powell's paper, which may require some notice. Referring to what we call "milling," he says, "That process never was called at the Mint by any other term than 'marking,' and has no relation or connection whatever with 'milling,' which is purely and simply the reduction of the bar or ingot of metal to a plate, and next to a strip or ribbon."

Having some acquaintance with one of the principal officers of the Mint, I applied to him requesting that he would kindly inform me what was the appellation by which the indentations on the edges of our coins were known to those connected with the Mint, and also whether they had ever been known by any other name. The answer was, that "milling" was the term which, as far as he knew, always had been, and was still, employed to designate that peculiar process. He also informed me that at the present
time "milled money" did not imply money struck by the mill and screw, as formerly asserted, but money having the milling on the edge, the early use of the term milled money having been employed to distinguish it from hammered money. I then inquired respecting the term marking, and was informed that marking is an operation which is performed in order to prepare the edge to receive the milling; in fact, that referred to by Mr. Powell in his last paragraph, as "smoothing and turning up the edge of the blank." "Milling," he added, is now impressed on the coin by the same stroke as that producing the impression, and not, as formerly, by an instrument called the "mill," which is not now in use for that purpose, although still employed for lettering on the edges. He also confirmed the statement that the moneyers were sworn to keep the process of "milling" secret.

From this I must infer that Mr. Powell was misinformed as to his assertion, that this process was never known as "milling" at the Mint, and also that marking, as at present understood in that establishment, is an operation of comparatively recent introduction, to prepare the coin for receiving the milling, which is not now, as formerly, a separate operation to that of striking.

I may also add, that while I find "milling" and "milled" continually employed in the usually received sense, I meet with no allusion to their being derived from the use of an instrument employed for reducing the sheet of metal to uniform thickness.

In recapitulating I may state that it appears, from what has gone before, that the term milling or milled, implying the indentations on the edges of our coins, is one which has been employed for more than a century past to designate the peculiar operation by which they are produced;
that it has been used for that purpose by writers both
numismatic and otherwise; that the term was very early,
and is still, employed at the Mint in the sense in which
we use it; and that "marking," the proposed substitute,
is at the present time used to designate a preparatory
process, adopted only since the cessation of the em-
ployment of a separate machine or mill for milling.

I trust these observations are sufficient to prove that
"milling," and not "marking," is the term that has
for time out of mind been employed in describing the
peculiar markings on the edges of our coins. I shall
therefore spare the Society any remarks as to whether,
under any circumstances, it would be judicious to alter
well-understood and well-established terms, even although
they may not bear strict critical examination, for others, the
introduction of which would only have a tendency to pro-
duce confusion and uncertainty; and I may express a hope
that in the remarks I have made, I have not only shown
the correctness of the use of this term by numismatists
in general, but have also vindicated the Society from the
imputation of having "permitted an error to be promul-
gated in its own journal," the constant use of the word
"milling" by numismatic writers—even allowing it to
have been originally erroneous, a fact I am by no means
disposed to admit—being sufficient authority for its use in
our journal.

I am not, however, prepared to assert that Mr. Powell
may not be correct as to the legal acceptation of the word
"marking" for "milling." I only contend for the long-
established employment of the word "milling," in its
universally understood sense, and must certainly protest
against the substitution of the other term, "marking,"
for it; particularly as that term is now used at the Mint
to express a different operation. I must also express my opinion that the introduction of "marking" instead of "milling" would, in my opinion, only tend to render obscure the writings of former numismatists, who have universally employed the word milling in the sense in which we usually understand it.

John Williams.
XVI.

KENTISH TOKENS OF THE SEVENTEENTH CENTURY. (Continued.)

CRANBROOK.

Plate Q.

CRANBROOK—deriving its name from a small rivulet called the Crane—long esteemed the principal town in the Weald of Kent, of which it is the centre, fourteen miles from Maidstone, and eight from Tenterden, was once the centre of the woollen manufacture, of which Harris, in his "History of Kent," writes:—

"Cranbrooke hath been a long while famous, especially for strong, durable broadcloths of very good mixtures and colours;" and Hasted, that "The occupation of this manufacture was formerly of considerable consequence and estimation, and was exercised by persons who possessed most of the landed property in the Weald, inso-much that almost all the ancient families of these parts, now of large estates, and genteel rank in life, and some of them ennobled by titles, are sprung from, and owe their fortunes to, ancestors who have used this great staple manufacture;" and continues—"They were usually called the grey coats of Kent, from their dress, and were a body so numerous and united, that at county elections whoever
had their votes and interest was almost certain of being elected."

From the Cranbrook tokens now engraved, and the extracts from the registers of that town forwarded by the Rev. T. A. Carr, Vicar of Cranbrook, who promptly and most kindly responded to a solicitation for aid, it will be seen that the majority of the issuers were connected with the above manufacture. The town almost had its origin from being the location of the first settlers of the cloth trade in England; the church registers abound with allusions to their occupations, and the dependent trades—clothiers, broad-weavers, linen-weavers, narrow-weavers, dyers, millmen, forgemen, hammermen, and wire drawers. The last four trades were connected with the furnaces, the localities of which, as well as of the cloth trade, are still known.

The parish and church registers of Cranbrook are complete and well kept from 1559, and contain notices of great interest.

No. 1 is a farthing without a date, of "John Avery of Cranbrooke." The device, three doves, indicates his shop sign, the word Mercer on the reverse denoting his trade, and the letter F., the initial of his wife's name—confirmed in the following extracts from the parish registers, in which the name first occurs in 1613, when Robert Avery was a sidesman in the church. In the register of marriages is—

"1621. Aug. 27. John Avery and Joane Cramton,"

And in

"1653. October 9. A consent of marriage was published between John Hubbard, Mason, son of John Hubbard, Broadweaver, and Katherm Avery, daughter of John Avery, Husband-
man; and were married before John Rabson, Esq., one of the
Justices of the Peace of this county."

The next extract is most satisfactorily the entry of the
marriage of John Avery, the issuer of the token; the
initial letter of his wife's christian name and the word
denoting his trade, exactly agreeing in both:—

"1656. October 2. A consent of Marriage was published
betweene John Avery, of Salehurst, in the county of Sussex,
Mercer, son of Thomas Avery, of Westfield, in the said
county, yeoman, and Frances Turke, of Cranbrooke, in the
county of Kent, spinster, daughter of Theophilus Turke, of
Tenterden, in the said county, joyner; were married.
"Tho. Plumar."1

John, the favourite name of his family, occurs again in—

"Marriages. 1686. June 22. John Avery, of Salehurst, in
Sussex, and Susanna Harvey, of Cranbrooke."

The registers of the burials of this family are:—

"1678. February 15. A child of Laurence Avery."
"November 7. John Avery."
"1687. May 17. Mary Avery, daughter of John Avery, of
Cranbrooke towne, Mercer, and Anne Fowle, uxor."
"1687. June 14. Frances Avery, vid(ua)."—(The widow of
John the issuer of the token).

No. 2 has been hitherto inedited. Two examples of
this farthing were secured last summer in Cranbrook by
Mr. Golding and Mr. Smallfield, who lent them to be

1 This name is enumerated in a list of ancient families of
Cranbrook who became rich by the woollen manufacture of
that place. The Plumers for many generations had their seat at
Milkhouse Street, about a mile north-east from Cranbrook town.
W. Plumer, counsellor-at-law, died possessed of it, 1620. His
eldest son, Thos. Plumer, was a magistrate and sheriff of the
county of Kent; he died in 1660, and was buried in the
churchyard of Cranbrook.
engraved. It has "Thomas Danill of Cranbrooke in Kent," the Grocers' arms, and the letters "T. D." It is without a date.

The following are from the church registers:—


And only five days after—


Thomas Danill was churchwarden of Cranbrook in 1660, and also in 1664.

No. 3, the farthing of Richard Francewell, in Cranbrook, (16)57, "R.E.F.," has for its device a King's head, with a crown and sceptre.

The church registers of this name are exceedingly interesting. The entry of birth, June 3, 1660, not only records that the issuer of the token was a vintner, but that he lived at the King's Head. It also appears from the next entry that he married the daughter of an innkeeper or "holder," of Chatham. It is further remarkable that the letter c occurs only in one instance in the name Francewell in the registers:—

"Births. 1660. June 3. Elizabeth Frankwell, daughter of Richard Frankwell, at the King's Head, Vintner, and of Elizabeth Adams, Uxor."

The next extract not only records a fatal accident at the “King’s Head,” temp. Eliz., but proves that the house derived its name from a Tudor king:—

“Buryalles. 1599. October 18. William Bettes, of Hide (Hythe), brooke his necke by a fall down a payer of stayers at the Kingses Head.”
“1667. Sep. 30. A stranger that died at the King’s Head.”

This very old house is no longer a tavern,—Pullen was the name of the last person who occupied it as such. It is still well known, and is now a draper’s shop. An excellent open spring, which up to the present day supplies all the lower part of the town with water, is called King’s Head Well, and was the property of that house; the footway leading from it to the well is now a public path.

No. 4.—“Robert March of Cranbroch Mercer R.C.M.,” and on the reverse across the field, “1657.” This token is of the same date as the last, and was probably made by the same hand. The orthography of the town is strangely blundered. The name Robert March does not occur in the parish registers.

“Marriages. 1653. February 19. A consent of marriage was published between William Love, Carryer, son of William Love, Clothyer, and Jane March, daugh. of William March, clothyer, and were married the 14 day of March, 1653, before Edward Sharpe, Esqre., one of the justices of peace of this County.”

Alexander, William, and Thomas March were sidesmen and overseers between the years 1617 and 1638.
No. 5 is without a date, and has for its device the *Grocers' arms*. It also announces that Peter Master was a mercer in "Cranbroock in Kent." The word Cranbroock is another of the many instances of the varied spelling of the time. Among the parish registers only one is found containing the name Master; it is to our purpose, as it records the marriage of the daughter of Peter Master.

"Marriages. 1665. June 5. A consent of marriage was published betweene Stephen South, of the parish of Saynt Mildred, in the city of Canterbury, Clothworker, son of Stephen South, of the same parish of Canterbury, Clothworker; and Katherine Master, of Cranbrook, spinster, daughter of Peter Master of this parish, mercer; were married before Thomas Plumer, Esquire, one of the justices of the peace of this county."

No. 6 is a large farthing of a very large family in Cranbrook in the seventeenth century. It has "Thomas Mun, Draper," the *Drapers' arms*, and on the reverse, "of Cranbroock in Kent T. M. M."

Drapers were incorporated 17 Henry VI. Their arms are:—Azure, three clouds, proper; radiated in base, or; each surmounted with a triple crown, or; caps, gules. Crest: a mount, vert; thereon a ram couchant, or; attired, sable. Supporters: two lions, argent, pellette. Motto: Unto God only be honour and glory.

The parish registers are said to abound with Mun; many of that name filled the offices of sidesmen, overseers, and surveyors, and followed the trades of butchers, mercers, drapers, and broad-weavers. Of twenty-five entries of this family from the church registers, three only appear to relate to the issuer of the token.

"Buryalles. 1691. March 27. Thomas Munn."
"1691. July 23. Frances, daughter of Mary Mun."
"1695. October 10. Mary Munn, widd."

In 1718 there is the remarkable entry of the baptism of John Mun by immersion.

No. 7 is new to collectors. The only known example was in the possession of Mr. H. B. Walker, of New Romney. It has "John Parton in Cranbrook in Kent 1669 I. D. P. his half peny." The letter a in the engraving is represented as that letter is formed in the original, the left side being thick.

From the church registers it is known that Dorothy was the Christian name of John Parton's wife.

"Marriages. 1655. March 27. A consent of marriage was published betweene Samuel Streeter, of this parish, Clothyer, son of Washer Streeter, of Hellingly, in the county of Sussex, yeoman, and Francis Parton, of this parish, spinster, daugh. of John Parton, of this parish, husbandman—were married before Thomas Plumier, Esq."
"1668. October 27. Mary, daughter of John Parton, and Dorothy, his wife."
"1678. May 26. Dorothy, daughter of John Parton, and Dorothy, his wife."

and another daughter, Elizabeth, was baptised November 9, 1677.

"1674. Octr. 2. William Parton."
"1676. August 24. John Parton."

No. 8.—"William Wacher in Cranbrook in Kent," three sugarloaves, and the letters W. M. W.

Not any of the names on the eight Cranbrook tokens—the greatest known number—occur among the present inhabitants of that town.

Tenterden—according to Philipott, formerly written vol. iv. n.s. x
Thein Warden (the ward or guard of the Thane)—is eighteen miles from Maidstone. The church is dedicated to St. Mildred. The tower has claims to architectural beauty, and, from its elevated situation, is seen to much advantage for many miles round. The tower is also remarkable for being connected with many traditions. To the antiquity it is valuable as a specimen of the refined taste and ingenuity of the times in which it was raised, and to the artist it is no less valuable, on account of its pleasing outline, and the interest it adds to the general scenery of this part of the Weald of Kent.

No. 9.—The very rare token from which this is engraved is in the Bodleian Library. It has on the obverse, in six lines, "John Church in Tanterdene 1668;" on the reverse, under the words "his half peny," the Butchers' arms. Azure, two slaughter axes endorsed in saltire, argent; handled, or; between three bulls' heads, couped, of the second, armed of the third, viz., two in fess and one in base; on a chief, argent, a boar's head, couped, gules; between two block brushes (i.e., bunches of knee holly—butchers' broom), vert. Crest: on a wreath a flying bull, argent; wings endorsed, or; armed and hoofed, of the last; over the head a small circle of glory, proper. Supporters: two flying bulls, argent; winged, armed, and hoofed, or; over each head a small circle of glory, proper. Motto: Omnia subjecisti sub pedibus, oves et boves.

No. 10 has for its device an angel, and the words "James Mead 1667 in Tentarden his half peny."
The name occurs in a deed of transfer of a messuage or tenement in Tenterden from James Mede to John Mede, 2nd of Elizabeth.

No. 11.—"John Reader of Tenterden in Kent I. R."
Tenterden has no representatives among its present inhabitants of the last three tokens—all that are known of that town.

No. 12.—The halfpenny of "Andrew Clifford Blacksmith in Dimchurch Ken," and for want of space a little "T;" also the letters A. S. C. Device, an anvil.

But little is known of the history of Dymchurch as a parish or village in early times. No mention is made of it in Domesday, though there must then have been such a place, as the church is decidedly Saxon or early Norman. It is entirely surrounded by Roman remains, every ploughed field producing, more or less, fragments of Roman pottery. The church is considered by the local antiquaries to be the oldest in Romney Marsh. It underwent many alterations about fifty years since. Before it was "modernised and beautified" it was, from the descriptions of the old inhabitants, quite unique in its character; the little spire or bell-turret it had, stood on timber posts, rising at the west end, but within the body of the church. There are, at the present day, three Norman arches in good order.

The village of Dymchurch lies in a compact space immediately at the back of the great sea wall, and is from six to seven feet under high water mark. The inhabitants, principally labourers, are maintained by working at the sea wall.

From the kind researches of the Rev. Charles Cobb and Mr. Elliott, of Dymchurch, in the registers of the parish, all that can be discovered of Andrew Clifford is, that he was married to Sarah Hoad, a widow, April 14th, 1670, and that he was buried, November 18th, 1672.

H. W. Rolfe.
NOTICE OF RECENT NUMISMATIC PUBLICATIONS.

In No. 1 (January and February) of the Revue Numismatique for 1864 there are the following articles:—

4. Mediaeval coins found at Eleusis.

In the Bulletin Bibliographique is a notice of M. Arthur Forgesais' work, "Collection de plombs historiés trouvés dans la Seine," by M. A. de Longpérier.

In No. 2 (March and April) of the Revue Numismatique there are the following articles:—

1. Letter from M. A. Sabinas to M. l'Abbé Prof. Gregorio Ugdulena, "On two silver coins bearing the Phœnician name of Himera and the types of Zancle and Agrigentum."

In this paper M. Lenormant has endeavoured to show that the interpretation of a curious archaic legend on a coin of Gortyna (which is in the collection of General Fox), given by Colonel Leake, as Τορσόνος Ῥόν θαύμα ( = ζήμα), i.e., "the symbol (is that) of Gortyna," is incorrect, and that the true reading is Τορσόνος Ῥόν παύμα ( = πήμα), i.e., "the type (is that) of Gortyna." The word παύμα is connected with παίειν, which has all the meanings of the French word frapper. The sense given by Colonel Leake and M. Lenormant is almost the same, though the reading of the latter seems far preferable. The principal argument in its favour rests upon the fact that the ζ could not have been represented as semi-lunar (C) at a time when the coin was struck; and, moreover, M. Thenon has published in the Revue Archéologique (N.S. vol. viii. pp. 441—447, pl. xvi.), inscriptions in which the sign ζ is employed fifteen times with the value of Π.


In the Bulletin Bibliographique is a prefatory notice of Mr. Evans's work on "The Coins of the Ancient Britons," and an article by M. A. de Longpéríer on the work of M. le Dr. Voillemin, entitled "Essai pour servir à l'Histoire des Monnaies de la ville de Soissons et de ses Comtes."

In the Chronique are notices of a discovery of Roman coins in Brittany, and of the sale of the collection Gossellin.

In the Nécrologie are brief notices of Le Chevalier Joseph Arneth, M. Hennin, M. Vincenzo Lazari, and M. Alexandre Vattemare.

In the première livraison of the Revue de la Numismatique Belge for 1864, there are the following articles:

1. "Gallo-Belgic Numismatics, or Monetary History of the Atrebates, the Morini, and Gallo-Belgic Nations in general," by M. Alexandre Hermand.

2. "Notice on some Roman Imperial gold Coins, forming part of the collection of M. le Dr. Colson, of Noyon," by M. Alexandre Colson.

3. Letter from M. F. Soret to M. Renier Chalon, "On the Elements of Mussulman Numismatics."

4. "Rare or inedited pieces from the collection of M. J. Charvet," by M. J. Charvet.


In the Mélanges are notices of various recent numismatic publications.

The third part of vol. i. of the Berliner Blätter für Münz-Stiegel und Wappen-Kunde contains the following articles:


22. "Nakona, and the Coins of the Campanians of Sicily," by Dr. Julius Friedlaender.
23. "Coins of Pomerania during the Middle Ages" (continued), by M. Dannenburg.
25. "Coins of the Kingdom of Naples in the thirteenth, fourteenth, and fifteenth centuries," Part III., by Dr. Ernst Strehlke.
26. Letter from M. le Baron de Koehne to His Excellence the Prince Alexander Labanoff de Rostoff, "On a Seal of Mary Stuart, Queen of Scotland."
28. Miscellanea.
29. Notice of recent medals, and thirty notices of numismatic publications, conclude the first volume.

We have to announce the appearance of another Numismatic Periodical, the Rivista della Numismatica Antica e Moderna, published at Asti, under the auspices of Professor Agostino Olivieri, Librarian to the University of Genoa. The work is intended to appear quarterly, and will, to some extent, treat of sphragistic as well as numismatic lore. The first number contains the following articles:—

1. "On a Roman Coin, struck in Apulia, and relating to the battle of Asculum, or Osclum, in which Pyrrhus was conquered by the Romans," by Signor C. Cavedoni.
10. "On the Mint at Luni, and the Coins struck there in the Middle Ages," by the same.

The Number concludes with some notices of seals and of recent numismatic works; a notice of the late Dr. Vincenzo Lazari, and a chronicle of events, among which we observe a report of some numismatic lectures delivered at Florence by Signor Carlo Gonzales.
The "History of the Jewish Coinage and of Money in the Old and New Testament," by Frederic W. Madden, M.R.S.L., has just made its appearance, under the auspices of Mr. Quaritch. It forms a handsome volume of royal 8vo. size, and is illustrated with 254 woodcuts, and a plate of alphabets, by F. W. Fairholt, F.S.A. We have not on the present occasion space to do more than call the attention of numismatists to the publication of this valuable work, which not only embraces all the discoveries of Cavedoni, Werlhof, de Saulcy, and Levy, in connection with the Jewish coinage, but gives the result of many original researches on the part of the author, and altogether forms the most complete text-book of Jewish numismatics which has yet appeared.

MISCELLANEA.

FIND OF COINS IN SCOTLAND.—We are indebted to Mr. William Douglas, of Bowbutts, for the following account of a "find" of coins at Kinghorn (Fife), in January last:—

"The coins in question were found while levelling some ground close to the old mansion-house of Abden, which, though probably not in its present form of an older date than the beginning of last century, occupies the site of much older buildings, and on the spot, or near it, the early Scottish kings possessed a hunting-seat. The workmen engaged in removing the earth, a few yards south of the Edinburgh, Perth, and Dundee Railway, found an earthenware vessel, something like the accompanying figure. Thinking it a stone, they struck it with
a pick, and some coins falling out, in the scramble that ensued it was utterly smashed. From the size of the impression in the soil, and the curve of the fragments, I judge it to have been at least twelve inches in height, and nine or ten inches in diameter at its widest part. It was very gibbous in form, and on the whole not unlike the old 'greybeards.' It was slightly marked with transverse ridges, composed of livid grey clay covered with a yellow glaze, and was in excellent preservation.

"With the exception of a small space in the mouth and neck, this vessel was entirely filled with silver pennies very closely packed, and partially, through oxidisation, sticking together in lumps; generally, however, they were in excellent preservation.

"I can give but little account of the coins themselves, as, out of so many thousands, I have not examined above a hundred or so. They were principally English pennies of the first Edwards; a few Irish pennies of Edward I., struck at Dublin and Waterford; Scottish pennies of Alexander III. and David II., with a foreign sterling or two. These I have seen; but it is known that there were also pennies of Alexander II., Bruce, and Baliol.

"As far as I have been able to discover, there was not a single groat in the 'find,' which, taken in connection with the singular newness of the bulk of the coins of David II., would seem to point to the earlier part of his reign for the period of the deposit; unless, however, a larger quantity can be examined than I have seen, this surmise must be very uncertain."

**Find of Coins in Ireland.** — We extract the following from the *Athenæum* of April 9, 1864:

"Brandon Towers, Belfast, April 4, 1864.

"The workmen engaged on the new line of railway from Derry to Letterkenny, in County Donegal, recently turned up a number of ancient English coins. The exact locality of the discovery was in the parish of Burt, on the banks of Lough Swilly. The coins, when found, were lying loosely in the soil, covered by a small flat stone, beside or partly under a very large isolated rock. The number of coins found is not known. Being of small size, coated with clay, and blackened by age, the labourers thought them of no value, and threw most of them away; others, I have heard, were given to children, and lost. I have been able to collect six of them. They are silver pennies of King Edgar, who reigned A.D. 968—975. On the obverse they have all the same legend, EADGAR REX; but the reverse of each has a different inscription: one reads FARD + ENINO; another apparently IZEM + BERT; another ASPER + DNON; another
They have no heads or figures of any kind; but each has a cross in the centre of the obverse: one has a cross in the centre of the reverse, with the legend round it: the others have the inscriptions on the reverse in two lines, with three crosses between the lines.

"It seems strange that coins of such an early date should be found in so remote a part of Ireland. It would be interesting to know if any of a later period had been discovered in the same place; for, if they were all of the coinage of Edgar we might suppose they had been placed there during or soon after his reign. It is a remarkable fact that, from time immemorial, a tradition existed in the neighbourhood that gold was secreted under the very rock where the coins were discovered."

"J. L. Porter."

TREASURE TROVE.—A parliamentary return has been issued of all objects coming under the denomination of treasure trove which have been claimed by the Solicitor of the Treasury on behalf of the Crown, between the 13th of May, 1863, and the 1st of March, 1864. The following are the dates of claim, description of treasure, estimated value, and how the property was disposed of: May 20, 1863—nine hundred silver coins, found at Comberford, Staffordshire, of the value of old silver only; returned coins to the finder. June 2, 1863—eight silver coins, found at Malton, Yorkshire, of the value of old silver only; returned coins to the finder. August 1, 1863—eleven rose nobles, stated to have been found in the Cloisters, Westminster Abbey, of the value of £9 18s.; now in the possession of the Lords of Her Majesty's Treasury.

On Friday evening, May 27, Mr. R. Stuart Poole delivered a discourse, at the Royal Institution, on Greek coins as illustrating Greek Art. Having laid down the distinctions between sculpture and painting, Mr. Poole showed that some Greek coins were treated in sculpture-like, and others in a picture-like manner, others again in the manner of gem-engraving; and that he had been thus led to the discovery that Greek Art on coins was separated into three great schools—those of Greece Proper (sculpture-like), Ionia (picture-like), and Sicily with Italy (gem-like), and two schools of less importance—those of Crete (picturesque), and Asia under Persian influence (architectural). The lecture was illustrated by diagrams and electrotypes of the coins.
Unpublished Medallion of Trebonianus Gallus and his son Volusianus.—Hitherto we have had no knowledge of any medallions having been struck in the colony of Viminacium, in Moesia; but at a late sale of coins I was fortunate in purchasing one of the Emperors Gallus and Volusianus.

Obv.—(IMP. C. VIBIO) TREBON. GALLO. AVG. IMP. C. C. VIB. VOLV (S. CAES). The laureate busts of Gallus and Volusianus facing each other, each wearing a cuirass.

Rev.—P. M. S. COL. (VIM. AN. . . ). Gallus on horseback riding to the right, preceded by Victory, holding a palm branch in one hand, with the other presenting a laurel crown to the Emperor. In the exergue, a bull and lion facing each other.

Unfortunately the medallion is much corroded, and the letters which I have supplied within brackets are not distinct; the only part which admits of doubt is the title given to Volusian; it certainly seems to be CAES, though the correctness of this reading may be questioned, from the circumstance that he is called IMP., and consequently ought to have the title of AVG. rather than of CAES.

On reference to Cohen's valuable work, tom. iv. page 235, I find that there is the description of a Roman medallion, reverse, ADVENTVS. AVGG., with the two Emperors on horseback, but no mention is made of any struck in the colonies.

William Boyne.

A Numismatic Society has recently been established at Manchester, being, according to the plan proposed by its promoters, a society for the reading of papers, discussions on numismatic subjects, the exhibition of rare coins, medals, tokens, &c., and, lastly, as often as the circumstances and funds of the society will allow, for the publication of the proceedings in the form of a journal. The officers elected at the inaugural meeting were—President, Chas. Clay, M.D.; Treasurer, A. Picard; Secretary, T. D. Batty; Council, Messrs. Botsford, A. Darbyshire, A. Law, and T. W. Ulph.—We wish them all success.
XVII.

COINS OF THE PTOLEMIES.

(Continued.)

1. COINS OF PTOLEMY I. (continued.)

Before continuing the examination of the silver coins of Ptolemy I., I may explain what has not, perhaps, been sufficiently clear to my readers. The object I have in view in the earlier portion of this essay is to determine the sovereigns to whom we should assign the principal silver currency. I therefore avoid all discussions as to mints, in order to keep the reader's attention fixed on the object to be gained. Having completed this division of the subject, I propose to examine those silver coins of the Ptolemies which, though coins, are also of the nature of medals, and may be said to constitute an occasional currency. The gold money, as intermediate in character between the two classes, but rather approaching that last mentioned, may be examined at the same time. The attribution to each sovereign having been as far as possible decided, the attribution to cities, or the question of the mints, may properly then be discussed. When all data afforded by the silver and gold coinage have been examined, the difficult subject of the copper coinage may be investigated.

I hope to be able to append a catalogue of the coins of
the series known to me, with references to the portions of
the essay in which each class is discussed.

At the end of the first portion of this essay I drew the
following inferences, to form the next subject of inquiry:—
1. "All coins of Ptolemy I. of the mints of Tyre, Sidon, Ptolemaïs, ΠΑ, ΠΠΙ, and ΠΟΙ, with the inscription
ΠΤΟΛΕΜΑΙΟΥ ΒΑΣΙΛΕΩΣ, and no dates, are before the
twenty-second year."

2. "All the coins of these mints, with the inscription
ΠΤΟΛΕΜΑΙΟΥ ΣΟΤΗΡΟΣ, and no dates, or with dates
either below 25 or above 40, are of a successor of
Ptolemy I."

Coins of Tyre, Sidon, &c.; inscribed ΠΤΟΛΕΜΑΙΟΥ
ΒΑΣΙΛΕΩΣ, and without dates.

Tyre.

In the Museum collection, I find a single didrachm with
the inscription ΠΤΟΛΕΜΑΙΟΥ ΒΑΣΙΛΕΩΣ, with the mono-
gram of Tyre, and club of Hercules, and having no date.
(Pl. ii. No. 1.) The portrait is of the same style as that
of the coins of Tyre, with early dates. (Pl. i. No. 1.)

Sidon.

Of Sidon, the same collection contains two coins with
the same inscription, the letters ΣΙ, and no date. (Pl. ii.
No. 2.) The portrait, as before, is the earlier one.

Ptolemaïs.

Of the mint ΠΠ, Ptolemaïs, there is a series of fourteen
coins—(a) with letters ΠΠ, six, all having the earlier
portrait; (b) with monogram as in Pl. i. No. 16, but
generally, if not always, in the other direction, i.e. not
reversed, eight, with the same portrait. Of the other
mints specified, I know no examples of this class.
COINS OF THE PTOLEMIES.

Coins of Tyre, Sidon, &c., inscribed ΠΙΤΟΛΕΜΑΙΟΥ ΣΩΤΗΡΟΣ, without dates, or with dates below 25.

WITHOUT DATES.

The didrachms of this class in the Museum collection which have mint-letters are of Tyre, Ptolemais, and of a mint which is probably Aradus. The coin of Tyre can be attributed with certainty to Ptolemy IV. I shall therefore not notice it here. Those of Ptolemais are the following—(a) with letters ΠΤ, seven coins: these have a portrait doubtful as to period; (b) with letters ΠΣΟ in monogram (Pl. i. No. 14), and monograms ΠΙ (?), ΚΙ, and ΠΑ or ΑΠ, one; a very difficult coin, to be afterwards considered. Here it is only necessary to remark that the portrait is probably of the later class. If the former coins bear this portrait, this can only be explained on the supposition that they were struck late in the reign of Ptolemy Soter, but exceptionally without dates, or early in the reign of Philadelphus. To this subject I shall almost immediately recur, and it will then be shown that the present view must be adopted in modification of that previously expressed as to this class of coins, and that they must be further restricted to Ptolemy I. The coin which is probably of Aradus bears on the reverse the monogram ΑΡ or ΡΑ, and a spear-head. (Pl. ii. No. 3.) The portrait is of peculiar style.

WITH DATES BELOW 25.

Of this class there are coins of Tyre, Sidon, Ptolemais, and ΠΑ.

TYRE.

Mr. Eastwood has brought to my notice a didrachm of Tyre, with the monogram ΤΥΡ and the club, the
date 5 (E), and beneath the date, the letter I. (Pl. ii. No. 4.)

SIDON.

I am also enabled, by Mr. Eastwood's kindness, to describe a didrachm of Sidon (ΣI), with the date 3 (Γ), and the letters ΞΗ, and monogram ΗΔ (Pl. ii. No. 5.), and another, with the same mint-name and letters, the date 4 (Δ), and apparently the same monogram, which, however, is not quite distinct. In the Museum collection there is a third specimen of the same town (ΣI), with the date Σ (6), and the same letters and monogram as the first. (Pl. ii. No. 6.)

These coins can only be of Philadelphus, unless we suppose that Ptolemy I. dated from his taking the title of king. There are, however, certain dated coins of Arsinoë, second wife of Philadelphus, which may be described as follows:—

GOLD STATERS.

2. Id. varied Σ (yr. 6) ΣΑ in monogram. Rose (?). Hunter.
3. Id. varied Σ (yr. 13) ΣΑ. Hunter.
4. Id. varied ΚΙ (yr. 16). British Museum.

The first of these coins is identical in date with the third of the didrachms described above; further, it is of Sidon, and apparently has the same monogram ΗΔ as both first and third, for we find Η, the rest being probably off the edge; thus it differs only in wanting ΞΗ. There can be no reasonable doubt, therefore, that all these are dated by years of Philadelphus. There might be some doubt whether Philadelphus dated from his accession, Nov., B.C. 285, or his succession to his father, 283. But Arsinoë II. dates from the latter event, for the earliest time we can fix for her marriage is late in the sixth year of her husband,
Philadelphus. We thus obtain for the first year of Philadelphus the Egyptian year B.C. 283-282.

PTOLEMAÏS.

The Museum collection contains a didrachm of Ptolemaïs, having on the reverse between the legs of the eagle the monogram ΚΓ or ΚΛ, 23 or 26. (Pl. ii. No. 8.) I was originally of opinion that the monogram was of the year 23, and consequently a date of the reign of Philadelphus. But more careful examination has convinced me that this was an incorrect view. (a) The type, though difficult to fix as either the earlier or later type of the portrait, is remarkably like that of a coin of Ptolemaïs of the year 25. (b) The monogram is nearer ΚΛ than ΚΓ. (c) Monograms are found of this series, but not in more than one case of Ptolemaïs, beginning with ΚΒ (22), and ending with ΚΛ (26), so that this monogram is not without precedent. If these reasons be considered sufficient, this coin must be transferred to the dated series of Ptolemy I. But this is not all. The coin bears beneath the letters ΠΤ two monograms, which are probably ΑΙ or ΑΝ and ΗΡΑ. Upon a specimen of the un-dated coins of Ptolemaïs, with the inscription ΠΤ. ΣΩΤΗΡΟΣ, described above, the same monograms occur. It is therefore probable that the latter coin must be referred to the period of the dated series of the reign of Ptolemy I. The other like un-dated coins are so evidently of the same time as this, that they must be considered as also exceptional, and struck during the period of dated money.

ΓΑ.

Mr. Eastwood has brought to my notice a didrachm of the mint ΓΑ, with the same monogram ΑΝ (?), and beneath
the date the same letter Π, as a didrachm of the year 37 (ΞΠ) of Ptolemy I. (Pl. ii. No.9), but with the date 2 (Β) (Pl. ii. No. 10). These coins are of especial importance, as positively connecting the dated series of Ptolemy I. with that of Ptolemy II. bearing his father’s name and portrait. They also suggest an explanation of the singular circumstance that the coinage of the first Ptolemy should have been continued by the second, with the change from the regnal years of the former to those of the latter. The latest date of Ptolemy I. known to me is 37 (ΞΠ); of this I have only noticed the specimen of ΓΑ: I can now add specimens of Tyre and Sidon. This suggests the probability that during the two years that Ptolemy I. survived his virtual abdication, Ptolemy II. forbore to strike coins. On resuming the coinage he would maintain the head of his father, but assert his rights by dating from his succession to absolute power.

It may be observed that the only other coins with the inscription ΠΤΟΛΕΜΑΙΟΥ ΣΩΤΗΡΟΣ known to me, except those with dates above 40, and one with Χ between the eagle’s legs, are without dates, letters, or monograms, and may be of a different period.

I propose, on the evidence I have given, thus to modify the second inference with which I commenced—

2. All the coins of these mints (Tyre, Sidon, Ptolemais, &c.), with the inscription ΠΤΟΛΕΜΑΙΟΥ ΣΩΤΗΡΟΣ, and with dates either below 25 or above 40, are of successors of Ptolemy I.

Leaving the rest of the silver coins of Ptolemy I., which it must be remarked are wholly of the class with ΠΤΟΛΕΜΑΙΟΥ ΒΑΣΙΛΕΩΣ, for later consideration, I pass on to a very important class connected with that last examined.
2. COINS WITH YEARS OF ERA, AND SIMILAR COINS.

These coins include a series dated from an era. All the specimens I have seen may be described as follows:—

A. Didrachms, inscribed ΠΙΤΟΛΕΜΑΙΟΥ ΣΟΤΗΡΟΣ, and dated.

1. Bust of Ptolemy I., right, diademed, and wearing aegis.

Rev.—ΠΙΤΟΛΕΜΑΙΟΥ ΣΟΤΗΡΟΣ. Eagle, left, on thunderbolt; in front, ΠΙ; below which, ΣΙ (E or H, 65 or 68). (Pl. iii., No. 1.)

2. OA (71). (Pl. iii. No. 2.)
3. OB (72). (Pl. iii. No. 3.)
4. OΔ (74). (Pl. iii. No. 4.)
5. OΖ (77). (Pl. iii. No. 5.)
6. In exergue Π (80). (Pl. iii. No. 6.)
7. Π (ΠΔ, 81). (Pl. iii. No. 7.)
8. ΠΒ (82). (Pl. iii. No. 8.)
9. ΠΠ (ΠΠ, 83). (Pl. iii. No. 9.)
10. In front ΠΔ (84). (Pl. iii. No. 10.)
11. Thunderbolt winged, ΠΗ (88). (Pl. iii. No. 11.)
12. ΠΘ in monogram (89). (Pl. iii. No. 12.)
13. Ψ (90). (Pl. iii. No. 13.)

B. Hemidrachms, inscribed ΠΙΤΟΛΕΜΑΙΟΥ ΒΑΣΙΛΕΩΣ, and dated.

a. Date on thunderbolt.

1. Bust of Ptolemy I., right, diademed, and with aegis.

Rev.—ΠΙΤΟΛΕΜΑΙΟΥ ΒΑΣΙΛΕΩΣ. Eagle, left, on thunderbolt; inscribed on thunderbolt, ΠΒ (102). (Pl. iv. No. 1.)

2. PE (105). (Pl. iv. No. 2.)

b. Date in field.

1. Π—Θ (109). (Pl. iv. No. 3.)
2. Thunderbolt winged, Β—ΙΠ (112). (Pl. iv. No. 4.)
3. Π—ΙΖ (117). (Pl. iv. No. 5.)

C. Didrachms, inscribed ΠΙΤΟΛΕΜΑΙΟΥ ΣΟΤΗΡΟΣ, of same fabric as dated coins, but without dates.

1. In front of eagle, cornu-copias.
2. In front of eagle, monogram of Tyre, terminating in club; behind eagle, Ω above Σ. (Pl. iii. No. 14.)
D. Didrachms, inscribed ΠΤΟΛΕΜΑΙΟΥ ΒΑΣΙΛΕΩΣ, of the same fabric as C 2, and without dates.

1. (Pl. iii. No. 15.)

I have engraved all the important coins of this series known to me, both because the series is unpublished, as such, and also in order that all its most distinct indications should be apparent to the student. In the matter of fabric it is extremely singular. Its changes may be best described as a succession of degradations from types, each of which differed more than its predecessor from the original model. This is equally true of the head of Ptolemy I. and of the eagle. At the same time it is very noticeable that there is a greater irregularity in the types even of years close together than in any other part of the Ptolemaic coinage. I have selected all the examples of peculiarities of both sides, only making this rule, that I have always engraved the first coin of each distinctive variety in the position of the date, even if a later coin should seem to display a little more markedly the special characteristics of the class. The Plate will show the reader that the series has the appearance of having been struck in one district and where the portrait of Ptolemy I. was not well known, therefore out of Egypt.

The coins can be dated only from the commencement of the rule of Ptolemy I., or from that of the reign of Ptolemy II., according as we suppose them to continue the coins of Ptolemy I., or the similar coins with his head and title Soter, dated by years of Ptolemy II. The first year of the series from the former date is 324-3, that of the series from the later, B.C. 283-2. It will be best to show to what years B.C. those of the era on the coins correspond on both theories.
COINS OF THE PTOLEMIES.

<table>
<thead>
<tr>
<th>Era of Ptol. I.</th>
<th>Era of Ptol. II.</th>
</tr>
</thead>
<tbody>
<tr>
<td>65 or 68 b.c.</td>
<td>260-59 or 257-6 b.c.</td>
</tr>
<tr>
<td>71</td>
<td>254-3</td>
</tr>
<tr>
<td>72</td>
<td>253-2</td>
</tr>
<tr>
<td>74</td>
<td>251-0</td>
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<tr>
<td>77</td>
<td>248-7</td>
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<tr>
<td>80</td>
<td>245-4</td>
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<tr>
<td>81</td>
<td>244-3</td>
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<td>82</td>
<td>243-2</td>
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<td>89</td>
<td>236-5</td>
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<tr>
<td>90</td>
<td>235-4</td>
</tr>
<tr>
<td>102</td>
<td>223-2</td>
</tr>
<tr>
<td>105</td>
<td>220-19</td>
</tr>
<tr>
<td>109</td>
<td>216-5</td>
</tr>
<tr>
<td>112</td>
<td>213-2</td>
</tr>
<tr>
<td>117</td>
<td>208-7</td>
</tr>
</tbody>
</table>

We can now see to what regnal years of the Ptolemies these would correspond.

The following dates are those of the first years of the first seven Ptolemies:

Ptolemy I., Soter . . . b.c. 324-3
Ptolemy II., Philadelphus " 283-2
Ptolemy III., Euergetes " 247-6
Ptolemy IV., Philopator " 222-1
Ptolemy V., Epiphanes " 205-4 (Accession March 204.)
Ptolemy VI., Eupator " 181-0
Ptolemy VII., Philometor " 181-0

These dates, except that of Ptolemy II., are the same as those given by Lepsius in his *Königsbuch der Aegypter*. See also his essay, *Ueber einige Ergebnisse der Aegyptischen Denkmäler für die Kenntniss der Ptolemäer-geschichte* (K. Akad, Berlin, 1853), where it is shown that Ptolemy Eupator was the eldest brother of Philometor.
<table>
<thead>
<tr>
<th>B.C.</th>
<th>Era of Ptol. I.</th>
<th>Era of Ptol. II.</th>
<th>Yr. of reign.</th>
<th>Yr. of reign.</th>
</tr>
</thead>
<tbody>
<tr>
<td>260-59</td>
<td>65</td>
<td>.</td>
<td>Ptol. II. 24</td>
<td></td>
</tr>
<tr>
<td>or</td>
<td>or</td>
<td>or</td>
<td></td>
<td></td>
</tr>
<tr>
<td>257-6</td>
<td>68</td>
<td>.</td>
<td>&quot;</td>
<td>27</td>
</tr>
<tr>
<td>254-3</td>
<td>71</td>
<td>.</td>
<td>&quot;</td>
<td>30</td>
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<tr>
<td>253-2</td>
<td>72</td>
<td>.</td>
<td>&quot;</td>
<td>31</td>
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<tr>
<td>251-0</td>
<td>74</td>
<td>.</td>
<td>&quot;</td>
<td>33</td>
</tr>
<tr>
<td>248-7</td>
<td>77</td>
<td>.</td>
<td>&quot;</td>
<td>36</td>
</tr>
<tr>
<td>245-4</td>
<td>80</td>
<td>.</td>
<td>Ptol. III. 3</td>
<td></td>
</tr>
<tr>
<td>244-3</td>
<td>81</td>
<td>.</td>
<td>&quot;</td>
<td>4</td>
</tr>
<tr>
<td>243-2</td>
<td>82</td>
<td>.</td>
<td>&quot;</td>
<td>5</td>
</tr>
<tr>
<td>242-1</td>
<td>83</td>
<td>.</td>
<td>&quot;</td>
<td>6</td>
</tr>
<tr>
<td>241-0</td>
<td>84</td>
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<td>&quot;</td>
<td>7</td>
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<td>237-6</td>
<td>88</td>
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<td>236-5</td>
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<td>&quot;</td>
<td>12</td>
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<td>90</td>
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<td>&quot;</td>
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<td>223-2</td>
<td>102</td>
<td>.</td>
<td>&quot;</td>
<td>25</td>
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<tr>
<td>220-19</td>
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<td>Ptol. IV. 3</td>
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<td>.</td>
<td>&quot;</td>
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<td>&quot;</td>
<td>7</td>
</tr>
<tr>
<td>213-2</td>
<td>112</td>
<td>71</td>
<td>&quot;</td>
<td>10</td>
</tr>
<tr>
<td>212-1</td>
<td>72</td>
<td>.</td>
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<td>11</td>
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<tr>
<td>210-9</td>
<td>74</td>
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<td>208-7</td>
<td>117</td>
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<td>Ptol. V. 2</td>
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<td>203-2</td>
<td>81</td>
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<td>3</td>
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<td>202-1</td>
<td>82</td>
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<td>201-0</td>
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<td>200-99</td>
<td>84</td>
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<td>196-5</td>
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<td>194-3</td>
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<td>179-8</td>
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<td>172-1</td>
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<td>&quot;</td>
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<tr>
<td>167-6</td>
<td>117</td>
<td>.</td>
<td>&quot;</td>
<td>15</td>
</tr>
</tbody>
</table>

If we adopt the first arrangement, it will be seen that the place of the date appears to change under Ptolemy III., and the inscription probably with the accession of Pto-
COINS OF THE PTOLEMIES. 169

lemy IV., and that the latest coin is of the latter king's last year but two.

If we adopt the second arrangement, the series runs on through the reign of Ptolemy V., in which the inscription changes from Soter to King, into the reign of Ptolemy VII. M. Six, of Amsterdam, has started this theory, which he supports by the following arguments. The tetradrachms, with the title Soter, were struck in Phœnicia [as appears from the earliest known being of Ptolemaïs], and must therefore cease at the conquest of the country by Antiochus III., in the year b.c. 199. With this idea accords the occurrence of four tetradrachms, with the dates ΞΕ, ΟΒ, ΟΗ, and ΠΔ 65, 72, 78, and 84), which, as dates of Philadelphus, fall in b.c. 221, 214, and 208, under Philopator (Ptol. IV.), and 202, under Epiphanes (Ptol. V.), three years before he lost Phœnicia.1

But if there are Phœnician coins of this era (we have published one, and M. Six mentions one of the same place, and probably of the same date, of which more hereafter), how are we to account for the difference of fabric between those that would fall in the reign of Ptolemy V., Epiphanes, and his known coins of Phœnician

1 “Zijn de Soter tetradrachmen in Phenicië geslagen, dan zijn ze alle ouder dan 199, het jaar, waarin Antiochus III. die streken aan Ptolemaeus V. Epiphanes heeft ontnomen, en ze weder met Syrië heeft vereenigd, nadat ze daarvan 80 jaren waren afgescheiden geweest. Hiermede stemmen overeen vier Soter tetradrachmen met de jaartallen ΞΕ, ΟΒ, ΟΗ, en ΠΔ (65, 72, 78, en 84), die, als regierungsjaren van Philadelphus gerekend, vallen in 221, 214 en 208 v. Chr. onder Philopator en in 202 onder Epiphanes, drie jaren vóór dat hij Phenicië verloor. Hoogere jaren zijn nog niet bekend geworden.”—(Over de Munten, die den naam van Ptolemaeus Soter dragen, door J. P. Six, pp. 2, 3, Amst, 1863, from Kon. Akad. v. Wetensch., Afdeeling Letterkunde, vii.)
cities? This argument is alone fatal to their Phœnician attribution, or to M. Six's theory, and the occurrence of coins of the years 88, 89, and 90, is as important. But we have not alone the coins of Ptolemas to cite. There is a coin of Tyre which not merely determines by fabric and inscription the Phœnician origin of the class, but throws a light upon the question on another ground.

The coin is the didrachm of Tyre, C 2, of which the reverse is identical with that of a didrachm of Ptolemy IV. These coins may be described as follows:—

C 2. Head of Ptolemy I., right, diademed, and with aegis.

Rev.—ΠΤΟΛΕΜΑΙΟΥ ΣΩΤΗΡΟΣ. Eagle, left, on thunderbolt; in front, monogram of Tyre, terminating in club; behind, Ω above Σ. (Pl. iii. No. 14.)

Bust of Philopator, right, diademed.

Rev.—ΠΤΟΛΕΜΑΙΟΥ ΦΙΛΟΠΑΤΟΡΟΣ. Same monogram, symbol, and letters; between eagle's legs, monogram ΑΣ (?). (Pl. iii. No. 16.)

The identity of fabric is complete, and there cannot be the slightest doubt that the two coins were struck not merely during the same reign, but at very nearly, if not exactly, the same date. M. Fr. Lenormant has arrived at the same conclusion, and inferred from it that coins with the head and title of the first Ptolemy were struck long after his reign in the cities of Phœnicia. He cites a coin of the date ΞΕ, which he supposes to be of "the Phœnician era." Our coin of Ptolemas at the head of the series (Pl. iii. No. 1) is probably identical with this. ("Essai sur le classement des Monnaies d' Argent des Lagides," pp. 80-82 and 82 note. Pl. VI. lege IV. Nos. 7, 8—not 6, 7, as in text.)

On comparing the coin with the inscription ΠΤΟΛΕΜΑΙΟΥ ΣΩΤΗΡΟΣ, with the others of the classes with
which it is placed, I find it to resemble the later dated coins with the same inscription on the one hand, and the dated coins with the inscription ΠΤ. ΒΑΣΙΛΕΩΣ on the other. The portrait is better than in the former, and not so good as in the latter; the eagle better than in both. The portrait is, however, as nearly as possible identical with that of the un-dated coins D., inscribed ΠΤ. ΒΑΣ., upon which the eagle most nearly resembles that upon the dated coins inscribed ΠΤ. ΒΑΣ.

From this evidence it would appear that Ptolemy Philopator first abandoned the dates on the didrachms, then almost immediately the title of Ptolemy I., substituting ΒΑΣΙΛΕΩΣ, and more rarely ΦΙΛΟΠΑΤΟΡΟΣ, and that he struck hemidrachms continuing the dates but bearing the title ΒΑΣΙΛΕΩΣ.

By the other theory the coin upon which the argument rests would have been struck in the midst of a dated series of didrachms, from which it differs in style, and there would be the further anomaly of a king’s striking at the same time in the name of the founder of the dynasty, and in his own, not as Philopator, for that might be explained on the principle of a medal, but as king, for it is impossible to suppose that the un-dated coins with the inscription ΠΤΟΛΕΜΑΙΟΥ ΒΑΣΙΛΕΩΣ, of the same fabric as the coin under consideration, can be separated from it by as long an interval as would be necessitated by their being placed at the close of the dated series of didrachms, that is, on this theory, not before the 12th year of Ptolemy V.

It will be seen, in examining the rest of the Ptolemaic series, that there are in the common silver currency exactly five distinct classes of coins of kings undoubtedly anterior to those of Ptolemy Auletes, and as evidently following the series just examined, and mutually related,
forming, in fact, one great group; and that there are in this interval only five kings, Epiphanes, Philometor, Physcon, Lathurus, and Alexander I., who reigned more than a few months. The explanation of M. Six would lead to this embarrassing result: there would be not quite four reigns for these five classes.

We have still to inquire where these coins were struck, and whether history explains the changes that they show.

The earliest date of the series upon any coin I have seen is the year 65 or 68. M. Six mentions the year 65 (ξΕ, p. 2); and M. Fr. Lenormant speaks of the same date on a coin having the letters ΗΤ (p. 82, note 1). It would seem, therefore, that the series began as early as B.C. 260-259, the 24th year of Ptolemy II. It is very possible that there may be earlier coins; but it is remarkable that the earliest date or dates should, at least in two examples, be accompanied by a mint-mark, unlike the later dates. There is no special reason why the issue of these coins should have commenced late in the reign of Philadelphus; but it is very probable that the abundant coinage of Ptolemy I. did not begin to fail until this time. A constant issue of the coins under consideration appears to have begun towards the close of the reign of Ptolemy II., and to have continued until the 13th year of his successor, Ptolemy III., when there is a break, and the series is only resumed at the accession of Ptolemy IV., if we may suppose that the coin dated 102 is of the latter part of that year, and that Philopator had then already come to the throne. It is not easy to account for the absence of coins of the later part of the reign of Euergetes, but it is easy to understand how, at the accession of Ptolemy IV., there should have been a general disturbance of the monetary system, and therefore such
radical changes as the coins indicate. It would, perhaps, have seemed more likely that there should have been a gradual transition from the dated series, with ΠΤΟΛΕΜΑΙΟΥ ΣΩΤΗΡΟΣ, to that with ΠΤΟΛΕΜΑΙΟΥ ΒΑΣΙΛΕΩΣ, in the following order:—

1. ΠΤΟΛ. ΣΩΤΗΡΟΣ, dated.
2. Id. un-dated.
3. ΠΤΟΛ. ΒΑΣΙΛΕΩΣ, un-dated.
4. Id. dated.

But it must be remembered that there are few if any instances in Greek coins of the abandonment and resumption of an era; and that therefore the dated series should be continuous, or, at least, not interrupted by an un-dated series. We may therefore consider the coins inscribed ΠΤΟΛΕΜΑΙΟΥ ΣΩΤΗΡΟΣ, without date, as exceptional, and the coins inscribed ΠΤΟΛΕΜΑΙΟΥ ΒΑΣΙΛΕΩΣ, without date, and of the same style, to be the main coinage of the reign of Philopator, the series of dated hemidrachms being the continuation of the money of the Era of Philip. The cessation of the issue may be explained by the troubles that occupied the earlier years of Ptolemy V., Epiphanes. We shall see that the next series of the common currency was struck in Cyprus.

So little attention has been paid to this class that my materials are extremely scanty, and further research may tend to remove the difficulties offered by what appears to be the only possible arrangement.

Reginald Stuart Poole.

(To be continued.)
REMARKS ON SOME JEWSH COINS, AND ON SOME INEDITED COINS OF PHŒNICIA, JUDÆA, ETC.

Jewish coins and coinage have been a subject of inquiry during the last few years, to a much greater extent than at any time since the learned Bayer wrote his well-known work, De numis Hebræo-Samaritanis. A new impulse was given to this branch of numismatic science by the fresh discoveries made by the French savant, M. de Saulcy, and no doubt newer and more important discoveries made since have been the means of enlisting fresh writers on this subject, and thus a greater interest has been raised in these remains of Jewish antiquity.

The new treatise of Mr. F. W. Madden, of the British Museum, on Jewish coins and coinage, will also contribute to this, and be universally welcomed by the English public in general, being the first substantive work on this subject in the English language, and, as regards matter and execution, surpassing any preceding work on Hebrew coins.

Mr. Madden assigns, as former numismatists have done, the silver shekels from anno 1—4, including half shekels from anno 1—3, and a few copper pieces, to Simon the Maccabee. The weight and style of these pieces point to a time when the country enjoyed complete autonomy and independence, as granted to the Jewish people by Antiochus VII., b.c. 143, and which was never so enjoyed under Alexander the Great, under whose reign
M. de Saulcy supposes these coins to have been struck. Wherever Alexander went he issued money in his own name, and in the Macedonian weight, as his tetradrachms and drachms will show.

To set future doubts at rest, I take this opportunity of stating that the piece of the fourth year, published in the Numismatic Chronicle, N.S., vol. ii., p. 268, and stated there to be plated, is the same piece as reported in the Zeitschrift d. Deutschen & Morgenländischen Gesellschaft, 1857, p. 155; it is of copper, partly covered with red oxide.

No coins have hitherto been found of Alexander II. with a legible Hebrew legend. That they had one no one doubted; but this has now become a certainty, as there are two with a Hebrew legend in my possession.

1. *Obv.*— . . . ΑΛΕΞΑΝΔ. . . round a circle; within, an anchor.

*Rev.*— . . . (?) שְׁנֶיעָרְבִּי. lexadras G[ardon] (?) round a beaded circle; within, a star with eight rays. *Æ* 2.

2. *Obv.*— BA . . . ΩC ΑΛΕΞΑΝΔ. OY round a circle; within, an anchor.

*Rev.*— . . . שְׁנֶיעָרְבִּי Alexa. as round a beaded circle; within, a star with eight rays. *Æ* 2½.

From these coins we learn that Alexander II. deviated from his predecessors in placing his Greek name in Hebrew characters on his coins instead of his Jewish name.
To Hyrcanus II. no coins have as yet been assigned. The following coin, which is in my cabinet, may be attributed to him, and may have been struck after his restoration, B.C. 47–40. Its description is as follows:—

Obv.—... ΞΑ... written round a circle; within, an anchor.
Rev.—... ב וריה (Jonathan the priest); a star inside a beaded circle, with eight rays. Æ 2.

From its form, fabric, and style, it is evident that this coin was struck in the time of Aristobulus II. It would appear that it did not refer to Alexander I., who, we now know, did not adopt on his coins a Jewish name, but a Greek name in Hebrew characters. It may, however, belong to Alexander II., whose Jewish name, like that of his grandfather, Alexander Jannæus, might also have been "Jehonathan" or "Jonathan."

I have much pleasure in calling attention to some coins of Antigonus, unknown to Mr. Madden. He only publishes the pieces of larger size, with the legend מְלוּכָה within a double cornu-copiae, not being aware that in my cabinet are two pieces of the first year, and another of the second year, the latter of which was published by me in the Numismatic Chronicle, N.S., vol. ii. p. 270.

Though Mr. Madden and others questioned the correct reading of the latter piece, yet after a careful re-examination I cannot read the legends otherwise than I have already done on a former occasion. I have likewise shown these pieces to the gentlemen at the British Museum, and they agree with my opinion.
The description of the coins is as follows:

**Obv.** - . . . \( \Lambda \varepsilon \omega \gamma \cdot A N T I T \) . . . written round a wreath, which is tied by a ribbon, the ends of which lie straight in the centre.

**Rev.** - הַמְּחַת הָעֵבֶּר provides a double cornu-copiae, between which are the letters \( \text{n}^\text{N} \) - i.e. year 1.

**Obv.** - . . . NTIPONO . . . type as the preceding one.

**Rev.** - הָעֵבֶּר 6 . . . written round a double cornu-copiae, between which \( \text{B}^\text{n} \) - i.e. year 2.

Both \( \alpha \varepsilon \).

The legend on the reverse of these two coins is important; it establishes the right and correct meaning of the word הרה. Dr. Levy supposes it to signify a confederation; but if this is the correct rendering, it ought to be connected with the preceding words "Mat-thathiah, the high priest," by the conjunction \( \text{r} \). This

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1 I find that Mionnet (vol. v., p. 563, No. 55) has already published a coin of Antigonus of the first year, and suppose that it is the same as the one engraved, but not deciphered by De Sauley (see Num. Jud., pl. v. No. 2). I conclude, therefore, that the Paris specimen is not in much better preservation than the average of the coins of Antigonus. Fortunately Mr. Reichardt’s coin is in a very fine state.—F. W. M.
is avoided on the coins under consideration, and therefore I cannot but maintain, on the authority of Rabbi Levita, that the true rendering should be "a doctor" or "learned man," in contradistinction to so many high priests who were "illiterate men." 32

The portrait of Agrippa II., as given at page 115 of Mr. Madden's work, only from a cast, is not a correct representation. Though the coin is not in as good a state of preservation as desirable, yet the portrait and the legend are quite clear and distinct. The accompanying engraving from the coin itself will give, I trust, a better and more satisfactory representation, and bear out my assertion of the juvenile countenance of the king. It is certain that year 10 cannot refer to Agrippa I., as may be seen from the table re-published by Mr. Madden, p. 106, and hence I believe my attribution of it to Agrippa II. is correct.

The Jewish coins published by M. de Saulcy, pp. 167,

3 The true interpretation of this word ר使用者或 now rests between Cavedoni, Levy, and Reichardt, but I confess that it is hard to believe that John Hyrcanus, or any of his successors, would call themselves "learned men" on these coins, in contradistinction to those who were not so, and thus insult all the other high priests. It seems far preferable to understand it as meaning societas, natio, confederation, and the legend ר使用者或 on the coin published by Mr. Reichardt certainly seems more correctly interpreted "Prince of the nation" (of the Jews) than "chief of the doctors," or "learned men." Neither can I see that the absence of the י (Vau) on these coins of Antigonus in any way proves that "doctor" or "learned man" is the only correct interpretation.—F. W. M.
168, plate xiii., No. 7, and supposed by him to be illegible, have at last been made out, and have been assigned, with justice, to Eleazar, the son of Simon. I cannot omit stating, however, that I have one coin in my cabinet, quite genuine, in copper, which instead of reading backwards as the other coins do, reads in the usual way, as may be seen from the following engraving and description:—

![Engraving](image)

*Obv.—>jמ “Eleazar the [High] Priest,” written in three lines, on either side of a palm-tree.*

*Rev.—[ף ת]נשה יאכד תולא תחת ישא “First year of the redemption of Israel,”—a cluster of grapes. Æ.*

The coins described by Mr. Madden, page 173, Nos. 13, 14, and first published by me, have been supposed by Dr. Levy not to be genuine; but they have, since the publication of Mr. Madden’s book, been examined by several gentlemen of the British Museum, who do not see any reason to doubt their genuineness. The coin, however, described page 174, No. 15, is not so satisfactory. Its weight is two grains above the coins which are decidedly genuine, yet it is supposed to be a cast; but still this is a matter of opinion only.

I shall not enter upon the question whether all the coins assigned to Simon, the son of Gioras, refer to him. I think it probable that some of these have been struck in the time of Bar-cochab.

One coin described by Mr. Madden, page 177, and
assigned to Simon, the son of Gamaliel, I cannot pass without a few remarks. M. de Saulcy, page 169, plate xiv. No. 1, first described it as being a coin of the second year. From Mr. Madden’s book I learnt that this coin is in Mr. Wigan’s cabinet, and after a most careful examination, I have come to the conclusion that it has been misread by the above-mentioned gentlemen. Any one examining the wood engraving of this coin, as given by Mr. Madden, page 177, will not fail to discover a great vacant space between the first letter ו and the word הַחַנה, which is filled up only by two letters. Having, therefore, studied with much attention this coin, I feel more thoroughly convinced that it is no other than that of the first year, described page 177, No. 2, for I can trace clearly the faint but complete legend on the reverse, as follows—בעצמה התאמה נחנ— as may likewise be seen from the accompanying drawing.  

Of coins struck during the reign of Domitian, commemorating the capture of Jerusalem, there is an unpublished one in my cabinet. Its description is as follows:—

3 I have carefully examined this coin, and superintended its engraving, and am convinced of the correctness of Mr. Reichardt’s reading, though I may remark that owing to some of the letters running into each other and being so very faint, even fainter than in the woodcut, a mistake is quite pardonable. Coins of Simon Nasi of the second year remain yet to be found.—F.W.M.
Obv.—IMP. DOMIT. AVG. GERM. Head, laureate, to the right.

Rev.—VICTOR. AVG. A trophy. Æ. 4½.

The type of this coin is found on one of Ælia Capitolina of Marcus Aurelius, and it is likewise part of a type struck under Domitian, without any legend on the reverse. 4 Style and fabric, as well as the place where they are found, point to its having been struck in Judæa, and it evidently commemorates the Imperial victory over the Jews.

My cabinet contains an unpublished coin of Simon Bar-cochab. It has marks of having been re-coined; faint traces of the back of the head of a Roman emperor are found on the reverse, and its singular legend on the reverse is interesting—

Obv.—דנהול, a cluster of grapes.

Rev.—לגרה ושלום "for the redemption and peace;"—a branch of a tree. Æ. 4.

I have no doubt that this coin is genuine; a hole has disfigured the letter ò on the reverse, and in making this hole a small piece broke out, and the coin split, as may be seen in looking at the woodcut. This was probably the first coin which Bar-cochab issued immediately after

4 On the one in my possession, which is as fresh as when it came from the die, there is no trace of a legend, and hence it is a mistake to suppose that there had ever been one.
the second revolt, when Israel was then freed, for a time, from the Roman yoke, enjoying national liberty again, redemption from heathen bondage, and peace procured by their leader, the false Messiah—Simon Bar-cochab. Mr. Madden has followed De Saulcy’s plan of including coins of Ælia Capitolina in his list of Jewish coins. I think it would have been better to have left them for a second part, which might have given an account of the Greek and Roman mintage of Palestine, a subject as interesting and as instructive as that of the Jewish series, and most closely and intimately connected with Jewish history and antiquity.

I cannot close these lines without pointing out an omission in the series of the coins of the emperors Mr. Madden describes as having been struck in or for Jerusalem. Mionnet already, quoting from Tanini, gives a coin of Hostilian, a description of which is likewise given by M. de Saulcy. As there is one in my cabinet, and since its description given by Mionnet and De Saulcy is not correct, I describe it here from the original—

![Image of coin]

*Obv.* — . . . C. VAL. OST. MES. QVIN . . . Bust, radiated, to the right.

---

5 I do not exactly know what to make of this coin, although I have seen it. It seems difficult to accept the legend as proposed by Mr. Reichardt. I cannot help thinking that it is intended for a coin already known (see “Hist. of Jewish Coinage,” p. 208, No. 10), the reverse legend of which is לוחות ירושלים—as it has every letter of this legend on it but two (לוחות ו).—F.W.M.
REV.—COL. AEL. KAP. Asarte, turreted, stands before a Roman standard to the left, holding a human head (?) in her right hand, and a staff in her left; she is crowned by Victory placed on a pillar behind her; between Asarte and the standard is a pitcher. Æ.

As the question of Jewish coin-weights has recently received much attention from Mr. Poole and Mr. Madden, it may not be uninteresting here to append a table of the weights and sizes of the Jewish coins in my cabinet. The scale used is that of Mionnet. The weights are given in English Troy grains. References, if not specified otherwise, are to Mr. Madden's new work on "Jewish Coinage," London, 1864.

**TABLE OF WEIGHTS OF JEWISH COINS IN MY CABINET FROM SIMON MACCABEUS TO AGRIPPA II. INCLUSIVE.**

<table>
<thead>
<tr>
<th>Metal</th>
<th>Shekel</th>
<th>Simon Maccabaeus</th>
<th>Weight in Eng. Troy grs</th>
</tr>
</thead>
<tbody>
<tr>
<td>6</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5½</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3½</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2½</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

- Shekel... an. 1 page 43 No. 1...
- Half Shekel... 1...
- Shekel... 9...
- Half Shekel... 4¼...
- Shekel... 3...
- Half Shekel... 6...
- Shekel... 4...
- " lost in cleaning...
- " half piece...
- " quarter...
- " sixth...

- 49
- 170:1
- 238
- 187:6
- 94:4

JOHN HYRCANUS.

<table>
<thead>
<tr>
<th>Metal</th>
<th>With Name and Title</th>
<th>Page 54 No. 1 heaviest</th>
<th>Lightest</th>
</tr>
</thead>
<tbody>
<tr>
<td>2½</td>
<td></td>
<td></td>
<td>33:1</td>
</tr>
<tr>
<td>2½</td>
<td>&quot;</td>
<td>56 &quot; 2</td>
<td>29</td>
</tr>
<tr>
<td>3</td>
<td>&quot;</td>
<td>57 &quot; 3 with Greek letter A</td>
<td>37:6</td>
</tr>
</tbody>
</table>

JUDAS ARISTOBULUS.

<table>
<thead>
<tr>
<th>Metal</th>
<th>With Name and Title</th>
<th>Page 62</th>
</tr>
</thead>
<tbody>
<tr>
<td>2½</td>
<td>&quot;</td>
<td>30:6</td>
</tr>
</tbody>
</table>

6 Not KAIH as in De Saucy.
## TABLE OF WEIGHTS OF JEWISH COINS.—(Continued).

<table>
<thead>
<tr>
<th>Metal</th>
<th>St.</th>
<th>ALEXANDER JANNEUS.</th>
<th>Weight in Eng. Troy grs</th>
</tr>
</thead>
<tbody>
<tr>
<td>£</td>
<td>2 1/2</td>
<td>First Coinage page 66 No. 1</td>
<td>28</td>
</tr>
<tr>
<td>£</td>
<td>2 1/2</td>
<td>&quot; &quot; &quot; &quot; &quot; &quot; 2</td>
<td>33 1/4</td>
</tr>
<tr>
<td>£</td>
<td>2</td>
<td>&quot; &quot; &quot; &quot; &quot; &quot; 3</td>
<td>23 1/1</td>
</tr>
<tr>
<td>£</td>
<td>3</td>
<td>&quot; &quot; &quot; &quot; &quot; &quot; 4</td>
<td>58 1/2</td>
</tr>
<tr>
<td>£</td>
<td>3</td>
<td>Second Coinage &quot; 69 heaviest</td>
<td>80 1/2</td>
</tr>
<tr>
<td>£</td>
<td>2</td>
<td>&quot; &quot; &quot; &quot; &quot; &quot; lightest</td>
<td>23 1/8</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Metal</th>
<th>St.</th>
<th>ALEXANDRA.</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>£</td>
<td>3</td>
<td>page 72</td>
<td>24 1/2</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Metal</th>
<th>St.</th>
<th>ALEXANDER II.</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>£</td>
<td>2</td>
<td>page 15 No. 1</td>
<td>28</td>
</tr>
<tr>
<td>£</td>
<td>2 1/2</td>
<td>With Hebrew Name, <em>vide</em> Num. Chron., n.s., vol. iv. p. 175</td>
<td>23</td>
</tr>
<tr>
<td>£</td>
<td>2</td>
<td>&quot; &quot; &quot;</td>
<td>19 1/2</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Metal</th>
<th>St.</th>
<th>HYRCANUS II. or ALEXANDER II.</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>£</td>
<td>2</td>
<td>With Name in Hebrew, <em>vide</em> Num. Chron., n.s., vol. iv. p. 175</td>
<td>18 1/2</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Metal</th>
<th>St.</th>
<th>ANTIGONUS.</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>£</td>
<td>6</td>
<td>Ab. 1</td>
<td>211 1/2</td>
</tr>
<tr>
<td>£</td>
<td>6</td>
<td>&quot; 2</td>
<td>195 1/2</td>
</tr>
<tr>
<td>£</td>
<td>5 1/2</td>
<td>Without Year page 77</td>
<td>229 1/2</td>
</tr>
<tr>
<td>£</td>
<td>5</td>
<td>With single Corun-copias &quot; 78</td>
<td>108 1/2</td>
</tr>
<tr>
<td>£</td>
<td>4</td>
<td>&quot; &quot; &quot;</td>
<td>115 1/2</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Metal</th>
<th>St.</th>
<th>HEROD THE GREAT.</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>£</td>
<td>5</td>
<td>With Helmet page 83 No. 1</td>
<td>84 1/2</td>
</tr>
<tr>
<td>£</td>
<td>4 1/2</td>
<td>With Macedonian Shield &quot; 85 &quot; 3</td>
<td>88 1/2</td>
</tr>
<tr>
<td>£</td>
<td>4</td>
<td>&quot; &quot; &quot; {half of preceding}</td>
<td>41 1/2</td>
</tr>
<tr>
<td>£</td>
<td>4</td>
<td>&quot; &quot; &quot; {without monogram f}</td>
<td>41 1/2</td>
</tr>
<tr>
<td>£</td>
<td>4</td>
<td>With Tripod &quot; 88 &quot; 6</td>
<td>58 1/2</td>
</tr>
<tr>
<td>£</td>
<td>2 1/2</td>
<td>&quot; &quot; &quot; &quot; &quot; &quot; 8</td>
<td>24 1/2</td>
</tr>
<tr>
<td>£</td>
<td>2 1/2</td>
<td>&quot; &quot; &quot; &quot; &quot; &quot; 15</td>
<td>55 1/2</td>
</tr>
<tr>
<td>£</td>
<td>3</td>
<td>&quot; &quot; &quot; &quot; &quot; &quot; 16</td>
<td>81 1/2</td>
</tr>
<tr>
<td>£</td>
<td>4</td>
<td>&quot; &quot; &quot; &quot; &quot; &quot; 17</td>
<td>41 1/2</td>
</tr>
<tr>
<td>£</td>
<td>3 1/2</td>
<td>&quot; &quot; &quot; &quot; &quot; &quot; 18</td>
<td>27</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Metal</th>
<th>St.</th>
<th>HEROD ARCHELAUS.</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>£</td>
<td>3</td>
<td>page 92 No. 2</td>
<td>22 1/2</td>
</tr>
<tr>
<td>£</td>
<td>4</td>
<td>&quot; 93 &quot; 3</td>
<td>57 1/2</td>
</tr>
<tr>
<td>£</td>
<td>2 1/2</td>
<td>&quot; 93 &quot; 4</td>
<td>15 1/2</td>
</tr>
<tr>
<td>£</td>
<td>3 1/2</td>
<td>&quot; 94 &quot; 8</td>
<td>34 1/2</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Metal</th>
<th>St.</th>
<th>HEROD ANTIPAS.</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>£</td>
<td>6</td>
<td>page 97 No. 2</td>
<td>170</td>
</tr>
<tr>
<td>£</td>
<td>2</td>
<td>&quot; 98 &quot; 5</td>
<td>24 1/2</td>
</tr>
</tbody>
</table>
### TABLE OF WEIGHTS OF JEWISH COINS.—(Continued).

<table>
<thead>
<tr>
<th>Metal</th>
<th>Size</th>
<th>Herod Philip II.</th>
<th>Weight in Eng. Troygrs</th>
</tr>
</thead>
<tbody>
<tr>
<td>AE</td>
<td>5</td>
<td></td>
<td>94·9</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>AE</td>
<td>3½</td>
<td>An. 5</td>
<td>rubbed</td>
</tr>
<tr>
<td>AE</td>
<td>4</td>
<td>An. 6</td>
<td>24·6</td>
</tr>
<tr>
<td>AE</td>
<td>3½</td>
<td>An. 7</td>
<td>44·3</td>
</tr>
<tr>
<td>AE</td>
<td>3½</td>
<td>An. 8</td>
<td>26·9</td>
</tr>
<tr>
<td>AE</td>
<td>3½</td>
<td>An. 9</td>
<td>37·1</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>AE</td>
<td>4</td>
<td>With Portrait</td>
<td>page 115 No. 1</td>
</tr>
<tr>
<td>AE</td>
<td>6½</td>
<td>Under Titus, an. 14 G.</td>
<td>128</td>
</tr>
<tr>
<td>AE</td>
<td>6</td>
<td>&quot;</td>
<td>181·1</td>
</tr>
<tr>
<td>AE</td>
<td>6½</td>
<td>&quot;</td>
<td>132</td>
</tr>
<tr>
<td>AE</td>
<td>4</td>
<td>&quot;</td>
<td>210·2</td>
</tr>
<tr>
<td>AE</td>
<td>4</td>
<td>Domitian</td>
<td>88</td>
</tr>
<tr>
<td>AE</td>
<td>5</td>
<td>&quot;</td>
<td>127·3 (without counter-mark)</td>
</tr>
<tr>
<td>AE</td>
<td>5</td>
<td>&quot;</td>
<td>99·7</td>
</tr>
<tr>
<td>AE</td>
<td>2½</td>
<td>&quot;</td>
<td>85·1</td>
</tr>
<tr>
<td>AE</td>
<td>5</td>
<td>&quot;</td>
<td>40·6</td>
</tr>
<tr>
<td>AE</td>
<td>7</td>
<td>&quot;</td>
<td>175</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>208·5</td>
</tr>
</tbody>
</table>

Before I close these lines, I will add a few inedited coins.

**COELE-SYRIA.**

**Damascus. Treb. Gallus.**

*Obv.*—IMP. C. VIB. TEB. GALLO AVG. Head of Treb. Gallus to the right, laureate.

*Rev.*—COL. ΔAMA . . . A deer standing to the right, and giving suck to a little child. AE 6.

**Decapolis.**

**Gadara. M. Aurelius and L. Verus.**

*Obv.*—CAEC. ΑΝΤΩΝΕΙΝΟC. KAI. . . YHPOC. . . . 

Heads of M. Aurelius and L. Verus, laureate, facing each other.

*Rev.*—ΠΟ. ΤΑΔΑΠ. Ι. Α. Α. Γ. . . Y Jupiter seated in a tetrastyle temple; on the front of which are the letters ΔΚC (an. 224). AE 8.
PHŒNICIA.

BYBLUS.

Obv.—Female head, turreted, to the right.

Rev.—ΔΑΛ Λ (孈). Chronos, with six wings, standing to the left; at his right side, three Phœnician characters—ΔΑΛ i.e. ṢΥΡ “holy.” Æ. 6.

Obv.—Head of Jupiter to the right.

Rev.—ΛΑΛ (孈) A double cornu-copiae; in the field, between each diadem with which the cornu-copiae are tied together, the letters Ψ and Π, probably for ṢΥΡ, and the date IIINNITθ, i.e. an. 142. Æ. 5.

Obv.—Female head, turreted, to the right.

Rev.—ΛΑΛ (孈) IE (for IEΠAC). Chronos, with six wings, standing to the left. Æ. 4.

Rollin, in his catalogue for 1864 (No. 7809, ter.), has published a similar coin, but without the Greek inscription IE—the usual title of this town, as may be seen from its imperial series.

SIDON.

Obv.—Female head, turreted, to the right.

Rev.—ΣΙ. Prow of a vessel; beneath IΝΠΥ, i.e. an. 31. AR. 2½.

This is the first coin of silver with a Phœnician legend, and is of a very early date.

Obv.—Female head, turreted and veiled, to the right.

Rev.—ΣΙΑΟΝΙΟΝ. An eagle standing on a rudder to the left; a palm-branch over his shoulder, in the field L. Π (an. 6) and monogram Π. AR. 7.

Obv.—Female head, turreted and veiled, to the right.

Rev.—ΣΙΑΟΝΙΟΝ. ΤΗΣ. IEΠΑΣ, ΚΑΙ. Eagle to the right, above a palm-branch; in the field to the left, before the eagle, L. Ω; to the right behind the eagle, KP N (L. ΩKP, an. 129). AR. 5.
Remarks on Some Jewish Coins, Etc. 187

Alexander Severus.

Obv.—. . . Bust of Alexander, laureate, to the right.
Rev.—COL. AV. METR. SID. Astarte riding on a lion, to the right. Æ. 6.

Aradus.

Tetradrachm, usual type and legend, but with the date . . . . . . ΣΟΡ. Ξ. ΘC. Α. 7. HΟΡ. Θ. ΜC. Α. 7. ΕΠΡ. Α. ΜC. Α. 7. ΗΙΡ. Ξ. ΜC. Α. 7. ΣΙΓ. Ξ. ΞC. Α. 7.

Obv.—Female head, with long hair hanging down on her shoulders, to the right.
Rev.—ΑΡΑΔΙΩ Θ Two ears of corn on a stand; at the side to the right a bunch of grapes; in the field, Κ and the date EOR (an. 175). Æ. 5.

Caligula.

Obv.—No legend; head of Caligula to the left, laureated.
Rev.—. . . ΔΙΩΝ. A vase between two sphinxes; in the field the date ΣΦ-Z (an. 297). Æ. 5.

GALILÆA.

Ace.

Obv.—Bust of female, turreted and veiled, to the right.
Rev.—ΑΚΗ. ΙΕΡ. ΚΑΙ. ΑC . . . A palm-tree with fruit. Æ.

Demetrius II.

Obv.—Bearded and diademed head to the right.
Rev.—ΔΗΜΗΤΡΙΟΥ. ΒΑΣΙΛΕΩΣ An eagle to the left; in field before eagle Υ behind eagle, ΕΠ behind feet of eagle, Υ. Α.
Obv.—Laureate head of Jupiter to the right.
Rev.—COL. PTOL. A club within a laurel crown, all within a wreath of pearls. Æ. 2½.

JUDÆA.

ASCALON.

Obv.—Female head, turreted and veiled, to the right.
Rev.—Æ. Prow of a vessel; beneath Æ. AR. 2.

Obv.—Female head, turreted and veiled to the right.
Rev.—Æ. Prow of a vessel; beneath M. AR. 2.

Obv.—Laureate head of Jupiter to the right.
Rev.—Æ. Prow of a vessel; beneath ΠΝΝΗΣ ΜΩ i.e., an. 48, and the initial of the town in Phœnician character ϝ. AR. 2½.

This coin is in the cabinet of the Rev. Churchill Babington, of Cambridge, and with his permission and at his special request, I insert the same in my paper. It is a very important coin, being the first of this town with a Phœnician legend giving the date when it was struck, and where it was issued.

GETA.

Obv.—ΣΕΠΤΕΜΙΟΣ ΓΕΤΑ Κ. Bust, laureate, to the right.
Rev.—ἈΣΚΑΛΩΝ ΗΤ (an. 308). Astarte standing to the left, holding a staff in her right hand, and an acrostolium in her left; in the field to the right, a pigeon. Æ. 4.

DIADUMENIAN.

Obv.—. . .Κ. ΑΝΤ. ΔΙΑ. . .ΝΟΣ. Bust, laureate, to the right.
Rev.—ΔΣΚΑΛΩΝ ΑΚΤ (an. 321). Astarte standing to the right, her head adorned with two horns or a half moon, holding a staff in her left hand; a pigeon to her right; under her feet a swimming Triton. Æ. 8.
EGYPT.

Ptolemy.

*Obv.*—Bust, diademed, to the right.
*Rev.*—ΠΠΟΔΕΜΑΙΟΥ. ΒΑΣΙΛΕΩΣ. An eagle on a thunderbolt, to the left; in the field, L. ΑΣ. ΚΑΙ. A. ΠΑ. i.e., an. 36, and 1, Paphos. ΑR. 6½.

Berenice, Wife of Evergetes.

*Obv.*—Bust, veiled, to the right.
*Rev.*—ΒΕΡΕΝΙΚΗΣ. ΒΑΣΙΛΙΣΣΗΣ. A cornu-copiae filled with grapes, pomegranate, wheat, &c.; a diadem hanging down; between this and the cornu-copiae the letter E; in the field two stars. Ν. 7.

Ptolemy V.

*Obv.*—Bust, diademed, of Ptolemy V., to the right.
*Rev.*—ΠΠΟΔΕΜΑΙΟΥ. ΕΠΙΦΑΝΟΥ. A winged thunderbolt; in the field two stars, monogram of Aradus Ρ on the left side, and something like a cypress-tree on the other side of the thunderbolt. ΑR. 6½.

This description and engraving is from a cast obtained from a friend of mine in Alexandria, and which was taken from a genuine coin.

H. C. Reichardt.
XIX.

NEW TYPE OF THE FIRST ETHELSTAN.

[Read before the Numismatic Society, November 19, 1863.]

The first Ethelstan was king of Kent, Essex, Sussex, and Surrey, from 837 to 852 A.D., and is said also to have governed in East Anglia during the reign of Egbert. Called by some the son of Egbert, by others of perhaps more authority the son of Ethelwulf, stigmatised as a bastard I believe by Roger of Wendover, he was, at all events, the prince to whom Ethelwulf, on succeeding to the throne, “gave the kingdom of the Kentish men, and of the East Saxons, and of the men of Surrey, and of the South Saxons” (Anglo-Saxon Chronicle, A. 836); and of whom it is recorded in the chronicle of Ethelwerd, and elsewhere, that with Duke Elchere he fought against the army of the Danes in his province of Kent, near the town of Sandwich, that he slew many of them, put their troops to flight, and took nine ships (A. 844).

I have now the pleasure of submitting to the notice of the Numismatic Society an unpublished type of this king’s money. It is one of the headless sort, and resembles in general character the coins described in Mr. Hawkins’ “Silver Coins of England,” which are figured in Plate VII. and numbered respectively 96, 97,
and 98, reading EPELSTANI on the obverse, with the letter Ν in its centre; on the reverse it bears the name of TORHTHELM, a moneyer already known to us; while the device of a "cross moline" on the same side at once distinguishes it from all other published types of these rare pieces, and connects it with the contemporary coin of Ethelwulf (Ruding, pl. xxx. 16), as well as with those of the Mercian kings, Coenwulf, 796—818 (Ruding, pl. vi. 7, 8, 9, 10), and Berhtulf, 839—852 (Ruding, appendix, pl. xxvii. 4).

When Mr. Hawkins published his well-known and very learned book on coins, two-and-twenty years ago, he assigned these, with others, to Gorm or Guthrum, the converted Dane, who assumed the name of Ethelstan on his baptism, in 878 A.D. The opinion given by Mr. Hawkins as to the correct attribution of some of the Ethelstan pennies was expressed with some hesitation then, and it may be changed now; but later writers have carried this particular class of them further back than Guthrum, and, for reasons which I apprehend are considered very sufficient, have assigned them to the Ethelstan who was king of Kent, and to whom no coins whatever had been previously attributed.

In his work on the coinage of East Anglia, Mr. Haigh has done this, and includes them in that series of Saxon monies. It will be apparent to the members of this Society that the argument of these numismatists receives additional support by the evidence this particular coin affords, from its likeness to others which certainly do find their place in the first half of the ninth century. Sufficient, however, as may be the reasons for transferring this special description of the Ethelstan pennies to the first ruler of that name, on what ground, numismatic or
historical, rests the translation of the king himself from Kent to East Anglia? That his coins bear the letter A upon them, as do many of the East Anglian series, seems a slender link to connect him with the sovereignty of that state; for the same letter we are aware is likewise to be found conspicuously on coins of Mercian princes, as well as on those of Ethelwulf.

I shall be glad if the question draws out further information on this subject from some of our leading numismatists. After a patient consideration of what has already been written about it, though I feel prepared to believe that this coin and its fellows belong to a period earlier than the date of Guthrum, and accept its appropriation for Ethelstan of Kent as rightful, yet I for one can go no farther—

"Hactenus est tutum; caetera caeca via est."

It may be well to mention that Northamptonshire had the honour of preserving for us the specimen of this king's coinage, which forms the subject of my paper, the type of which was hitherto unknown. It was found about two years ago in the parish of Bulwick. Turned up by a farm labourer with the plough, I am told it only just escaped the "drill," for its first owner was greatly tempted to wear it at his watch chain, in compliance with the present fashion.

Assheton Pownall.
XX.

BACTRIAN COINS.

The article on the Bactrian Alphabet, in the last November number of the Numismatic Chronicle, will, I trust, have proved a sufficient introduction to the practical application of the Aryan system of writing, as exemplified in its use in transliteration or translation of the Greek, Sanskrit, or Scythic names and words to be found on the coinage introduced, in the first instance, by the Bactrian Eparchs after their revolt from the Seleucidae, and associated in its development with the extended conquests of their successors over much of India intra Gangem.

I now propose to recapitulate the conjoint royal nomenclatures, following the necessarily incomplete serial order already adopted in the Bactrian Catalogue (Num. Chron., vol. xix.); and further to explain the purport of the local titles designed to correspond with the regal honorary prefixes of the Greek. I have intentionally retained in the genitive, in each case, or as they chance to occur on the coins, the names of the several monarchs, both for facility of direct reference to available specimens, and to avoid the possible confusion incident to the irregular conversion of Oriental designations into Hellenic forms. I would, at the same time, warn my English readers who may desire to go beyond the classic Greek, and to test the attribution of the medals of this series by the counterpart legend in the vernacular, that it is needful
to regard the *dots* inserted below the consonants in the English type, which, in effect, mark differently shaped and distinctly euphonised letters in the Bactrian alphabet, and are used, as may be seen in the plate (vi. vol. iii., N.S.), to denote the cerebrals as discriminated from the dentals. The former comprise the series of letters the Sanskrit-speaking races are now discovered to have borrowed from the Scythian family of languages,¹ and the legends on the present suite of coins indicate very clearly that, whenever their original incorporation may date, their functions were but imperfectly discriminated in official documents embodied in an Aryan dialect two centuries before Christ.

I have had occasion to advert, in the earlier portion of these papers, to the incapacity of the Bactrian alphabet to satisfy the phonetic requirements of the Sanskrit language, a defect that might readily be explained by the more extended and exact literal series to be provided for, and the necessity of eliding the short vowel inherent in each Sanskrit consonant, by some arbitrary combination or conjunction with the succeeding letter. In its greatly improved form, incident to this cultivation and, so to say, reconstruction, for the purpose of its adaptation to the due expression of Aryan speech, it is singular that it should

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¹ The Rev. R. Caldwell, in speaking of these cerebrals, remarks: "There is no trace of these sounds in the Aryan family of tongues west of the Indus; but no sooner does a member of that family cross the Indus, and obtain a lodgment in the ancient seats of the Dravidians and other Scythians in India, than the cerebral sounds make their appearance in their language. It is worthy of notice, also, that the Prákrit, a local dialect or vernacular of the Sanskrit, makes a larger use of the cerebrals than the Sanskrit itself."—"Drávidian Grammar," p. 112. See also Norris, "Jour. R. A. Society," xv. 19; and Dr. Bühler, who advocates a new theory, "Madras Journ. Lit. and Sci.," 1864, p. 116.
prove so little competent to render or reproduce the
cognate Greek, which had already elaborated its own
admirable alphabet out of the identical elements of the
parent Phœnician, whose original linear configurations
reappear in such marked individuality in this eastern
compromise of a Semitic clothing for Aryan tongues.²

² India has frequently had occasion to complain of being an
oppressed nationality in the matter of alphabets. Having con-
structed for herself, before historic times, the most exact literal
series posterity is in a position to test, she suffered, some eight
or ten centuries B.C., from the intrusion of the Phœnico-Babyl-
onian scheme of writing—which freely satisfied the wants of
so many civilised nations of the West, but for which even
official influence was unable to secure any permanent footing
beyond the Indus. After the temporary intervention of the
Greek character, which had a still more ephemeral reign, India's
Scythic invaders—unlettered barbarians—availed themselves of
the existing Greek or Bactrian adaptation of the cursive Baby-
onian, till the local alphabets reasserted their due position, and
diverged in their independent progress from the formal lines of
the old Pâli into the many seeming varieties of the ancient type
of writing Mahmûd of Ghazni's men of letters found localised
in the land. In the train of the Moslem conquerors once
again came Semitic letters, and under Muhammad bin Sâm
(A.D. 1191), who founded the dynasty of the Pathân kings of
Dehil, Kufic inscriptions on mosques, and Arabic legends on
coins, mark the beginning of the change which was eventually
destined to result in the mixed Urdu, or "language of the camp,"
which consisted of Arabic, Persian, and Turki words, inter-
mingled with the local speech, recorded in the Naskhi character
—an alphabet as unsuitable for the modern vernaculars as the
eyear Phœnician had proved in its day. And now English
supremacy, under home administration, desires to make all
incongruous sounds bend to its own cherished letters—an odd
instance in the world's history of a very mixed and remote
section of the Aryan family proposing to supersede, with its
comparatively limited alphabet, the indigenous characters which
have been in the course of maturation and adaptation to the
wants and circumstances of the diverse kingdoms of the con-
tinent of India for nearly thirty centuries,—in addition to the
more practicable conflict of meeting on its own ground the now
extensively-adopted Semitic importation.
LIST OF NAMES IN GREEK AND BACTRIAN.

1. ΔΙΟΔΟΤΟΥ.
2. ΑΓΑΘΟΚΛΕΟΥΣ .... Agathuklayesa, } In Indian,
3. ΠΑΝΤΑΛΕΟΝΤΟΣ .... Pantalevasa. ) Pálfi.
4. ΕΥΘΥΔΗΜΟΥ.
5. ΔΗΜΗΤΡΙΟΥ.

6. ΗΛΙΩΚΛΕΟΥΣ .... { Heliakreyasa, Heliyakresasa,
                     Heliyakraasa, and
                     Eliakreyasa.

7. ΑΝΤΙΜΑΧΟΥ (θέου).
8. ΕΥΚΡΑΤΙΔΟΥ .... Eukrátiqasa, EUkrátiqasa.
9. ΑΝΤΙΜΑΧΟΥ (τίκετοραυ) .... { Antimakhasa, and
                           Antimakhaasa.

10. ΦΙΛΟΞΕΝΟΥ .... { Pilasinasa, Philasinaasa, and
                     Phalasinaasa.

10a. ΑΡΤΕΜΙΔΩΡΟΥ .... Atimidarasas.
11. ΝΙΚΙΟΥ .... Nikiasa.
12. ΑΠΟΔΛΟΔΟΤΟΥ .... { Apaladatasas, Apaladatasa, &c.
                        (transcription varies considerably).
13 ΖΩΙΔΟΥ .... Jhoilasa.
14. ΔΙΟΜΗΔΟΥ .... Diyamedasa and Diyamedása.
15. ΔΙΟΝΥΣΙΟΥ .... Dianisyasa and Diannisiyasa.
16. ΔΥΣΙΟΥ .... Lisiasa, and Liskasa.
17. ΑΝΤΙΛΙΚΙΔΟΥ .... Antialikiqasa, or Atialikidasas.
18. ΑΜΥΝΤΟΥ .... Amitasa.
19. ΑΡΧΕΒΙΟΥ .... Arkhabiyasa.
20. ΜΕΝΑΝΔΡΟΥ .... Menadrása, or Menandrasa.
20a. ΕΠΑΝΔΡΟΥ .... Epadrása.
21. ΣΤΡΑΤΩΝΟΣ .... Stratasa.
21a. (Βασιλισσας) ΑΓΑΘΟΚΛΕΙΑΣ.
22. ΠΙΠΟΣΤΡΑΤΟΥ .... Hipastratasas.
23. ΘΗΛΕΦΟΥ .... Teliphasa.
24. ΕΡΜΑΙΟΥ .... Hermayaasa.
24a. ΚΑΛΛΙΟΠΗΣ .... Kaliypaya.
24b. ΣΥ ΕΡΜΑΙΟΥ.
25. ΜΑΥοΥ . . . . . . . . . (Moasa (Taxila inscription
{ Mogasa²).
26a. ΚοΖοΛΑ ΚΑΔΑΦΕΙ . Kuyula Kaphsasa (Yaiusa).
26b. ΚΥΔΔΟΥ.
Variety, ΓΡΚΟΔΟΥ.
27. οΝΟΝΟΥ.⁴
29a. ΓΙΑΛΑΙΡΙΛΟΥ . . . . Spaliriṣasa.
30. ΑΖοΥ . . . . . . . . . . Ayasa.
31. ΑΖΙΛΙΣοΥ . . . . . . . Ayilishasa.
32. ΓΩΤΗΡ ΜΕΓΑΛ . Mahatasa Traḍatasasa.
32a. ΚΑΔΦΙΧΗΚ . . . . . . Kaṭhipiṣasa.
32b. ΟΟΗΜΟ . . . . . . . . Hima.
33. ΓοΝΔοΦΑΡοΥ . . . . { Gudupharasa,
{ Gandapahanṭhasa, or
{ Godaphanṭhasa.
34. ΑΒΔΑΓΑΣσΟΥ 
{ ΑΒΑΓΑΣσΟΥ . . . . Abadagaṣasa.
35. ΑΡΣΑΚοΥ . . . . . . . Ashshakasa.
36. ΠΑΧοΡΗΣ . . . . . . . Pakurasasa.
37. ΟΡΘΑΓΝΗΣ.

140, 427.
⁴ The coins of Vonones do not bear his own name on the
reverse. His local governors, Azas, Aya? (Bactrian Catalogue,
No. xxvii. Classes A, B, and C), Spalahora, and Spalagadama,
figure in the Aryan character in combination with Vonones'
own designation in Greek on the obverse. Azas' name again
appears on the reverse of certain coins, having on the obverse
the imperfect designation ΠΙΑΛΑΙΡΙΚοΥ (Class D), and the
nearly identical name of ΠΙΑΛΥΠΙΓ, who is described as the
brother of the king, and son of Spalahora (Class C a). I must
confess that I distrust the combination of the names of Vonones
and Azas on one coin, as I do those of Azas and Azilisas on
another (Jour. des Savants, October, 1836, pl. ii. No. 16, and
"Ariana Antiqua," p. 321). Looking to the limited examples
hitherto brought to light, I regard them, for the present, as
fortuitous combinations by the mint officials of new and legitimate
with old and obsolete dies.
Unlike the Bactrian design for the mere mechanical reproduction of the sounds of Greek names, the parallel system of transmutation of titles aimed at higher objects, and sought to convey to the comprehension of the subject races the relative dignity and power of the monarch as exemplified by the titular distinctions prefixed to his name. And whether regarding the Greek or the cor-responding Aryan application of the gradational scale, the theory seems to have been carried out with fair discrimina-tion, and but little of personal presumption or Oriental hyperbole. Hence we find Eukratides, who became so powerful, commencing with the ordinary ΒΑΣΙΛΕΙΟΣ, next assuming the ΜΕΓΑΣ of the Greek, and passing on to the higher equivalent of "king of kings" in the local speech. And the Scythian Moa, the spread of whose kingdom is evidenced in the multitude of the types, and the variety of mint marks of his later coinages, is found advancing from the simple king to the ΒΑΣΙΛΕΩΣ ΒΑΣΙΛΕΩΝ ΜΕΓΑΛΟΥ and Rajadiraja Mahata of the Aryan transcript.

1. The Βασιλευς of the Greek is represented by Māhāraja, from Mahā, "great," and Rāja, "king;" in our Western tongues, Rex, Roi (Gothic), Reiks (Old Irish), Rī. The more exalted title of Βασιλευς Βασιλεων is indifferently rendered by Rāja rāja, "king of kings," or Rājadhirāja, "king over kings," in addition to the ordinary Māhāraja, and the same equivalents are used for Βασιλευοντος Βασιλεων.

2. The Greek Σωτήρ is reproduced in the word Tradata, derived from the Sanskrit root Trā, "to preserve."

3. The Δικαως of the coins is translated by Dhamika, or Dhramika (at times Dramia), from Dhṛi, "to hold," the "Dharma," faith, virtue, &c., of the Buddhists.

5. The meaning of Αρικτήριος is well preserved in the vernacular Αρατήθα — the Sanskrit Apratihala, "unrepulsed" (A-prati-hata, from Han, "to strike," "to hurt").

6. Mahāta and Mahātaka are sufficiently obvious counterparts of the Greek Μεγας.

7. The classic €πιφανής is converted, in the local dialect, into Pratichha, which may be identified with Pratishta, "renowned," or possibly with Pratikshya, "venerable, respectable."

8. €περγίερης is cast into the Indian form of a word which reads dubiously Kalakrama, for Kalyakrama(?). This title occurs but once in the entire series, and is found on the coins of Telephus (No. xxiii.).

9. The Greek Στρατηγός is preserved in its original form in Stratega, and the Persian Σαρπάτης finds the varying local equivalents of Chhatrapu and Katrapa, which last accords with Khatrapa, the orthography employed in the Indian Pāli.

10. The word ΖΑΘοΥ I suppose to represent the adjective Ζάθεος, "very divine," "sacred," in which sense it may be understood to agree with the Sāccha dharma thira(sthīra), "steadfast in the true faith," on the reverse of the same class of coins. In a similar way we may understand the application of Mācap, "blessed," on the Kodes coins.

11. The long Aryan legend on the Kadphises coins has

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5 Major Hay's Coin of Zsionisas, unpublished.
6 Prinsep's "Essays," ii. 223.
at last received a satisfactory interpretation. Professor Dowson’s discovery of the value of the Bactrian compound ḫṣ or ṣw determined the term ḯśvara, which was the one thing wanting to complete my previous reading (Num. Chron. Coin Catalogue, No. xxxiii.). The entire legend may now be transcribed and explained:

Maharajasā Rajadīrajasā Sarvā-loga-ḍśvarasa Mahiśva-
rasa Kaṭhpīṣasa.

"Of the great king, king over kings, lord of the whole world (all people), the great Lord, Kaṭhpīṣa."

And to complete the identifications I may point to the Aryan word, Hima, “cold,” “snow,” white, which gives us the true meaning of OO HMO.⁸

Before describing the contents of the plate, I may as well notice any novelties, belonging to the earlier portion of the general Bactrian series, that have rewarded our collectors since my last revision of the coins of the first four kings of the Num. Chron. Catalogue (vol. ii., N.S., p. 259). Captain Stubbs, R.A., has been so fortunate as to secure a fourth specimen of the gold coinage of Diodotus, which, however, calls for no particular remark, beyond the relative rarity of these pieces; and the same gentleman has acquired a very perfect reproduction of the original Diodotus and Antimachus Theos coin, an unsatisfactory cast of which, obtained by Major Hay, was copied in the engraving in pl. iv., vol. ii., Num. Chron., N.S. Mr. Bayley, the President of the Asiatic Society of Bengal,⁹ has

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⁸ See the coin figured under No. 19, pl. xxii., "Ariana Antiqua," and a still better specimen in the British Museum. Gen. Cunningham originally identified this Hima with the Yuechi (Hieumi). His latest theory is that the names of Kozola, Kara, and Hoemo, are Türkii for red, black, and white. See "Journ. A. S. Bengal," xiv., 493, and 1863, p. 147; Lassen Ind. Alt. ii. 387; and for Coins of Kara Kadphises, A. A., pl. vii. fig. 11.

⁹ "Jour. A. S. Bengal," 1864, p. 84.
announced the discovery of a coin of Theophilos. The types and general details of the piece would seem to associate the king with the period of Philoxenes and Nicias. I may remark that the reading of the Greek name is sufficiently assured, and is confirmed in all but the opening letter by the Aryan context. The monogram seems to be No. 74a.

Captain Stubbs has further favoured me with the following description of a new specimen of Artemidorus.

No. X a.

Artemidorus. O. S. Cast of Didrachma, in the collection of the Asiatic Society of Bengal.

Obv.—Bare head of king, to the right (similar in character to the style of Hippostratus' obverses).

Legend, ΒΑΣΙΛΕΩΣ ΑΝΙΚΗΤΩY ΑΡΤΕΜΙΔΩΡΟY.

Rev.—Artemis erect and buskined, to the left, in the act of discharging an arrow; her robe floats in the wind.

Legend, Māhārajasa Apadihatasa Atimi(darasa).

Monogram, △

I also transcribe the following notices of two coins, descriptions of which have not yet appeared in this Journal.

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10 I have some reserve in further describing this novelty, as I derive my knowledge of the coin from an imperfect drawing taken while the original was in the possession of Lieut. Pullan.

□ Copper.

Obv.—Head of king, similar to that of Nicias.

Legend, ΒΑΣΙΛΕΩΣ ΔΙΚΑΙΟΥ ΘΕΟΦΙΛΟΥ.

Rev.—Cornucopiae, and monogram 74a.

Legend, Māhārajasa Dhramiṣa (Thi)aphalasa.
PANTALEON.

a. Tetradrachma.

*Obv.*—"Bare diademmed head of the king to right, very like Agathocles, with a fuller and larger head, but with the same remarkable nose, within a circle of small dots."

*Rev.*—"Jupiter seated, and holding the Diva-triformis, or three-headed Hecate, in his right hand. Legend, ΒΑΣΙΛΕΩΣ ΠΑΝΤΑΛΕΟΝΤΟΣ."


b. O. Debased silver. Mr. Brereton. Similar to No. 4. Agathocles.

*Obv.*—Head of Bacchus to the right, with spear.

*Rev.*—Panther, with vine. Legend, ΒΑΣΙΛΕΩΣ ΠΑΝΤΑΛΕΟΝΤΟΣ.

I extend these notices of new acquisitions by a return to the serial résumé of the additional coins of the three kings subsequent in succession to Euthydemus (Num. Chron., N.S. vol. ii., 178, 259), which have come to light since the original Bactrian Catalogue appeared in 1858 (Num. Chron., vol. xix., 13). Although these accessions offer no very striking varieties, yet it is desirable to bring the earlier list up to the progressively advancing knowledge of the day, and to maintain a full record of the mint monograms, which, as will be seen, become of peculiar interest and importance under Eukratides.

DEMETRIUS.

No. 2. Drachma. Gen. Abbott, monograms No. 7 and No. 8, with the additional sloping down stroke of the A.


Mr. Brereton, monogram No. 4.

General Cunningham has figured a new coin, which he attributes to this prince (under No. 2, 3rd supplementary plate of Bactrian coins), of which the following is a description:–
C. O. *Obv.*—Laurelled head, to the right.

*Rev.*—Tripod.

Legend, ΒΑΣΙΛΕΩΣ ΔΗΜΗΤΡΙΟΥ. No monogram.

*Summary of Monograms*—nine in all.

Nos. 4, 7, variety of 8, 10 (Cunningham), 11, 12, 13, 15, 17a.

**Heliocles.**


No. 2.—Tetradrachma.11

*Obv.*—Helmeted head.

*Rev.*—Seated figure of Jupiter, the right hand holding a small statue of Victory, the left resting on a spear.

Legend, ΒΑΣΙΛΕΩΣ ΔΙΚΑΙΟΥ ΗΔΙΟΚΑΕΟΥΣ.

No. 4. Gen. Abbott has a unique didrachma (weight, 164.3 grains) of the type described under the hemidrachma numbered 4 in the Num. Chron. Catalogue. Monogram similar to No. 97, but nearly identical with No. 22b, Prinsep.

*Recapitulation of the Monograms of Heliocles.*

Nos. 4, 7, 8, and 8 variant, with the down stroke of the A inserted. Nos. 12, 20, 21, 22. The isolated letter Ω. Nos. 23,

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11 This piece was imperfectly described in the early catalogue. I have since had an opportunity of making an examination of the original coin, the result of which is now given.
23 variant, associated with Σ in the field. Nos. 33, 44, 73, 74, with the addition of the letter Π to the right. The combination similar to Nos. 56 and 91, consisting of Ε, with Δ on the lower limb of the Ε. The upper portion of a doubtful example of No. 77, and a monogram given by General Cunningham under No. 53 of his plate in vol. viii. of this Journal.

EUKRATIDES.


Obv.—Helmeted head of the king.

Legend, ΒΑΣΙΛΕΥΣ ΜΕΓΑΣ ΕΥΚΡΑΤΙΔΗΣ.

Rev.—Male and female heads uncovered, without fillets.

Legend, ΗΑΙΟΚΑΛΕΟΥΣ ΚΑΙ ΑΛΩΔΙΚΗΣ.

Major Hay has a second cast, seemingly derived from the same original piece as that from which Col. Sykes' reproduction was taken.

Mr. Gibbs, of the Bombay Civil Service, communicates a (genuine) drachma of similar type in his possession, with the monogram 19a. (See Prinsep's Essays, vol. i., p. 16).


Obv.—Helmeted head to the right.

Legend, ΒΑΣΙΛΕΩΣ ΜΕΓΑΛΟΥ ΕΥΚΡΑΤΙΔΟΥ.

Rev.—Dioscuri, on foot, to the front, leaning on their spears (as in subsequent Azas coins).

Aryan Legend, Māhārajasa Mahātakasa Eukratidasa.


Obv.—Helmeted head, to the left.

Rev.—A single horseman at the charge.

Legend, B. M. E.

Recapitulation of the various Monograms observed on the entire Series of the Coins of Eukratides.

Nos. 6a, 7, 8, 9, 12a, 13, with two lower limbs only instead of three. Nos. 14, 15, 15a, 17a, 19a, 23a, 23b, and variety of No. 23, given as No. 37, Prinsep, 24, 24a, 24b, 25, 26, and
BACTRIAN COINS.

No. 26 Prinsep, consisting of the detached letters NI., 27, 28, 29, 29 with E, variant of 30 given as 24 Prinsep, 31, 32a, 33, 34, 35a, 36, 36a, 37, 37a, 37b, 38, 39, 40, 40a, 41, 41a, 42, variant of 43 given as No. 42, Prinsep, 44, 45, 76, 127a. The third figure under No. 142, and a novelty consisting of the detached letters KI (Gen. Abbott).

In addition to these, Gen. Cunningham has already published in his table of Bactrian Monograms (p. 175, vol. viii. of this Journal), the following signs, which have not yet come under my direct observation:

His No. 14, identical with No. 10 of my plates, Num. Chron. No. 26, unique. Under No. 28, a variety of No. 27 of my table. No. 30 a variety of No. 40, supra. His Nos. 31, 33, 42, 51, all of which are unique, and No. 53, which is a variety of my No. 19b.

The monograms of Eukratides outnumber by far the mint-marks of his predecessors, and in the very fact elucidate materially a disputed statement in written history. Strabo (Book xv., chap. i. sect. 3), in quoting Apollodorus of Artemita, disparages his assertion that "the Bactrians had subjected to their dominion a larger portion of India than the Macedonians; for Eukratides had a thousand cities subject to his authority."

We have already recovered from the coins nearly sixty mint monograms of this king, and without claiming any credit for those varieties that may still remain to be discovered, or making any deduction from the round sum of the historian's total, this number of metropolitan mint cities gives a fair representation of the true extent of the Bactrian dominion at this period. A mint for every sixteen or seventeen towns, villages, or hamlets, is a very sufficient average return for a not over-rich country, and tested by this measure we can afford to accept without hesitation the testimony of the original author rather than the comment of his critic.
It is true that some of these mint monograms may be repetitions or re-arrangements of a combination of the same letters in a slightly varied form, changes which would probably remain at the option of the mint officials unchecked by superior authority, but the limited time of one king's reign would necessarily reduce these, to us, possible sources of error to a very narrow margin.

On the other hand, these minor modifications and almost imperceptible variations in one and the same monogram, may, perchance, be designed to discriminate the subordinate mints of the same circle of government; and as we know that the generic designation of the province was often applied to, and used as the specific name of its capital, it is not impossible that new combinations of the leading letters of that geographical expression, in the official Greek, may have been extended to local and non-metropolitan towns, which still retained their ancient native nomenclatures in the vernacular. And this brings us face to face with a very important obstacle to any complete determination of the comparative geography and monarchical distribution of the country through the mechanism of interpretation of mint-marks, that is, the practice of renaming old cities by the designations of their foreign conquerors; so that we find the monograms of Ξ, Ν, Κ, and Ε, indicating severally the favoured capitals of Diodotus, Antimachus, Heliocles, and Euthydemus, with-

\[12\] It may be considered rash to affirm that the first of these monograms embodies every literal element of the long word ΔΙΟΤΟΠΟΛΙΣ. Of course, the same lines may be used over and over again to form succeeding and different letters, while any single letter contained in the combined group may be re-read as often as occasion requires, and great license is to be permitted in determining the direction, horizontal or perpendicular, in which alphabetical symbols were originally fitted in. The one great
out any corresponding aid or indication as to where those sites may be looked for. There is no doubt but that some of the more remarkable cities of this class have had their identities preserved in the text of Greek authors; but the difficulty still remains in regard to the very large majority of places entitled to the honour of a city mint.

**Description of the Plate of General James Abbott's Coins.**

**No. 1. □. C. Unique.**

*Obv.*—Figure of Victory, with palm-branch and chaplet.\(^{13}\)

Legend, ΒΑΣΙΛΕΩΣ ΝΙΚΗΦΟΡΟΥ ΕΠΙΜΑΧΙΟΥ.

*Rev.*—Indian bull to the right.

Legend, Μάχαραγκά Τάγκαρα Τάκα (Ε) παρά (sa).

Monograms, No. 7; with ΚΕ (?) beneath the bull.

**No. 2. □. C.**

*Obv.*—Figure, to the front, with the lower extremities composed of fishes’ tails. The extended right hand holds a fish,\(^{14}\) the left an oar.

Legend, ΒΑΣΙΛΕΩΣ ΣΩΤΗΡΟΥ ΕΠΙΣΤΑΡΘΟΥ.

requisite is to leave no single stroke unaccounted for. The interpretation of the third monogram may require some explanation. The ΗΔΙΚ are sufficiently obvious; the Ο is obtained from what would ordinarily form the top of the letter Π, but I imagine that it was desired to keep the Ο out of the centre of the cipher, to preserve the complete legibility of the K, which was a more important letter in the name than the vowel O, which could be as conveniently supplemented outside. So also No. 29α is clearly the monogram of Demetrius, of which combination endless modifications are to be found, with or without the horizontal Τ, with the occasional addition of Π, sometimes placed in the proper run of the writing, at others thrown back in reverse upon the first limb of the H.

\(^{13}\) Identical with the reverse type of Menander's coins—see "Ariana Antiqua," pl. iv. figs. 5, 6.

\(^{14}\) A nearly similar reverse occurs on the coins of Telephus. Num. Chron. Catalogue, No. xxiii.
Rev.—Female figure, with singular (Scythic?) head-dress and palm-branch.
Legend (Máhárajasa) Traḍa(tasa Hi)paastratasa.
Monogram, No. 103, Num. Chron.

No. 3. □. C.
Obv.—Jove seated (as on the coins of Hermæus).
Legend, BAIΛEΩΣ ΣΟΤΗΙ'οΣ ἈΠΙΟΣΤΡΑΤΩΥ.
Rev.—Horse, free.
Legend, Maharajasa träda(tasa) Hipastratasa.
Monogram, No. 47 (?).

No. 4. O. S. Vonones and Spalahora.
Obv.—Scythian horseman to the right, with spear sloped.
Legend, BAIΛEΩΣ BAIΛEΩΝ ΜΕΓΑΛΟΥ ΟΝΩΝΟΥ.
Rev.—Jupiter, with spear and thunderbolt.
Legend, "Máhárajasa—Bhrata Dhramikasa Spalahorasa" (Coin) of the Just Spalahora, Brother of the King.
Monogram, No. 131, Num. Chron.

No. 5. □. C. Unique, unpublished.
Obv.—Elephant.
Legend, ATIAHΛοΥΑΛΑ - - βαιΛΕ .
Monogram, a Bactrian T.
Rev.—Indian humped bull (?).
Legend, Mahárajasa - -
Monogram, variety of 140 (Buddhist symbol).

This coin is possibly connected with some of the subordinate classes of the Azas series. The legends, however imperfect, may aid in the attribution of other specimens. See Prinsep's Essays, ii. p. 210, and Gen. Cunningham in "Journal Asiatic Society of Bengal," 1854, pl. xxxv., figs. 1, 2; and 1862, p. 425.

No. 6. O. S.
Obv.—Head of king to the right.
Rev.—Head of Bucephalus.
Legend, ΒΑΣΙΛΕΩΣ ΑΝΤΙΟΧΟΥ.
Monogram, 82, Num. Chron.

No. 7. O. S.

Obv.—Head of king to the left.
Legend, variety of Phoenician writing.

Rev.—Scythian (?) warrior, with bow.
Legend, corrupt, βασιλεως ΑΝΤΙΟΧΟΥ.
Monogram, K.

I have inserted these two coins in the accompanying Plate with a view to trace the derivation of the types of the mintage of Kodes, who has been, on somewhat insufficient grounds, incorporated in the general list of Bactrian kings. It will be seen that both the coins in question bear the name of Antiochus in debased Greek. The reverse "head of Bucephalus," on No. 6, associates the piece with the prototype introduced by Seleucus Nicator, a device which, like the humped bull, is supposed to refer to Indian conquests, and by some numismatists held to convey a possible allusion to Bucephalia on the Jhelum. A degraded outline of this horse's head would seem to have retained a place on the money of Kodes. So also the reverse of No. 7, though not identical with the second Kodes design, is sufficiently approximated in outline, though for good reason altered in detail, to be accepted in the presence of other typical coincidences as an intentional imitation; and although the one die represents an archer and the other a spearman, with flames

16 "Trésor de Numismatique; Rois Grecs," p. 84.
issuing from his shoulders, the general combination seems to be sufficiently established by the discovery of an identical horse’s head, reverse, conjoined with the same obverse style of head and an absolutely analogous Oriental legend on other coins of the class; a connection still further carried out by a similarity of monograms, the letter K being common to both. I do not wish, at the end of this paper, to go largely into the question of the true locality, date, or precise family to which the Kodes coins should be attributed; but I may state generally that I suppose them to have been issued by a local king or kings, “Fire-worshippers” in creed, and reigning probably in Kermán, of which the monogrammatic K on their money probably stands for the initial letter, Karmania (μητρέωςον).

The legends on the Kodes coins are as follows:—Overse, ΚΩΔΩΥ, and in some cases ΥΡΚΩΔΩΥ; Reverse, ΟΡΑΘΟΥ ΜΑΚΑΡΟΥ (sic). The first of these I propose to interpret by supposing the name, in its oriental form, to have been Kobád. I should have more difficulty about the absence of the long a, did not the legend on the reverse justify a suspicion of considerable laxity or ignorance in the reproduction of sounds, on the part of the designers of these dies, or a comparative disregard of vowels, common enough in Zend. Kobád, though it is written داد, Kubád, in modern Persian, appears as کوت, kuat, in the old Pehlevi, and indifferently as نم.
and בָּשָׁם, on the Sassanian coins. It is well known that the \( u \) was constantly used in the East of Persia in the place of the Western \( b \), as in Zādīstān, for Zābulistān, &c.

The त्र occasionally prefixed to the name of Kodes, seems to be identifiable with the Hebrew יָם “light, fire,” which latter meaning will be seen from the reverse legend to be peculiarly applicable in the present instance. The अष्टिर्य may be explained by areta or ereta, Zend, Persian, जि “Veneratus, illustris, magnus;” and the ऋ of the Indo-Scythic coins, the Zend अधर, “Fire,” while the मकवय (Makarov) “blessed,” completes the legend, which may be summarised “of Kodes” (or Kobād) [the guardian] “of the sacred great fire.”

No. S. O. S.

Obv.—Head.

Legend illegible.

Rev.—Minerva Promachos.

Legend imperfect. The name at the foot reads Kahayasa, or preferably, Kanayašasa. Greek Monog. No. 98, Prinsep’s “Essays.” Bactrian letters, \( H\im\), and \( b \) or \( n \) to the left.

E. Thomas.

\[21\] The Greek transcript of this period is Kαυάδης or Κοκάδης. Hyde de Relig. Vet. Persarum, p. 291.


\[23\] This अन is the correct orthography of the “Ur of the Chaldees.” Hyde, p. 358, says “Alia Ignis nomina reperio ἔρημος Ὑρ,” &c. The Persian خر, modern حر, modern is the Sun.

\[24\] “Ariana Antiqua,” pl. xii. figs. 6, 7, 16. Prinsep’s “Essays,” i. p. 225, pl. xxi. fig. 6.


NOTICE OF RECENT NUMISMATIC PUBLICATIONS.

In No. 3 (May and June) of the Revue Numismatique for 1864, there are the following articles:

1. Letter XVIII. from M. F. de Saulcy to M. A. de Longpérier "On the Numismatics of Gaul."
   In this paper the author restores a small silver coin, with the letters AVSC on the reverse, between the limbs of a cross, to the chief Aucrocos, whose name is found allied with that of Durnacos on this and other coins. The piece had been formerly attributed by the Marquis de Lagoy to the Ausci or Auscii.

2. "On a coin of Sane, in Macedonia," by M. Fr. Lenormant.
   M. Chabouillet, the keeper of the medal room at Paris, has inserted a letter in the Revue Archéologique, stating that this coin, published by M. Fr. Lenormant as having the letters ΣAN, or as in the woodcut MAN, upon it, has not a single letter upon it, and that it must therefore still be classed among the uncertain coins. A third person might perhaps be able to decide this difficulty with a microscope.

3. "On some inedited Greek coins," by M. Alfred de Courtois; comprising coins of Tiryns, Mothone (or Methone), and Eretria of Euboea.


In the Chronique is an account of a find of mediæval coins at Saint Aignan (Loir-et-Cher), and a translation from the Italian, by MM. A. Grassi and H. Æcapitaine, of a decree relative to the value of coins in use in the Island of Corsica.

In the Nécrologie is a notice of M. Monnier.

In No. 4 (July and August) of the Revue Numismatique there are the following articles:

1. "Attribution of an inedited coin to Serpa (Hispania Ulterior)," by M. Zobel de Zangroniz.
2. Letter XIX. from M. F. de Sauley to M. A. de Longpérier, "On the Numismatics of Gaul. Tasgetius, King of the Carnutes."

In this letter M. de Sauley points out that the coin attributed by La Sausaye to Ucetia is in fact one of Tasgetius, and gives an account of a hitherto unpublished coin, with the legend ANDVGOVONI.


4. "Bronze quincusis of rectangular shape," by M. le Duc de Blacas. This remarkable piece bears the type of a short sword on the one side, and of the sheath on the other, with the inscription N. ROMANOM.


In the Bulletin Bibliographique is a notice by M. de Longpérier on the work of Dr. H. Meyer, "On the Gaulish coins found in Switzerland."

In the Chronique is an announcement that l'Académie des inscriptions et belles-lettres de l'Institut, under the presidency of M. F. de Sauley, at a meeting on the 6th of August, gave the numismatic prize founded by M. Allier de Hauteroche to M. Maximin Deloche, for his work entitled "Description des monnaies Mérovingiennes du Limousin," 1 vol. 8vo.

The second medal of the "Concours des antiquités nationales" was assigned to M. Arthur Forgeais for his work "Collection de plombs historiés trouvés dans la Seine; Méraux des corporations de métiers, 1862; Enseignes de pèlerinages, 1863; Variétés numismatiques, 1864." 3 vols. 8vo.

It is also announced that M. Antonino Salinas is preparing a recueil général of Byzantine seals; and archaeologists possessing any are requested to send impressions to the bureau of the Revue Numismatique, 12 Rue Vivienne, Paris.

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1 "Beschreibung der in der Schweiz aufgefundenen Gallischen Münzen.—Zurich, 1863."
In the *Nécrologie* is a short notice of M. Faustin Poey d'Avant.

In the *deuxième livraison* of the *Revue de la Numismatique Belge*, for 1864, there are the following articles:—

1. "Gallo-Belgic Numismatics, or Monetary History of the Atrebates, the Morini, and Gallo-Belgic nations in general," (continuation), by M. Alexandre Hermand.


3. "Numismatic curiosities. Rare or unpublished coins," (sixth article), by M. R. Chalon.


In the *Correspondance* are the following letters:—

1. Letter of M. le Comte Maurin Nahuijs, "On the numismatic works of the Royal Academy of Amsterdam."

2. Letter of M. le Comte de Limburg-Stirum, "On a jetton of a magistrate at Brussels."


In the *Mélanges* are notices of various recent numismatic publications.

In the *Nécrologie* are notices of MM. Vincenzo Lazari, Deltetre, and de Roye de Wicheren.

In the *troisième livraison* of the *Revue Belge* there are the following articles:—

1. "Gallo-Belgic Numismatics, or Monetary History of the Atrebates, the Morini, and Gallo-Belgic nations in general," (continuation), by M. Alexandre Hermand.

2. Fourth letter of M. le Général J. de Bartholomaei to M. F. Soret, "On unpublished Oriental coins."

3. "Description of several coins found in Lorraine," by M. J. Chautard.


In the *Mélanges* are notices of various recent numismatic publications.

In the *Nécrologie* is a notice of M. Auguste Monnier, by M. J. Chautard.
Part I. of the Proceedings of the Manchester Numismatic Society has just been published in the form of a small quarto, of about 20 pages of tinted paper. It contains a comprehensive essay, by Dr. Charles Clay, the President of the Society, on the brass, copper, and other currency of the Isle of Man, which is illustrated by a photographic plate of the coins described. The paper is pleasantly written, though we must confess to having been surprised on reading that the Virgin and Child and the names of the three Magi are to be found on a Phœnician monument given by Gesenius, and that the correct form of the Manx motto is "Quocunque jaceris stabit." Still, as a whole, this number of the Proceedings is a most creditable production, and we hope that so successful a commencement may be well followed up. If criticism were allowable, we would suggest a little more care in the correction of the press, so that our eyes might not be offended by such slips as "Matidia, niece of Trajan and daughter of Marcianæ," "a bigæ," "the cortinæ," the engraver "Crokin," "Lilybœum," &c.

In the Journal of the British Archaeological Association for September 30, is a short but interesting paper by Mr. Syer Cuming, on Bracteate coins, illustrated by a plate of ten specimens of various dates, for the most part struck in the north of Germany, the earliest of them being assigned to the Emperor Frederick I. (A.D. 1153—1190).

In the Reliquary, Nos. 14, 15, and 16, are farther portions of the illustrated description of the Traders' Tokens of Derbyshire, by the Editor, Mr. Llewellynn Jewitt, F.S.A. This account of the Tokens is replete with genealogical and topographical details, and will be of great value to all who are interested in the antiquities of Derbyshire.

"A selection of Papers on Archaeology and History," lately published by the Rev. John Kenrick, F.S.A., of York, contains an Essay on the relation of Coins to History, illustrated by Roman coins discovered at Methal, near Warter. The series of coins more immediately noticed in this paper begins with Valerian, A.D. 253, and ends with Aurelian, A.D. 270; and though extending over a space of only seventeen years, illustrates a most eventful period of Roman history, the principle occurrences of which are detailed by the author of this learned and interesting essay.

VOL. IV. N.S.  G G
MISCELLANEA.

FIND OF ROMAN COINS.—By the kindness of Mr. A. W. Franks, I have been enabled to examine a number of coins recently found on the borders of Gloucestershire and Wiltshire, in the bed of the river Churn, which, though not forming a portion of any hoard, but rather the accumulation of accident, are of some interest, from their belonging to an early period of the Roman dominion in England. They were discovered in the parish of Lattom, near Cricklade, in a mass of gravel, at a point where the new brook, recently formed, joins the river Churn. The metal has preserved, in most cases, its brilliant yellow colour, as may be also noticed in coins found at various times in the Thames, in London. A lyre-shaped fibula and a few other ancient remains were exhumed at the same spot. These discoveries seem to suggest the former existence of a bridge or ford at this place, which is very near the line of the Ermine Street from Cirencester (Corinium) to Speen (Spena):—

AGrippa.

1. Obv.—M. AGRIIPPA L. F. COS. III. Head to the left, with the rostral crown.
   Rev.—S.C. Neptune standing to left; a mantle over his shoulders, and holding a dolphin and a trident. (Cohen, 3.) Æ. ii. 3.

ANTONIA.

1. Obv.—ANTONIA AVGVSTA. Bust to the right.
   Rev.—TI. CLAVDIVS CAESAR AVG. P. M. TR. P. IMP. Claudius standing to left, holding a simpulum. In field S.C. (Cohen, 6.) Æ. ii. 1.

Claudius.

1. Obv.—TI. CLAVDIVS CAESAR AVG. P. M. TR. P. IMP. Head to the left, bare.
   Rev.—S.C. Mars, helmeted, walking to the right, about to throw a javelin, and holding a shield in his left hand. In field S.C. (Cohen, 87.) Æ. ii. 13.

2. A very barbarous coin of this type. Æ. ii. 1.

3. Obv.—Same legend and type.
   Rev.—CONSTANTIAE AVGVSTI. Mars, helmeted,
standing to left, holding a spear, and raising his right hand to his mouth. In field S.C. (Cohen, 73.) Æ. ii. 1.

4. Obv.—Same legend and type.  
Rev.—LIBERTAS. AVGVSTA. Liberty, standing to right, holding a cap. In field S.C. (Cohen, 79.) Æ. ii. 2.

5. Obv.—... DIVS CAESAR. Head of Claudius (?) to left, laureate.  
Rev.—[TI. CLAVDIVS CAESAR AVG. P. M.] TR. P. IMP. Claudius, standing to left, holding simpulum. In field S.C. Æ. ii. 1.

6. Obv.—... AVGVSTVS (?). Head to the right, laureate.  
Rev.—Same legend and type. Æ. ii. 1.

The last two coins are of very barbarous workmanship, especially the latter, and were evidently struck in Britain by ignorant artists. The reverse type of both is well known as occurring on the coins of Antonia.

NERO.

1. Obv.—NERO. CLAVD. CAESAR. AVG. GERMANI. Head to the right, bare; beneath, a globe.  
Rev.—PONTIF. MAX. TR POT. IMP. P. P. Nero, laureate, dressed as a woman, walking to right, holding a lyre. In field S.C. (Cohen, 205.) Æ. ii. 1.

2. Obv.—Same legend. Head to the left, bare; beneath, a globe.  
Rev.—Same legend and type. (Cohen, 204.) Æ. ii. 1.

3. Obv.—IMP. NERO CAESAR. AVG. P. MAX. TR. P. P.P. Head to the right, laureate; beneath, a globe.  
Rev.—SECVRITATI. AVGVSTI. Security seated to right, before an altar, holding in left hand a spear, and resting her head on her right hand, her elbow being placed on the back of the chair; before the altar a lighted torch. In exergue S.C. (Cohen, 257.) Æ. ii. 1.

4 Obv.—Same legend. Head to the right, bare; beneath, a globe.  
Rev.—S.C. Victory flying to left, holding a shield, on
which is inscribed S. P. Q. R. In field S.C. (Cohen, 253.) Æ. ii. 1.

5. Obv.—Same legend. Head to the left, bare; beneath, a globe.
   Rev.—VICTORIA AVGVSTI. Victory flying to left, holding wreath and palm-branch. In field S.C. (Cohen, 268.) Æ. i. 1.

6. Obv.—IMP. NERO. CAESAR AVG. P. MAX. TR. POT. P. P. Head to the right, bare; beneath, a globe.
   Rev.—S.C. Same type as No. 4. Æ. ii. 1.

VESPASIAN.

1. Obv.—[IMP. CAESAR] VESPASIAN. AVG. [COS. III.] Head to the right, radiated; beneath, a globe.
   Rev.—[PAX] AVG. Peace, standing to left, near an altar, holding a patera in right hand, and a caduceus and branch of olive in the left. In field S.C. (Cohen, 328.) Æ. ii. 1.

2. Obv.—[IMP CAES.] VESPASIAN. AVG. COS. VIII(?) P.P.). Head to the right, laureate.
   Rev.—S.C. Victory, walking to left, holding shield, on which S. P. Q. R. (Cohen, 442.) Æ. ii. 1.

3. Obv.—IMP. CAES. VESPASIAN. AVG. COS. III. Head to the right, laureate.
   Rev.—VICTORIA [AVGVSTI]. Victory walking to left. In field S.C. (Cohen, 477.) Æ. ii. 2.

4 Coin of Vespasian, illegible. Æ. ii. 1.

TITUS.

1. Obv.—[T. CAES. IMP.] AVG. F. TR. P. COS. VI. CENSOR. Head to the right, laureate.
   Rev.—S.C. Hope, standing to left, holding a flower and lifting her dress. In field S.C. (Cohen, 254.) Æ. ii. 1.

DOMITIAN.

1. Obv.—IMP. CAES. DOMIT. AVG. GERM. COS. XIII. CENS. PER. P. P. Head to the right, laureate, with aegis.
Rev.—IOVI VICTORI. Jupiter, seated to the left, holding Victory and sceptre. In exergue S.C. (Cohen, 367.) Æ. i. 1.

2. Obv.—IMP. CAES. DOMITIAN. AVG. GERM. COS. XI. Head to right, radiated, with aegis.
   Rev.—FIDEI PVMILICAÆ. Female figure standing to left, holding basket of fruits in right hand, and two ears of corn and a poppy head in left. In field S.C. (Cohen, 325.) Æ. ii. 1.

   Head to the right, laureate, with aegis.
   Rev.—FIDEI [PVMILICAÆ]. Female figure standing to left, holding ears of corn and poppy head in right hand, and a basket of fruits in left. In field S.C. (Cohen, passim.) Æ. ii. 1.

4. Obv.—IMP. CAES. DOMIT. AVG. GERM. COS. XII.
   CENS. PER. P. P. Head to the right, radiated, with aegis.
   Rev.—FORTVNAE AVGVSTI. Female figure standing to left, holding a rudder (?) and a cornu-copiae. In field S.C. (Cohen, 339.) Æ. ii. 1.

5. Obv.—Same legend. Head to the right, laureate, with aegis.
   Rev.—MÔNETA AVGVSTI. Female figure standing to left, holding pair of scales and cornu-copiae. In field S.C. (Cohen, 373.) Æ. ii. 1.

6. Obv.—CAESAR AVG. F. DOMITIANVS COS. II.
   Head to the right, laureate.
   Rev.—S.C. Female figure (Hope) walking to left, holding flower, and raising her dress with left hand. (Cohen, 415.) Æ. ii. 2.

NERVA.

1. Obv.—IMP. NERVA CAES. AVG. P. M. TR. P.
   COS. III. P. P. Head to the right, laureate.
   Rev.—LIBERTAS. PUBLICA. Female figure standing to left, holding cap and sceptre. In field S.C. (Cohen, 107.) Æ. ii. 1.

TRAJAN.

1. Obv.—IMP. CAES. NERVA TRAIAN. AVG. GERM.
   P. P. Head to the right, laureate.
Rev.—TR. POT. COS. II. P. P. Victory flying to left, holding shield, on which S. P. Q. R. In field S. C. Æ. ii. 2.

2. Coin of Trajan, illegible. Æ. ii. I

Hadrian.

1. Obv.—IMP. CAESAR TRAIANVS HADRIANVS [AVG. P. M. TR. P. COS. III.] Bust to the right, radiated with portion of paludamentum.

Rev.—A [ETERNITAS AVGSTI]. Female figure standing to left, holding heads of the sun and moon. (Cohen, 650.) Æ. ii. 1.

2. Obv.—HADRIANVS [AVGVSTVS]. Head to the right, laureate.

Rev.—COS. III. P. P. Female figure standing to left, feeding serpent. In field S.C. (Cohen, 729.) Æ. ii. 1.

3. Obv.—[HADRIANVS] AVGVSTVS. Head to the right, laureate.

Rev.—[SALVS] AVGVSTI. Female figure standing to left, feeding a serpent which is entwined round an altar, and holding a sceptre. In field S.C. In exergue COS. III. (Cohen, 1108.) Æ. ii. 1.

4. Obv.—HADRIANVS AVG. COS. III. P. P. Head to the right, laureate.

Rev.—S.C. within a laurel crown. (Cohen, 1136.) Æ. ii. 1.

5. Coin of Hadrian, illegible. Æ. i. 1.

Sabina.

1. Obv.—SABINA AVGVSTA HADRIANI AVG. P. P. Head to the right.

Rev.—[IVNONI REGINAE ?]. Juno, standing to left, holding patera and sceptre. In field S.C. (Cohen, 55.) Æ. ii. 1.

Antoninus Pius.

1. Obv.—[ANTONINVS AVG]PVS. P. P. TR. P. XVIII. Head to the right, laureate.

Rev.—FELICITAS AVG. COS. III. Female figure standing to left, holding caduceus and two ears of corn. In field S.C. (Cohen, 590.) Æ. ii. 1.
2. Obv.—ANTONINVS PIUS. P. P. TRP. [XVII. ?].
Head to the right, radiated.

3. Obv.—ANTONINVS AVG. PIUS. P. P. TR. P. COS. III. Head to the right, laureate.
Rev.—IMPERATOR II. Liberty standing to left, holding cap and sceptre. In field S.C. In exergue LIBERT. (Cohen, 671.) Æ. ii. 1.

FAUSTINA I.

1. Obv.—DIVA FAVSTINA. Bust, to right.
Rev.—AETERNITAS. Female figure standing to left, raising right hand and holding globe (?) in left. In field S.C. (Cohen, 159.) Æ. ii. 2.

2. Obv.—Same legend and type.
Rev.—AVGVSTA. Female figure, standing to left, holding torch and two ears of corn. In field S.C. (Cohen, 186.) Æ. ii. 2.

M. AURELIUS.

1. Obv.—M. ANTONINVS AVG. GERM. SARM. TR. P. XXXI. Head to the right, laureate.
Rev.—[IMP. VIII. COS. III.] P. P. PAX AETERNA. AVG. Female figure standing to left, holding in right hand a torch, with which she is setting light to a pile of bucklers, and in left hand a cornu-copiae. In field S.C. (Cohen, 551.) Æ. ii. 1.

2. Obv.—Same legend. Head to right, radiated.

FAUSTINA II.

1. Obv.—FAVSTINA AVGVSTA. Bust to right.
Rev.—(?). Female figure standing to left. In field S.C. Æ. ii. 1.

LUCILLA.

1. Obv.—LVCILLA AVGVSTA. Bust to right.
Rev.—[IVNO ?]. Female figure seated to left, holding patera and sceptre. In field S.C. (Cohen, 60.) Æ. i. 1.
Commodus.

1. **Obv.**—M. COMMODO. ANT. P. FELIX. AVG. BRIT. P. P. Head to the right, laureate.
**Rev.**—LIBERAL. [AVG. VII. P. M. TR. P.] COS. VI. Liberality standing to left, holding patera and cornu-copiae. In field S.O. (Cohen, 589.) Æ. ii. 1.

Crispina.

1. **Obv.**—CRISPINA AVGVSTA. Bust to right.
**Rev.**—VENVS FELIX. Venus, seated to left, holding Victory and sceptre. In field S.O. (Cohen, 43.) Æ. i. 1.

Gallienus.

1. **Obv.** GALIIENVS AVG. Head to the right, radiated.
**Rev.**—[FORT]VNA. REDVX. Female figure standing to left, holding rudder on globe and cornu-copiae. In field C'. (Cohen, 170.) Æ. iii. 1.

Tetricus.

1. **Obv.**—IMP. C. TE. . . . Head to right, radiated.
**Rev.**—. . . III. Figure standing to left. (Cohen, 95.) Æ. iii. 1.

**Rev.**—PAX. . . . Female figure standing to left, holding olive branch and sceptre. (Cohen, 88.) Æ. iii. 1.

Carausius.

1. **Obv.**—IMP. C. CARAVSIVS P. F. AVG. Bust to the right, radiated, with paludamentum and cuirass.
**Rev.**—PAX AVG. Female figure standing to left, holding olive branch and sceptre. In field S.P. In exergue M. L. XXI. (Moneta Londinensis XXI.) Æ. iii. 1.

2. **Obv.**—IMP. CARAVSIVS P. F. AVG. Same type.
**Rev.**—Same legend and type. In field F.O. In exergue M. L. Æ. iii. 1.

Illegible, 5.
MISCELLANEA.

GENERAL SUMMARY.

<table>
<thead>
<tr>
<th></th>
<th>Α. Ι.</th>
<th>Α. ΙΙ.</th>
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<tr>
<td>Agrippa</td>
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<td>Antonia</td>
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<tr>
<td>Claudius</td>
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<td>Nero</td>
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<td>Vespasian</td>
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<td>Titus</td>
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<td>Domitian</td>
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<td>Trajan</td>
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<td>Hadrian</td>
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<td>4</td>
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<tr>
<td>Sabina</td>
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<td>Antoninus Pius</td>
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<tr>
<td>Faustina I</td>
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<tr>
<td>M. Aurelius</td>
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<tr>
<td>Faustina II</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lucilla</td>
<td>1</td>
<td></td>
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<tr>
<td>Commodus</td>
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<td></td>
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<tr>
<td>Crispina</td>
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<td></td>
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<tr>
<td>Gallienus</td>
<td>1</td>
<td>1</td>
<td>2</td>
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<tr>
<td>Tetricus</td>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Carausius</td>
<td></td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Illegible</td>
<td>5</td>
<td>65</td>
<td>5</td>
</tr>
</tbody>
</table>

Frederic W. Madden.

COIN OF OFFA WITH SČS PETRVS.

To the Editor of the Numismatic Chronicle.

My dear Sir,

I was much interested in reading lately, in a notice of your numismatic proceedings, an account of a penny of Offa, with SČS PETRVS on its reverse. In the British Museum collection there is a penny of Æthelwulf, figured in Mr. Hawkins' "English Silver Coinage," with SCS ANDREAS on its reverse; and a fragment of another, unpublished, with —NDRE— These I always considered as having been coined at Rochester, the church of which was dedicated to St. Andrew, and which was certainly a place of mintage at the time, as a coin of one of the Ceolwulf's of Mercia, formerly in the collection of our late friend Mr. Cuff, with the legend DOROBREBIA
CIBITAS, shows. So, without seeking for the origin of this penny of Offa in the institution of the Peter-pence, I should regard it as having been minted in Lichfield, the church of which was dedicated to St. Peter. In Offa’s time, and through his influence with Pope Hadrian, the city of Lichfield enjoyed the dignity of a metropolis, and Aldwulf, the tenth successor of St. Chad, was its first and last Archbishop. Its importance, then, as the see first founded in Mercia, the favour with which Offa regarded it, and its nearness to his own residence, Tamworth, render it probable that it might have a mint in his reign, and warrant us in claiming this penny for its mint.

Believe me, as ever,

Yours very sincerely,

DANIEL HY. HAIGH.

Erdington, 18th May, 1863.

FIND OF COINS AT ECCLES.—On the 11th of August last, a large hoard of silver coins was found buried in what is now the footpath of a new junction road, which is being made from Wellington Road, Eccles, past the boundary wall on the west side of the ancient residence known as Monk’s Hall. We extract the following particulars of the discovery from the Manchester Guardian. It appears that a young man walking along this footpath, seeing something glitter, picked it up, and finding it to be a coin, sought farther, and found about a score of similar coins. After some days, these were shown to a neighbouring antiquary, Mr. J. Harland, F.S.A., who, hearing that some coins were still left in the ground, persuaded the finder to resume his search, which resulted in the discovery of a vessel containing about 6,400 coins. This vessel is described as having been urn-shaped, of coarse reddish earthenware, and slightly ribbed inside, the only external ornament being a border of small square indents. Unfortunately, it was in an extremely friable condition, and only portions of it could be preserved. Out of a thousand coins which were examined, 964 proved to be short-cross pennies of Henry II. or III. Of the other thirty-six, nineteen were pennies of John, and the remainder principally pennies of William the Lion. It would appear as if not a single long-cross penny was present, so that in all probability the hoard, if carefully examined, may throw some light upon the disputed long and short-cross question. As it has been claimed by the Duchy of Lancaster as “treasure-trove,” we hope that it may be submitted for examination to some competent numismatist, and that we shall, ere long, be made acquainted with further details.
FIND OF ANGLO-SAXON COINS AT IPSWICH.—By the kindness of the Rev. J. H. Marsden, of Great Oakley, near Harwich, we are able to make the following additions to the list of mints and moneyers of Æthelred II. (given at page 29), of which there were coins in the hoard found at Ipswich:—

CANTERBURY.

LEOFRIL M—O LÆNT.

DOVER.

LEOFGAR M—O DOFE.

HUNTINGDON.

ÆLFRIE M—O HVNTAN.

Maldon.

EADPOLD M—O MÆL.

Besides these, Mr. Marsden has coins struck at Norwich and Thetford, and five specimens from the Ipswich mint, all with the type of the Hand of Providence and A.—O.

FIND OF ANGLO-SAXON COINS AT GAINFORD, DURHAM.—In May last some workmen discovered, in an excavation made outside the church at Gainford, four pennies of Ælfric and Burghred, of which we extract the description from a well-written account of the find given in a local paper.

1. + AELBRED REX.
   SIGERIC MONETA. Type of Ruding, pl. xv. 5.

2. A similar coin, broken.
   .. ILDESRED MO—TA.

3. AELBRE—D REX.
   [HE]REBALD MO—NETA. Type of Ruding, pl. xv. 4, but differing in the division of the king’s name.

4. BVRGRED REX.
   EADNOÐ MONETA.—Type of Hawkins, No. 86, but no cross before moneyer’s name.

The coins are in the possession of the Rev. J. Edleston, the vicar.
**RECENT FINDS OF COINS IN SCOTLAND.**

List of coins found in a rocky dell at Glenbeg, on the lands of Cluny, parish of Rafford, and county of Elgin, in the beginning of July last, by Kenneth McLennan, and subsequently by others who went and made a search at the same place:

<table>
<thead>
<tr>
<th>Kentucky, England.</th>
<th>Groats</th>
<th>12</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>? Half-groat, <strong>very poor</strong></td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>? Penny, <strong>do.</strong></td>
<td>1</td>
</tr>
<tr>
<td><strong>Elizabeth.</strong></td>
<td>Shillings</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Sixpences</td>
<td>23</td>
</tr>
<tr>
<td></td>
<td>Groats</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>Threepences</td>
<td>2</td>
</tr>
<tr>
<td><strong>James I.</strong></td>
<td>Shilling</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Sixpence</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Do. (Irish)</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Billon Plack (Scottish)</td>
<td>1</td>
</tr>
<tr>
<td><strong>Charles I.</strong></td>
<td>English Halfronws</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>&quot; Shilling</td>
<td>1</td>
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<tr>
<td></td>
<td>&quot; Sixpences</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>&quot; Twopence</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Scottish Half-noble</td>
<td>1</td>
</tr>
<tr>
<td>Illegible silver coins, probably of Elizabeth</td>
<td>5</td>
<td></td>
</tr>
</tbody>
</table>

| Copper bodies of James VI., Charles I. and II., and four or five double tournois of Louis XIII., the great bulk of these coins being the bodle with C. R. crowned, there being not a single specimen noticed with C. R. II |

64

557

621

The copper coins were fairly preserved, but the silver (excepting a halffronw of Charles I., m.m. a Lion) were *extremely* poor.

List of coins found at Botriphnie, in Banffshire, August, 1864, and recovered from fifteen different men by the Procurator Fiscal:

| German, Spanish, and other foreign dollars, some French coins of Louis XIV., &c. | 49 |
Charles II., all Scottish coins—
Dollars ........................................... 3
Half-dollar ....................................... 1
Quarter-dollars ................................... 9
Two-merk piece .................................... 1
Merks .................................................. 31
Half-merk .......................................... 1
Bawbees ........................................... 3

James II., Scottish coins—
Ten shilling pieces ............................... 2

William & Mary. Pieces of £2 Scots, or 40s. 8
Ten shillings Scots ................................. 1

William III.  £2 Scots ................................. 9
£1 " ................................................. 5
10s. " .............................................. 2
English crown ...................................... 1
Half-crown ......................................... 1
Shillings ............................................ 5

THE BRITISH MUSEUM.—The department of Coins and Medals in the British Museum has, during the year 1863, acquired 826 articles, of which 195 are Greek, 111 Roman, 513 Mediaeval and Modern, 7 Oriental. The most remarkable of these are—Greek: a rare didrachm of Thebes; a very rare tetradrachm of Messene; a fine tetradrachm of Chios; very rare tetradrachms of Ialysus and Lindus; and two copper coins of Tiryx, a place hitherto unrepresented in the Museum cabinets; a fine didrachm of Ptolemy the Fifth; and a large number of Ptolemaic coins. Roman: a rare solidus of Eugenius; a solidus of Libius Severus; one of Constantine the First. Mediaeval and Modern: a rare sequin of Hugo Lubens, G. M. of Malta, 1582—1595; a large gold coin of Sigismund the Third, of Poland; rare silver roubles of Peter the Second and Peter the Third, of Russia.

SALE OF COINS.—The valuable collection of English coins formed by Captain R. M. Murchison, was dispersed by Messrs. Sotheby, Wilkinson, and Hodge, on the 27th of June, 1864, and four following days. The collection consisted of 617 lots, which produced the large sum of £3,523 8s., and the under-
mentioned pieces are selected as deserving of notice, of which 31 lots sold for £1,624 10s.

XXI.

COINS OF THE PTOLEMIES.

(Continued.)

3. COINS STRUCK IN CYPRUS, ATTRIBUTED TO PTOLEMY V., EPIPhanes.

The following list describes all the examples in the British Museum of the class of didrachms now to be examined:

A. Didrachms struck at Π, Paphos.

1. Bust of Ptolemy I. to right, diademed, and with σηγις.
   
   Rev.—ΠΤΟΛΕΜΑΙΟΥ ΒΑΣΙΛΕΩΣ. Eagle, left, on thunderbolt; in field, Π—LB (yr. 2).

2. LB—Π (yr. 2). (Pl. iv. No. 6).

3. LE—Π (yr. 5).

4. LZ—Π (yr. 7).

B. Didrachms struck at ΣΑ, Salamis.

1. LB—ΣΑ (yr. 2). Above LB, cap of Dioscuri, surmounted by star, beneath which, hat with ribbons; above ΣΑ, former symbol.

2. Rev. In field, left, owl; right, ΛΔ
   
   ΣΑ (yr. 4). (Pl. iv. No. 12.)

3. ΛΔ—ΣΑ (yr. 4). Above ΛΔ, cap of Dioscuri, surmounted by star, beneath which, hat with ribbons; above ΣΑ, former symbol. (Pl. iv. No. 7.)

4. LE—ΣΑ (yr. 5). The same symbols in the same places.

5. LE—ΣΑ (yr. 5). The same symbols, but caps of Dioscuri laureate, in the same places.

6. LL—ΣΑ (yr. 6). Above LL, cap of Dioscuri, surmounted by star; above ΣΑ, the same symbol, beneath which, hat with ribbons. (Pl. iv. No. 8.)
7. In field, left, \( \Sigma A \) (yr. 15). (Pl. iv. No. 10.)
8. In field, left, \( \Sigma A \) (yr. 20); right, cap of Dioscuri, with ribbons, surmounted by star. (Pl. iv. No. 11.)

C. Didrachms struck at \( \text{KI} \), Citium.
1. LB——KI (yr. 2).
2. LE——KI (yr. 5). (Pl. iv. No. 9.)
3. LE——KI (yr. 6).
4. Obv. varied in portrait. LI——KI. (yr. 6.)
5. L E——KI (yr. 7).

The data for classing these coins are the following:—
They are a series of the three chief towns of Cyprus.
They bear the head of Ptolemy I.
In style, the obverses resemble those of the hemidrachms inscribed ΠΤΟΛΕΜΑΙΟΥ ΒΑΣΙΛΕΩΣ, bearing dates of the Era of Philip, from 102 downwards.
In style, the reverses resemble those of the coins of Ptolemy V., Epiphanes, with his portrait (Pl. iv. No. 13).
The dates are years of a king who reigned at least twenty years.
It is well known that there is a great number of Ptolemaic didrachms bearing the initial syllables of the names of the three cities of Cyprus, or of Paphos only, and the years of reigning kings, but with heads sometimes certainly portraits of those kings, at other times possibly of Ptolemy I., but if so, much further from correctness than those of the present series. This series, therefore, would properly commence the coinage of Cyprus. The most probable occasion of the abandonment of the mints of Phœnicia, and the establishment of the mints of Cyprus, would be in the earliest years of Ptolemy V., who came to the throne B.C. 204 (March), but was soon plotted against by Antiochus III. of Syria, who completed the conquest of Phœnicia B.C. 199, and restored it in the same year. The transfer probably took place early in this period.
GOINS OF THE PTOLEMIES. PL. IV.
We may infer that these coins immediately follow those struck after the death of Ptolemy I., and dated by the Era of Philip, as they show a second transition in the relation of the head to the title and date. First, coins were struck with the head and title of Ptolemy I. and the dates of his era, for so we may call that of Philip; then, with his head and era, but with the title (king) of the reigning king; and at last the era might well have been abandoned for the years of the reigning king. The latest date of the era known to me is B.C. 208-7, the 15th year of Ptolemy IV.

The style connects the coins with the latest of Philopator, dated by the Era of Philip, according to my arrangement, and with the series of Epiphanes with his portrait.

The dates accord with the reign of Epiphanes, which was of twenty-five years' duration.

The indications of the coins therefore point to the reign of Epiphanes, or a reign very near to it. The reign of his predecessor, Ptolemy IV., Philopator, is too short, and it will be seen that we have coins of his successor, Ptolemy VII., Philometor; for Ptolemy VI., Eupator, may be excluded in the present case.

There are, however, two objections, which it will be well to discuss.

It may be asked whether it is not likely that when Ptolemy V. recovered Phœnicia by treaty, he would have restored its mints. This may well be doubted; for having had cause to remove the mints to places of safety, he would have been unlikely to restore them to cities which had once fallen into the power of an enemy.

It may be objected that there are coins of Phœnician cities, struck by Ptolemy V., which indicate the very restoration suggested. These coins will be considered in a later place, and I hope it will then be evident that
they are of the earliest years of Ptolemy V., and are either of the nature of medals, like most of the coins bearing the portraits of the Ptolemies, from the second to the fourth inclusive, or were struck to meet the necessity of paying troops during the war.

It may be well here to notice some matters connected with the coins we have considered—the identification of the mints, the symbols, and the sign Λ for year.

The first subject belongs to a later part of this essay, and here it needs only to be observed that the occurrence of the initial letter or syllables of the three chief towns of Cyprus, Π (later ΠΑ), ΣΑ, and ΚΙ, and of no other mint letters, upon a great series of dated coins beginning with those last examined, and the similar work of the three mints, point incontestably to the attribution to Cyprus.

The symbols occurring upon these coins are limited to the mint of Salamis. They are the caps of the Dioscuri; in one case a single cap instead of the two, a hat with ribbons, and an owl.

The worship of the Dioscuri was no doubt practised at Salamis, as it was the chief seaport of the island. Their ordinary symbols, the caps surmounted by stars, offer no subject for discussion. It is otherwise with the other symbol which accompanies the caps on the coins of Salamis. It is evidently a kind of hat or cap, for it has pendent ribbons, exactly as in one representation of a cap of the Dioscuri on the last coin of Salamis cited (Pl. iv. No. 11). It has been described by Schledehaus as a tiara (Grote: Münzstudien, vi. pp. 861, 905, 906, 907), but it resembles forms of the petasus occurring on coins of Philip (Müller, "Numismatique d'Alexandre le Grand," pl. xxvi. No. 233). Diomedes was worshipped at Salamis, (Porphyry. de Abstin, ii. 54), and Pindar says he was
placed among the gods as well as the Dioscuri (Nem. x.) Böckh conjectures (ad loc.) that Diomedes is the name of a Pelasgian divinity, who was confounded with the hero (Smith, "Dict. Biog.," s.v.). Is the third symbol on the coins that of Diomedes? The occurrence of the owl has been explained by M. F. Lenormant ("Essai," pp. 12, 13), by the circumstance that Pallas was worshipped at Salamis. (Porphyr. de Abstin, l. c.)

Of the sign L two explanations have been given. It was formerly supposed to represent ΑΥΚΑΒΑΝΤΟΣ, a term occurring for ΕΤΟΥΣ on a coin of Vespasian (Eckhel, iv. 43). Now, setting aside all question of the genuineness of the coin, it would be very strange if a Latin L should be used for a Greek Λ at any time, and, of course, the earlier the time the more improbable the use. L, be it remembered, is very different from an archaic Λ. The second explanation, due to M. Salemann, Russian Vice-Consul at Alexandria, is that the sign in question is a form of the Egyptian demotic ideographic sign for year, as used in the papyri of the Ptolemies. To this it must be objected that the form is not exact, and that the coinage is Greek, or at all events not native Egyptian. (Madden's "Roman Coinage," p. 163, note).

The manner in which the sign occurs on the coinage of the Ptolemies may suggest a more probable solution of the difficulty. It is not used, except in one part of the coinage, until the silver money was struck in Cyprus. From that time it is invariably used with dates. The exception consists of the gold stater of Arsinoë II., wife of Philadelphus, struck at Paphos, Salamis, and Citium. This circumstance suggests the idea that the sign is Cypriote, and is probably the initial of the word for year in that language. That such is the case I am not as yet able to prove.

Reginald Stuart Poole.
XXII.

ON GREEK COINS AS ILLUSTRATING GREEK ART.

[Report of a Discourse delivered at the Royal Institution of Great Britain, on Friday Evening, May 27, 1864, by REGINALD STUART POOLE, Esq.]

1. Introduction.—It has been long known that Greek coins are important monuments of Greek art. K. O. Müller constantly cites them in his great work on the Archæology of Art ("Archäologie der Kunst"), and had he been able thoroughly to study a large collection, he would have rendered the present attempt needless. But, notwithstanding the general agreement of archæologists, and this illustrious example, Greek coins have not yet been the subject of an essay defining their place as documents in the history of art.

2. Definitions.—Under the term art, sculpture and painting are here intended, with the intermediate province of bas-relief, to which coins, as reliefs in miniature, belong. Sculpture represents character; painting, expression. Character is the general and permanent aspect of the face and body as denoting the dominant quality. We can trace in the features and form the effect of study or of idleness, of pride or of humility. Expression is the transient but intense effect of some sudden feeling, such as love or hatred, daring or terror. [It is illustrative of this distinction that we feel that whereas we look at a
sculptured face of the best style, a face in a fine picture seems to look at us.] Bas-relief partakes sometimes of the characteristics of sculpture, sometimes of those of painting.—(Comp. Müller, "Arch. der Kunst," § 27.)

3. **Our Knowledge of Greek Art.**—Our present knowledge of Greek art, apart from that derived from coins, is extremely scanty. Of sculpture, under which bas-relief may here be included, we have incomplete and uncertain information. Literature tells us the names of the chief artists, and gives us some idea of their styles. In the works that remain we recognize the characteristics thus pointed out. But of all the famous names of ancient sculpture, only works of Phidias, and of Scopas and his fellow-artists at Halicarnassus, are known to us. The noble architectural sculptures from the Parthenon and the Mausoleum, happily united at our national museum, acquaint us thoroughly with the styles of these masters; but when we look for a work of Praxiteles or Lysippus, we look in vain. In the museums of Europe there are a few statues of such surpassing excellence that they must be works of the greatest sculptors, but it has been impossible even to guess their authors. The majority of famous statues forms but a Graeco-Roman gallery of inferior, and even corrupted copies, made to suit the taste of Roman collectors by artists who could not invent, and who wanted the honesty or the skill to copy accurately.

Our knowledge of Greek painting scarcely deserves the name. The information of literature, necessarily more vague than in the case of the sister art, is wholly unsupported by any remains. It would be an insult to Greek painting to cite the feeble frescoes of Pompeii. The only glimmer of clear evidence is derived from bas-reliefs and vase-paintings. The former are sometimes pictorial, but
as they have lost what colouring, at least of background, they had, they only show us design and arrangement, not the essential characteristic of painting, the representation of light. The latter are monuments of the skill of the Greeks in drawing, though they fail in the same manner as the bas-reliefs, for they are simply designs in outline, and from their necessarily rapid execution, could never have attained any further development.

4. **Value of Coins.**—Greek coins are of every age of Greek art, and of every city of the Greek world; of every age from the period of its long infancy before the Persian war gave it a sudden maturity, until its destruction under the Roman rule; of every city from Thasos to Cyrene, from Marseilles to Tarsus. Every Greek city was constantly sending forth coins bearing types varied in accordance with the rich power of invention of the Greek mind. From such a mass of evidence, it must be possible to obtain some valuable generalizations. For a correct induction, we require not only a large number of instances, but the means of classing them. Greek sculpture fulfils only the first condition; Greek coins fulfil both. Without induction, the bases of not a single science have been laid down; and what has been done since the days of Bacon, first in natural science and then in learning, still remains to be effected in the archaeology of art.

5. **Local Character of Greek Art.**—I lay claim to the discovery that Greek coins fall into classes representing great local schools. This might have been expected, as all art shows the same characteristic. When we speak of modern schools of painting we designate them as those of countries or cities. In architecture the same law prevails. Gothic architecture varies in each country.
Arab architecture, best in Egypt and worst in India, is different in each country. That the same law obtained in Greece, Müller has incidentally suggested ("Arch. der Kunst"): the coins prove it.

The date of the best examples of art in the coins is from B.C. 450 to B.C. 350, from not long after the repulse of the Persians to the overthrow of the liberties of Greece by Philip, the age of the highest political, literary, scientific, and artistic excellence of the nation.

6. The Schools.—The chief and leading school—the term school being used in its geographical sense as distinguished from style, which is the effect produced upon art by a leading artist—was that of Greece itself, with Macedon and Thrace. Its works are eminently sculpture-like;—Greece produced the great sculptors;—the designs may be enlarged; the forms are compact; they represent character instead of expression, and are marked by repose and truthfulness. The favourite material is silver.

The west coast of Asia-Minor produced the Ionian school, the pictorial style of which reminds us that the three greatest names in the list of Greek painters, Zeuxis, Parrhasius, and Apelles, were claimed by this very country. The works of this school may be enlarged; the forms are free and flowing; it delights in dishevelled hair and streaming drapery; it represents expression instead of character, the transient instead of the constant. The favourite materials are the warmer metal, gold, and what is but pale gold, electrum.

In Sicily and Italy a school flourished which combined the highest technical skill in execution with a lower kind of design. Unaided by the influence of sculpture or painting, neither of which owes a single name of celebrity to the western colonies, it lived upon repeating itself, and
so fell into a mannered and eclectic style. Its works cannot be enlarged without injury, on account of the exaggerated proportions. The forms are usually compact, but occasionally they show a timid freedom. They represent neither character nor expression, unless we are to admit, for instance, but one character for all female heads. In place of either it puts manner. It displays a certain hardness and cramped drawing that indicate a limitation to one kind of material and to minute work. Gem-engraving probably largely influenced it. [It is remarkable that the only name found as that of a gem-engraver, and also as that of a coin-engraver, is Phrygillus, on a gem, ΨΡΥΓΙΛΔΟΣ (Winckelm, Opp. 5, 256), on a coin (a tetradrachm of Syracuse), ΨΡΥΓΙΛΛ.]

Intermediate between the schools of Greece and Ionia is the school of Crete, which, copying nature rather than following sculpture or painting, goes half-way from the gravity of the Greek ideal to the expressiveness of the Ionian. It is realistic without being pictorial. It oscillates between character never strong, and expression never intense. Its want of force is relieved by its love of nature. It excels in the portrayal of animal and vegetable subjects, and delights in perspective and foreshortening.

Far in the East, where Greek civilization struggled in vain against the destructive influence of Oriental formalism, art could never emancipate itself from a dependence on architecture. The Asiatic school is architectural; the forms are hard and straight; they are never developed.

We may distinguish these schools by assigning to each its most marked characteristic. The school of Greece is sculpture-like; the school of Ionia picture-like; the school of Sicily and Italy gem-like; the school of Crete realistic; and the school of Asia architectural.
The distinctive characteristics of the schools may be illustrated by a comparative and separate criticism of some of their chief works.

[As no engravings in outline, however excellent, can truthfully represent bas-reliefs, I wish to state that Mr. Ready, the electrotypist of the British Museum, can furnish copies of the subjects cited.]

7. Criticism of Examples.—Three examples may be first compared in illustration of these distinctions.

The Proserpine of Messene (Pl. X., No. 4) is ideal—a goddess superior to human feeling. She is the maiden Cora: this is essentially her mythic character.

The Proserpine of Cyzicus (Pl. X., No. 6), instead of showing character, shows an intensity of expression. She is the maiden struck by a sudden foreboding of her fate. But it is evident that here we have something of the nature of a portrait. While the face showing character can be generalized from a multitude of instances, the face in momentary expression must be taken from a living instance: otherwise it would lack that vital reality that is in its very essence. Thus, though ideal, this head is scarcely that of a goddess; it is partly but not wholly that of a woman, and we may suppose that some beautiful Ionic suggested that depth of melancholy expression that could not have wholly sprung from the artist's mind.

The Proserpine of Syracuse (Pl. X., No. 9) is neither goddess nor maiden, merely the most beautiful young lady of Syracuse, with her hair very elaborately dressed by the best Syracusan hair-dresser.

The subjects may now be taken one by one, and carefully criticized, to show their characteristics as well as their differences.
A. Greek School.

I have thought it interesting to give examples of the earlier works of the Greek School, to show its progress during the period preceding that of the best art.

The first subject is the obverse of a coin of Athens of the sixth century B.C. (Pl. X., No. 1). The head is that of Minerva. It seems amazing that by any process of growth, Greek art, of the age of Phidias, should have sprung from such a rude beginning, and we can scarcely realise that poets sang of the beauties of a goddess to whose face the engravers, and doubtless the sculptors also, of that day gave such elephantine ears and bullet-eyes.

The next figure (Pl. X., No. 2), shows the advance that had been reached a little before the Persian war. The forms have more of nature, the full-face eye approaches the profile-shape, and if not a smile at least a smirk enlivens the features.

Let us leave these hard conventional forms, and rejoice our eyes with the full beauty of Greek work in that golden age which produced Phidias, Æschylus, Herodotus, Socrates and Pericles, and which ended in the universal corruption that Philip helped to cause, and of which he took advantage.

Remark in the Bacchus of Thasos (Pl. X., No. 3), the simplicity and repose of the features, showing character, not expression, the simple treatment of the hair, the ornamentation being wholly thrown into the wreath, and the natural beauty of that wreath, which seems to be a growth, not a composition, a remark I owe to Mr. Ruskin. The idea is the old dignified one of Bacchus, free from all later distortions, though it is difficult precisely to define that idea. The Proserpine of Messene (Pl. X., No. 4), shows the same characteristics, with the difference that the subject demands: the leading impression produced is that
of character. The hair is ornamental, but its forms are natural, especially that rich weight which so well marks the maiden. Yet the ornamentation is partly thrown into the corn-wreath and elaborate earring.

B. Ionian School.

It is natural that the Ionian School, the school of expression, should have produced the first portrait. For religious reasons the Greeks admitted none but the gods to the honours of a place on the coinage, until Alexander’s half-deification, when his portrait opened the way for the ambitious imitation of his generals. The head (Pl. X., No. 5), held by a very ingenious chain of reasoning to be that of the second Artaxerxes, is marked by the characteristics of the Ionian school. This portrait at first strikes one as repugnant to the theory I have offered, and as bearing the aspect of character not expression. But we must recollect that the subject was one in which character and expression for once were fused. The regal expression put on for a moment in asserting dignity or assuming the royal part, by the western king, is the unvarying characteristic of the eastern. And thus it is that in the face of Artaxerxes this expression has the fixedness of a constant aspect, not the intensity of a transient one. Look at the simplicity of the features, yet the strong expression of command. Look especially at the pictorial treatment of the head-dress. This is the highest ideal portrait taken from life, whether directly or indirectly, that I know.

The Proserpine of Cyzicus (Pl. X., No. 6) is marked by simplicity and an absence of ornament. The forms are very graceful, with the freedom of painting. The expression is intense—a sweet melancholy in the eyes, haughtiness in the mouth.

The Apollo of Clazomenæ (Pl. X., No. 7) is one of the
highest efforts of Greek art. The treatment is extremely simple; the hair is very pictorial; there is no ornament; the expression is melancholy in the eyes, haughty in the mouth. Here a very high degree of beauty is reached with an absence of softness or trick.

C. Siculo-Italian School.

Of the examples of the Siculo-Italian School I take, first, the head of Minerva, from a coin of Thurium (Pl. X., No. 8). It is impossible not to admire the splendid decoration of the helmet, where, beneath the deep crest, the whole head-covering is adorned by a figure of the sea-monster, Scylla, whose form adapts itself excellently to the space. The head is less satisfactory; the hair is too artificially disposed, as if it were an arabesque, and, without helmet and hair, the features are hard, and lack expression, using the word in the common sense.

Of the famous Syracusan medallions, to use the common name, I have given two examples, representing the styles of two artists, Evaenetus and Cimon.

The Proserpine of Evaenetus (Pl. X., No. 9) I take to be the finer head, and I admit that nothing more delicately finished has been produced in Greek art. Its merit is another question. The first impression is very pleasing, but the work does not bear analysis. You cannot magnify it without becoming aware of a want of expression, in the common sense, in the face, and an exaggeration in the features. You could not judge from the face whether the head were of Proserpine or Juno; and, indeed, it has been disputed whether it is of Proserpine, Ceres, or Arethusa, though there can be no doubt that it represents the first. The ornamental arrangement of the hair is not accidental, but essential, in the treatment of the coun-
tenance, and conceals the weakness of the features. It is moreover intensely artificial, with shell-like and snake-like curls, that are suggestive of the hot irons and "artists in hair" of conventional life. The eye is too large, the nose too small, the mouth exaggerated in its pout, and too small. The chin is too large, and the cheek heavy. The medallion of Cimon (Plate X., No. 10), probably representing Arctusa, shows a stronger mannerism than that of Evaenetus. The hair, though partly confined in a net, is more wildly artificial. The eye is larger and more open, so as to have a staring expression, but the nose is in better proportion; the mouth is open; the chin and cheek are better, but the throat is equine.

To understand the intense mannerism of the beautiful coins of Syracuse, we have only to look at a Carthaginian imitation, which exaggerates all their peculiarities (Pl. X., No. 11). The hair of this Proserpine has become that of a sham Medusa’s head; the eye is still larger, and strangely caricatured; the mouth still smaller, and the throat ridiculously like that of a horse. No art free from mannerism could have been the parent of such a monstrous example of mannerism.

D. CRETAN SCHOOL.

The head of Juno, from a coin of Cnossus (Pl. X., No. 12), if not the most characteristic, is probably the most beautiful head in the series of Cretan money. The intermediate place of the school is, however, sufficiently marked in this example. The outlines are free and flowing, as in the Ionian school; yet the face expresses character, though not with the strength of the Greek school, which will be at once perceived, when it is remembered that the head is one of Juno. For the rest, the ornamentation is judiciously thrown into the tiara and earring, and the hair is treated in a simple manner.
E. Asiatic School.

The monster from a Lycian coin (Pl. X., No. 13), which I have selected as an example of the Asiatic school, indicates the architectural character and Oriental formalism of that school, the least interesting of the five which I have endeavoured to distinguish. The stiff attitude, and the exaggeration of muscle, especially in the legs, at once suggests the compound animal forms of the Assyrian temples.

[It must not be supposed that I would limit every coin of the territory I have indicated for each school, to that school. Very opulent towns, or very wealthy tyrants, may have attracted artists from distant countries, especially towards the close of the period of good art. At that time it is certain that the same engravers worked for several Sicilian towns, and probably were also employed for towns of Magna-Graecia. One coin of Syracuse seems unmistakeably of Ionian work, and in the exergue of its reverse it bears a well-known Asiatic symbol. But such exceptions must be extremely rare, for I have been unable to find another.]

The discovery of schools to which are due the differences in the style of Greek coins will tend to render more definite our knowledge of Greek art in general. Sculpture and painting flourished most in those territories in which the coins most show their influence; and thus, in the case of sculpture, classification will be aided by a knowledge of the various treatments of bas-relief, and it will ultimately be proved that the schools extended

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1 ΝΙΚΟΜΑΠΥΧ. Head of Arethusa (?) to the left; around, three dolphins; behind, ΙΜ.  
Rev. — Goddess in fast quadriga, to the left; above, Victory; in exergue, lion devouring bull.
through the range of the kindred arts. Thus a new basis may be laid down for the archæology of art.

[This subject, the art of Greek coins, might be pursued further in two interesting lines of inquiry. The successive styles of the Greek school could have been compared with the successive styles of sculpture, so as to show the influence of Phidias, Praxiteles, Lysippus, and later artists, upon the coinage. Or it might have been shown how various are the subjects represented on Greek coins, and how variously those subjects are represented by the artists of the different schools.]

The study of coins of the age of decline cannot as yet be safely attempted. We must thoroughly understand those which are unmistakably of good work before we attempt to distinguish the elements of good and bad work in those which as unmistakably show the signs of decline; first, of the change from the epic style of repose to the dramatic style of action, and next, of the rapid fall, when the dramatic element had been introduced, from the dramatic style proper to what I may, using a common distinction, call the theatrical. I have confined myself to what I thought would be most likely to prove how much Greek coins may contribute to our more accurate knowledge of Greek art.

(The lecture concluded with some remarks on the national value of the study of art, on the prospects of art in England, and on the assistance that the critical knowledge of Greek works, if studied, not copied, would give to those wishing to promote the growth of art in this country.)

Reginald Stuart Poole.

2 The portions of this Essay enclosed in square brackets are subsequent additions.

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XXIII.

ON A COUNTERFEIT GROAT OF HENRY VIII.

[Read before the Numismatic Society, Oct. 20, 1864.]

By the kindness of Mr. Webster, I am able to exhibit this evening a rather curious forgery of the time of Henry VIII. The disgraceful debasement of the standard of both the gold and silver coins, which took place in the latter part of the reign of that not over scrupulous monarch, is familiar to all. In 1543, the old sterling standard of silver, of 11 oz. 2 dwt. fine and 18 dwt. alloy, was altered to 10 oz. fine and 2 oz. alloy; in 1544, to 6 oz. fine and 6 oz. alloy; and in the following year to 4 oz. fine and 8 oz. alloy, so that the silver coin of the realm contained but one-third of pure metal. In this debased state, the currency continued until 1549, when a partial restoration took place, which, after a short relapse to a standard of only 3 oz. fine and 9 oz. alloy, was followed by a return to the original sterling quality.

As might have been expected, the appearance of the coinage was not improved by the baseness of the metal of which it consisted, and many were the jokes of the period upon the subject. Camden ¹ tells us how "Sir John Rainsford, meeting Parson Brooke, the principall deviser of the Copper Coyne, threatened him to breake his head

¹ Remaines, p. 208.
for that he had made his Soveraigne Lord the most beautifull Prince, King Henry, with a redde and copper noase.' And John Heywoode's epigram "of Testons"—

"Testons begone to Oxforde; God be their speed, To study in Brasenose there to proceede;"—

and many others to the same effect will be found in Ruding.²

But there was another circumstance connected with the debasement of the coinage, which there would, at first sight, appear to be less reason to have expected, viz. that the greater the debasement, the greater the amount of forgery. Paradoxical as it may sound, it appears to be really the case, within certain limits, that the less the intrinsic value of the coin to be counterfeited, and the less the profit to be obtained by counterfeiting it, the greater will be the amount of forgery. The reason for this apparent anomaly is to be found in the fact, that the baser the metal of which the genuine coin is composed, the more difficult it becomes to distinguish a still baser alloy from it, and the smaller the intrinsic value of the coin, the less care is exhibited in guarding against forgeries.

How rife forgeries were during the latter years of Henry VIII., and the reign of his successor, Edward VI., the numerous proclamations relating to the subject, and issued at that period, will prove. Several of these are cited by Ruding, who also mentions, under the first year of Edward VI., that the debasement of the coinage rendered it extremely liable to be counterfeited, and in an Act for a general pardon passed that year, the offences of

² Vol. i., p. 213.
forging, counterfeiting, washing and clipping, are more particularly enumerated and excepted than they appear to have been in preceding statutes of that kind.

In a proclamation dated April 10, 1548, it is stated that the king's coins were then greatly counterfeited, and another states that the testoons, shillings, groats, &c., had of late been counterfeited beyond the seas, and in great multitudes privily brought into the realm; and then ordains that all persons who should bring such coins into the realm, knowing them to be coined beyond the seas, or in any other place, out of his majesty's mints, should suffer pain of death, and loss of all lands, &c. On the accession of Mary, in 1553, she issued a proclamation, in which again the base monies of late made within her realm, as also the great quantities of the like base monies made and counterfeited in other realms, and issued within this, her grace's realm, are mentioned and deplored. Similar proclamations were issued in 1556, and again under Elizabeth, in 1560.

A discovery made in the Seine, at Paris, some few years ago, of a pair of dies for striking groats of Henry VIII., shows that Paris was at all events one of the places where the counterfeiting of the coins of this country, so much complained of in the proclamations, was carried on. These dies, which are, I believe, now the property of Mr. Wigan, were shown to me by Mr. Webster, to whom I am also indebted for the coin which forms the subject of the present notice. It is to all appearance a base groat of one of the last years of Henry VIII.; but on examination the legend on the obverse, instead of giving the name and title of Henry, reads as follows—FERNANDVS AGLIE . . . . IB' REX. The portrait is that of Henry VIII., three-
quarter faced, with the falling collar. The reverse bears the arms of France and England quarterly, and the legend CIVITAS CANTOR. The lions, it may be observed, are passant in the wrong direction.

This coin, like the dies, was also lately found at Paris, in company with four others of the same character, one of them being a half-groat. Its weight is $82\frac{3}{4}$ grains, and it appears to be formed of yellow brass slightly silvered over. Its weight and thickness are rather superior to those of the genuine groats, but probably it was thought by the forger to be good policy to give good weight for the money.

The name Fernandus may possibly have been suggested by that of the younger brother of Charles V., who became emperor in 1558; it must, however, have been actually adopted from the general resemblance between FERNANDVS and HENRICVS. Though, therefore, the piece is of interest, as illustrating the counterfeiting of the English currency by foreign forgers, and especially in connection with the proclamations I have cited, it has no historical value.

The singular combination of the name of Ferdinand as king of England with the portrait of Henry VIII., must, I think, be only due to the tender conscience of the forger, who, though going the length of counterfeiting the king's image, and attempting to defraud his lieges, felt no doubt that he was exhibiting a virtuous and commendable self-denial in abstaining from adding his superscription.

John Evans.
XXIV.

ON SOME VARIATIONS IN THE BEARING OF THE ROYAL ARMS, AS EXHIBITED ON COINS.

By Sir CHARLES GEORGE YOUNG, Knt., Garter King of Arms, F.S.A., &c.

I am not aware of any alteration in the bearing of the Royal Arms of the kingdom, emanating from authority, between the period of the accession of King James I., in 1603, to the union with Scotland, in 1707, with the exception, in the reign of King William III., of the introduction of an Escocheon of Pretence of "Nassau" in the centre of the royal shield—the Royal Arms upon the great seal of that period being in the first and fourth quarters, France and England quarterly; in the second, Scotland; and in the third, Ireland.

Upon examination and inspection of the coins of the period, it is, however, evident that the mode of exhibiting and arranging the shields of the Royal Arms was not uniform. The masters of the Mint exercised their taste and judgment in the arrangement, so as to produce in their mind an artistic effect and elegance of design for the coin.

The introduction of a fashion of placing the national arms in four separate shields, arranged in the form of a cross, led to confusion, from the arbitrary way in which from their position the order of the shields might
be read. This arrangement of the shields in all probability led to the placing upon the coins of Charles II. and James II., England alone, and France alone, in the first and fourth quarters; possibly from the space in one shield being thought too small and too confined for four coats. This division, however, of the national shield involved a great error, inasmuch as France, which had borne the first position when quartered with the Royal Arms of England for centuries, was thus consigned to the last.

In such matters, however, which should be essentially correct, too much has been left to the taste and judgment of those who looked only to effect in design without consideration of historical accuracy.

Mr. Leake, Garter, describing the current monies of King William and Queen Mary, of the years 1689, 90, 92, and 93, says, "There is some difference in the bearing of the arms. The half-crown of the first year has the arms in one large shield, viz., first, England; second, Scotland; third, Ireland; fourth, France, with Nassau in the centre. This placing of France in the last quarter was certainly owing to the manner of placing the

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1 The earliest instance of this arrangement in four shields occurs on the medal struck to commemorate the birth of Charles II., with the legend HACTENVS ANGLORVM NVLLI. On some of these the shields are arranged—1. France and England quarterly; 2. Scotland; 3. Ireland; 4. France. On others England alone occupies the first shield. A similar arrangement of the four shields is found on the MAGNALIA DEI pattern of Simon, and on his Petition Crown; while on the MAGNA OPERA DOMINI pattern, where the arms are marshalled on a single shield, the arrangement is—1. England; 2. Scotland; 3. France; 4. Ireland. The same arrangement occurs on the medallion of Charles II., by Roettier, with the Royal Arms on the reverse.

four shields upon the former milled money, where France is in the bottom shield, which is the last quarter. For, as a proof that no such alteration was intended in either case, the very same year, upon another half-crown, the arms are respectively marshalled, viz., France and England quarterly, in the first and fourth quarters; Scotland in the second; and Ireland in the third; and in an escocheon in the centre, the arms of Nassau, being Billety a lion rampant."

Ruding, in his History, supplies three half-crowns of King William and Queen Mary:—

1. With the Royal Arms as borne upon the Great Seal and the acknowledged arms of the realm.

2. With the four shields in cross and Nassau in the centre, and where France occupies the lowest instead of the highest place.

3. With the arms quarterly, but England only in the first, and France only in the fourth, which in point of principle is as erroneous as the last, but arises out of the precedent before referred to, that of placing, for want of room, single coats in the four shields crosswise instead of double, or quarterly coats in two of them, as should have been strictly speaking the case; and this mode of arranging the Royal Arms is to be seen in a shield on one of the gates of the palace at Hampton Court.

Upon the accession of the House of Hanover, an alteration of course took place, by the introduction of the Hanoverian Escocheon, which continued to be borne until the crown of Hanover passed, upon the accession of Queen Victoria to the English throne, to his Royal Highness the Duke of Cumberland, when the Hanoverian Escotcheon was discontinued.
XXV.

ON AN EXAMPLE OF CHINESE PAPER CURRENCY
OF THE MING DYNASTY.

[Read before the Numismatic Society, October 20, 1864.]

It is now about two years since I had the pleasure of communicating to the Society a description of the objects found in an ancient statue of Buddha, opened by me in June, 1862. Among these a note, or order for money, of the Ming dynasty, was mentioned. During the past summer I have been induced to examine that note carefully, and to make a translation of the inscriptions upon it, and this investigation having led to some facts and suggestions which appeared to me worthy of notice, I have considered it might interest the Society to call their attention more particularly to this curious example of early paper currency.

The note in question (which is now exhibited) is on exceedingly coarse paper, so much so that it is very difficult to make out the exact composition of many of the characters inscribed upon it. It is 13 inches long by 8½ inches wide, and is of a bluish or slate colour. The inscription is evidently printed from a wooden block, with blank spaces left for the exact date, which, however, does not appear. The whole is surrounded with a double black line. At the top is an inscription in six characters. Beneath this a broad ornamental border surrounds the
remainder of the inscribed portion of the note, which is divided into two compartments. At the top of the upper compartment are two large characters, beneath which is the representation of ten strings of copper money. On each side of this compartment is a line of four words in the seal character. This division of the note is separated from the lower compartment by two black lines. In this lower division is an inscription in seven lines in the ordinary character. Two large red official seals are stamped upon this side of the note, one on each of the before-mentioned compartments. The back also has one of the red official seals stamped upon it, and beneath is a repetition of the two large characters, and of the ten strings of copper money just named as occurring in the upper compartment of the inscribed portion of the note.

The inscription at the top reads "Ta Ming Tung Hing Paou Chaou." Ta Ming is the name of the dynasty under which this note was issued. The Ming dynasty subverted the T'atar dynasty, called Yuen, whose monarchs were the immediate descendants of Genghis Khan, in 1368, and in turn was superseded by the present T'atar dynasty, the Tsing, in 1644. Tung Paou, two of the succeeding characters, is the designation of the current money of China, all the more recent coins having these two characters impressed upon them. Hing, the character between these, signifies going from place to place, and hence may be used as implying anything that passes from hand to hand, or circulates. The concluding word, Chaou, is used as the designation of the paper money issued by the Chinese government. In the great Dictionary, compiled by the order of the Emperor Kang He, under this word we have a notice to the following effect:—"In the Ching Tsze Tung (a former Dictionary) this word is said to
mean the government paper money used for exchange, called the notes of the twenty-fourth year of the epoch Shaou Hing, of the Sung dynasty. These notes, in accordance with the trade regulations of the Sung, were employed instead of copper money, which at that time was scarce. When of the value of the five following sums, viz. 1,000, 2,000, 3,000, 5,000, and 10,000 pieces of money, they were termed Ta, or Great Chaou; when of the value of 100, 200, 300, 500, and 700 pieces, they were termed Seaoou, or Small Chaou. They were to be used instead of the current copper money. Their circulation was limited to seven years, at the end of which period the old notes were required to be presented and exchanged for new, the charge for each being fifteen pieces, which sum was considered as an equivalent for the expenses incurred. To facilitate this exchange, government treasury offices were established in various places. These notes were considered as highly advantageous both for public or government business, and for that of private individuals."

Such is the description given in the Dictionary of Kang He of the notes then issued. Now the 24th year of the epoch Shaou Hing, of the Sung dynasty, answers to the year 1154 of our era. The name of the then Emperor was Kaou Tsung. He was the first emperor of the Nan, or Southern Sung, and Shaou Hing was the second epoch of his reign, which extended from 1127 to 1163. We have here, then, a recorded notice of the employment of paper money by the Chinese government at least 710 years ago. That the issue of this paper money was continued by subsequent emperors is clear from the note now before us, to the description of which I now return.

The two characters at the top of the upper inner com-
partment read "Yih Kwan:" Yih signifying "one," and Kwan a string of copper money, being in all probability the sum for which the note was current; and I must here take the opportunity of correcting a statement in my former paper, that the amount for which the note was issued did not appear, whereas, as I have just stated, it is in all probability expressed in these two characters. The four words in the inscription in the seal character to the right read Ta Ming Paou Chaou, "The precious paper money of the Great Ming dynasty." Those to the left read Teen Hea Tung Hang, or Hing, "Mercantile or circulating money of China," being altogether a repetition of the words at the top, slightly differing in arrangement, and with the addition of the words Teen Hea, "Heaven below," one of the designations of China. The inscription in the lower compartment can only be read with difficulty, on account of the roughness of the paper. The first characters to the right are illegible, the paper there having received some damage. The rest of the inscription appears to be as follows:—"Representation having been made to the emperor, he has allowed that, under the official seal, this valuable paper money of the Great Ming dynasty shall be universally current instead of the usual copper money. He who shall counterfeit it, shall be beheaded. He who shall inform against such person, and shall pursue and take him, shall be rewarded with 250 taels, and the whole of the property of the criminal shall also be given to him. Hung Woo year, month, day."

Hung Woo was the first epoch of the Ming dynasty. It was that of Tae Tsoo, the founder of that dynasty. It extended from 1368 to 1398, within which period the date of the paper before us must be placed. We have
then, in this curious document, an example of paper money issued by the Chinese government about 500 years ago, that is, either in the reign of our Edward III., or in that of his successor, Richard II.

In order more fully to elucidate this subject, I have bestowed some pains, although not with the most satisfactory result, with a view of tracing the introduction of paper currency under the authority of European governments. Bills of exchange appear to have originated among the modern European nations at a very early period of their existence, but these were transactious of a private nature, depending solely upon the credit of the parties issuing them, and negotiable to a limited extent among themselves only. I have been unable to ascertain the precise time when notes, issued under the authority of any of the European governments, first appeared. Thus, although I find that in 1718 the Bank of England had in circulation notes of the value of five pounds and upwards, to the amount of £1,829,930, I can discover no trace of their payment in cash having been guaranteed by the existing government. They are to be considered, therefore, as having been merely the notes of a private banking company, similar to those issued by the country banks of the present day, which depend wholly for their payment in specie on the credit of the respective parties issuing them. In 1716, the notorious Law, the originator of the Mississippi scheme, which, like our South Sea bubble, occasioned the ruin of thousands, founded a bank in France, and issued notes redeemable in cash on demand, which notes were ordered by the French government to be received in payment of the taxes. They were to a very considerable amount, which however was afterwards immensely, and indeed ruinously exceeded by the influence of the Regent Duke
of Orleans, and thus, when Law's bubble burst, great national distress was the result of their not being redeemed in specie as promised. These notes, however, do not appear to have had government security for their payment in cash, and were consequently not strictly national. In later times the French assignats were, however, truly national paper money, as may be seen from the wording of the one exhibited. It reads, "Assignat de Cinq Livres, Série 20,439." It is signed "Riottot," and has the national seal. In the border we read "Crée le 10 Brumaire l'an 2ème de la République Française," answering to our year 1794 or 1795. In the four corners we have, "Unité, Indivisibilité de la République. Liberté, Egalité, Fraternité, ou la Mort. La Loi punit de mort le contrefacteur. La Nation récompense le dénonciateur." Within each sentence is the number 5. It must here be remarked, that although the nation provided thus stringently against the forgery of these documents, it never produced the cash for their redemption, and hence they became absolutely worthless as representatives of value. I may also notice that there is a curious coincidence in their wording, as to the punishment of the forger and the rewarding the informer, with that of the Chinese note now under consideration.

I have also another note of rather earlier date than that of the assignat, for eight dollars, issued by the then infant government of the United States of America. At the top is "The United Colonies," with "VIII. Dollars" twice repeated. It then reads as follows, "No. 44,809, Eight Dollars. This bill entitles the bearer to receive eight Spanish milled dollars, or the value thereof in gold or silver, according to the resolutions of the Congress held at Philadelphia, the 10th of May, 1775. VIII."
Dollars." Two signatures follow. To the left is the representation of a kind of seal, being a harp surrounded by the motto "Majora minoribus consonant." On each side are the words "Continental Currency: Eight Dollars," and at the bottom the same inscription as at the top, but inverted. At the back are the representations of the leaves of trees, above which are the words "Eight Dollars," and below "Philadelphia: Printed by Hall Sellers, 1775," the whole being surrounded with a border, composed of ordinary ornaments employed by printers. I am informed that, upon some of these notes, the penalty of death is denounced against the forger, but this does not appear on the present example.¹ This also is undoubtedly national paper money. Whether Law's notes are to be considered equally so, appears to me exceedingly doubtful, and I question whether one of his original notes can now be produced to clear up that doubt. And even allowing that his notes are the earliest instances of European national paper money, we find from the Chinese records that a national paper currency had been adopted by that people nearly 600 years before Law flourished; the example before us proves that a similar currency existed during the Ming dynasty, and as Chinese bank notes are still in use in that vast empire, we may infer that the custom has continued even to the present time.

The Chinese note before us is remarkable in other respects. In it we have a specimen of the paper of the time, although by no means a favourable one, it being exceedingly coarse, and not at all equal to their paper of the present day. It also presents us with an instance

¹ For these examples of paper currency I am indebted to W. D. Haggard, Esq., late of the Bank of England.
of block-printing, as applied to ordinary purposes, of earlier date than is usually assigned to that process in Europe; and when we consider that this note is something like 500 years old, I think I am fully justified in asserting that it is with every probability the earliest instance of paper money now in existence: I should perhaps say, in Europe, as it is possible that native Chinese antiquaries may possess in their collections similar examples of their early paper currency; but this, I need scarcely say, it would be exceedingly difficult to ascertain with certainty, excepting by inquiry in China itself, and it is possibly scarcely to be done even there by European inquirers. That the specimen now exhibited is undoubtedly genuine may be taken as certain, as it had been enclosed in the statue in which it was found for at least 230 years. It was, as I stated in my paper describing the find, enclosed in an embroidered silk bag, and with it were two coins inscribed Tae ping, of uncertain date. There was not the slightest reason to suppose that the deposit had been disturbed during the period I have mentioned, everything appearing to be exactly in the same condition as when first enclosed.

In conclusion, I may add, that having been requested several times lately to exhibit the before-mentioned curious Chinese statue, and the deposit found in it, at various meetings and soirées of societies, this note in particular attracted so much attention, as to induce me to examine it more closely than I had hitherto deemed expedient, and I thus was led to the production of the present paper, which I trust will not be found entirely devoid of interest, as throwing some light upon what appears to be the earliest national paper currency of which we have any record.

John Williams.
XXVI.

THE Earliest Indian Coinage.

So many questions connected with the earliest form of Indian money have been incidentally adverted to in the examination of the weights upon which it was based, and from whose very elements, as divisional sections of metal, all Indian coinages took their origin, that but little remains to be said in regard to the introductory phase of local numismatic art, beyond a reference to the technic details, and a casual review of the symbols impressed upon these normal measures of value. The contrast, however, between the mechanical adaptations of the east and west may properly claim a momentary notice, with the view of testing the validity of the assumption I have previously hazardcd respecting the complete independence of the invention of a metallic circulating medium by the people of Hindustán.¹

Many years ago the late Mr. Burgon² correctly traced, from the then comparatively limited data, the germ and initial development of the art of coining money in Western Asia, describing the process as emanating from the Eastern

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custom of attaching seals, as the pledge of the owner's faith in any given object. This theory satisfactorily predicated the exact order of the derivative fabrication of coins, which may now, with more confidence, be deduced from the largely-increased knowledge of the artisan's craft and mechanical aptitude of the ancient inhabitants of Mesopotamia, the relics of which the researches of Layard, Loftus, and Botta have recovered in so near an approach to their primal integrity. The universal employment of clay for almost every purpose of life, including official and private writings, with the connecting seals that secured even leather or parchment documents, extending down to the very coffins in which men were buried, naturally led up to marked improvements in the processes of stamping and impressing the soft substance nature so readily hardened into durability, and to which fire secured so much of indestructibility. If moist clay was so amenable to treatment, and so suitable for the purpose of receiving the signets of the people at large, we need scarcely be unprepared to find yielding metals speedily subjected to a similar process—for the transition from the superficially-cut stone seal to the sunk die of highly-tempered metal which produced the Darics, would occupy but a single step in the development of mechanical appliances. In effect, the first mint stamps were nothing more than authoritative seals, the attestation-mark being confined to one side of the lump of silver or gold, the lower surface bearing traces only of the simple contrivance necessary to fix the crude coin. In opposition to this almost natural course of invention, India, on the other hand,

though possessed of, and employing clay for obvious needs, had little cause to use it as a vehicle of record or as the medium of seal attestations; if the later practice may be held to furnish any evidence of the past, her people must be supposed to have written upon birch bark, or other equally suitable substances so common in the south from very remote ages, while the practical advance from ever-recurring weighings towards fixed metallic currencies was probably due to the introductory adoption of lengths of uniformly-shaped bars of silver (Plate XI., Figs. 1, 2), which, when weight and value gradually came to require more formal certificates, were adapted designedly to the new purpose by change of form and a flattening and expansion of surface, in order to receive and retain visibly the authoritative countermarks. One part of the system was so far, by hazard, in accord with the custom of the west, that the upper face alone was impressed with the authenticating stamps, though the guiding motive was probably different, and the object sought may well have been the desirable facility of reference to the serial order of the obverse markings—each successive repetition of which constituted a testimony to the equity of past ages.

The lower face of these domino-like pieces is ordinarily indented with a single minor punch, occupying as a rule

5 The primitive Persians of the north-east also wrote upon birch bark. Hamza Isfahâni, under the events of A.H. 350 (A.D. 961), adverts to the discovery, at Jas (Isfahân), of the rituals of the Magi, all of which were written, in the most ancient Persian language, on birch bark. See also Q. Curtius, viii. 9, § 15; Reinaud, "Mém. sur l'Inde," 305; "Ariana Antiqua," pp. 60, 84; Prinsep's "Essays," ii. 46.
nearly the middle of the reverse. The dies, though of lesser size, follow the usual symbolical representations in vogue upon the superior face. There are scarcely sufficient indications to show if the dies in question constituted a projected portion of the anvil; but I should infer to the contrary: nor does the isolation of these symbols, in the first instance, prevent repetitions of small punctures or around their central position; in some cases—though these form the exceptions—the clear field of the reverse is ultimately devoted to the reception of the obverse or larger devices: which anomaly recurs, of necessity, to a greater extent with those pieces which have continued long in circulation, and more especially is this found to be the case among the residue of this description of currency in Central India, and the Peninsula, where ancient customs so firmly resisted the encroachments of foreign or extra-provincial civilisation.

As far as the typical designs in themselves, when compared with later Indian symbolical adaptations, are concerned, they would seem to refer to no particular religious or secular division, but, embodying primitive ideas, with but little advanced artistic power of representation, to have been produced or adopted, from time to time, as regal or possibly metropolitan authorities demanded distinctive devices. It would be useless, at this stage of the inquiry, to attempt to decide whether these discriminating re-attestations appertain primarily to succeeding dynasties, progressive generations of men, or whether they were merely the equitable revisions of contemporary jurisdictions. Though more probably, as a general rule, the simple fixed weights of metal circulated from one end of the country to the other, in virtue of previous marks, only arrested in their course when seeming wear or dubious colour called
for fresh attestation: or incidentally, when new conquerors came on the scene and gratuitously added their hereditary symbols. The devices, in the open sense, are all domestic or emblematic within the mundane range of simple people—the highest flight heavenwards is the figure of the sun, but its orb is associated with no other symptom of planetary influences, and no single purely Vedic conception. So also, amid the numerous symbols or esoteric monograms that have been claimed as specially Buddhist, there is not one that is absolutely and conclusively an origination of or emanation from that creed. The Chaitya other Scythians had before them; the Bodhi-Tree is no more essentially Buddhist than the Assyrian Sacred Tree, the Hebrew Grove, or the popularly venerated trees of India at large.

Equally on the other part Vedic advocates will now scarcely claim the figure of the objectionable Dog, or seek to appropriate to Aryan Brahmanism ploughs, harrows, or serpents. In brief, these primitive punch-dies seem to have been the produce of purely home fancies and local thought, until we reach incomprehensible devices, composed of lines, angles, and circles, which clearly depart from Nature’s forms; and while we put these aside as exceptional com-

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8 Goss’s "Assyria," p. 94; Rawlinson’s "Ancient Monarchies," ii. 235.
9 Smith’s "Dictionary of the Bible," article "Grove,"—doubts are raised regarding the correctness of the translation of the word Asherah as a grove. See also note in Gesenius, sub voce, Asherah.
10 Wilson, "Megha Dúta," ver. 157. So also Tulasi,—"Ocimum sanctum," or "Sacred Basil."
11 Manu, iii. 92, iv. 208, x. 51, 91, 106, etc. Max Müller, "Science of Language," ii. 481.
posite designs, we may accept unhesitatingly as of foreign origin the panther and the vine, engraved in a style of good Greek art, which overlays the mixed impressions of earlier date and provincial imagery, and appears only towards the end of the career of the punch-marked coins, in their north-western spread, before they were finally absorbed in that quarter by the nearly full-surface die-struck money with devices of an elephant and a panther; 12 which class in turn merge naturally into the similar though advanced fabrics of the mints of Agathocles and Pantaleon, of square or oblong form, a shape the Greeks had not previously made use of, but which when once adopted they retained without scruple, whatever their early prejudices might have been—possibly out of respect for local associations, a motive which weighed sufficiently with their successors and other Bactrian Hellenes to induce them to perpetuate the square indifferently with the circular coins. The exceptional, or in this case indigenous form, found favour in later generations with the Muhammadan conquerors, who sanctioned unreservedly square pieces in common with the circular forms, up to the time of Sháh Jehán (A.D.

12 These coins are still mere compromises, being formed from an obverse punch, with a full surface reverse. "Ariana Antiqua," pl. xv. figs. 26, 27; Prinsep's "Essays," i. pl. xx. figs. 50, 51, page 220; Cunningham's pl. i., &c.

While upon this subject, I may notice the discovery of the name of Agathocles in Bactrian characters on a coin of similar fabric. His name, it will be remembered, has hitherto only been found in the Indian-Páli transcript of the Greek (Num. Chron. N.S. iv. 196). The piece in question has, on the obverse, a Chaitya, with a seven-pointed star, and the name Akathakayasa (possibly Aukathakrayasa). The reverse bears the conventional sacred tree, with the title Maharaja strangely distorted into Hiraýaíasa,me or He,ragasa,me.

13 A. A., pl. vi. figs. 7, 8, 9, 11; Prinsep's "Essays," pl. xxviii. 8, 9; vol. ii. pp. 179, 180; "Jour. des Sav.," 1835, pl. i. fig. i.
1628–58). But though these unshapely bits of metal ran on in free circulation up to the advent of the Greeks, this by no means implies that there were not other and more perfect currencies matured in India. The use of the time-honoured punch survived in the Peninsula till very lately, but no one would infer from this fact that there were not more advanced methods of coining known in the land. In fact, like other nations of the East, the Hindus have uniformly evinced more regard for intrinsic value than criticism of the shape in which money presented itself.

Many of these ancient symbols, more especially the fourfold Sun (Plate XI., coin No. 4, reverse), are found established in permanence on the fully-struck coinage of Ujjain,\(^\text{14}\) of a date not far removed from the reign of Asoka, who once ruled as sub-king of that city; the probable period of issue is assumed from the forms of the Indian-Pali letters embodying the name of Újenini, the local rendering of the later classical Sanskrit Ujjayini. Associated in the same group as regards general devices, and identified with the apparently cognate mintageps of similar time and locality, there appear other symbolical figures which no predilection or prejudice can claim as exclusively Buddhist; indeed, whatever hostility and eventual persecution may ultimately have arisen between the leading creeds of India, it is clear that at this period, and for long after, the indigenous populations lived harmoniously together;\(^\text{15}\) like all things Indian, old notions and pre-existing customs retained too strong a hold upon the masses to be easily revolutionised; and if at times a proselyting Buddhist or able and am-


bitious Brahman came to the front, and achieved even more than provincial renown, the Indian community at large was but little affected by the momentary influence; and it is only towards the eight or ninth centuries A.D. that, without knowing the causes which led to the result or the means by which it was accomplished, we find Brahmanism dominant and active in persecution.

I have now to advert to the symbols embodied in the Plate. I shall notice only those of more moment in the text of this paper, leaving the engraving to explain itself under the subjoined synopsis.

**A. Heavenly bodies**  \(\ldots\)  1 Sun.

**B. Man and his members**  \(\ldots\)  2

Animals  \(\ldots\)  3 Elephants.

"  \(\ldots\)  4 Dogs.

"  \(\ldots\)  5 Deer, Cows, &c.

"  \(\ldots\)  6 Leopards.

Fish  \(\ldots\)  7

Reptiles  \(\ldots\)  8

**C. Home life**  \(\ldots\)  9 Ploughs.

"  \(\ldots\)  9* Cups, vases, &c.

"  \(\ldots\)  10 Harrows.

"  \(\ldots\)  11 Wheels.

"  \(\ldots\)  12 Bows and arrows.

**D. Imaginary devices**  \(\ldots\)  13 Chaityas.

"  \(\ldots\)  14 Trees.

"  \(\ldots\)  15 Ornamental circles.

"  \(\ldots\)  16 Magic formulae.

Under class A appears the single representation of the Sun: no other planet or denizen of an Eastern sky is reflected in early Indian mint-symbolisation. In examining the general bearing of these designs, the first point to determine is,—does the sun here, as the opening and deepest-sunk emblem, stand for an object of worship? Savitri, or Sūrya, undoubtedly held a high position in
the primitive Vedic theogony, and it is a coincidence singularly in accord with its typical isolation on these pieces, that the Indo-Aryans, unlike their Persian brethren, dissociated the Sun from all other planetary bodies. But with all this, there is an under-current of evidence that the Scythians had already introduced the leading idea of sun-worship into India, prior to any Aryan immigration; for even the Vedic devotion to the great luminary is mixed up with the obviously Scythic aswamedha, or sacrifice of the horse. Then, again, arises the question as to whether this Sun-type, which appears the earliest among all the mint dies, and is so frequently repeated in slightly modified outlines, does not refer to the more directly Indian traditionary family of the Surya Vanśas, who eventually are made to come into such poetic hostility with the Chandra Vanśas, or Lunar branch. Neither one race nor the other is recognised or alluded to in the text of the Vedas; but abundance of reasons may be given for this abstinence, without implying a necessary non-existence of children of the Sun before the date of the collection of those ancient hymns. However, looking to the decidedly secular nature of the large majority of the figures in subsequent use upon this class of money, I am content for the present to adopt the popular rather than the devotional solution; or, if the latter alternative find favour, it must be conceded that the Buddhists incorporated the symbolism of the early worship of the Sun into their own system, which in itself may fortuitously have carried them through many sacerdotal difficulties, even as, if we are to credit resem-

blances, the Hindus successfully appropriated the Buddhist adaptation of an older form in the outrageous idol of Jagannáth, or secured as a Brahmanic institution the ancient Temple of the Sun at Multán.\textsuperscript{19} Whatever may have been the course in other lands, it is clear that, in India, it was primarily needful for the success of any new creed, to humour the prejudices, and consult the eye-training of the multitude, as identified and associated with past superstitious observances.

Among other figures of very frequent occurrence and very varying outlines, a leading place must be given in this series to the so-called \textit{Chaityas}. There is little doubt but that the normal tumulus originally suggested the device, for even to the last, amid all the changes its pictorial delineation was subjected to, there remains the clear ideal trace of the central crypt, for the inhumation of ashes, or the deposit of sacred objects, to which it was devoted in later times.

Much emphasis has been laid upon the peculiarly Buddhistic character of this symbol. It is quite true that its form ultimately entered largely into the exoteric elements of that creed, but it is doubtful if Buddhism, as expounded by \textit{Sákya Sinha}, was even thought of when these fanciful tumuli were first impressed upon the public money; and to show how little of an exclusive title the Buddhists had to the \textit{chaitya} as an object of religious import,\textsuperscript{20} it may be sufficient to cite the fact that, so far as India is concerned, its figured outline appears in conjunction with unquestionable planetary devices on the coins of the Sáh kings of Surashtra,\textsuperscript{21} who clearly were

not followers of Dharma. But, as the Buddhist religion avowedly developed itself in the land, and was no foreign importation, nothing would be more reasonable than that its votaries should retain and incorporate into their own ritualism many of the devices that had already acquired a quasi-reverence among the vulgar, even as the Sun reasserted its pristine prominence so certainly and unobtrusively, that its traditional worshippers, at the last, scarcely sought to know through what sectional division of composite creeds their votive offerings were consigned to the divinity whose "cultus" patriarchal sages, here and elsewhere, had intuitively inaugurated.

Many of the singular linear combinations classed in the Plate under D, as Nos. 15, 16, which it would be difficult otherwise to interpret, may reasonably be referred to the independent conceptions of primitive magic; as, whatever may have been the religion of the various grades of men in its higher sense, it is manifest that even the leading and more intellectual rulers of the people retained a vague faith in the efficacy of charms; almost all the tales in Persian or Arabic authors bearing upon Alexander's intercourse with the unconquered nations of India, turn upon their proficiency in the black art;—traditions sufficiently warranted by the probability that he, a Greek, would intuitively seek revelations of this kind, even as he sought the knowledge of the art of the Chaldees.

So also with their own home legends—one half of the revolution wrought by Chandra Gupta's advisers is placed to the credit of magic, and the Nandas, whom he superseded, appear to have been special proficients in sorcery.

Bengal," vi. 377; vii. 347. Prinsep's reading of his coin (No. 11, p. 354, "Jour. A. S. B.") as Jinaśātmā, "votary of Buddha," was an error; the name is Jiwa Dāmā.
If this was the state of things in India in those semi-historical times, may not we adopt the parallel of other nations, and assume that, as so many crude hierarchies grew out of archaic divinings, these Indian symbols, in their degree, may well have been emanations from a similar source, and have run an equal race into the higher dignity of representing things held more sacred?—as such, their later reception into a series of the typical adjuncts of a faith formed in situ, need excite no surprise.

In concluding these papers on Indian Weights, and completing somewhat hastily the illustration of the introductory system of Indian coinages, I am anxious, as the inquiry may end here, to furnish a final and I trust a convincing argument against those who affirm that Alexander taught India how to coin money—by meeting them on their own ground, and producing a very perfect piece of an Indian king, a manifest emanation from the gradational advances of indigenous treatment, minted contemporaneously in a part of the country Alexander did not reach. Additional interest will be felt in these coins, when it is known that there are strong grounds for believing that they bear the name and superscription of Xandrames, the king of the Gangetic provinces, who was prepared to meet Alexander should he have ventured to advance towards the Jumna.

The first suggestion for this identification only occurred to me a few days ago, on reading the newly-published French translation of the second volume of the Arabic Text of Masaudi, where mention is made of Alexander's

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\[22\] Maçoudi, "Les Prairies d'Or," par C. Barbier de Meynard et Pavet de Courteille. Paris, 1868. "Après avoir tué Porus, l'un des rois de l'Inde, ... Alexandre ... après avoir dans les extrémités les plus reculées de l'Inde il y avait un roi, plein de sagesse, très-bon administrateur, pratiquant la piété, équi-
having, after the conquest of Porus, entered into correspondence with one of the most powerful kings of India, who is incidentally stated to have been addicted to magic, named Kand (كند). Masaudi is not very lucid as to the exact position of this potentate’s dominions; but the Arabs of his day (330 A.H.) had but limited knowledge of the geography of India beyond their new home on the Indus. This king, however, I believe to be no other than the Kananda (properly, it will be seen Krananda), monarch of the sacred centre of Brahmanism and the valley of the Ganges, whom I have already had occasion to refer to, under the numismatic aspect, as having been unscrupulous in the measure of the value of his coins²³ (a reproach I shall perhaps now be in a position to relieve him of). The same name of Kananda, obscured under the three letters of Semitic alphabets, reappears in the Sháh Námah as دند, Káid, “the Indian;” and long stories are told of him and his mystic powers in connection with similar traditions of Alexander.²⁴ The triliteral designation is preserved in other oriental authors as دند, with the necessarily imperfect transcription²⁵ incident to the Semitic conversion of Indian words, and the systematic ignoring of short vowels; but the name occurs, as a nearer approach to the apparent original, in a work entitled “The Mujmal-al-Tawárikh,” compiled about 520 A.H., at the court of Sanjar, wherein the letters appear as قنند,²⁶ a mistake probably for

²⁵ Ibn Badrún, quoted in Masaudi, French Edit., iii. 452.
Kananda, where the ear perhaps designed to do more in the first instance to restore the true pronunciation, than the hands of succeeding copyists knew how to follow.

Before proceeding to examine what the Indians say of themselves on this subject, I will revert casually to the incidental references in the Greek authors. The leading passage, which contributes the name of the king of the Gangetic provinces, occurs in Diodorus Siculus, to the effect that Xandrames was prepared, with an overwhelming force, to oppose Alexander in his progress beyond the Hyphasis. Quintus Curtius has preserved the designation in sufficient integrity as Aggrames, and attests similarly the reputed power of the monarch in question. Arrian does not mention the names either of king or people; but after alluding to the autonomous cities to the west of the Hyphasis, goes on to remark, that the country beyond that river was reported to be highly productive and well cultivated, and to be governed equitably by the Nobility. The earlier classical critics were inclined to think that this testimony of Arrian’s conflicted with the assertions of Diodorus, &c.; but if I rightly interpret the evidence of the native authors I am about to notice, and its special bearing upon the coins, these seemingly

27 Diod. Sic. lib. xvii. 93. Πραιτῶν καὶ Γανδάριδῶν ἐθνῶν, τῶν δὲ βασιλεῶν Ζανθράμην.

28 Quintus Curtius, ix., c. 2:—“§ 2. Percontatus igitur Phgea, qua noscenda erant, ‘xi. dierum ultra flumen per vastas solitudines iter esse’ cognoscit: ‘excipere deinde Gangen,’ maximum totius Indian fluminum. § 3. Ulteriorem ripam colere gentes Gangaridas et Pharrasios; eorum que regem esse Aggrammem, xx. millibus equitum ducentisque peditum obsidentem vias.” See also Plutarch (Langhorne), iv. 405.

29 Arrian, Hist. v. cap. xxii. See also Diod. Sic. ii. cap. xxxix.

30 Arrian, v. c. 25. Πρὸς γὰρ τῶν ἁριστῶν ἀρχεσθαι τοὺς πολλοὺς, τοὺς δὲ οὐδὲν ἔξω τοῦ ἐπιτεκουσὶ ἐγγεζέσθαι.

31 Roorkes’s, “ Arrian” (London, 1729), ii. p. 54.
opposing statements are not only reconcilable in themselves, but mutually aid and assist in the single solution that it would be possible to draw from the independent data they are here cited to illustrate.

The materials available from indigenous sources for the illustration of this section of Indian history, though promising, in virtue of the importance attached to the dynastic changes involved, are proportionately meagre in detail and distorted in substance. So that, in preference to relying upon purely local chronicles, we draw our most consistent testimony from the Ceylon annals, which, though they had, in the first instance, to embody foreign events, and possibly to arrive at much of the necessary knowledge through oral channels, have eventually remained intact, unassailed by hostile revision or reconversion for sectarian purposes into simulated Paurânic prophecies, or equally unscrupulous scriptural fabrications. Not to encumber the text of this paper with quotations, it may be sufficient to state the general purport of the information obtained from the Mahâwanso and its subordinate commentaries. It would seem that there were nine NANDAS, the predecessors of Chandra Gupta, who ruled conjointly, forming a co-equal

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32 Mahâwanso, p. 21. "Kâlásoko had ten sons; these brothers (conjointly) ruled the empire, righteously, for twenty-two years. Subsequently there were nine; they also, according to their seniority, reigned for twenty-two years."

Mahâwanso, p. xxxviii. [from the commentary, the Tīka]. "Kâlásoko's own sons were ten brothers. Their names are specified in the Atthakathā. The appellation of 'the nine NANDAS' originates in nine of them bearing that patronymic title. . . . in aforesight, during the conjoint administration of the (nine) sons of Kâlásoko. . . . His brothers next succeeded to the empire in the order of their seniority. They altogether reigned 22 years. It was on this account that (in the Mahâwanso) it is stated that there were nine NANDAS."
brotherhood similar to those of lower degree, so common amid the still existing village communities of India; designated in the vernacular dialect, Bhaiyáchará, proprietary fraternities. The Brahmanical chronicles, though they do not directly confirm this statement of the contemporaneous sovereignty of the Nandas, incidentally support such a conclusion, as in the expressions, "the Brahman Kauțilya will root out the nine Nandas;" and in the southern legend, quoted in the introduction to the Play of the Mudrá Rákshasa, the king is represented as consigning the kingdom to his nine sons. I advert to this point the more prominently, as one of the great difficulties has hitherto been to explain or reconcile the apparent anomaly of Kunda’s designating himself in the coin legends as "the King, the great King, Krananda, the brother of Amogha;" and the question naturally arose, if Amogha had no title, and no apparent position in the government, what was the object of his brother’s claiming relationship in so formal a manner upon the state coinage? The coincidence may now be satisfactorily accounted for, by supposing Amogha to have been the eldest living brother in the family oligarchy, a position recognised to this day, while Krananda had already justified, by his talents and administrative ability, the choice of the brotherhood, who

33 Wilson derives the chara from the Sanskrit áchára, "institute." I should prefer the local chára, "pasturage," especially as the associate Bhaiya is in the Indian form of the classic Aryan, Bhrata.

34 Wilson’s "Vishnu Purána," p. 467. See also note, p. 468, for various readings from Bhágavata, Vayu and Matsya Puránas.

had apparently elected him "Primus inter pares;" 26 but necessarily with much larger powers and functions in dealing with kingdoms than the ordinary title would carry with it in the mere management of village communities.

I now have to refer to the coins themselves, but as introductory to further details, it is necessary to indicate the leading locality of their discovery, and the epoch to which they should, on independent grounds, he attributed. I have so lately, and so entirely without reference to any present theory, reviewed the chief sites of the discovery of this class of money, under comparatively careful systems of geographical record, that I had better confine myself to a recapitulation of those results, pure and simple. The conclusion I arrived at was, that the kingdom for the supply of whose currency these coins were designed, had "its boundaries extending down the Doáb of the Ganges and Jumna below Hástinapura, and westwards beyond the latter river to some extent along the foot of the Himálayas into the Punjáb"—the division of the entire country probably the most advanced, at that period, in material wealth, as it was in intellectual development.

26 General Cunningham, many years ago, guessed, in virtue of a portion of the name, that Kuvanda might be one of the nine Nandas, but as he has not ventured to support his conjecture, I conclude he has abandoned the identification. ("Bhilsa Topes," p. 355.) Max Müller rightly divined that Xandrames might be "the same as the last Nanda" ("Sanskrit Literature," p. 279); though, Wilford, in 1807, had already enunciated, to all intents and purposes, a similar theory. ("As. Res.," ix. p. 94.)

27 Prinsep's "Essays," i. 204. General Cunningham says, "found chiefly between the Indus and Jumna." Mr. Bayley's experience coincides with my own in placing their centre more to the eastward. These coins were first brought to notice in 1854, on the occasion of Sir P. Cautley's discovery and excavation of the ancient city of Behat, on the Jumna, 17 feet below the present general level of the surrounding country. See Prinsep's "Essays," i. p. 76.
I have a more onerous duty to perform in satisfying my readers in regard to the date internal evidence would assign to these issues. I have previously confessed a difficulty, and admitted that the data for testing the age of this coinage by the style of the letters on its surface were somewhat uncertain, and in a very elaborate examination of every single literal symbol employed on the varying representatives of the class, I came to the conclusion that if certain more archaic forms of letters might take the whole series up in point of time, modifications, approaching to modernisations, might equally reduce individual instances to a comparatively late date. 38 I was prepared to disavow any adhesion to the old theory that the fixed lapidary type of Asoka’s inscriptions was to constitute the one test of all local time and progress, and the sole referee of all gradations in Palæography, though I was not in a condition to cite what I now advance with more confidence—both the exceptional and stiff form of a lapidary alphabet, per se, as opposed to the writing of everyday life, which last the numismatic letters would more readily follow; but I subordinated the fact that Asoka’s alphabet was designed for all India, and although it condescended to admit modified dialectic changes, all the inscriptions are supposed to have emanated from one official copy, which, however perfect at Palibothra or imposing at Ganjam, may well have been behind the age in that focus of learning to the eastward of the Saraswati, where not only must Indian-Pâli have been brought to unusual caligraphic perfection, but from its contact and association with the Semitic alphabet on the same ground and in the same public documents, may be supposed to have achieved suggestive progress of its

38 Prinsep’s “Essays,” i. p. 207.
own, and to have risen far above the limitations of the writing of ordinary uninstructed communities in other parts of India; so that, whatever doubts or hesitation I may have felt in the once discouraged notion that any approach to perfection existed in India prior to Alexander's advent, I have been forced into, and now willingly acknowledge, diametrically opposite convictions, and concur in the surprise expressed by the Greeks themselves that the Indians were already so far and so independently advanced in civilisation.

Silver. Weight 29·0 grains. B.M.

*Obv.*—A female figure, holding on high a large flower, and apparently in attendance on a fanciful representation of a sacred deer. The animal has

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39 This is probably intended to represent a lotus, a favourite object of reverence with the Buddhists. One of the Nandas was named Mahá Padma, "great Lotus." (Vishnu Puráña, 467. The Padma-chenpo of Tibetan writers. J. A. S. B. i. 2.) "The distinctive mark" of one of the four principal classes of Buddhists (the Rákula) was also "an utpala-padma (water-lily) jewel, and tree-leaf, put together in the form of a nosegay." I may as well take the opportunity of noting that the symbols of the remaining three classes of Buddhists were the "shell, or conch" for the Káschyapa: a "sortsika flower" for the Upáli: and "the figure of a wheel" for the Kútáyana. (Csôma Körösi, "Jour. As. Soc. Bengal," vii. (1838), pp. 143-4.)

40 The deer was typical of the Pratyeka Buddhas. Deer were the authorised devices for the signets of the priests ("Jour. A. S. Bengal," 1835, p. 625), and deer were from the first cherished and sacred animals among the Buddhists—"The Deer Park of the Immortal," at Sarñáth, near Benáres, was an important feature in connection with the celebrated Stúpa and religious establishments at that place. ("Foe Kone Ki," chapter xxxiv. "Mémoires," Hionen-Thsang, i. p. 354.)
curiously curved horns, and a bushy tail like a Himalayan Yāk. Monogram  FontAwesome.  

Legend, in Indian-Pāli [a similar flower to that in the field is repeated at the commencement of the legend]:—

Rājñah Kṛaṇandasa Amogha-bhratasa Mahārajasa.  
(Coin) of the great King, the King Krananda, the brother of Amogha.

Rev.—A Chaitya surmounted by a small umbrella, above which appears a curious symbol—a wavy line (representing a serpent?) is seen at the foot of the Chaitya. In the field are the Bōdhi tree,  the

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41 I am unable to offer any solution of the meaning of this sign. It may possibly be an older form of the Tree.

42 Chaityas, or more properly Stūpas (Sanskrit “a pile of earth”), are also called Dūgobas in the Mahāwanso, a name stated to be derived from Dhātu and gabhah, “Womb of a relic.” (Mah. p. 5.; see also Prinsep’s “Essays,” i. 165.) The monogram which surmounts the Stūpa on the coins eventually came to be recognised as a symbol of Dharma; its outline has much in common with the representations of the idol at Jagganāth. (Stevenson, J. R. A. S. viii. 331. Cunningham, “Bhilsa Topes,” pl. xxxii.) The device in question recurs frequently on the later Bactrian and Indo-Seythic coins. (Num. Chron. xix. pl. p. 12, No. 166. “Ariana Antiqua,” pl. xxii. 156. Burnouf, ii. 627).

43 This tree is another chosen emblem of later Buddhism; but, as I have before remarked, it did not appertain exclusively to the Buddhists in early times, as it is to be seen on a very ancient coin implying a directly opposing faith, in the fact of its bearing the name of Vishnud-deva in old Indian-Pāli characters. (Prinsep’s “Essays,” ii. 2, vol. i. pl. vii. fig. 1. So also Q. Curtius, in his notice “Deos putant, quicquid colere coeperunt; arbores maxime, quas violare capital est” (viii. 9, § 34), refers to Indians in general, and not to Buddhists in particular). Another suggestive question is raised by the accompanying devices on the surface of this piece, one of which represents a half-moon—a totally exceptional sign, which in conjunction with the name of Vishnu, may be taken to stand for a symbol of Brahmanism as opposed to Buddhism, a coincidence which may be further extended to import the pre-existence of Chandra-ansas, in designed contrast to Surya Vanṣas; and an eventual typical acceptance of the name in combination as Chandra-Gupta,—all evidencing an
intentional hostility to the "Children of the Sun" of Ayodhya, with whom Sākya was so immediately identified. I may as well take the opportunity of adding that the remaining objects on the obverse of this coin consist of the triple Caduceus-like symbol, under D in the Plate, together with a deer above the half-moon, and a reverse device of a horse.

Let the primary ideal which suggested the cross of the Swastika be what it may, the resulting emblem seems to have been appropriated by the Buddhists as one of their special devices in the initial stage of the belief of Sākya-Muni. The Tao su, or "Sectaries of the mystical cross," are prominently noticed by Fa-Hian (cap. xxii., xxiii.), and their doctrine is stated to have formed "the ancient religion of Tibet, which prevailed until the general introduction of Buddhism in the ixth century." Mr. Caldwell has instituted an interesting inquiry into the ancient religion of the Drávidians, which bears so appositely on the general question of the rise of subsequent sects in India, that I transcribe the final conclusion he arrives at:—"On comparing their Drávidian system of demonolatry and sorcery with 'Shamanism'—the superstition which prevails amongst the Ugrian races of Siberia and the hill tribes on the south-western frontier of China, which is still mixed up with the Buddhism of the Mongols, and which was the old religion of the whole Tartar race before Buddhism and Muhammedanism were disseminated amongst them—we cannot avoid the conclusion that those two superstitions, though practised by races so widely separated, are not only similar but identical."—Drávidian Grammar, p. 519. See also Maháwanso, p. xlv.

Pañini enumerates the Swastika among the ordinary marks for sheep in use in this day (Goldstücker, p. 59).

There is a very full list of Buddhist symbols in Captain Low's paper on "Buddha and the Phrahbat," in the Transactions of the R. A. S., vol. iii. p. 57, which has been commented on, in detail, by M. E. Burnouf, in his "Lotus de la bonne loi" (Paris, 1862), p. 626.

The annexed woodcut of a coin, obtained by myself in the Suhárumpúr district, was engraved by mistake in lieu of the
It has been usual to read the name of this king as Kuranada, and tested by the limitations of the Indian Pâli alphabet proper, the initial compound should stand for ku and nothing else; but as some of the lately-acquired specimens have furnished, for the first time, an approximate reading of the name in the counterpart Bactrian character on the reverse, with the indubitable foot-stroke to the right, which constitutes the subjunct r, appended to the κ, there can be no reasonable doubt but that Kurananda is the correct transliteration. The apparent anomaly of supposing that the Indian Pâli borrowed this form of suffixed r from its fellow alphabet is disposed of by its use a second time in this legend, in the Pâli Bhrata. With similar licence, the Bactrian writing, to supply its own deficiencies, appropriated the Pâli jh in Rajha, corresponding with the Rajnâh of the obverse.

The copper coins of this class follow the typical devices of the silver money, varying, however, in shape and weight to such an extent as to indicate a very general and comprehensive original currency. A peculiarity in which they depart from the parallel issues of silver, is the total omission of the counterpart reverse legend in Bactrian Pâli, occasionally so imperfectly rendered even in the best designed m intages, and the superscription is confined to what we must suppose to have been the local Indian Pâli character, in which mint artisans and the public at large were probably much better versed.

The ninth, or one of the nine Nandas, seems to have been popularly designated Dhana Nanda, or the rich Nanda,\textsuperscript{46} better specimen in the British Museum. As the cut has been already prepared, I insert it as a second example of the same style of money. The coin weighs 35 grains.

and certainly, if the extant specimens of the money bearing the impress of the name of Krananda are any test of the activity of his mints and the amplitude of his treasure, he must have truly deserved the title.

Whatever mythical conceptions may have first determined the outlines of these various coin devices, or whenever they were incorporated into that religious system, it is clear that they one and all eventually came to be regarded as typical emblems of the Buddhist creed. As such, there can be no hesitation in accepting their combined evidence as conclusive, that the kings who set them forth in such prominence two centuries after the Nirvána of Sákya-Muni, must have been votaries of the faith he originated or reformed.

If the faintly preserved similarity of the names of Xandrames and Kand fortuitously led to their association in the person of Krananda, and an almost obvious sequence connected him with one of the nine Nandas, and alike the issuer of the coins bearing this designation, it was reserved for the coins themselves to contribute the most important item in the entire combination to the effect that these Nandas were Buddhists, and in this fact to explain

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47 The association of these symbols with a somewhat advanced phase of Buddhism is shown in the retention of the deer, the Bodhi-tree, the Chaitya, and the wavy line (which is placed perpendicularly on some specimens) on the reverse of a coin, the obverse of which displays the standing figure of Buddha himself, having the lotus (?) and the word Bhagavata, his special designation, in the marginal legend. (Prinsep's "Essays," i. pl. vii. fig. 4).

There seems to have been a current tradition in the land, regarding the real faith of the Nandas, signs of which are apparent in Hionen-Thsang's notice, "Les hommes de peu de foi raisonnaient entre eux à ce sujet: Jadis, disaient ils, le roi Nan-tho (Nanda) a construit ces cinq dépôts pour y amasser les sept matières précieuses" (vol. ii. p. 427).
much that the whole written history of India, foreign or domestic, had hitherto failed to convey—the exact record of the State religion at the period, thus obscuring the right interpretation of the then impending dynastic revolution, commenced and accomplished, as it would now seem, for the triumph of the Brahmanical hierarchy over the representatives of the more purely indigenous belief.

These considerations, however, open out a larger area of Oriental national progress than the legitimate limits of the scope of the Numismatic Society may justify my entering upon, though history must once again, in this case, admit a debt it owes to the archeology of money. And as antiquaries, we ourselves may frankly recognise the aid conferred by the determination of the correct epoch of these coins, in justifying the arrangement of so many prior and subsequent series of the subordinate mintage of a country whose early annals were so largely perverted or sacrificed to sectarian hostility.

I have still two purely numismatic questions to advert to before concluding this paper. Reference has already been made to the adoption by the Greeks of the Indian or square form of money, but if the period and personal identity of the Krananda of these coins are rightly determined, the Greek Bactrians must have condescended to appropriate further oriental mint developments. Alexander the Great, Seleucus, and all those invaders who might have influenced Indian art, had their nominal legends arranged in parallel lines, or at the utmost on three sides of a square, on the inner field of the reverse.

Diodotus, Agathocles, Euthydemus, Demetrius, and other Bactrian Hellenes, who came into closer contact with India to the westward, retained the same practical arrangement of legends. So far as existing numismatic
data authorise a conclusion, Eucratides was the first to commence any marked modification of the practice, and to lean towards the filling up the complete outer margin of the coin with royal names and titles. Of course, if Krananda came after all these Bactrian Greeks, he may have imitated their customs; but if, as it would appear, he was a contemporary of Alexander, ruling in a distant and unassailed part of the country, it is clear that local art was thus far independent and in advance of that of Greece, and that the Bactrian and Scythian interlopers borrowed circular legends from India.

In contrasting the equitable adjustment and full value of the early punch-impressed pieces, with the irregularity in these respects, to be detected in the mechanically improved and more advanced specimens of Indian mintages, I was lately led to instance the identical coins of Krananda as proofs of what unscrupulous kings might do, even in the very introductory application of ideas of seigniorage, towards depreciating their own currency. The results in question were cited to exemplify the statement in the Maháwanso, where the Brahman Chánakya is accused of so operating on the coin of the realm as to convert every one into eight. When I quoted the tradition and the numismatic fact in juxtaposition, I little surmised how much more closely the two might be connected, or that instead of the latter affording a mere illustration of the former, that the surviving metallic witnesses would suffice, with

48 The mention of these later Scythians recalls the curious coincidence of many of the subordinate members of the ruling families designating themselves, somewhat after the manner of Krananda, "Brothers" and even "Nephews of the King," &c. See Num. Chron. vol. xix., Nos. xxvii. class B, and xxxiv.

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the slight introductory testimony, to put a man's memory on trial for forgery twenty centuries and more after date. But so it would seem: the Brahman Chánakya\textsuperscript{50} confesses, through his own advocates, that in his desire to subvert the rule of the Nandas, he seduced sons from their father's palaces, and "with the view of raising resources," to have had recourse to the more than questionable expedient of depreciating, or properly speaking forging, coins of the ruling monarch, which, however, under the ultimate test of the old money changers, would soon have found their level. The copper coinage of the day was probably beyond any very ready power of transmutation, but if the silver currency is to afford a modern "pix," the Brahman must have worked to advantage, as there may be seen in the cabinets of the British Museum, at this present writing, a piece purporting to be of Krananda, with fair legends and full spread of surface, though of tenuity itself, which should in ordinary equity have weighed somewhere over 40 grains, but which on trial barely balances 17.7 grains Troy.\textsuperscript{51}

E. Thomas.

\textsuperscript{50} Maháwanso, p. xli. "Opening the door [of Nanda's palace at Palibothra] with the utmost secrecy, and escaping with the prince out of that passage, they fled into the wilderness of Winijhá. While dwelling there, with the view of raising resources, he converted (by recoining) each kahápanan into eight, and amassed eighty kóris of kahápaná. Having buried this treasure, he commenced to search for a second individual entitled (by birth) to be raised to sovereign power, and met with the aforesaid prince of the Móriyan dynasty called Chandagutto."

\textsuperscript{51} This of course is an extreme instance, but it is not a strained example; and although the piece, which I refrained from quoting previously, is damaged, and has lost its oxyzised film, it is by no means worn, or anything like a coin which we might legally refuse for want of the king's emblems. The best coin of the class still weighs 38.2 grains. (Num. Chron. N.S., iv. p. 128.)
NOTICE OF RECENT NUMISMATIC PUBLICATIONS.

The second part of Vol. II. of the *Berliner Blätter für Münzsiegel und Wappenkunde* has just appeared. It is illustrated with four plates, and contains the following articles:—

12. "Macedonian coins of M. Brutus," by Dr. Julius Friedländer.
13. "Find of coins at Semoitzel," by Dr. Dannenburg.
14. "On the weights of the silver coins of Philip II. of Macedon," by Dr. Julius Friedländer.
15. "Some inedited and rare Byzantine coins," by Dr. Julius Friedländer.

_Beschreibung der in der Schweiz aufgefundenen Münzen_, von Dr. H. Meyer, Zurich, 1863. 4to.

This carefully drawn up account of Gaulish coins found in Switzerland was communicated to the Swiss Antiquarian Society, by Dr. Meyer, the director of the cabinet of coins at Zurich, and is printed in their Transactions. It is illustrated by three plates, comprising about 150 coins, of nearly the whole of which the provenance is recorded. It is, however, rather remarkable that among them are so few that are to be regarded as of exclusively Helvetic origin, the majority being coins of more purely Gaulish tribes. Among them are imitations of the silver coins of Massilia, some of those attributed by De Sauley to the Sequani, coins of Verotalus, Dubnorix, Orgitirix, and numerous uninscribed coins in gold, silver, and potin. The coins reading ΚΑΛΗΤΕΔΟΥΔΥ, either in full or in an abbreviated form, have been found in Switzerland in considerable numbers, and especially at a spot near Nunningen, about twelve miles from Basle. On the meaning of this legend Professor Schreiber appends some notes to Dr. Meyer's essay, and shows that the opinion
that it could be separated into two words, ΚΑΛΕΤ and ΕΔΟΥ, one of which referred to the great Celtic people, and the other to its principal tribe the Αέδνι, can hardly be maintained, and that the other attribution to the Kaloces is more probable. Among the rude imitations in gold of the Philippus there are some of very peculiar workmanship, and considerably dished, which are to be reckoned among the few indigenous coins of Switzerland. The discovery of a die for the obverse of these coins at Avenches, the ancient Aventicum, proves the correctness of this attribution. The die in question is of bronze, but inlaid in a block of iron, and is of its kind, unique. A notice of it, communicated by Dr. Ferdinand Keller, will be found in the Archæological Journal, vol. xix. p. 253. Of the Regenbogen-schisselchen, to an account of which, by Dr. F. Streber, we have on a former occasion directed attention, only a single example is engraved. This, however, does not arise from their scarcity in Switzerland, where, on the contrary, they are by no means rare, but from the fact that they are all alike—we will not say of one type, for they have no device upon them, but are simply plain, dish-shaped circles of gold, such as, but for their relation to other coins with more defined types, might be ascribed to any period. It is a curious feature that we find among the potin coins discovered in Switzerland several of those engraved, under a mistaken impression, by Ruding, in his plates 3 and 4, as British, and some of which are, in fact, occasionally found in England. There is, however, an absence of reciprocity between the two countries, for not a single British coin figures in Dr. Meyer’s plates.

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MISCELLANEA.

The attention of numismatists has already been called to the translation by Mr. Fox Talbot, of a passage in the Khorsabad Assyrian inscription of Sargon, which he has supposed to allude to “coined money,” and the answer to the same by our member, Mr. Dickinson (Num. Chron. N.S., vol. ii. p. 123). This question also received notice from M. A. de Longpérier, who published in the Revue Numismatique the translation of this passage by M. Jules Oppert. (See Num. Chron. N.S. vol. iii. p. 212). Sir Henry Rawlinson has now translated the same passage, and the following is the result of his examination. (Trans. Roy. As. Soc., 1864, p. 208).

It is necessary to commence the translation from the 39th line:—
(39) Ana susub alu sasu, zakkur parakki makhi (or ziri)

In founding this city, a building glorious and exalted,
adman ili rabi va hekali subat bilutiya, varzi va
temples of the great gods, and palaces for my royalty, graciously and
musakku, azkir-va episu ikki (40.) kima zjar sumiya,
honourably, I constructed and I made it to be called like the saying of my own
sha ana nazir gitti va misharissu, suteur
name, which to the dominion of the world (?) and its government (ruling
la bihi la khabal,
innumbu-imii Ilī rabi.
without violence or oppression) the great gods have blazoned forth for me.
(41.) Kaship eqili alu sau, ki yi dypipte sha

The price of the lands of this city, according to the tablets which
ainanusu kasa va zjarva ana billtan
secured it (or its title-deeds), (in) silver and copper, to the proprietors of
vattir-va; (42) assr raggati la rusti sha kaship eqil
they
I returned, and in solid bullion, (?) whoever the price of their
la zib, eqil mishur eqil akhir panunus
lands did not wish for, lands in front, lands in rear, in exchange to
addin sumuti.
them I gave them.

To this explanation Sir H. Rawlinson has added some notes,
from which we extract the following:—

"In the third line (line 41) I am not sure whether the words
'silver and copper' refer to the weight of metal given to the
proprietors for their lands, or to the material of the tablets on
which the title-deeds were written, these title deeds being of the
same class as the clay tablets and inscribed stones which we
are now discussing. Probably, however, the latter is the true
application, as I have never, in one single instance, found
copper given as a representative of value, although gold, silver,
and iron are mentioned in almost every transaction of sale or
barter."

"It is from line 42 that Mr. Talbot draws his inference of
the use of coined money, translating raggati la rust as 'coins,
not of gold;' whereas I compare the cuneiform, not with
孵孵, but with the Chaldee ArrayOfText, which was probably in its
origin, an ingot of metal used instead of money, but which we
translate in Prov. xvi. 11, by 'a just weight;' and with regard
to rust (which, in the Nebuchadnezzar inscription, is always
written with a double s), I do not at all admit its signification of
gold, 'beaten out,' so as to be laid on the walls and pillars
of temples and palaces, in laminae or plates. I compare there-
fore the Syriac ArrayOfText which the dictionaries give as 'contusus,
percussus malleo,' and suppose, in this instance, la rust means
merely 'solid bullion;' however, I admit that the phrase is a
difficult one, and have only noticed the passage to show on what
slender foundation scholars like Oppert and Fox Talbot are sometimes tempted to build up important theories."

A large medal has been struck for private circulation complimentary to Sir Moses Montefiore, Bart., and Lady Montefiore. On one side are their profiles, and on the other in a brilliantly-executed scroll of flowers, is a memento in Hebrew, recalling the places and giving the dates when Sir Moses performed for his people, and for civilisation in general, good and benevolent services. The places and time are:—Russia, 5606; Damascus, 5618; Rome, 5618; and Morocco, 5624. These dates are reckoned according to the Jewish chronological method, which calculates the 1st of October, 1864, as the commencement of the Hebrew year 5625. The crowning word is 'Jerusalem,' and the sentences in the centre beneath are—'When Moses was grown he went out to his brethren and looked on their burdens. And they that be wise shall shine as the brightness of the firmament, and they that turn many to righteousness, as the stars for ever and ever.'—Court Journal.


1 M. Oppert's theory is respecting the name of Sargina (Sargon). "The allusion," says Sir H. Rawlinson, "is to the city of Dur-Sargina, being named after the king; not to any explanation of the king's own name."

The collection of Greek and other coins, formed by O. L. W. Merlin, Esq., H.B.M. Vice-Consul at Athens, was sold by auction by Messrs. Sotheby, Wilkinson, and Hodge, on Wednesday,
30th November, 1864. The collection was divided into 156 lots, of which the following are selected as being of the greatest importance:—Lot 6. Silver, Amphipolis; obv., three-part face of Apollo, a crab in the field; rev., ἈΜΦΙΟΛΕΙΤΕΩΝ, a torch, all within a sunk square—£6 6s. Lot 9. Gold, Philippi; obv., head of Hercules to right; rev., ΦΙΛΙΠΠΩΝ. A tripod, in field a horse’s head. Remarkably fine—£12 5s. Lot 45. Electrum, Thebes; obv., head of Bacchus, with wreath of ivy to right; rev., within an incuse square Θ, the infant Hercules seated to left, strangling the serpents. Extremely fine—£10 10s. Lot 50. Silver, Athens, a didrachma, of the same type as the old tetradrachma, and apparently struck from dies intended for the larger coin. Presumed to be unique—£5 5s. Lot 67. Silver, Corinth; obv., ζ, Pegasus flying to left; rev., incuse, divided by four bars, between each an oblong object—£6 6s. Lot 72. Silver, Sicyon; obv., Chimera walking to left, a small male head below; rev., a dove flying to right, within a wreath; no letters on either side. Fine condition—£8 8s. Lot 76. Silver, Elia (?); obv., in a sunk square, a female head of archaic work to right; rev., Κ, Pegasus flying to right. Well preserved—£6 2s. 6d. Lot 88. Silver, Pheneus; obv., head of Proserpine to right; rev., ΦΕΝΕΩΝ. Mercury, with a caduceus in right hand, and a child on the left arm. Very fine work and well preserved—£25. Lot 90. Silver, Stymphalus; obv., head of a female crowned with laurel to right; rev., ΣΤΥΜΦΑΛΙΩΝ. Hercules striking with his club, between his feet ΣΟ.—£28. Lot 99. Copper, Delos; obv., head of Apollo to left; rev., ΔΗ; a lyre.—Myconus; obv., full-faced beardless head crowned with ivy; rev., ΜΥΚΟΝΙΩΝ, two ears of corn on the same stalk—£6 6s. Lot 107. Copper, Pergamus, of Sept. Severus, and Domna; obv., usual legend, heads of Severus and Domna, face to face; rev., ΕΠΙ ΣΤΡΑ. ΚΑΛΑΙΔΙΑΝΟΥ ΤΕΡΠΑΝΔΡΟΥ ΠΕΡΓΑΜΗΝΟΝ Β. ΝΕΟΚΟΡΩΝ. Gateway of a temple, a humped bullock on each side, four small figures on top of columns—£9. Lot 138. Silver, uncertain Ptolemy: obv., busts of Serapis and Isis, side by side, to right; Serapis bearded and laureate; both with lotus flower on top of head; rev., ΒΑΣΙΛΕΩΣ ΠΤΟΛΕΜΑΙΟΥ. An eagle on a thunderbolt to left, looking back on a cornucopia between its feet—£6.
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OF LONDON,
DECEMBER, 1864.
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PROCEEDINGS OF THE NUMISMATIC SOCIETY.

SESSION 1863—64.

October 15, 1863.

W. S. W. Vaux, Esq., President, in the Chair.

The following presents were announced, and laid upon the table:—


4. Smithsonian Report, 1861. From the Smithsonian Institution.


6. Revue Numismatique Belge, 4ème Série, tom. i. From the Society.

7. Curiosités Numismatiques, Monnaies, Méraux, etc. By M. Renier Chalon. From the Author.


9. Jahrbücher des Vereins von Alterthums-freunden im Rheinlande, i. to xxxii. (1862), [excepting No. xiii., which was
afterwards presented by Mr. Edw. Rapp, of Bonn]. From the Society.


The Earl of Verulam exhibited a small brass coin, lately found in the neighbourhood of ancient Verulam. It is of Tasciovanus, with a rude bearded head on the obverse, and a hippocampus on the reverse, with the legend ven. (Evans, pl. vii. 9).

Mr. Evans exhibited an ancient British coin, in gold, of the usual type, inscribed vo-coni, lately found near Llanthony Abbey, Monmouthshire.

Mr. Evans also exhibited a coin of the Brigantes, found at Cirencester. It is of the type inscribed ver corr (Evans, pl. xvii. 5), but, instead of being gold, is of such base metal (if not actually of brass) as to be coated with a green oxide.

Mr. Gabrielli sent for exhibition a copper coin of the class usually ascribed to Panormus (but which possibly was struck at Carthage), found in dredging at Ancona Harbour.

Dr. Aquilla Smith communicated an account of a small hoard of Anglo-Saxon coins, found in a sand-pit in the county of Meath about the year 1843, and which had lately been purchased for the Museum of the Royal Irish Academy. The Saxon coins were all of Edward the Elder, with one exception—a penny of St. Edmund—and were probably deposited where found, about A.D. 920—930. They were accompanied by a single Cufic coin, struck at Samarkand in A.D. 914, by Nasr-ben-Ahmed, fourth Prince of the Samarian dynasty. The account is printed in the Numismatic Chronicle, N.S., vol. iii. p. 255.

Mr. H. F. Holt, the owner of the gold piece of Francis and Mary, the authenticity of which had been questioned at a previous meeting, communicated some observations in its defence.
NUMISMATIC SOCIETY.

November 19, 1863.

W. S. W. Vaux, Esq., President, in the Chair.

The Rev. J. H. Marsden, B.D., and E. K. Lidderdale, Esq., were elected members of the Society.

The following presents were announced and laid on the table:—


The Rev. J. H. Pollexfen exhibited a small-brass coin, supposed to be of Avitus, but possibly only a barbarous imitation of a late Roman coin; also a coin of Carausius, with the S's in the obverse legend reversed. On the reverse is a female figure standing, draped, with her right hand holding a patera over an altar, in her left a hasta, held vertically. The legend, which is imperfect, appears to be . . . . . TATIVTXI. Mr. Pollexfen also exhibited an unpublished penny of Charles I., struck from the dies used by James I., but with the I altered into a C. It is of the common type with the rose on the obverse and the thistle on the reverse.

The Rev. A. Pownall exhibited a coin of Ethelstan, King of East Anglia, found in the parish of Bulwich, Northamptonshire. The type of the obverse is that of Hawkins, pl. vii. No. 98, having the legend EÆLSTANTI, with the letter X in the centre. The reverse bears the moneyer’s name, TORHTHELM, with a cross moline in the centre, like that on the coin of Ethelvulf, figured in Ruding, pl. xxx., No. 16, so that it presents an unpublished type. An account of the coin is given in the Numismatic Chronicle, N.S., vol. iv. p. 190.
Mr. Vaux exhibited a cast of a medal of John Kendal, with the title "Turco-peilerius," and the date 1480; also a cast of a silver Persian tetradrachm, with the type of the galley, the peculiarity consisting in the fact that the galley has a sail.

Mr. Madden read a communication from W. Airy, Esq., relative to a find of coins in the Isle of Wight. The coins in question were found at Wroxall, near Appuldurcombe, and were principally third-brass of Claudius Gothicus, Constantius, Constans, Valens, Valentinian II., Theodosius, Arcadius, and Gratianus. The number of the coins must have been nearly 5,000. See Numismatic Chronicle, N.S., vol. iii. p. 268.

Mr. Madden also read a letter from W. Buttery, Esq., giving an account of a leaden bulla of Pope Innocentius VI., found in 1856 in the hands of a skeleton in Milford Church, Hants.

Mr. Madden read a paper, communicated by Mr. Rapp, of Bonn, "On a Coin of Nemausus, on which Marcus Vipsanius Agrippa is represented with a Beard." In this paper the author notices the custom of wearing the beard in token of mourning, which was prevalent among the Romans; and after commenting on the fact that on some of the coins of Nemausus, with the heads of Agrippa and Octavianus upon them, that of the former alone is bearded, comes to the conclusion that it cannot have been an official mourning that was thus signified, as only one of the co-regents wears the beard. He therefore regards these coins as having been struck at the time when Agrippa was in mourning on account of some family loss, and suggests the death of his father-in-law, T. Pomponius Atticus, in b.c. 32, or that of his first wife, Pomponia, in b.c. 20, as the possible occasion.

Mr. Vaux read a paper, communicated by E. Thomas, Esq., "On the Bactrian Alphabet," in which he claimed for some of the characters which occur upon the coins an Indian rather than a Phœnician origin. This paper is printed in full in the Numismatic Chronicle, N.S., vol. iii. p. 225.
December 17, 1863.

W. S. W. Vaux, Esq., President, in the Chair.

G. G. Brooks, H. F. Holt, and R. Spence, Esqs., were elected members of the Society.

The following presents were announced, and laid on the table:—

1. La Numismatique en 1862, by M. A. de Barthélemy. Tirage à part. From the Author.


5. Di una rara Moneta di Offa, Re de Merciani, by Signor Calori Cesis. From the Author.

Mr. Rolfe exhibited a brass medal of William Duke of Cumberland. *Obv.* His bust in armour, to the right, with the legend GUILLELMUS DUX CUMBRIC. *Rev.* A lion rampant, crowned, in front of which is the kneeling figure of a Highlander, with long hair, in a plaid coat and knee-breeches, taking off a low-crowned hat. Date, 1746.

The Rev. J. H. Pollexfen exhibited a Roman coin-mould of baked clay, found at Colchester, similar to those found at Lingwell Gate, and described in Akerman’s “Coins of the Romans relating to Britain,” and in the Numismatic Chronicle, vol. i. p. 161. It is for an obverse of Septimius Severus, and for a reverse of FORTVNAE FELICI; a standing figure holding in her right a cornucopia, her left resting on a rudder—a type which belongs to Julia Domna.

Mr. Evans exhibited some casts of ancient British coins found in Kent, which had been communicated to him by Mr. C. Gordon,
of the Dover Museum. The coins are in gold, of the types of Ruding, pl. i. 15, 19, 20, and 21.

Mr. G. Sim communicated an account of a small hoard of coins found at Newstead, near Melrose. They consisted of a testoon and half-testoon of Francis and Mary, and nearly a hundred placks of James III., IV., and V., and of Mary. Among them, however, was a third-brass coin of Tetricus, which had probably been in circulation as a plack.

Mr. R. S. Francis communicated an account of a hoard of Anglo-Saxon coins discovered in October last at Ipswich. They were all pennies of Æthelred II., with the hand of Providence between A and Ω on the reverse, and struck at Bath, Bedford, Cambridge, Canterbury, Ipswich, London, Lyminge, Norwich, Rochester, Southampton, Sudbury, and Thetford. Only two appear to have had the head to the right. See Numismatic Chronicle, N.S., vol. iv. p. 28.

Mr. Evans exhibited a penny of Ecgbeorht, of the type of Hawkins, No. 157, and with EEBBEBARTHT RXE on the obverse, and SVENETI MONETA on the reverse, with the name of Ecgbeorht in monogram in the centre, for such it appears to be, and not Dorobernia Civitas.

Mr. Boyne exhibited a short-cross penny of Henry, of the large size, with five curls of hair to the head, and minted by FILL' AMER ON LYN, and gave reasons for regarding the FIL as significant of Filius rather than of Filippus or Philip.

Mr. Vaux read a paper "On Finds of Roman Coins in India, and the Relations of Rome with the East," in which he traced from ancient historians the intercourse of Rome with the Oriental nations, and illustrated it by the various hoards of Roman coins found in Asia.

Mr. Madden read a paper "On some Roman Coins found at Coimbatore, India." These coins, fifty-one in number, are all in gold, and range from the time of Augustus to that of Caracalla. They are in the possession of Mrs. Marjoribanks.
NUMISMATIC SOCIETY.

JANUARY 21, 1864.

W. S. W. VAUX, Esq., President, in the Chair.

The Rev. H. Meason, and J. S. Smallfield, Esq., were elected members of the Society.

The following presents were announced, and laid on the table:—


Mr. Buttery exhibited a silver dollar of Augustus Duke of Brunswick, two tokens, and a farthing of the Corporation of Southampton.

Mr. C. Roach Smith sent for exhibition casts of a gold coin of Cunobeline, of the type Evans, pl. ix. No. 7, lately found at Cudham, Kent, and communicated to him by G. W. Norman, Esq. It had been found by Captain Christy, when out shooting, in a form from which a hare had risen.

Mr. Akerman exhibited two silver coins of Valens and Julianus, found some years ago, with many other coins, in an urn, near Wantage.

Mr. Grenfell exhibited a five-cent note of the state of North Carolina, and a one-dollar note of the Confederate States of America, dated June 2, 1862.

Mr. Evans exhibited a cast of a gold coin of Addedomaros, type of Evans, pl. xiv. No. 5, in the possession of Richard Almack, Esq., of Melford, near Sudbury. The coin was found in the hamlet of Brundon, in Essex, close to the river Stour, which divides Brundon from the parish of Melford, in Suffolk.

Mr. Evans also exhibited a false testoon of Francis and Mary of Scotland, from the same dies as the gold coin exhibited to the Society, April 16, 1863; also a false dollar of Mary and Henry, dated 1565.
Mr. Webster exhibited the following false coins belonging to the English series:—

Henry VIII.—Testoon of fine silver: mint-mark, on obv. S, on rev. fleur-de-lis.
Edward VI.—Side-faced shilling: mint-mark, harp.
Ditto—Bristol penny: mint-mark, fleur-de-lis.
Mary—Penny, reading mar. d.g., &c.
Lady Jane Grey—Testoon, with the title of Queen! Legend on rev. si deus nosiscum quis contra nos.

The Rev. J. H. Polllexfen communicated a further notice of the coins of Æthelred II., lately found at Ipswich, and cited coins struck at Stamford and Worcester, besides others coined at the towns enumerated previously.

Mr. Evans read a paper, by himself, "On some Anglo-Saxon Sceattas found in Friesland." This paper is printed in full in the Numismatic Chronicle, vol. iv. p. 22, No. 1.

February 18, 1864.

W. S. W. Vaux, Esq., President, in the Chair.

Stanley C. Bagg, Esq., and Arthur Crump, Esq., were elected members of the Society.

The following presents were announced, and laid on the table:—


Mr. Evans exhibited casts of a gold coin of Cunobeline, type Evans's "British Coins," pl. ix. 5, but with a pellet below the horse, found at Glemsford, near Melford, Suffolk, and in the possession of Richard Almack, Esq., of the latter place; also of a gold coin of Cunobeline, found near Faversham, similar to that found near Baldock, and described in Evans's "British
Coins," p. 302. It is in the possession of Mr. Gibb, of Faversham.

Mr. Freudenthal exhibited a cent piece struck by Rajah Sir James Brooke, for the use of Sarawak. On the obverse is the Rajah's head in profile to the left, beardless, but with whiskers; around is the inscription, J. BROOKE, RAJAH. Reverse, one cent, in the centre of an olive-wreath; above, SARAWAK; below, 1863. The edge is plain.

Mr. Madden read a paper, communicated by the Rev. Churchill Babington, B.D., "On an Inedited Tetradrachm of Alexander III., struck at Rhodes, with some observations on the Rhodian Symbol, and other matters connected with Rhodes." This paper is given in full in the Numismatic Chronicle, N.S., vol. iv. p. 1.

Mr. Evans read a further communication from Signor F. Calori Cesis on the subject of a coin of Offa, King of Mercia, with the legend s. FERAVS on the reverse, which had been described to the Society in May last.

MARCH 17, 1864.

W. S. W. VAUX, Esq., President, in the Chair.

The following presents were announced, and laid on the table:—


Mr. Evans exhibited a fine contorniate, bearing the head of Nero on the obverse, and a victorious charioteer in a quadriga on the reverse, and the legend evpimvς mirandvς. It is the identical piece described in Sabatier, *Méd. Contorn.*, p. 128, pl. xix. 14. The legend, however, is there erroneously written evvimvς, and, in the engraving, the bell which hangs in front of each of the horses’ necks is omitted, as well as a small ornament like a wheel of four spokes on the haunch of one of the horses. The word mirandvς, which is in the exergue of the medal, has been read upon another specimen in the French Imperial collection as matvndvς; but in all probability it is in each case the same word.

Mr. Whitbourn exhibited a half-noble of Richard II., the reverse struck from a die of Edward III.

Mr. Boyne exhibited a large brass coin of Titus, presumed to be of Cinque-cento work, with the *Meta Sudans* on the reverse; and also a Paduan coin of the same emperor, with the Colosseum type.

Mr. Allen, of Winchmore Hill, contributed a short account of a coin of Cunobeline, closely resembling that published by Evans, pl. ix. fig. 14, but with a pellet beneath the head of the horse. It was found by a labourer in the neighbourhood of Hitchin, at a place called Lilly Hoo, the downs about which are noted for their earthworks, tumuli, &c.

Mr. Edward Thomas contributed a paper “On Ancient Indian Weights,” in which he claims for the people of India, at a period of remote antiquity, the invention of a native system of weights, just as he has, in former papers, vindicated for them the creation of an independent alphabet. This paper is printed in full in the Numismatic Chronicle, N.S., vol. iv. pp. 40 and 124.
April 21, 1864.

W. S. W. Vaux, Esq., President, in the Chair.

John Davidson, Esq., was elected a member of the Society.

Mr. Evans exhibited two ancient British coins, said to have been found in Kent; the one of Tinc[omnius] similar to Evans, pl. i. No. 12, but without the dv—the other of Tasciovanus, struck among the Segontiaci, and of the type Evans, pl. viii. No. 11.

Mr. Williams exhibited five short-cross pennies of Henry II. or III., found last autumn in a field near Enfield, in company with a number of other coins of the same class which had been buried in an unglazed earthen vessel, of which a fragment was also exhibited.

Mr. Webster exhibited two silver coins of Gelas, in illustration of the manner in which many of the Sicilian and other Greek coins were struck. The metal in this case had evidently been cast in a spherical or spheroidal shape in a mould, and then struck either while hot or after having been subsequently heated. Not only was the line showing the joint of the mould in which the blanks had been cast apparent, but there were also portions of the runner projecting beyond the edge of the coins.

The Rev. J. H. Pollexfen exhibited a coin of Maximus, of second brass, but plated at the period, so as to give it the appearance of being silver. It was found at Colchester.

Mr. Fairholt exhibited a specimen of the copper coinage struck during the occupation of Rome under Garibaldi. The obverse bears a well-executed design, representing the Roman eagle standing on the fasces, surrounded by an oaken garland—the artist’s initials, n. c. (Niccolo Cerbara), beneath. The legend is Dio.B.Porolo. In the exergue the letter r. The reverse has, within a beaded border, the words REPUBBLICA ROMANA, and the date 1849. The value of the coin, “3 Baiocchi,” is expressed in large letters in the centre. But few of these coins were struck for necessary use, and the issue was restricted
to pieces of 1, 2, and 3 baiochi. They were, of course, rigidly suppressed after the defeat of the Republican party.

Mr. Madden exhibited a second brass coin of Titus, apparently struck in Samaria or Judæa. On the obverse is the legend ΑΥΤΟΚΡΑ. ΤΙΤΟΣ ΚΑΙΣΑΡ ΙΕΒ., with the laureate head of Titus to the right. The legend on the reverse appears to be ΕΙΠ Μ. ΣΑΛΟΥΙΔΗΝΟ........ the device being a palm-tree, with a cuirass beneath it on the left and a shield on the right. The name M. Salvidienus is given by Mionnet (Supplement, v. p. 2) as that of a Proconsul occurring on a coin of Domitian struck in Bithynia. The complete legend should apparently be ΕΙΠ Μ. ΣΑΛΟΥΙΔΗΝΟΥ ΠΡΟΚΛΟΥ ΑΝΘΥΙΑΤ., but no mention is made of such a person in history, though a Salvidienus Orfitus was banished by Domitian for conspiracy (Suet. Dom. 10), and a Longinus Proclus was also living during the same emperor’s reign (Dion. Cass. lxviii., 16). The coin belonged to Mr. Evans, who has since presented it to the British Museum.

Mr. Evans read a communication from Mr. W. Douglas relative to a find of coins at Kinghorn, Scotland. They consisted chiefly of pennies of the first Edwards, but there were also a few Irish and Scotch coins in the hoard, which was contained in a large jug of livid grey clay, covered with a yellow glaze. The coins are now dispersed. The paper concluded with some pertinent remarks on the present state of the law of “Treasure-trove.” See Numismatic Chronicle, N.S., vol. iv., p. 155.

Mr. C. Roach Smith sent for exhibition photographs of some gold ornaments lately found in company with some Gaulish coins at Frasnes, in Belgium, as described in the Revue de la Numismatique Belge, 1864, p. 140. Mr. Evans communicated some remarks upon the discovery, which is of great interest as tending to fix the date of a class of antiquities to which Mr. Franks in the Horæ Ferales has given the name of “late Celtic.” The ornaments consisted of three objects, of which the principal was a tore about 8 inches across. The other two ornaments were a bracelet and large ring. With them had been
found about eighty Gaulish coins in gold, all with the plain and convex obverse, and a rude horse on the concave reverse, like Ruding, pl. i. No. 1. This class of coins is of common occurrence, not only in Belgic Gaul, but in Britain, and Mr. Evans showed reasons for assigning them to a period extending probably over the earlier half of the first century B.C. This paper is printed in full in the Numismatic Chronicle, N. S., vol. iv. p. 96.

Dr. Aquilla Smith communicated a paper on the type of the first Anglo-Irish coinage. The coins principally referred to are the halfpennies of John, bearing on the obverse a head full-faced, with a diadem or crown of pearls, and the legend IOHANNES DOM. The full face on these coins fills the entire space within the inner circle, and has much the appearance of "the sun" on the signboard of an inn. Simon and others believed that the head thus represented was that of John, but Mr. Haigh, in 1889, made a communication to the Numismatic Chronicle, in which, after pointing out the resemblance of the head to that on some Monnaies des Evèques, &c., infers that the head is intended either for the moon or the morning star, and typical of St. John the Baptist, since as the moon in the absence of the sun reflects his light and testifies to his existence, so it was said of St. John that he "was sent to bear witness of the Light;" while the morning star was also considered typical of the Baptist, inasmuch as he was the forerunner of "the Sun of Righteousness." This paper is printed in full in the Numismatic Chronicle, N. S., vol. iv. p. 102.

The Rev. Churchill Babington, B.D., communicated a notice of a coin which he ascribed to Elusa, in Palestine, a city of which he gave an interesting account. The legend on the coin is, however, unfortunately indistinct, so that the attribution requires further corroboration. It has since been ascertained that it belongs to Laodiceia, in Syria, and that the legend is LADICGON.
May 19, 1864.

W. S. W. Vaux, Esq., President, in the Chair.

B. V. Head, G. Lambert, and A. G. Scott, Esqrs., were elected members of the Society.

The following presents were announced, and laid on the table:—


The Rev. A. Pownall exhibited a large gold medallion of Mary, of the type engraved in the Medallic History of England. pl. v., No. 3. It is remarkable as giving Mary the titles of Maria I., and Fidei Defensatrix. By Evelyn (whose engraver has represented the devices the reverse way to what they are on the medal) it is considered to have been struck A.D. 1553, upon Mary's "restoring the Roman religion," to which the device and the legend of the reverse, CECIS VISUS TIMIDIS QVI ES, was thought to refer; but the die of the obverse was originally engraved by Jac. Trezzo, an Italian artist, for the reverse of a medal of Philip and Mary, bearing date 1555, and the device of the reverse does not seem to be satisfactorily explained by either Evelyn or Pinkerton.

Mr. Evans exhibited an ancient British coin (type Evans, pl. B, 6) lately found near Guildford. Its weight is 96½ grains.

Mr. Rolfe exhibited five forgeries of Roman large brass coins of Caligula, Otho, and Vitellius, which had been palmed off on a gentleman as having been found in digging for a foundation in the city. They are casts, not of genuine coins, but of Paduan forgeries. Three genuine coins of Probus and Maximian were sold with them, as having been found at the same time.

The Rev. H. C. Reichardt, of Cairo, exhibited some rare coins procured by him in Egypt and Syria. Among them may be mentioned:—1. A large gold coin of Berenice IV.
2. A didrachm of Ptolemy, of the ordinary type, and struck at Paphos, but bearing the double date Λ. ΚΑΙ Α (the year 36 and 1), thus affording evidence of the introduction of a new era. 3. A cast of a coin of Ptolemy V., struck at Aradus, and giving the title of ΕΠΙΦΑΝΟΥ, and thus identifying a well-known portrait on the Ptolemaic series as belonging to that monarch. 4. A unique gold coin of Arsaces VI., found near Persepolis. Some of these coins are published in the Numismatic Chronicle, N.S., vol. iv. p. 189.

Mr. G. H. Virtue exhibited some bank-notes of the new "fractional currency" of the Federal States of America, for 5, 10, and 25 cents respectively. On these notes, the portrait of Washington is surrounded by an oval border printed in bronze, as if to show that they were originally derived from a metallic parentage.

Mr. J. G. Grenfell exhibited another of these notes, and also two tradesmen's cardboard tickets, issued at New York, and representing 1 and 2 cents respectively.

Mr. Vaux exhibited a selection of Oriental coins from the collection of Colonel Tobin Bush, upon which he communicated some remarks. Among them were some rare specimens of the coins of Mahmud of Ghazna, two of them bearing the name of Alkader-billah; an extremely rare coin of Muhammed, the son of Mahmud; a square coin of Jehanyn Shah, struck at Lahore, and bearing also the name of his celebrated wife, Nurjehar; and a remarkable medal of Runjeet Singh.

Mr. Williams communicated a paper on "Milling not Marking," being a reply to a paper by Mr. E. J. Powell, in the Numismatic Chronicle, N.S., vol. iv. p. 59, and showed that, whatever may be the legal acceptation of the term "milling" as applied to coins, it has the sanction, not only of custom, but of Numismatists of the highest authority, as being applicable to the graining or other ornamentation of the edge of coins. This paper is printed in full in the Numismatic Chronicle, N.S., vol. iv. p. 133.
JUNE 16, 1864.

ANNIVERSARY MEETING.

W. S. W. VAUX, Esq., President, in the Chair.

H. Cane, W. H. Johnston, J. F. Neck, and W. Lake Price, Esqs., were elected members of the Society.

The minutes of the last Anniversary Meeting were read and confirmed, and the following report of the Council was read to the Meeting:

GENTLEMEN,—In accordance with the usual custom of the Society, the Council have the honour to lay before you their Report as to the state of the Numismatic Society, at this, another Anniversary Meeting. The Council can confidently congratulate the Society upon the steady improvement it each season shows, and on the flourishing condition it this day presents, both as to the number of new members added to its list, and its comparatively small loss by deaths.

The only members we have lost by death are Beriah Botfield, Esq., M.P.; and an honorary member, Prof. Joseph Arneth.

The Council on the other hand, have to record the election of the seventeen following members:

Stanley C. Bagg, Esq.  George Lambert, Esq.
Henry Cane, Esq.      Rev. J. H. Marsden, B.D.
John Davidson, Esq.   J. F. Neck, Esq.
Barclay Vincent Head, Esq.   W. Lake Price, Esq.
Robert Spence, Esq.

A few more years of such an annual increase, and the Society may hope again to recover its true position.
According to our Secretary’s Report, our numbers are as follows:

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We now proceed to give a short notice of our deceased member, Mr. Botfield, late M.P. for Ludlow, in Shropshire.

Mr. Botfield was educated at Harrow, where he afterwards founded a medal, called the “Botfield Medal for Modern Languages.” From Harrow he went to Christchurch, Oxford, and took his B.A. degree in 1828.

In 1840 he was first returned to Parliament for Ludlow, and obtained the same place the following year. In 1847 he contested the borough, but was unsuccessful, and remained out of Parliament for ten years, when, at the request of his constituents, he again consented to hold the seat, retaining it till his death. In 1853 he married Isabella, second daughter of Sir B. Leighton, Bart., M.P. for South Shropshire, to whom he has left the whole of his property for her life, entailing the greater portion on the second son of the Marquis of Bath—the families of Botfield or De Boteville being distantly connected with the Boteville Thynnes, of Longleat, in Wiltshire.

Mr. Botfield, besides contributing to different periodicals, published, in 1849, “Notes on Cathedral Libraries in England;” in 1859, the “Stemmata Botevilliana,” in which he traced the history of his own family, and of those allied with it; and, lastly, in 1861, he edited the “Prefaces to the first editions of the Greek and Roman Classics and of the Sacred Scriptures.” Mr. Botfield possessed, at Norton Hall, one of the largest private collections of “Editiones Principes” of classical and other writers.
He died at his residence in Grosvenor Square on the 7th of August, 1863, in the 57th year of his age.

Our late honorary member, Professor Arneth, also merits a few words. He died at Carlsbad, the 31st of October, 1863. He was for many years director of the Museum of Vienna. The principal works published by him are as follows:—

Geschichte des Kaisertums Oesterreich, 1827, 8vo.

Synopsis Numorum Græcorum qui in Museo C. R. Vindob. adservantur. 1837. 4to.¹

Katalog der K. K. Medaillen-Stümpel-Sammlung. 1839. 4to.

Ueber das Tauben-Orakel von Dodona. 1840. 4to.

Synopsis Numorum Romanorum qui in Museo C. R. Vindob. adservantur. 1842. 4to.

Zwölf Römische Militär-Diplome. 1843. 4to. 25 plates.

Das Niello-antependium von Kloster-Neuberg. 1844. 8vo.

Das K. K. Münz-und-Antiken-Cabinet. Two editions, 1845 and 1854. 8vo. 4 plates.


Die antiken Cameen des K. K. Münz-und-Antiken-Cabinettes. 1849. fol. 25 plates


The Council beg to congratulate the Society on the third volume of the New Series of the Chronicle, and to express their thanks to Mr. H. W. Rolfe, for his liberal contribution of no less than seventeen plates of Kentish Tokens, with descriptive letter-press. Members are earnestly requested to help by further contributions of papers.

The Report of our Treasurer is as follows:—
Statement of the Receipts and Disbursements of the Numismatic Society, from June 21, 1862, to June 20, 1863.

**Dr.**

**THE NUMISMATIC SOCIETY IN ACCOUNT WITH G. H. VIRTUE, TREASURER.**

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<td>W. S. W. Vaux, Esq., Rent to June, 1864</td>
<td>20</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Ditto, towards expenses of Conversazione</td>
<td>5</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Expenses of Meetings</td>
<td>2</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>For Porterage, Wrapping, and Postage of 4 Nos.</td>
<td>6</td>
<td>1</td>
<td>10</td>
</tr>
<tr>
<td>Balance forward</td>
<td>36</td>
<td>12</td>
<td>1</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>1864</th>
<th>£</th>
<th>s.</th>
<th>d.</th>
</tr>
</thead>
<tbody>
<tr>
<td>By Balance brought forward</td>
<td>48</td>
<td>3</td>
<td>11</td>
</tr>
<tr>
<td>Dividends on £305 17s. 10d.</td>
<td>8</td>
<td>18</td>
<td>2</td>
</tr>
<tr>
<td>Cash received for Chronicle (back numbers)</td>
<td>11</td>
<td>11</td>
<td>0</td>
</tr>
<tr>
<td>Admission Fees</td>
<td>10</td>
<td>10</td>
<td>0</td>
</tr>
<tr>
<td>Annual Subscriptions</td>
<td>54</td>
<td>12</td>
<td>0</td>
</tr>
<tr>
<td>Cash from Mr. J. R. Smith for Chronicle</td>
<td>58</td>
<td>10</td>
<td>0</td>
</tr>
</tbody>
</table>

£192 5 1

Balance in hands of Treasurer . . 36 12 1

G. H. VIRTUE, TREASURER.
The meeting then proceeded to ballot for the officers of the ensuing year, when the following gentlemen were elected:—

**President.**


**Vice-Presidents.**

Rt. Hon. the Earl of Enniskillen, Hon. D.C.L., F.R.S., F.G.S.

John Lee, Esq., LL.D., F.R.S.

**Treasurer.**

George H. Virtue, Esq., F.S.A.

**Secretaries.**

John Evans, Esq., F.R.S., F.S.A.

Frederic W. Madden, Esq., M.R.S.L.

**Foreign Secretary.**

John Yonge Akerman, Esq., F.S.A.

**Librarian.**

John Williams, Esq., F.S.A.

**Members of the Council.**

Thomas James Arnold, Esq.

Rev. Churchill Babington, B.D.

J. B. Bergne, Esq., F.S.A.

S. Birch, Esq., LL.D., F.S.A.

W. Boyne, Esq., F.S.A.

W. Freudenthal, Esq.

J. Granville Grenfell, Esq., R.A.

Rev. J. H. Pollexfen, M.A.

Rev. Assheton Pownall, M.A.

H. W. Rolfe, Esq.

The Society then adjourned until October 20th, 1864.
"A book that is shut is but a block"

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