



The First Age of Roman Coinage

H. Mattingly

The Journal of Roman Studies, Vol. 35, Parts 1 and 2. (1945), pp. 65-77.

Stable URL:

<http://links.jstor.org/sici?sici=0075-4358%281945%2935%3C65%3ATFAORC%3E2.0.CO%3B2-2>

The Journal of Roman Studies is currently published by Society for the Promotion of Roman Studies.

Your use of the JSTOR archive indicates your acceptance of JSTOR's Terms and Conditions of Use, available at <http://www.jstor.org/about/terms.html>. JSTOR's Terms and Conditions of Use provides, in part, that unless you have obtained prior permission, you may not download an entire issue of a journal or multiple copies of articles, and you may use content in the JSTOR archive only for your personal, non-commercial use.

Please contact the publisher regarding any further use of this work. Publisher contact information may be obtained at <http://www.jstor.org/journals/sprs.html>.

Each copy of any part of a JSTOR transmission must contain the same copyright notice that appears on the screen or printed page of such transmission.

JSTOR is an independent not-for-profit organization dedicated to creating and preserving a digital archive of scholarly journals. For more information regarding JSTOR, please contact support@jstor.org.

THE FIRST AGE OF ROMAN COINAGE¹

By H. MATTINGLY

A paper by me on the same subject appeared in the *Journal* as long ago as 1929 (pp. 19 ff.). The criticism of the traditional datings there suggested seems in the main to have stood the test of time. But reconstruction should follow in due course on demolition; and, although no final scheme can yet be proposed, already it should not be premature to formulate some results to which research is pointing. Before we can produce a perfect figure we need a rough casting on which to work.

The earliest Roman tradition about coinage is of a very mixed character.² A number of references to Roman coins—scattered at intervals over the period of the Kings and the Early Republic—may be dismissed as later intrusions. The golden prime of the Etruscan Kings will surely have known the precious metals—perhaps actual coins of foreign cities; but it has no coins of its own to show. A more trustworthy tradition tells of a form of reckoning in oxen and sheep—the ‘pecunia’ (from ‘pecus’, ‘flock’), which became the Latin word for money—only giving place officially to the currency of uncoined bronze (‘Aes Rude’) in the age of the Decemvirs. The picture of the debtor to the State driving in his oxen and sheep, or later carting his bronze in wagons to the Aerarium, may strike us as comic; but, though the tradition possibly errs in carrying down the reckoning in oxen and sheep to too late a date, the currency of ‘Aes Rude’ certainly lasted down into the third century B.C. Early Rome ‘post exactos reges’ seems to have been primitive and poor to a degree hard to realize under the blaze of her subsequent greatness.

The intervention of Rome in Campania must have made her familiar—if not so before—with coins of Naples and other Greek cities. But the only Roman coin of the period seems to be a product of the mint of Naples, a small bronze in Neapolitan style, with the Neapolitan types of Apollo and forepart of man-headed bull, but with legend ΠΩΜΑΙΩΝ replacing ΝΕΟΠΟΛΙΤΩΝ.³ The precise occasion is unknown.

In 289 B.C., at the close of the great Samnite Wars, the office of *iiiviri* of the mint was instituted. The bronze bars, bearing types on both sides, the so-called ‘Aes Signatum’, intermediate between ‘Aes Rude’ and ‘Aes Grave’ (uncoined and coined bronze), seem to be the only representatives of their work for the first twenty years.⁴

Before we turn to the first chapter of Roman coinage, which opens in 269 B.C., it may be helpful to explain the general plan that is here followed. On the one side is the coin-material, already collected and analysed with a high degree of thoroughness, on the other the general plan of Roman and Italian history. Setting the two together we hope to be able to select that one of the possible interpretations of the coin-material that actually fits the historical setting. Despite the numismatic detail, the general interest of the theme has made it seem appropriate to this historical *Journal*. Evidence from special branches of

¹ For a bibliography nearly complete up to its date see H. Mattingly and E. S. G. Robinson, ‘The Earliest Coinage of Rome in Modern Studies,’ *Num. Chron.* 1938, 1 ff. Add now: H. Mattingly, ‘Aes and Pecunia,’ *Num. Chron.* 1943, 21 ff.; ‘The Little Talents of the West,’ *ibid.*, 14 ff.; T. O. Mabbott, ‘The Meaning of the Types of Roman Republican Bronze,’ *Num. Rev.*, New York, 1945, no. 7, pp. 5 ff.; J. G. Milne, ‘The Aes Grave of Central Italy,’ *JRS* 1942, 27 ff.; ‘Roman Literary Evidence on the Coinage,’ *JRS* 1938, 70 ff.; ‘Pliny on the First Coinages of Rome,’ *CR* 1936, 215 ff.; C. T. Seltsman, ‘Bigati and Argentum Oscense,’ *Num. Chron.* 1944.

² For the early tradition see article on ‘Aes and Pecunia,’ quoted in note 1 above.

³ This is the only true representative of that Romano-Campanian coinage that has bulked so large in modern studies: cf. H. Mattingly, ‘The Romano-

Campanian Coinage from a New Angle,’ *Journal of the Warburg Institute*, 1937, 197 ff.

⁴ These bars weigh on the average about 6 pounds of 10 oz. each (of the later Roman pound). Excessively rare as they are to-day, they were not always so, as is proved by the occurrence of fragments, with copper coins going down to the first century B.C., in a number of hoards. One only bears a legend, ROMANO; but the types of all—such as shield and sword, trident, anchor, and caduceus, elephant, sow, ox—seem to fall within or near the Roman sphere. Our tradition, which knows of a coinage preceding the round *asses* and characterized by types of domestic animals seems to preserve faint but unmistakable traces of these bars. Other bars, with more rudimentary types, such as fishbone pattern or crescents, seem to be nearer to the ‘Aes Rude’, and therefore earlier.

The value of a bar of 6 lb. should be that of a Neapolitan silver *nummus* (see below).

study—as of hoards, types, metrology, the coinage of the Latin colonies and Italian cities—has been adduced where apposite. But some at least of these branches demand separate and fuller treatment. My immediate object is to blaze a trail: the complete motor road can follow later.

The success of this paper will rest mainly on three postulates—

- (1) the Romans struck their first silver in 269 B.C.;
- (2) the X denarius was not struck before c. 187 B.C.⁵;
- (3) one at least of the first (ROMANO) Roman silver issues ran for forty-nine years.

Of these postulates, the first two give us upper and lower limits of time, less than a century apart. They are, I would claim, beyond any reasonable doubt. The third—which will be discussed in detail below—is less sure, but certainly promising enough to deserve a thorough trial. If it should prove to be correct we must be drawing in very close to the lost historical facts which we are trying to rediscover.

I. THE FIRST MONETARY SYSTEM OF ROME: THE ROMANO-SILVER AND ITS AES GRAVE

The Romans may have been slow to inaugurate a coinage, but there was nothing mean or narrow about that coinage when at last it came. What we find is, in fact, something quite astonishing—a magnificent system of four separate mints, each issuing its fine silver *nummi* and its imposing *asses* of bronze.⁶ The general scheme is this:—

| | Mint A. | Mint B. | Mint C. | Mint D. |
|-------------------------------------|---------------------------------|--|------------------------|--|
| Silver- <i>nummus</i> —Didrachm. | Hercules—She-wolf and twins. | Mars l., oak-leaf— Horse's head, corn-ear. | Apollo—Horse, star. | Diana, symbol— Victory, single and double Greek letters. Diana—Diana. ⁷ |
| Bronze (Aes Grave) —As. | Diana—Wheel. | Fontus ('Young Janus')— Mercury. | Apollo—Apollo. | |

The only legend is ROMANO on the reverse of each of the didrachms. Light token Aes accompanies the silver in Mints A, B, and D, perhaps not in C. There are marks of value on the Aes (from Tressis, Dupondius, As to Semuncia, III, II, I, S, . . . , . . . , . . . , Σ), but not on the silver. The only subdivision of the silver didrachm is a very rare *litra* (1/10th) in Mint B.⁸ The standards are: for the *nummus*, c. 6½ scruples in B and C, c. 6¼ scruples in A, c. 6 in D, for the *as*, 300 scruples in C, 288 in B, 240 in A and D.

The existence of four mints is deduced from the four distinct styles,⁹ the four distinct sets of types, sharing the legend ROMANO, the variations of standard and the absence of any sign of transition from one series to another. The kinship of *nummus* to *as* is indicated in Mints C and D by the common obverse type. For Mint B it is inferred from the later, ROMA, issue, in which very similar types of *nummus* and *as* are linked by the common symbol, sickle. There remain over a *nummus*, parallel to the other three, without an obvious correspondence in Aes Grave, an *as*, parallel to the other three, without an obvious correspondence in silver. These are presumably to be combined, as we have combined them, in Mint A: confirmation will be found below. Definite links between the four series exist, but they are such as to suggest not succession within a single mint, but common participation in one general plan. Thus, the *as* of Mint A is related by its obverse, Diana,

⁵ See Mattingly and Robinson, 'The Date of the Roman Denarius,' *Proc. Brit. Ac.* xviii, 2, 1933, 211 ff.

⁶ *Nummus* is derived from Greek νόμος, 'standard coin,' familiar in South Italy and Sicily: cf. op. cit. in note 5, Appendix I, 254 ff. The derivation of *as* is unknown. Its by-form *assis* might link it to *asser* (or *assis*) 'bar', or to *axis* (*assis*) 'wheel'. *As* means 'unit', 'ace' as well as standard coin. Some relation, then, if only by way of false analogy to Greek εἰς may be suspected; but the Doric forms, ἄς, ἄ is quoted in Forcellini's dictionary seem to lack ancient authority.

⁷ For all details see E. J. Haeberlin, *Aes Grave* (Frankfurt, 1909): here, only the types of the *as*

are quoted. For the coinages here discussed see also M. v. Bahrdfeldt, 'Le monete romano-campane,' *Riv. It. Num.* 1899, 387 ff.; 1900, 11 ff.; H. A. Grueber, *Coins of the Roman Republic in the British Museum*, 3 vols., 1910: A. Sambon, *Les monnaies antiques de l'Italie* (incomplete, vol. i only), 1903: W. Giesecke, *Italia Numismatica* (Leipzig, 1928); *Sicilia Numismatica* (Leipzig, 1932).

⁸ Cf. M. v. Bahrdfeldt, op. cit., 1900, 33 f. (wt. 0.65 gm.).

⁹ In Aes, as in silver. Some resemblance between silver and *aes* may be seen in each mint, but struck silver and cast *aes* are too unlike to admit of easy comparison.

to that of Mint D. The Apollo of Mint C balances the Diana of Mint D. In both mints the Aes Grave shows the same curious characteristic—the obverse and reverse types are the same for each denomination, except that on the reverse the direction is changed from right to left. Mint B is linked to Mint D by its Aes Grave: each of its denominations, from Semis to Semuncia, uses the obverse type of Mint D, adding reverses of its own.

The coinage is clearly bimetallic—silver and token Aes for the cities, Aes Grave—value bronze—for the country.¹⁰ The *nummus* presumably equalled the same number of *asses*—six—in each group.¹¹ If so, the relation of silver to bronze varied, not inconsiderably, from group to group. Account was taken of local conditions rather than of complete uniformity. Of the standards of the silver the $6\frac{1}{2}$ scruples of Mints B and C is approximately that of Naples, the $6\frac{1}{4}$ scruples of Mint A approximately the same as that of Alexandria: the six scruples of Mint D—later to become the standard of all four mints—is very close to the reduced standard found at Tarentum after the Pyrrhic War.¹² Of the standards of the *as*, the 300 scruples of Mint C can be paralleled closely at the Mints of Luceria and Venusia in Apulia: the 288 scruples of Mint B is the later Roman pound: the 240 scruples of Mint D—five-sixths (10 oz.) of that pound—is the so-called ‘Oscan’ pound of Haeblerlin.¹³ It was destined later to become the standard in all mints. The types are mainly of a general character, not decisive of mint or date; what needs immediately to be said of them will be found in the notes.

Four contemporary ^{13a} issues of silver and bronze in the Roman name at four distinct mints can have only one meaning—a coinage not for Urbs Roma only, but for Roman interests throughout Italy as well. The mint of Rome must have been seconded by three other mints in Italy. It is obviously impossible not to associate these mints with the new financial administration of Italy, introduced in 267 B.C., when the ‘*quaestores classici*’ were first appointed for the Italian ‘provinces’. The supply of coin throughout Italy is only a special case of the general financial principle.

While holding fast to this certainty one must freely admit that the exact correspondence between mints and ‘provinces’, which may have existed originally, cannot be fully recovered. The evidence of the coins on the one hand, the tradition of the ‘provinces’ on the other, are both too imperfect.

Mint A of the coins must represent Rome itself. The types of its didrachm refer directly to the two consuls of 269 B.C.¹⁴ Its *as* is certainly the predecessor of the famous Janus-Prow *as*, which is so clearly marked out later as the main series of its time. The mint no doubt served Latium as well as Rome—perhaps even Campania, with its capital city of Capua.¹⁵

Mint B is closely associated with Etruria and the North. Types of its silver and token Aes are copied at Cosa in Etruria: its token Aes is known in barbarous imitations, usually and probably rightly assigned to Cisalpine Gaul. Among the votive offerings at Vicarello

¹⁰ So too in Sicily the Sicels had a currency of bronze, while the Greek cities gave priority to silver: the *litra*, the tenth of the Greek *nummus*, was the silver equivalent of the pound of bronze.

¹¹ The libral *as* was often equated by later writers with the obol (Aeginetic). The sixth of a didrachm should strictly speaking be called a diobol, but the Aeginetic drachm (over $5\frac{1}{2}$ scruples) was not so very much lighter than the didrachms in question.

¹² A table of weights, compiled for me by my friend, Mr. E. S. G. Robinson, shows the Diana didrachm c. 10 gm. lighter than the reduced Tarentine: itself, it does not quite reach the 6 scruple standard.

¹³ See the introductions to the appropriate sections in Haeblerlin's *Aes Grave*.

^{13a} It is, of course, impossible as yet to prove that all four issues were precisely contemporary. We go on, in fact, to suggest that they were not so. But that they are *approximately* contemporary is proved—

(1) by the limiting date, 269 B.C., for the first issue of Roman silver, and

(2) by the lower limits set by the succeeding ROMA issues, themselves followed by the denarius. There is no room in time for the ROMANO-issues to fall far apart from one another.

¹⁴ Hercules of the obverse, founder of the Fabian gens, refers to C. Fabius, the she-wolf and twins of the reverse to Q. Ogulnius, who, as aedile with his brother in 296 B.C., had ‘placed likenesses of the twins who founded the city under the udders of the she-wolf’ (Livy x, 23, 11–12). Groag (P-W s.v. ‘Fabius’, col. 1749) questions whether the connexion of the gens *Fabia* with Hercules was earlier than Augustus, but he himself cites evidence which might be held to refute his own view.

¹⁵ Jérôme Carcopino (‘La louve du Capitole’—*Bull. Assoc. G. Budé*, 1925) thinks that the twins, Romulus and Remus, were the founders of the two cities, Rome and Capua, respectively. When Capua revolted and fell, Remus ceased to have any proper function, and fell into neglect. The reverse, she-wolf and twins, recurs on the quadrans (of the 6 oz. standard) probably struck at Capua (see below).

in N. Etruria small Aes, cast and struck, of this mint preponderated over that of other series. A hoard of *asses* of the mint was found near Ostia. The actual site of the mint—Ostia, Cosa, Ariminum (?)—awaits determination. Its products certainly tended to circulate in N. and N.E. Italy.¹⁶

Mint C is intimately related to Beneventum by the style and types of its didrachm compared with those of the local Aes.¹⁷ The standard of its Aes Grave can be matched in Apulia. Beneventum itself may have been the mint.

Mint D was presumably a Greek city—it alone of these mints uses Greek letters as mint-marks. It was also, as we shall shortly see, an intermediary between Rome and Alexandria. The standard of its silver is very close to that of Tarentum after the Pyrrhic war. Tarentum itself may be suggested as the site.¹⁸

The Italian 'provinces' were apparently four in number; for the number of quaestors—by then four—was doubled in 267 B.C. to provide for them. These quaestors were named 'classici'—'quaestors of the fleet', perhaps, rather than quaestors concerned with the classes. The 'provinces' of which we have definite information—in each case much later than 267—are (1) the Gallic province (? of Ariminum), (2) Ostia, (3) Cales. The fourth is unknown. Mommsen thought that it might be represented by the second quaestor whom we find later in Sicily. This is quite uncertain. Even if the fourth Italian quaestor was later moved to the island, he cannot have been there in 269. He should rather be sought in S. Italy.¹⁹

If we now bring together the evidence from the coins and literary tradition, Mint C—Beneventum (?)—will appear as a reasonable representative of the province of Cales, Mint D of the unknown province in S. Italy. For Ostia and Ariminum the coins have only one mint—Mint B—to show. Perhaps Ostia served a northern circulation, and Ariminum, as a mint, was yet to be. The result is obviously imperfect, but far from discouraging, considering the limits of our evidence.

It might be objected that the postulate of Roman mints in a Latin colony like Beneventum and a Greek ally, like Tarentum, raises very serious constitutional difficulties. The evidence of the coins is very strong. Rome was striking at three mints in Italy other than Rome. One of these may have been Ostia, a community of citizens, in which a Roman mint is less surprising: the other two cannot reasonably be assigned to any Roman colony, but must belong to some peregrine or 'quasi-peregrine' community. Our ideas of constitutional possibilities have to be expanded. Naples lent her mint for a moment to Rome to strike the first of all Roman coins (see p. 65 above). When Tarentum revolted to Hannibal, a Roman garrison still held the citadel. Where there was a Roman garrison there might surely be a Roman mint. It is submitted that Rome must have asked and obtained facilities for issuing her own coins from Latin colonies or allies, where need required.

The first Roman silver was certainly struck in 269 B.C.²⁰ But if the Italian mints of Rome are to be so closely associated with her Italian provinces, can they be dated earlier than 267—the year when those 'provinces' began? Instead of an initial date of 269 for

¹⁶ For Cosa see A. Sambon, op. cit., pp. 82 f. For imitations see M. v. Bahrldt, op. cit. *Riv. It. Num.* 1899, 401 ff. For evidence of hoards see L. Cesano, *Atti e Mem. d. Inst. It.* i, 47 ff. Ariminum has light token Aes in a style not unlike that of this mint (A. Sambon, op. cit., 88). The Mars of the obverse owes something to the head of Leucippus at Metapontum, struck for some years down to about 300 B.C. (see W. Giesecke, *Italia Numismatica*, 95, pl. 13, 1, 2, 6).

¹⁷ See A. Sambon, op. cit., 115.

¹⁸ Over 300 *unciae* of this series were found at an unknown site in Apulia (L. Cesano, op. cit., in note 16, Tab. i, after p. 82). When Tarentum surrendered to Rome in 272 B.C. it became a *socius navalis*, but did not retain full autonomy: a Roman legion was stationed in the citadel (*CAH* vii, 655). From 213–209 Tarentum was in revolt against Rome, but the citadel was still held. In 209 100 lb. of gold from

the special reserve was specially allotted to Q. Fabius the consul for the citadel at Tarentum (Livy xxvii, 10, 11–13).

¹⁹ See Th. Mommsen, *Römisches Staatsrecht* ii³, 570 ff. Johannes Lydus, *De mag.* i, 27, gives the year 267 B.C. Mommsen reckons four quaestorships—Ostia, Cales, Gaul (Ravenna or Ariminum), and Lilybaeum (?), possibly included with the strictly Italian quaestorships in Tac. *Ann.* xi, 22 ('*duplicatus numerus*', etc.).

²⁰ Cf. O. Leuze, 'Das Datum der ersten Silberprägung in Rom,' *ZfN* 1920, 15 ff., where the ancient evidence is quoted: the *Chronicon Paschale* gives the year 273 B.C. marked both by the Roman consuls and by the regnal year of Ptolemy II. The evidence of the coins themselves is entirely consistent with this date. The *nummus* of Mint C is from the same hand as the local Aes of Beneventum, struck not earlier than 268, when Maleventum received its new name.

all mints, we have to admit the possibility of 269 for Mint A only, 267 for Mints B and D. In Mint A—Rome, as we shall shortly see there was a change of type and legend, *c.* 235 B.C. For Mint C there is no clear evidence. For Mint B the imitation of its types at Cosa in Etruria may have significance. Cosa must have been the base of the Roman armies that routed the Gauls at Telamon (225 B.C.), and so have enjoyed one brief hour of fame in Roman history. If that were the occasion of the imitations at Cosa, we should presume that the ROMANO-issues of Mint B were still circulating in that year. For Mint D the evidence is much stronger and more direct. The *nummus* shows a sequence of 49, marked by Greek letters A-Ω, AA-ΩΩ, and AB (apparently the beginning of a new third alphabet). The decadrachms of Arsinoe at Alxandria struck after her death in 270 B.C. show an almost identical series, A-Ω, AA-ΩΩ, A, B—50, where Rome has 49. This form of numeration, not very uncommon in Greek inscriptions,²¹ is not common on coins, and there are no other long continuous sequences quite like the two here in question. The two series must run parallel, and the unit represented by each letter should be a period of time—the calendar year in fact.²² Fifty years reckoned from 269 B.C. takes us down to 220, reckoned from 267 to 218—the last year in either case not being recorded on the Roman side. One would have expected, one must admit, to find the silver of Mint D struck on the Alexandrine standard; but, if that mint was Tarentum, it is intelligible that a local Tarentine standard should have been preferred.

It has hitherto been unusual to allot so long a run to the ROMANO-issues; but there is nothing in the evidence to forbid it, and the results that seem to follow are very satisfactory.

Our dates, then, for the first Roman issue will be :—

Mint A. 269 B.C.—*c.* 235 B.C. (see below for further discussion)

Mints B and C. 269 or 267 B.C.—*c.* 235 B.C. (see below for further discussion)

Mint D. 269 or 267 B.C.—220 or 218 B.C. (see below for further discussion).

II. ISSUES INTERMEDIATE BETWEEN THE ROMANO-ISSUE AND THE DENARIUS

| | <i>Mint A.</i> | <i>Mint B.</i> | <i>Mint C.</i> | <i>Mint D.</i> |
|-------------------------------------|---|----------------------------------|--|-------------------------------------|
| Silver- <i>nummus</i> —Didrachm. | Quadrigratus : Fontus—Jupiter and Victory in quadriga r. | Mars r.—Horse's head, sickle. | Apollo r.—Free horse. | Mars r.—Free horse, club. |
| Bronze (Aes Grave) —As | Janus—Prow. | Fontus—Mercury, sickle. | Apollo—Apollo, vine-leaf. ²⁴ | Diana—Diana, ²³ club. |

There are half-pieces of the silver (drachmae) in Mints A, B, and C, with the same types as the *nummus*, except that in A the quadriga is turned l. instead of r. There is no corresponding piece in Mint D. A half-piece, with types, head of Jupiter-Victory erecting trophy—the 'victoriate'—is not obviously attached to any one of these mints, though it certainly seems to replace the half-quadrigratus of Mint A after the earliest issues. The only legend is ROMA²⁵ on the reverse of the silver, token bronze and struck value bronze (see below). There are no marks of value on the silver. On the bronze, *as*—*uncia* are again marked I, S, . . . , . . . , . . . Decussis, Tressis and Dupondius (found only in Mint A) bear the marks x, III, and II. For the Aes only the types of the *as* are here quoted: for all further detail see again Haebler's *Aes Grave*. Gold, corresponding to the quadrigratus, is found in Mint A only. Small, token, Aes, is struck at all four mints.²⁶ In Mint A, but in no other, the *as* undergoes two reductions, and in these the lower denominations are struck, not cast.

²¹ See M. N. Tod, *BSA* xxxvii, 236.

²² This suggestion, made already by J. N. Svoronos in his Τα Νομίσματα τοῦ Κράτους τῶν Πτολεμαίων (*Die Münzen der Ptolemäer*) 1908, i, 148 ff., 217 ff., iv, 83 ff., 143 ff., has been unduly neglected. Svoronos thinks that Rome and Egypt agreed to issue these coinages, side by side, for a term of fifty years. He himself reckons from 270, the year in which Arsinoe died.

²³ This series, for some reason unknown, is excessively rare.

²⁴ For the coins, see the works quoted in note 7 above.

²⁵ ROMA might seem to indicate the sovereignty of Rome more explicitly than ROMANO; but perhaps the distinction is little more than formal. The small token bronze, with types, Diana-Hound, has ROMA, whilst the *nummus*, Diana-Victory, has ROMANO.

²⁶ The little pieces, with rev. prow to right, and obv. head of Mercury and head of Bellona, respectively, have usually been called 'semunciae', and 'quartunciae', and attached to the first and second reductions. They bear no mark of value.

Beside the struck pieces of the first reduction with rev. prow is found a series from *triens* to *uncia*, with original types of its own. Its style has always caused it to be associated with the quadrigatus.^{26a}

In all four mints the standards are now uniform—*c.* six scruples for the silver (as already in Mint D of the first issue), 240 scruples for the *as* (as already in Mints A and D of the first issue). If, as we suppose, a *nummus* equals six *asses*, the ratio of AR : AE is now 240 : 1. The system is still bimetallic, but the inconveniences of slight differences between the mints have not unnaturally led to a complete standardization.²⁷

Nummus and *as* are bound in Mints B and D by the obvious link of a common symbol, in Mint C by the common obverse, Apollo : the presence of a symbol, vine-leaf, on the *as*, which is absent from the *nummus*, is a minor irregularity, which demands further research. In Mint A the double-headed Fontus of the *nummus* is closely related to the double-headed Janus of the *as*, and the relationship of *nummus* and *as* is confirmed by a study of the long and varied development which each of them undergoes.

The succession of these new, ROMA, issues to the original ROMANO is definite and clear in the three mints B—D. In B and C the types are actually carried on, with only minor modifications : in D the types of the Aes continue as before on all denominations, except for the addition of the symbol, a club. In Mint A the succession is as certain, if not quite so obvious : the prow, replacing wheel, on the reverse of all denominations of Aes is the clearest piece of evidence. The style is little changed in Mints A and D, very markedly changed in Mints B and C : a change of mint city—hardly of 'province'—might be considered.

The simplest and most satisfactory plan—in theory—would be to let the ROMA-issues supplant the ROMANO at a single stroke, and leave them to run without interruption, until the denarius was introduced. This solution is too simple and must be renounced. The ROMANO-*nummus* of Mint D continued in issue till 220 (or 218) B.C. : for the ROMA-*nummus* of Mint A we have soon to indicate a change as early as *c.* 235 B.C. Mint A stands clearly apart from Mints B to D in the reductions which its Aes undergoes. Mint D differs from Mints B and C in having no half-piece in silver and in changing the types of its *nummus* from the ROMANO-issue. This is assuredly a case where the pure regularity of a scheme has been warped by the pull and drag of circumstance. How exactly it has been warped is hard to determine. We shall offer some suggestions when we have analysed and interpreted the material of Mint A, the one mint in which the historical sequence can be surely traced.

MINT A. ROMA-ISSUES. ANALYSIS

Silver. The silver didrachm (the 'quadrigatus') falls into a number of distinct classes²⁸ :—

(1) Early, fine style, relief sometimes very high. With these go the half-pieces of quadriga-reverse and the bulk of the gold six- and three-scruple pieces.

(2) Related to (1) but in a curious, flat, and inferior style. Large, long heads.

(3) A late derivation from (1), in a style of its own. Mint-mark, corn-ear. A small group.

(4) Fine, florid style, distinct from (1). A few gold pieces of six and three scruples belong with this group.

(5) Possibly derived from (4), style florid, but inferior. Thick short necks and a 'cherubic' portrait are characteristic.

These five groups agree in one notable detail : the Victory on the reverse standing behind Jupiter is cut off at the waist by the line of the car. Victory, seen full-length, behind the line is a feature of

^{26a} Cf. Haeberlin, *Aes Grave*, 134 ff. and pl. 56.

²⁷ In both silver and bronze, the standardization is downwards—to the lowest standard in use in the first issue. The triumph of the six-scruple *nummus*

was probably due to its close agreement with the standard of Hiero of Syracuse.

²⁸ See again the works quoted in p. 67, n. 7, and add : P. le Gentilhomme, 'Les Quadrigati Nummi et le dieu Janus' in *Rev. num.* 1934, 1 ff.

(6) Long, narrow heads, often with weak features. The last sometimes show the peculiar truncation λ : very rarely there is a pellet below it. With the rare 'quadrigati' with the pellet go the excessively rare gold pieces of four scruples, marked XXX.

The only standard that can be clearly observed is the norm of *c.* six scruples, but there is a tendency to fall away from it, specially marked in groups (5) and (6). A large and miscellaneous class of 'quadrigati', in inferior style, shows debasement of metal as well as reduction of weight. A few, sporadic 'quadrigati' show eccentric styles, which can be closely matched on the 'sextantal' *as* (2 oz. or over) of the period of the denarius.

While much still remains to be discovered, a few points, necessary to our argument, may at once be emphasized:—

(1) The coinage begins in Rome and is centred round it (see below).

(2) It spreads from Rome to other mints, which must be regarded not as independent units, but as branches of the Roman mint. Classes (2), (3), and (6) must belong to such branches.

(3) It extends over a long period of time.

At one end it touches the ROMANO-issue (see below), at the other the denarius; 'quadrigati' of classes (5) and (6) come very near to early denarii in style, in form of legend, and other details.

The victoriata, with obverse, head of Jupiter—rev. Victory and trophy, is said by Pliny the Elder to have been imported from Illyricum ('ex Illyrico advectus') and to have been used 'mercis loco', as merchandise, not as coin.²⁹ It was struck at many mints, which use symbols, letters, or monograms to distinguish their issues; but the earliest issues, which lack these marks, have never yet been closely analysed, either by themselves or in relation to quadrigati. As the quadrigatus, after class (1), has no longer a half-piece of its own reverse type, and as quadrigati and victoriates were certainly struck over much the same period of time, it is natural to assume that the victoriata served as half-piece to the quadrigatus. As regards length of issue, the victoriata was certainly well established before the end of the Second Punic War. It outlasted the quadrigatus, not only, like it, overlapping the denarius, but actually running parallel to the denarius in no small number of issues.

Aes. The Aes of the Janus-Prow series exhibits two characteristics, unmatched in the issues of the other mints:—

(a) it undergoes two reductions of weight;

(b) in those reductions struck pieces appear beside the cast.

Analysis presents the following picture:—

| | | | |
|---------------|--|------------|---------------------|
| <i>Cast</i> | A. 'libral' standard (<i>as</i> of 10 oz.) | Prow to r. | <i>As—Uncia</i> |
| | B. " " " | Prow to l. | <i>As—Sextans</i> |
| | C. 1st reduction ³⁰ (<i>as</i> of 6 oz.) | " | <i>As—Quadrans</i> |
| | D. 2nd reduction (<i>as</i> of 3 oz.) | " | <i>As—Triens</i> |
| | (also Decussis, Tressis, and Dupondius) | | |
| <i>Struck</i> | A, B. 'libral' standard (<i>as</i> of 10 oz.) | | None. |
| | C. 1st reduction (<i>as</i> of 6 oz.) | Prow to r. | <i>Triens—Uncia</i> |
| | D. 2nd reduction (<i>as</i> of 3 oz.) | " | <i>Semis—Uncia</i> |

Closely related to the struck pieces of the first reduction is a series of the same standard, but with divergent types: Juno-Hercules and Centaur, Head in boarskin—Bull and snake, etc. All these struck pieces have legend ROMA on reverse.

The Janus-Prow Aes, like the quadrigatus in silver, begins in Rome and is centred

²⁹ Pliny, *NH* xxxiii, 46; cf. E. A. Sydenham, 'The Roman Victoriata,' *Num. Chron.* 1932, 73 ff.

³⁰ The two reductions are quite clear in the struck issues, though much obscured in the cast, where there seems to be an almost uninterrupted decline in weight.

The evidence of the L mint shows conclusively that the cast and struck pieces of the reductions *do* belong together. The standards, then, were the same in both cases, even if they only appear at all clearly in one.

round it, but presumably extends to other, branch, mints. The only one, certainly known as yet, is that which signs L³¹: it issues in the second reduction (*as* of 3 oz.):

| | | |
|---------------|------------|-----------------------|
| <i>Cast</i> | Prow to r. | <i>As, Semis.</i> |
| <i>Struck</i> | „ | <i>Semis, Triens.</i> |

It has been customary—and natural enough—to place the ‘libral’ issues first—prow to r. then prow to l., followed by the two reductions. The actual order, however, must be ‘libral’, prow to l., then the two reductions, then ‘libral’ prow to r. This is both unexpected and important and must be justified in full.

- (a) B has mark of value on reverse only of *as*: so, too, have C, D, and a part of A. The rest of A has mark of value on both sides, agreeing in this point with the sextantal *Aes* which accompanies the denarius.
- (b) B has no mark of value on obverse of *semis*, *triens*, *quadrans*, and *sextans*. A, C, and D have mark on both sides.
- (c) B has Hercules with club on obverse of *quadrans*. A, C, and D have no club. B has no wing on cap of Mercury on obverse of *sextans*. A, C, and D have wings. A agrees in so many points with C and D, against B, that it is not possible to place B in between it and them. Further arguments show where A has to be placed.
- (d) The prow is to the left in B and the cast parts of C and D, to the right in A and the struck parts of C and D. Prows to the right occur regularly on cast coins of the L mint (second reduction, D), rarely on cast coins of the same reduction in the main series. The direction to right is retained on the sextantal and all later *Aes*.
- (e) The helmet of Mars on the obverse of the *triens* in C and D seems to be intermediate in shape between the helmets of A and B.
- (f) B is the issue that immediately follows Diana-Wheel of the ROMANO-issue. It is similar to it in style and fabric and shares with it the curious omission of the *uncia*.
- (g) Among the obverses of A are found short, thick heads, which must be associated with similar heads on the *quadrigati* of Class (5)—a class unquestionably late.

B, then, must be the first issue, followed by the reductions C, D. A must come last of all. Rome went off the libral standard and returned to it again.³² The arguments adduced above may seem rather trivial and humdrum to sustain so important a conclusion. They are such accidental betrayals of the sequence of work at the mint. But they are valuable for that very reason: mint-masters do not vary the more or less insignificant detail of their work simply in order to mislead researchers of later days. They are bound to leave their traces in such detail, if one has material enough to examine and the patience to examine it thoroughly.

The outlines of a satisfactory chronology now begin to appear. The libral series of Janus, with prow to left, falls before the Second Punic War, the two reductions of weight reflect the stress of that great struggle, the return to the libral standard, with prow now turned to right, marks the final victory. Of the *quadrigati*, classes 1 and 2 fall, mainly, before the Second Punic War, classes 3 and 4 within it, classes 5 and 6 after its end. The *quadrigati*, of inferior style, reduced weight and debased metal, may represent that debased

³¹ The L mint also produces *victoriatas* and *quinarii* in silver, and *Aes*, *sextantal* and *uncial*. In style, it is very close to two mints that sign respectively CA and P (P), Canusium and Paestum (?). In a series of *Aes*, shared by this mint with a mint that signs T, types of the *Dioscuri* are very prominent. One thinks of Tarentum, the colony of Sparta, home of the two gods, and of Locri, the home of their legend as helpers in battle.

The attribution of the L coins to Luceria (Grueber, *BMC Rep.* ii, 145, n. 1) rests only on vague reports of finds near that city. Luceria has a coinage of its own, with distinctive style and types.

³² There is nothing in itself improbable in a return after a war to a standard prevailing before it. Such a

return must be readily admitted, if a balance of evidence points towards it.

If the return to libral standard is accepted on general grounds, it might be possible to relate to it the remarkable *as*, of libral standard (10 oz.), with obv. Goddess facing in triple crest, rev. Ox, ROMA, L (or *caduceus*). This *as* is unique in bearing the signature of Rome and in having no subdivisions. It seems to be, as Haeblerlin has already observed (*op. cit.*, i, 141 ff., ii, pl. 55, 56), a commemorative piece. The goddess would be Ma (Bellona), the war-goddess who attends on Cybele, the giver of Victory over Hannibal, the ox would be the symbol of ‘*pecunia*’, ‘money’. The *caduceus* suggests trade: L = ‘*Litra*’—pound?

silver coinage, which Zonaras records.³³ The victoriate ran beside the quadrigatus over the greater part of its course: it may perhaps have been a little later in origin. Of the gold issues, that in the style of class 1 of the quadrigati probably falls in the year 217 B.C., when Naples, Paestum, and Hiero of Syracuse all sent gifts of the precious metal to Rome (Livy xxii, 32, 4 ff.; 36, 9; 37, 5): the second, in the style of class 4 of the quadrigati, may belong to 209 B.C., when gold was withdrawn from the special reserve for purposes of war. The piece of four scruples marked XXX shows clearly the style of class 6 of quadrigati, probably near its close. A date after the Second Punic War is to be expected.³⁴

The first reduction of the Janus-Prow Aes fell in 217 B.C. under a 'lex Flaminia minus solvendi'; the *as* of 6 oz. was substituted for the *as* of 10 oz. as the unit of reckoning.³⁵ The substitution of the *as* of 3 oz. for that of 6 followed after an interval—perhaps in the year of crisis, 209 B.C. If the *nummus* of six scruples was worth six *asses* of 240 scruples, it equalled ten *asses* of 144: in other words, it was the 'denarius nummus' (δεκάλιτρος στάτηρ) of the litra. The same *nummus* must have equalled twenty of the *asses* of seventy-two scruples. It was the half-piece that now became the 'denarius' or 'tenner'.³⁶

The struck pieces of the first reduction are very common. They are used for overstriking by the rebels of Capua, Calatia, and Atella. Though this is not actually inconsistent with a first issue of these pieces in 217 B.C., it certainly suggests that they had been longer in circulation. Perhaps it is most probable that struck sub-divisions of an *as* of 6 oz. were issued beside the quadrigati from its beginnings, that the two *asses* of 10 oz. and 6 oz. respectively existed side by side down to 217 B.C., and that then the lighter replaced the heavier as unit of reckoning. What is true of the first reduction of the Prow-series will apply also to the pieces of the same weights, but divergent types noted above. The δεκάλιτρος στάτηρ was a Sicilian conception: the quadrigatus, as we shall see in a moment, shows strong Sicilian influence in its types and styles. It would be perfectly natural then, that it should come to Rome as a 'denarius' from the first.

The two great series of quadrigati and Janus-Prow Aes obviously centre on the mint of Rome. They are the essential coinage of the Roman State, and if other mints issue them it is as auxiliaries of the Roman. Their succession to the silver and Aes of the ROMANO-series is fortunately clear. The quadrigatus shows a style very closely akin to that of the Hercules—she-wolf *nummus*. Its reverse, Jupiter in quadriga, like the she-wolf and twins, copied a work set up by the brothers Ogulnii in 296 B.C. The prow on each denomination of

³³ viii, 26, p. 1416 C: in 217 B.C. Rome debased (χαλαρῶ προσμίζει) her silver, which before had been pure (ἀμιγὲς καὶ καθαρόν).

³⁴ In 209 B.C., after the defection of the Latin colonies, 4,000 lb. of gold were taken out of the reserve: 500 lb. each were allotted to the consuls, the proconsuls, M. Marcellus and P. Sulpicius, and L. Veturius, the praetor, a special 100 lb. to the consul Fabius for the citadel at Tarentum: the residue was assigned to provision for the Spanish War (Livy xxvii, 10, 11–13). H. Willers in *Corolla Numismatica*, 310 ff., assigns the 'Oath-scene' coinage to this date, noting that the reverse occurs on a denarius struck by Ti. Ve. a member of the gens Veturia (?) about a hundred years later (Grueber, *BMC Rep.* ii, 281 ff.). As the six- and three-scruple gold pieces show two distinct styles, it seems better to divide them over two occasions. The six-scruples piece was probably the 'talent' of the silver *nummus*, twelve times its value.

A closer attribution of the piece marked XXX must wait, until we can decide to what unit its mark refers. (For the coins, see M. v. Bahrfeldt, *Die römische Goldmünzenprägung*, 12 ff. The coins are certainly genuine.)

³⁵ Cf. Festus, 347 M. The 333,333½ *asses* voted in 217 B.C. for the 'ludi Romani' (Livy xxii, 10, 7) must surely be a converted version of a round sum. 333,333½ *asses* of 6 oz. equal 200,000 *asses* of 10 oz.

Pliny (*NH* xxxiii, 45) thought that on this occasion the *as* was reduced from being the tenth to being the

sixteenth of the denarius: Festus, as far as we can judge from the fragments, shared this view. It is to-day quite certain that the reduction to which they refer is nearly a hundred years later.

³⁶ For the equation, victoriate = 10 *asses*, note the following evidence.

The Roman series of Aes with mint marks, L and P (Grueber, *BMC Rep.* ii, 179 ff., 203 ff.) shows beside the *as* of 12 oz. a *dextans* of 10 oz. The silver *nummus*, then, that contained ten of these *asses* contained twelve of these *dextantes*. Now twelve to one is the relation of talent to *nummus* in the system of the 'little talents' (see Mattingly, *op. cit.*, in note 1 above), and the only talent small enough to have a *nummus* expressed by a bronze piece of this size in place of a silver is the 'Rhegine' talent, the victoriate. Bronze coins of Venusia and Teate actually mark with N (*nummus*) bronze coins comparable in size to these *dextantes*. It appears, then, that at the mints L and P, the victoriate is the 'denarius', containing ten *asses*, of one system of reckoning and the collapsed talent, containing twelve *dextantes* of the other.

Silver coins of Populonia, weighing c. seven scruples, bear at first the mark X, later the mark XX. The later series may be assigned to the close of the Second Punic War. This doubling of the number of units in the *nummus* is exactly what we are postulating for the Roman quadrigatus. (A. Sambon, *op. cit.*, in note 7 above, 48 ff.)

Aes from *as* to sextans exactly balances the wheel in the earlier Diana series. To what year must the change from old to new be assigned? It must be some years after 269 B.C. to allow room for the ROMANO-issues: it must be some years earlier than 217 B.C., to allow room for the first libral issue of Janus, with prow to left. It cannot reasonably be placed as early as the great naval victory of Mylae. Still less can it be assigned to the dragging depression of the middle years of the First Punic War.

A 'Victory' issue in some sense it certainly is, but the balance of argument is in favour not of the actual year of the final triumph of the Aegates Insulae (241 B.C.), but of a slightly later year, 235 B.C., when the danger of a renewal of war, which had suddenly blazed up, as suddenly subsided, and the temple of Janus could be closed as a sign that all the neighbouring peoples were at peace, by land and sea.³⁷

How do the types of quadrigatus and Janus Aes fit in with this proposed date? The prow of the reverse of the Aes is surely the sign of sea-power, not, if we see it right, in the winning, but already won. The obverse types, from *as* to sextans, are Janus, Saturn,³⁸ Mars, Hercules, Mercury—that is to say, the two ancient god-kings of Latium, who came to it by sea, the war-god, the god of strength and gain, the god of trade. C. Duilius, the victor of Mylae, dedicated a temple of Janus; the old temple or doorway of the god was closed, as we have just seen, in 235 B.C. The explanation of the make-up of types clearly lies partly in current history, partly in an application of mythical history to its interpretation. The 'young Janus' of the obverse of the quadrigatus can hardly be any other than Fontus, god of waters, son of Janus. The use of the head as obverse by a member of the *gens Fonteia* is decisive.³⁹ We are still in a phase of Roman religion earlier than that of the late Republic and early Empire which gives form to our modern textbooks. Jupiter on the reverse is the Jupiter Optimus Maximus of the Capitol, driving his car and brandishing his thunderbolt for the destruction of his enemies. The Victory, who holds the reins for him, is not mentioned as part of the group set up by the Ogulnii; was she, perhaps, a later addition? Types of chariots so common in the later Roman series had hitherto been little known in Italy: they had been the distinctive reverse of Syracuse for generations. As the style of the quadrigatus runs very close to that of Hiero, we can hardly err in assuming direct Sicilian influence here.⁴⁰ The gold shows on the obverse the same double head as the quadrigatus: its reverse—two warriors striking a treaty over the body of a pig—is a symbol of a treaty or rather a sworn alliance. It would suit, even better than it would the alliance of Rome with Hiero, the 'coniuratio' of Italy against Hannibal the invader.

The main course of Mint A (Rome) being thus determined, it only remains to relate to it the courses of the Italian mints, B, C, and D. The vital point of difference is that all three of them show no trace of first and second reduction. They must either have ended before the crisis of the Second Punic War or been interrupted by it. The one mint of Rome—or, rather, the one central organization, striking partly in the city, partly at branches outside—bears the whole burden of the war and alone exhibits the marks of the strain. There are various possible arrangements that take some account of the main facts, and no final choice between them is yet possible. It will be enough here to mention one or two

³⁷ If, as appears to be the case, the shape of the Roman prow (ending not in a 'goose's neck', χηνισκός, but in a solid ball) was of new design, it is much more likely to represent the model of the fleet of the Aegates Insulae (241) than of that of Mylae (260). The first Greek coin to show the new 'Roman' shape is the tetradrachm of Antigonos Gonatas, struck to celebrate his victory over the Egyptian fleet at Cos (c. 258 B.C.).

³⁸ That the head is of Saturn, not Jupiter, is proved by a later series of Aes, in which each deity of the obverse has his appropriate emblem on the reverse: the 'harpa' (sickle) of Saturn appears for the *semis* (Grueber, *BMC Rep.* ii, 259 ff.—coinage of Cn. Domi., M. Sila., Q. Curti.). Cf. T. O. Mabbott, *op. cit.* in n. 1 above, who has independently reached the same conclusion.

³⁹ For coins of C. Fonteius, c. 105 B.C., see Grueber, *BMC Rep.* ii, 292 ff. Such Roman deities as did not finally find a place in the Pantheon of the twelve gods—with Roman names co-ordinated with Greek—tended to fall more and more into the background. In many cases glimpses of their early importance can still be caught. The subject deserves further investigation.

⁴⁰ For the style, cf. coinage of Hiero (Giesecke, *Sicilia Numismatica*, 117 ff., and pl. 24, 25) and, even more, the didrachms (ΣΙΚΕΛΙΩΤΑΝ) struck by Rome for the Sicilians under her rule (Giesecke, *op. cit.*, 147 ff., and pl. 27).

For references to the quadrigatus in literature, cf. Giesecke, *Italia Numismatica*, 202; Fr. Hultsch, *Metrologiae scriptorum reliquiae* ii, 76 (Festus 98 M) and 80 (Festus 347 M).

which I reject—with reasons for rejection—and finally outline one, which seems to have good chances of proving true.

A. c. 235–218. ROMA-issues in all four mints, A, B, C, D. 217 onwards. A alone continues in issue.

But it was shown above that the ROMANO-issue in D probably runs down to 218.

B. c. 235–218. ROMANO-issues in all mints.

218. ROMA-issues in all mints, stopping abruptly in 217 in B, C, D.

This would force Mint A out of what seems to be its natural course, and would leave no real room for the ROMA-issues of B, C, D.

C. c. 235–218. ROMA-issue in A, ROMANO in B, C, D.

217. A continues, while B, C, D are closed.

202. ROMA-issues in B, C, D.

It is difficult to make so wide a difference between the ROMA-issues of A on the one hand, and those of B, C, and D on the other.

The system, which is now to be suggested, may seem a little involved, but it avoids all the objections raised to other suggested arrangements above. I owe it to my friend and collaborator in these studies, Mr. E. S. G. Robinson.

c. 235–218. ROMA-issues in Mints A, B, C, ROMANO in D.

The essence of the reform is the levelling of standards. This was unnecessary in D, which already used the standards of the reform. Mints A, B, C now have a half-piece, whereas D has not: perhaps the gap was partly filled by the victoriate, which came into being within this period.

217–202. ROMA-issue continues in A. The ROMA-issues of B, C, and the ROMANO-issue of D dry up (the last date, noted for D, seems to be 220 or 218 B.C.). This is due to interruption of communications in Italy. Rome begins to send out branch mints which strike her types.

202–187 (and later). ROMA-issue continues in A. Mints B and C do not return to life. Mint D resumes with its ROMA-issue (which, like the ROMANO-issue of D, unlike the ROMA-issues of B and C, has no half-piece).

The ROMA-issue in Mint D does not follow nearly so directly on the ROMANO as in Mints B and C. It continues the same types of the Aes, but with the addition of a symbol, a club. But its *nummus* seems to borrow obverse type, Mars, from B, and reverse type, horse, from C. The issue, in fact, has the appearance of a collection of details from the three Italian mints, concentrated in the single one that survives. The victoriate will now serve as half-piece both in Mints A and D.

There is a very striking resemblance between the ROMA-silver of Mint D (but not of Mints B and C) and early denarii—most easily explained if the silver of that mint actually lasted longer than that of the other two.⁴¹

The years that followed the Second Punic War must have been years of unsettlement and confusion. The original organization of the Roman coinage had been upset by the war and could never be restored. *Asses* of three different magnitudes and values circulated side by side—libral *asses* of 10 oz. at six to the *nummus*, reduced *asses* of 6 oz. at ten to the *nummus*, further reduced *asses* of 3 oz. at twenty. As a further complication, foreign coins came in mass from abroad—‘*argentum Oscense*’ from Spain, the ‘*Philippeus*’, the gold stater of Macedon, the Athenian tetradrachm and the light tetradrachm of Asia Minor, called from its type the ‘*cistophorus*’, from the East. The ‘*Philippeus*’, which must have been equal in value to 100 sesterii, was probably called in Rome ‘*centussis*’—the *as* (libral) being identified with the sestertius (2½ *as* piece) of the reduced system of the denarius. Whether ‘*decussis*’ was also the name of any one coin is less certain: it might conceivably stand for the *cistophorus*. The Athenian tetradrachm was nicknamed ‘*trinummus*’, as the

⁴¹ If the view here expressed is correct, some hint of the later date of the ROMA issue in D may be looked for in hoards. Also, one might possibly find quadrigati or victoriate showing the style of Mints B and C.

rough equivalent of three *nummi* of a reduced standard, falling away from six towards five scruples.⁴²

III. THE NEW NUMMUS, THE X DENARIUS

The system of the denarius, though it strictly lies outside our present inquiry, may be briefly sketched, to round off the tale. A new *nummus*, the denarius (X piece) of c. 4 scruples replaces the quadrigatus: it has a half-piece the *quinarius* (V), and a quarter, the *sestertius* (115–2½).⁴³ The *as*, the tenth of the denarius, usually called 'sextantal' (2 oz.) actually in its first stage weighs some half-ounce more.⁴⁴ The quadrigatus survived, for a short time, in sporadic issues. The victoriate was incorporated in the new system and ran in a number of issues, parallel to the denarius, before it lapsed. A close similarity of early denarii to coins of Bruttium has long since been noted, and recent research strongly suggests that the denarius began as an experimental issue in the extreme south, before ever it came to Rome.⁴⁵ The date of origin, c. 187, already suggested, may still stand as approximately correct, but the date at which the new *nummus* ousted the old must be put nearly twenty years later, c. 170 B.C.⁴⁶ During the period in between, the old and new *nummus* fought for mastery.⁴⁷

The Italian mints in the end had had their revenge on Rome. Originally of equal rank, they had lost grade in the Second Punic War and could never recover it. Mint D, the only survivor of the war, held no more than a corner of the field. It is the types of Rome, now spreading out from the capital to branch mints, that are dominant. But in the sphere of Mint D and under its influence arises a new system, a new *nummus* with new types, which

⁴² For Centussis, cf. Festus 54 M; 'centenariae cenae dicebantur, in quas lege Licinia non plus centussibus praeter terra enata inpendebantur, id est centum assibus, qui erant breves nummi ex aere.' In Persius, *Satire*, v, 191, 'et centum Graecos curto centusse licetur,' the Centussis is certainly a coin.

Decussis is more difficult. Festus 335 M seems to make it equal 'denarius': 'sestertius dicitur quarta pars denarii, quo tempore is decussis valebat.' In another passage (237 M) he makes it equal ten libral *asses*: 'Tarpeia lege cautum est ut bos centussibus, ovis decussibus aestimaretur.' The *cistophorus*, of c. 190 grains, might perhaps be called Decussis, as being approximately equal to ten sestertii (in the earliest issues, not much inferior to it in weight). For the *trinummus* see Mattingly and Robinson, 'The Date of the Roman Denarius', 214 ff.

⁴³ For the combination of several *nummi* in one system, see Mattingly, 'The Little Talents of the West,' *Num. Chron.* 1943, 14 ff.

⁴⁴ The ancient authors, who speak of '*asses sextantarii*', were possibly thinking not of *asses*, weighing 2 oz. but of *asses*, overstruck on sextantes of the first reduction, weighing about 1 oz. These overstruck *asses* are actually earlier in date than our 'sextantal' *asses*.

⁴⁵ Cf. E. A. Sydenham, 'Problems of the Early Roman Denarius,' in *Trans. Int. Num. Congress* of 1936 (London, 1938), 262 ff.

⁴⁶ The evidence of the Prologue to the revival of the *Casina* of Plautus is decisive. The 'new plays', that are there said to be as bad as the 'novi nummi', must be those of Terence and his friends, c. 170 B.C. following. At about that time the change of *nummi* was still recent. If any doubt still remains we note that *nummus*, which in Plautus means 'didrachm', in Terence means 'drachma'.

⁴⁷ That the 'denarius' in 194 B.C. was still the quadrigatus appears from Livy xxxiv, 52, 6 (Attic tetradrachm equals about three denarii). That the *as* of libral weight was still in use in the same year may be deduced from a comparison of Livy xxxiv,

46, 3, with Plutarch, *Cat. Ma.* 10, 4, on Cato's gift to his troops in Spain—270 'aeris' in the one, 1 lb. of silver in the other.

The arguments of Dr. J. G. Milne (see works quoted in note 1) in favour of an earlier date for the denarius—218 B.C., in fact—are individually very ingenious, but they seem to fail in recognition of the solid framework of the new dating. Pliny (*NH* xxxiii, 47) does, indeed, state,—if 'denarius nummus' is to be preferred as a reading to 'aureus nummus'—that the denarius was struck fifty-one years after the 'argenteus'. But Pliny, earlier in the same chapter, had written of a 'denarius aureus', and the context shows beyond doubt that a gold coin is in question. For the passage of Pliny and its 'variae lectiones', see M. v. Bahrfeldt, *Die röm. Goldmünzenprägung*, 3 ff., 16 ff.

Again, Livy, in booty lists from Spain from a little after 200 B.C., records the bringing in mass of 'bigati'. Dr. Milne argues that these bigati must be denarii, with reverses of Diana or Victory in a biga. If these denarii—by no means the earliest—were current in Spain by 200 B.C., the origin of the coin must be some years further back. But Livy in these contexts mentions not only bigati but *argentum Oscense*. If he means by *argentum Oscense* what we mean by it to-day—coins of the standard of the denarius—he is simply in error: these coins were not struck until one—perhaps even two generations—later. It is possible at least that Livy meant by 'bigati' something quite different. The fragment of Festus s.v. 'Sesterti' (347 M) in Lindsay's text (Leipzig, 1913) reads: 'sesterti not . . . dupundi et semisis q . . . tertius; sed aucto sesqu . . . apud antiquos autem . . . rant et valebant d . . . ti bigati quinquessis q(uin) . . . etc. This tantalizing fragment, certainly spoke of 'bigati' and 'quinquessis' in immediate conjunction, probably also of '[quadriga]ti' and '[decussis]'. Where quadrigatus = 10, bigatus then = 5. The bigatus, by a sort of pun, describes the half of a quadrigatus: a biga is half a quadriga. For further consideration of these passages of Livy, see C. T. Seltman, *op. cit.*, in n. 1.

gradually invades the Roman sphere and ousts the quadrigatus, and, a little later, the victoriate. Rome maintains her position of privilege and retains the Janus-Prow types of her Aes ; but she takes over the famous Bellona-Dioscouri of the denarius from the last of the Italian mints.

To sum up—in 269 B.C. Rome burst into coinage with a magnificent system adapted to the needs of her growing interest in Italy. The First Punic War passed, without leaving any mark on the coinage. In so far as the war was fought in Sicily, its burden must have fallen largely on Hiero of Syracuse : his coinage, like the Roman, shows no trace of inflation. Victory won and assured, with the indemnity from Carthage mounting up, it was decided, *c.* 235 B.C., to inaugurate a new set of issues, and to use the opportunity to standardize the units both in silver and Aes. This reformed system continued, in essence, to exist down to the introduction of the denarius. But the marks of the Second Punic War are everywhere to be seen—in the growth of the mint of Rome at the expense of the Italian mints, in the debasement of the silver, in the reductions of the standard of the Aes. Finally, the new system of the denarius represents a general stabilization at the close of the great series of wars that ended in 168 B.C. The denarius, reduced from its first standard of four scruples or more, was generally reckoned as the equivalent of the Athenian drachm and became the standard coin of Rome as an expanding and imperial power.

Re-reading in recent months Haeberlin's Introduction to his stately work on *Aes Grave*, I paused rather sadly over his claim to have reached an 'endliche Lösung', 'a final solution', of most of the problems set before him.⁴⁸ There are no 'final solutions'. No single student can do more than move from the point where he has to start in the direction in which the truth beckons to him. Even where advance is certain, one problem solved means one or more new problems posed. The end, then,—the reconstruction of a lost chapter in the story of Rome's transition from Italian to Mediterranean policy and power—is not yet in sight, but it is surely worth pursuing. If we can recover some lost facts about the greatness of Rome, what does it matter if we have to sacrifice some elements of myth in the process ?

In conclusion I wish to express my indebtedness to friends whose criticism and encouragement have been of serious help to me in writing this paper—Pro essor F. E. Adcock, Professor Hugh Last, the Rev. E. A. Sydenham, and my colleague, Mr. E. S. G. Robinson—and also to the host of earlier students, whose works have been quoted in the notes, without whom we could not even be asking many of the questions that we are now hoping to answer.

⁴⁸ *Op. cit.*, xiii.