

MINUTE COINS FROM CAESAREA

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ON the dunes of Caesarea a great number of coins is continually being found. A systematic search on periodic visits to the site resulted in the finding of several hundreds of coins, ranging in date from the second cent. B.C.E. to the thirteenth cent. C.E. Those which could be easily identified were described in a paper,¹ dealing with their distribution and thus throwing some light on the area the city had occupied during the various periods of its existence.

In addition to those well known types, there were found a great number of minute coins measuring some 7-15 mm. in diameter and generally bearing no inscription whatsoever. In spite of their small size they can be easily spotted because of their glossy black patina, typical for Caesarea, which contrasts sharply with the light yellow sand of the sea-shore. Though found in great numbers, comparatively few are well preserved, since the grinding action of sand and wind quickly obliterates the relief on the surface. The proportion of fairly well preserved specimens to the completely worn ones may be roughly estimated as 1:10.

The first task which confronted the author in dealing with this vast material was its division according to types. After this had been done, some 50 pieces were sent to the British Museum for identification through the kindness of the Palestine Archaeological Museum, Jerusalem. They were examined by Mr. E. S. G. Robinson, and his reply was as follows:² 'All... are minimis of the type which comes to us from Palestine and Syria, a few of such appear to be from Palmyra and so we call the whole class Palmyrene for want of a better name... I suspect these

coins are commoner than would appear at first sight. They are so small that collectors are not apt to bother about them and they tend to get overlooked. We have got (uncatalogued) a considerable number of the varieties in our lot, though not all... There must be a large number of minimis of these and other types in Palestine and Syria, from excavations and elsewhere and it would be well worth while for some one on the spot to make a study of them...'

As far as I am aware, there is not much published material on the 'Palmyrene' coins. F. de Saulcy³ reproduced some coins which he had acquired at Palmyra and attributed to this mint, but only very few of them vaguely resemble those found at Caesarea.

The hoards found at Karanis⁴ (Hoards II and III) consist of 'minimi' which are, however, nothing but the smallest denominations of the official issues. The 'local imitations' found in Hoard III which form 35% of the lot 'range from very close copies, sometimes badly distinguishable from their originals, to absolute blanks...' and bear legends (at least as far as they have been identified), and therefore do not enter into the scope of the present paper. The lack of reproductions and descriptions does not permit any comparison with our coins.

Among the coins found at Dura-Europos, which number 20,000 and which were so

¹ H. HAMBURGER, *Caesarea Coin Finds and the History of the City*, BJPS XV (1950), pp. 78-82 (Hebrew).

² Letter dated 11th October 1947.

³ F. DE SAULCY, *Numismatique de la Terre Sainte*, Paris, 1874, pls. XXIV, 5-10; XXV.

⁴ A. E. R. BOAK, *Karanis, The Temples, Coin Hoards... Seasons 1924/31*, Ann Arbor, 1933.

admirably published by A. R. Bellinger, only twelve small coins are mentioned under the heading Palmyra.⁵ They represent 'very nearly all that the excavation produced'. They are ascribed to Palmyra because of their fabric, and dated to the first and second centuries C.E. according to the 'common fashion', although 'the absence of inscriptions or imperial types makes them quite unlike anything else of that period'. In Bellinger's opinion, 'the whole question of their date and denomination badly needs serious study'.

Although there are no reports of such coins from any other excavated sites in the Middle East, it seems likely that they have been often overlooked, as suggested by E. S. G. Robinson in his above-mentioned letter. This may be due to their smallness, and to the fact that they are hard to distinguish in dark soil. Only in places like Caesarea or Palmyra can they be readily seen in the yellow sand. A confirmation of our statement may be found in the words of W. Wright:⁶ 'The sands of Palmyra are full of little copper coins. After strong winds the people of Palmyra gather them in handfuls.'

In Caesarea they are also found in great numbers. The author owns at present some 300 more or less well preserved coins. If we assume that their proportion to completely obliterated specimens is 1:10, the above number would correspond to some 3000 coins picked up by the author on the dunes of Caesarea.

We have already pointed out that these coins bear no inscriptions and can only be classified according to types. Should these types show similarities to known coin issues, we would have a link connecting both groups.

COINS ASSIGNED TO TYRE

Let us first consider the coins showing on the obverse a bust of Tyche to right, wearing turreted crown, and on the reverse a palm-tree. The coins obviously recall the well-known autonomous coins of Tyre struck in that mint from the end of the IInd cent. B.C.E. to the middle of the IInd cent. C.E.⁷

Our coins may be arranged typologically in a series starting with a regular issue of Tyre,

and then gradually deteriorating in size and workmanship (see the *Catalogue of Coins* on pp. 123-138, and pls. X-XII).

No. 1 was struck at Tyre in C.E. 117/8.⁸ The obverse shows a bust of Tyche, wearing turreted crown, veil and earring; behind, palm-branch. On the reverse: palm-tree with bunches of fruit, around monogram χ and inscription ΜΗΤΡΟ-ΠΟΛΕΩΣ ΙΕΡΑΣ, across field, date. This type was used as a model for Nos. 2-5 of our Catalogue. At first the size of the coins remains practically unchanged, but the weight is reduced by almost fifty per cent. Tyche and the palm-tree become smaller, and the palm-branch is placed in front of the Tyche. The inscription is incomplete. The best preserved specimen is No. 4, but the date is unclear; its obverse deserves special mention on account of its good workmanship and beautiful patina.

Nos. 6-15 again form a more or less homogeneous group. They steadily diminish in size and weight, and the workmanship gradually deteriorates. Their dates are fairly legible, with the exception of Nos. 14 and 15. No. 13 shows in the left field the two letters Σ , probably meant for 17. If we assume that the third letter was a C, we have the year 217 of Tyre, or 91/92 C.E., in complete disagreement with the rest of the series. Reading T would bring us to 191/2 C.E., a date much later than the last coin of this type struck at the mints of Tyre,⁹ but not altogether impossible. In No. 17 only the first letter of the date is legible.

All the following coins of this class (Nos. 16-23) bear no date. The workmanship deteriorates greatly; the features of the Tyche coarsen, the turreted crown is simplified, and the palm-

⁵ *The Excavations of Dura-Europos*. Final Report VI. A. R. BELLINGER, *The Coins*, New Haven, 1949, p. 157, Nos. 1844-1852.

⁶ W. WRIGHT, *Account of Palmyra and Zenobia*, 1895, p. 155.

⁷ G. F. HILL, *Brit. Mus. Cat. of Greek Coins, Phoenicia*, London, 1910, pp. 253-4 265-7.

⁸ B. M. C. *Phoenicia*, p. 266, Nos. 344, 345, pl. XXXII, 3.

⁹ B.M.C. *Phoenicia*, p. 267, No. 355, struck in 166/7 C.E.

tree on the reverse becomes a mere outline. The empty space which had contained the date is filled with a number of dots, which, in some instances, replace the fruits of the palm-tree.

Nos. 24-34 are classed together with the foregoing on account of the similarity of the reverse type, although the obverse is different. Nos. 24-29 show male heads, some diademed (e.g. No. 26), some bare, and others bearded. The heads of Nos. 30-34 are primitively finished, showing only an outline without relief.

We can now attempt to draw some conclusions with regard to the date and place of origin of one class of our small coins. The type represented by coin No. 1 was first struck in Tyre in 104/5 C.E.¹⁰ It seems likely, therefore, that this date can be considered as a *terminus a quo* for this class of coins; in other words that these types are not earlier than the second century C.E. Indeed, our *dated* specimens bear the dates 117/8 C.E. to 153/4 C.E., or possibly even 191/2 C.E. (No. 13). They were obviously minted at Tyre as shown by their types and by the remains of the legends on Nos. 2-6. Since their weights are smaller than those of the known coins of Tyre, they must probably represent some smaller denominations.

The undated specimens (Nos. 16-23) can hardly be dissociated from the preceding with regard to their place of origin, since they show the same types, and their fabric and character are similar. Thus the only likely mint for them is Tyre. The question of their date is more complicated. The autonomous and quasi-autonomous coinage of Tyre came to an end in 195/6 C.E.¹¹ and thus it would seem *prima facie* that our undated series was struck before the end of the second century. But there is still another possibility worth considering. From the 11th consulship of Septimius Severus, i.e. from 198 C.E.¹² onwards, the mint of Tyre issued a considerable number of bronze coins, all of comparatively large size. Our small undated coins could represent the smaller denominations of the undated colonial series, which continues until the reign of Gallienus. The need for small change would explain the fact that these coins

were found in Caesarea in great numbers, and would also account for their crude and hasty workmanship. If the latter assumption is accepted, our undated series should be ascribed roughly to the first half of the third century C.E. In the second half of the third century C.E. 'the local and provincial silver and copper of the East had begun to collapse with the breakdown of the imperial silver under Gallienus. Aurelian made no attempt to restore them... For the senatorial copper of Rome he substituted new imperial issues, while leaving the East as a whole without any fresh supplies of small change.'¹³ The provincial cities were thus left to fend for themselves and we may well imagine that they continued to issue their own supply of small change. In doing so they would naturally continue to use the types familiar through long usage, but not entirely unchanged. The palm-tree on the reverse remained in use, but the head of the Tyche was replaced by the head of an emperor (No. 24), or by some other male head (Nos. 25-28), which escapes identification. The heads on Nos. 29-34 look like crudely executed imitations of heads of emperors of the IVth century C.E.

This state of affairs can be paralleled elsewhere. In distant Britain conditions were not altogether different. There too, barbarous imitations were tolerated in order to supply the constant need for small change prevalent in the third and fourth centuries C.E.¹⁴

In conclusion we may sum up our results as follows: In the second cent. C.E. the mint of Tyre issued smaller denominations of the usual Tyche / palm-tree coins in order to supply small change for local needs. From ca. 200 C.E. onwards this need was covered by coins bearing the same types, but without dates, and of steadily deteriorating workmanship. With the cessation of local coinage around the middle of the third

¹⁰ B. M. C. *Phoenicia*, p. 265, No. 338.

¹¹ *ibid.*, p. CXXXVI.

¹² *ibid.*, p. 269, No. 367.

¹³ H. MATTINGLY, *Roman Coins*, London, 1928, pp. 192-3.

¹⁴ P. V. HILL, *Barbarous Radiates*, New York, 1949, p. 2 (*Numismatic Notes and Monographs* No. 112).

century our minute coins continued to be issued, semi-officially, but their size diminished and their workmanship became even cruder.

COINS ASSIGNED TO CAESAREA

During the first cent. C.E. no small coins in the true sense of this article seem to have existed. At that time the coins of the procurators,¹⁵ which were coined between 6-66 C.E., must have been in use for the smallest values. Their careless execution and the large numbers found (the author himself found 90 pieces) speak in favour of this assumption as well as the fact that the coins were minted in Caesarea itself.¹⁶

In the second cent. C.E. Caesarea started to mint the well-known small coin of Hadrian with the lion on the reverse.¹⁷ During the reign of Trajan too, a small coin (quadrans) was issued by the senatorial coinage (No. 35), obv.: bust of Hercules, diademed, r., with lion-skin on neck, inscr.: IMPCAESTRAIANAUGGERM, rev.: boar, walking right, in ex. SC.¹⁸ There is also a corresponding coin of Hadrian.¹⁹ Only a single specimen of the coin of Trajan was found by the author in Caesarea, but a considerable number of coins of a similar type were found, which are of much poorer design and finish (Nos. 36-44). They no longer bear any legend and are much smaller. The head of Hercules appears in many variations, sometimes unlike the prototype, and at times it even shows a likeness to the head of an emperor (No. 44). The animal on the reverse looks sometimes like a boar and sometimes like a wolf or even a goat (No. 41).

In view of the letters SC, it might be assumed that the coins belong to an imperial mint. But the difference between them and any other imperial coins of this type in respect of fabric and size is so evident that they have to be attributed to a provincial mint. I assume that the continuous demand of Caesarea for small change finally caused the Roman senate to grant its 'consultum' and the town was granted the right to add the letters SC on the reverse of its coins.²⁰

On the other hand, it should be pointed out, that even in comparison with other official issues

of Caesarea, our minimi are of much inferior workmanship. This may be the result of hasty execution due to the ever growing demand for small coins of low denomination.²¹ Their frequent occurrence at Caesarea is an additional proof of their provenance from the local mint.²² Even more frequent, however, are the same types without the letters SC, and we may assume that Caesarea continued to issue coins even without

¹⁵ G. F. HILL, *Brit. Mus. Catalogue of Greek Coins, Palestine*, London, 1914, pls. XXVIII, XXIX.

¹⁶ *ibid.*, p. CI.

¹⁷ *ibid.*, pl. III, 9. I should also like to place on record an unpublished variant of this coin, which I found in Caesarea in 1949 (see pl. XI, A).

Obv: Head. r. laur., IMPCAES..... OPTIM-AVG.

Rev: Lion, walking to r., above (C)IFAVG.

Size: 12 mm., weight 1.89 gm.

The name of the emperor is unfortunately off flan. On account of the title 'CAES.... OPTIM' this would seem to be a coin of Trajan, who used this title frequently. But the title 'CAES.... OPTIM' is also used by Hadrian on his first issues of the year 117/18 C.E. (H. MATTINGLY and E. A. SYDENHAM, *The Roman Imperial Coinage II*, London, 1926, pp. 338-9, 342-4, 405-6). Judging, however, from the portrait, no decision is possible, probably because: 'The earliest portrait of Hadrian is developed from the latest of Trajan' (*ibid.*, p. 336).

On account of the indistinguishable portrait and the title 'CAES.... OPTIM' which is also used by Hadrian, I do not believe that we have here a new coin of Trajan, but am inclined to attribute it to Hadrian, issued during the first year of his reign, probably in 117/18 C.E. It seems to have been a rather small issue, since the coin is, according to my knowledge, hitherto unknown, while the subsequent types without the title 'CAES.... OPTIM' were found in Caesarea in large numbers.

¹⁸ H. MATTINGLY, *Coins of the Roman Empire in the British Museum III*, London, 1936, Trajan, No. 1062.

¹⁹ *ibid.*, Hadrian, No. 1832 A.

²⁰ Apart from the coins from Antiochia we find the SC on a coin of Agrippa II, *B. M. C. Palestine*, pl. XXVII, No. 11.

²¹ The above mentioned coins of the Procurators also show a primitive execution and are ascribed to the mint of Caesarea. (*B. M. C. Palestine*, p. CI).

²² I was confirmed in this conviction after a discussion sponsored by Mr. M. Narkis, which took place at the IInd Numismatic Conference held in Tel-Aviv on May 16th-17th 1952.

authorization, either officially or semi-officially. These new coins are somewhat reduced in size and weight. The execution of the obverse and reverse in most specimens is not less artistically finished than its prototype (Nos. 36-44 as compared with Nos. 45-52). The first group bears imitations of the Roman Hercules-type, or the head of an emperor (No. 44), while the second group follows its own (provincial) Hercules-type (Nos. 45-47, 52). Here, as in all types which were issued over prolonged periods, we can observe a certain deterioration. The coins decrease in size and the finish of the head becomes barbarous, leaving no trace of the former Hercules image (Nos. 53-58). The animal on the reverse undergoes the same degeneration. We suggest therefore that these smaller and more deteriorated specimens are later issues. The coin must have been in use until the beginning of the third century C.E.

We ascribe the small coins of the type: Tyche on the obv., galley on the rev. (Nos. 59-74) to Caesarea during the IIIrd century for the following reasons:

1) Of all the small coins found, this is the commonest (125 pieces), a point in favour of the coinage in Caesarea itself.

2) Alexander Severus (222-235 C.E.) introduced the Tyche for the first time on coins of Caesarea, and she predominated during the entire IIIrd cent. on all the coinage of Caesarea.

3) By this time the galley had almost passed out of use in the near-by Mediterranean cities,²³ but in the case of Caesarea, whose port was flourishing as never before, the galley stressed the maritime importance of the city.²⁴

All these coins lack inscriptions and differ only in small details. The smaller they are, the later they seem to have been coined. The workmanship becomes increasingly inaccurate, and in particular the galley-design ends up as mere guesswork. The presumably earliest coins (Nos. 59-60), show a fine galley with high sails divided into three parts, with an artistically high-curved prow. Later the type changes (Nos. 61-65). The galley has a superstructure divided into three parts (cabins?). According to tradition, prow

and stern are exaggeratedly curved upward. The oars are indicated by parallel lines, the water by a scalloped line and dots. Many coins show lines and dots above the galley (Nos. 62, 63, 65-68; No. 61 a clear N). Coins with galley on the reverse minted in other towns usually bear an inscription (mint and date) above it. These otherwise inexplicable lines and dots are perhaps a space-filler in imitation of this inscription. Later again the galley becomes even more conventionalized and the head of the Tyche on the obverse fills the entire space, leaving no room for the former representation as a bust (Nos. 66-68, 71-73). On the last coins the galley has deteriorated to a few parallel lines (Nos. 70-73). A female head appears instead of the Tyche (No. 74), like on the later coins of Tyre (Nos. 24-34), perhaps after the town had lost the autonomous right of coinage.

We assume that all these coins continued to serve as small change in daily use also after the cessation of autonomous coinage.

COINS ASSIGNED TO ALEXANDRIA

Some more groups of minute coins can be ascribed with certainty to Alexandria, although a legend is lacking. They represent types which can be found in the *B. M. C. Alexandria*,²⁵ and they show dates which are in use on Alexandrian coins. Moreover, their 'bevelled edge' is typical for Alexandrian coinage. They differ from the catalogued coins in that they bear a different date or are undated, or are imitations in the customary sense. Unfortunately the *B.M.C.* plates show only a small part of those minute coins and we have to depend for identification on the description.

²³ Already in the first half of the IIrd century the coastal cities of Palestine and Phoenicia stopped coining 'galleys' altogether (Ascalon, Aradus, Berytus, Dora and Sidon; Tyre in 195/6 C.E.). The galley occurs only sporadically in the IIIrd cent. on a coin of Tyre of Macrinus and at Sidon as the ship 'Argo' coined by Severus Alexander.

²⁴ Robinson writes in his remarks about the coins sent to the British Museum by the author: 'Caesarea, for which galley is an appropriate type.'

²⁵ R. S. POOLE, *Brit. Mus. Catalogue of the Coins of Alexandria and the Nomes*, London, 1892.

plans for legions?

Nos. 75-76 resemble *B. M. C. Alexandria* Nos. 491-493. The date LIS does not occur on the *B. M. C.* specimens. No. 76 is an imitation of No. 75; the obv. shows an imperial head, the rev. an elephant, the date is omitted. The diameter is only 10 mm.

No. 77 is identical with *B. M. C.* No. 559. The date is not on the reverse because the coin has not been centered properly.²⁶

No. 78 is identical with *B. M. C.* No. 561. Coins with the same reverse of the crown of Harpokrates were struck under Hadrian, cf. Nos. 101-103 in this catalogue.

No. 79 is unpublished to the best of my knowledge. A somewhat similar coin seems to have been issued by Hadrian (cf. *B. M. C.* Nos. 913-15).

No. 80 is an imitation of *B. M. C.* Nos. 700-702. Both sides are carelessly executed. The size is much reduced. The *B. M. C.* coins are undated.

Nos. 81-84. No. 81 is related to *B. M. C.* Nos. 831-832, but represents a smaller specimen with a later date. Nos. 82-83 are additional undated imitations. The obverses of the three coins are very different. No. 82 is barbarous in workmanship, but No. 83 shows a carefully wrought head with elaborate headdress or hairdress, and No. 84 clearly represents the head of an emperor.

No. 85 is identical with *B. M. C.* No. 835, but instead of the date LEN it has LIZ.

No. 86 is an imitation of *B. M. C.* No. 887, reduced in size and undated. It is possible, however, that it is an imitation of a coin of Trajan, *B. M. C.* No. 550.

No. 87-90 are the same type of coinage as *B. M. C.* No. 891, but with a different date. No. 88 is an imitation of No. 87, reduced in size and weight. No. 89, undated, shows a well wrought head of Hadrian. No. 90 is of inferior workmanship.

Nos. 91-94. No. 92 is identical with *B. M. C.* No. 896. The dates of Nos. 93-94 are not mentioned in the *B. M. C.* No. 91 shows the head of an unidentified emperor. Nerva, Trajan and Hadrian struck identical coins according to the *B. M. C.*, but the year A is nowhere mentioned. As the first year of an imperial reign is always unreliable for the likeness of a portrait in the provinces, it remains uncertain to whom the coin should be ascribed.²⁷

Nos. 95-98. No. 95 is an imitation of *B. M. C.* No. 901. On coins Nos. 96-98 the headdress of Isis is represented in additional variations. As the head of the emperor cannot be identified with certainty, these coins could well be imitations of coins of Trajan (*B. M. C.* No. 560), Hadrian (*B. M. C.* Nos. 898-901), or Antoninus Pius (*B. M. C.* No. 1210). In Nos. 97-98 the representation of the headdress is further conventionalized and simplified. The fact that the author possesses 7 specimens of No. 98 indicates that it was coined over a prolonged period or in great numbers. The coin is undated.

Nos. 99-100 show on the reverse an Atef crown which is not represented in the *B. M. C.* This type is a regular coin with regard to size and finish. No. 100 is an imitation of No. 99 but with a different date.

Nos. 101-103. Hadrian recoined the 'hem-hem' headdress of Harpokrates (Cf. *B. M. C.* No. 902). No. 101 shows the same date (LIZ) as the coin of Trajan (No. 78 in this catalogue) but the head excludes Trajan. Nos. 102-103 are imitations, either undated or bearing incomplete dates.

²⁶ The crowns on the rev. of coins Nos. 77, 95 and 99 were kindly identified by Mr. J. Leibovitch of the Department of Antiquities, Jerusalem.

²⁷ With the advent of a new emperor, the provincial mints frequently continued issuing coins with a portrait similar to that of the former emperor until such time as a hurriedly made bust of the new emperor reached the outlying provinces. The true portrait of the new emperor must have appeared on the provincial coinage only after the arrival of the new denarii or sestertii from Rome.

Nos. 104-107. No. 104 is probably identical with *B. M. C.* No. 912, which has the date LI. The lacking A (B, I?) should perhaps be supplemented on the coin of the *B. M. C.* Nos. 104-105 are carefully executed, while Nos. 106-107 are simplified and undated imitations.

No. 108. The griffin with fore-paw on wheel is known from Alexandrian coins (Domitian, Hadrian, Antoninus Pius). No. 108 can only be an imitation of those larger coins. The barbarous head excludes the possibility of attributing the coin to one of the above emperors.

When we consider the various coin types in this group, it becomes evident that nearly all of them follow a known prototype; generally speaking they are only variations or imitations of specimens in the *B. M. C. Alexandria*. In other words, minute coins have long since been published in Alexandrian catalogues, while other coin catalogues of the Near East make little mention of these small coins. Perhaps the dry sands of Egypt—as in Caesarea—favour the easy visibility of these coins so that they found their way into the hands of collectors.

In the *B. M. C. Alexandria* these small coins appear in considerable numbers under Trajan and even more frequently under Hadrian. This relative frequency is strikingly paralleled by the author's finds at Caesarea. The cause of the frequent occurrence of the minute coins should be sought in the propitious economic conditions of the period. Prices were low and even the lowest denomination had some purchasing power. In the subsequent period, however, and especially during the third century, the minimi disappear as a result of the general devaluation of the currency.

There is a remarkable difference, however, between Alexandria and Caesarea. While the minute coins were reduced to a minimum in the metropolis Alexandria, they continued to be used in the provincial town of Caesarea. In spite of the inflationary tendencies of the period, the more modest conditions at Caesarea seem to have required the continued issue of these denominations.

LATE ROMAN AND BYZANTINE COINS

In the IVth and Vth centuries Roman bronze coinage becomes progressively smaller with the passage of each decade, so that by the time of Arcadius, Theodosius, Valentinianus III etc. the coins are reduced to 10 mm. The bronze coinage of these late emperors, however, consisted exclusively of such small coins. Considering the extremely small size of the regular coins, it is remarkable that it has been possible to find any of the still smaller minute coins of this period in the sense of this article. None the less, the catalogue shows some interesting specimens which clearly demonstrate the continuous evolution of this denomination.²⁸

Nos. 109-110. The Vot-Mult coins of the late emperors²⁹ furnish the prototype for Nos. 109-110. Because of the size of these coins, the execution of both lines of inscription is imperfect in No. 109, and completely illegible in No. 110. The numbers (X and XX) are omitted altogether. The obverses show the conventionalized head of an emperor, laureate.

Nos. 111-112 bear a cross on the reverse like the coins of Arcadius³⁰ and Theodosius.³¹ Both coins are of very inferior workmanship. There is nothing extraordinary in these types, since the whole monetary system was declining at this period.

²⁸ An indirect argument for the existence of minute coins from the end of the IIIrd cent. to the beginning of the IVth cent. C.E. is the issue of coins of Probus, Diocletian, Maximian etc. with exerg. XXI. Harold Mattingly writes in *Roman Coins* p. 128: 'The "Antoninianus" ... is frequently marked XX.XX.I, XXI, KA, K.A., and it may now be taken as almost certain that all these varied marks have but one meaning: the coin is a unit containing twenty smaller units.' In my opinion these 'smaller units' should be identified with the 'minute coins' of this paper.

²⁹ Cf. pl. XII, A, coin of Valentinianus II, 383-392 C.E. DNVALENTINIANUSPFAV rev.:VOT X MULT XX ex. SIS. Weight: 1.01 gm., size: 8 mm. Cf. H. GOODACRE, *The Bronze Coinage of the Late Roman Empire*, London, 1922, p. 74, No. 20.

³⁰ GOODACRE, *op. cit.*, p. 85, No. 2: CONCORDIA AVGGG. Cross in field (see pl. XII, B). ³¹ *ibid.*, p. 95, No. 10, no legend. Cross in wreath (see pl. XII, C).

Nos. 113-114. With No. 113 we approach the Byzantine coinage introduced by Anastasius. Obv.: bust of emperor, r., in very low relief. Dots are used instead of an inscription. Reverse:

Λ. Letters occupying the entire reverse in the capacity of marks of value occur for the first time in the reign of Anastasius. Wroth³² does not mention the use of A for marking the value 1. The lowest value is B=2 on a coin of Justinian I,³³ presented in 1854 by George Finlay.³⁴ Elsewhere³⁵ Finlay writes: 'I presented to the British Museum a set of small coins of this period (Anastasius) marked ABTA&E. The pieces of general circulation were those of 1, 5, 10, 20 and 40 . . . nummi, marked A, E, I, K and M.' In the note to this he writes: 'I have now in my possession pieces marked A, weighing from six to ten grains' (0.38-0.64 gm.; coin No. 113 = 0.52 gm.; No. 114 = 0.47 gm.). In the catalogue only the specimens of B, E, Δ are mentioned as presented by Finlay. For some reason a coin with A has been omitted. No. 114 shows a striking similarity to the type marked B,³⁶ even the stars of I. and r. being represented, and there can be no doubt that we have here the very coin mentioned by Finlay. While No. 113 still shows the head of a late Roman emperor in profile, as customary before Justinian I, No. 114 shows the head full-face, a representation which begins with Justinian I. The coins Nos. 113-114 must therefore have been issued under at least two emperors, an assumption which is supported by the great number of coins found.

No. 115 can be compared with J. SABATIER, *Monnaies Byzantines* I, Paris, 1862, pl. XVII, Nos. 36-38. Neither of these coins have the ⚡, while it is present on all coins found in Caesarea.

No. 116 shows the sign ⚡. Wroth does not mention coins of this type. The obverse shows the crude portrait of an emperor, perhaps of the Vth cent.

Nos. 117-118. We consider these coins to be a further evolution of No. 116. The coin is too

minute to accommodate a P. The head of the emperor is shown full-face, and is very like Maurice Tiberius and Phocas;³⁷ the workmanship is entirely Byzantine.

Summarizing the coins in this last group, we attribute types Nos. 109-112 to the late Roman emperors of the IVth and Vth century. The rest of the minute coins with their very Byzantine workmanship could only belong to the Vth-VIth centuries. It looks as if the demand for small change persisted though economic conditions and the type of coinage had changed considerably.

The author has in his possession other minute coins whose attribution remains obscure in spite of their excellent preservation, and they have been omitted for that reason. This paper covers only part of the existing types and the author believes that the picture will be rounded out by further finds and by the publication of additional minute coins from other collections.

One more type, of which the author has several specimens, may, however, be of some interest. Nos. 119-121 show a barbarous male head, while Nos. 122-124 bear a female bust. On the reverse are 2-4 heads (laureate?) or busts. It looks as if these heads and busts were made in a continuous design and only accident determined which part of the design actually got on to the individual coins. On some there are two heads (No. 119), on others two heads and the lower part of two other heads (No. 124), and on others again variations of an accidental nature. The author has found no parallel to these coins and is at a loss to attribute them to any particular period.

³² W. WROTH, *Catalogue of the Imperial Byzantine Coins in the British Museum*, London, 1908.

³³ *ibid.*, I, pl. VI, 15.

³⁴ *ibid.*, I, p. 43.

³⁵ G. FINLAY, *Greece under the Romans*, London, Everyman's ed., p. 429, n. 4.

³⁶ WROTH, *op. cit.*, I, pl. VI, 15.

³⁷ *ibid.*, pl. XXII, 10.

SUMMARY

The finds of Caesarea include a large number of minute coins in addition to the well known types of regular coins. It is possible to date these small coins with great probability and to identify their place of origin by comparison with similar regular coins. It is further possible to follow their production from the IInd to the VIth cent. C.E. We consider the minute coins to be a constant accompaniment of the regular coins, representing the small change necessary for every-day use. Their coinage was taken over by the provinces, officially or semi-officially, because the imperial mints were never able to satisfy the demand. In numismatic circles they were well known long ago, but their identification proved difficult because they were never assembled for a general survey, and because the

accidentally acquired single specimens of uncertain provenance offered no clue for identification.

This article is an attempt to give an extensive illustration of a number of types over many centuries and to reconstruct their chronology. It was made possible by intensive collecting during several years in a restricted area.





The author wishes to thank his fellow-collectors at Caesarea: Mrs. Josef of Hefşiba, Mr. Bezalel Rabani of Tiberias, Mr. Menachem Redner of Zikhron Ya'akov and Mr. Aharon Wegmann of Sdot Yam, who lent the writer parts of their collections with utmost readiness. His thanks are also due to the Department of Antiquities of the Government of Israel for technical help with the photographs.

The drawings were made by Mrs. Annie Hamburger.

CATALOGUE OF COINS

(See plates X-XII)



















COINS ASSIGNED TO TYRE (86)³⁸



















No.	Wt. in gm.	Size in mm.	Reverse	Date C.E.	Quant.
1 ³⁹	3.73	15.5	 	✕ ΜΗΤΡΟΠΟΛΕΩΣ ΤΙΕΡΑΣ Γ ΜΣ = 243 = 117/8	1
2	2.01	15	 	[M]HT[P]OΠ OAEΩC OC = 279 = 153/4	























³⁸ The figures in the column 'Quantity' refer to specimens found by the author and give an idea of the relative frequency of the finds. The catalogue and pls. X-XII include also a number of specimens from other collections, with the intention of providing as







full an outline as possible with the help of well preserved specimens. The total number of coins of each type found by the author is given in brackets beside each heading.

³⁹ B. M. C. *Phoenicia*, pl. XXXII, 3.









No.	Wt. in gm.	Size in mm.			Reverse	Date C.E.	Quant.	
3	1.98	14			MHTPO.... CO	OC C	= 276 = 150/1	4
4	1.89	14			✕ MH....			
5	1.54	14.5		ΔΕΩ [C]I	1?		
6	0.72	12			MH.... Σ	OS	= 277 = 151/2	
7	0.87	12.5			CO	AI	= 233 = 107/8	
8	0.50	11			Γ	MS	= 243 = 117/8	
9	0.54	11			ς	MC	= 246 = 120/1	
10	0.79	12			SM	C	= 247 = 121/2	
11	1.57	13			⊙	OC?	= 279 = 153/4?	

No.	Wt. in gm.	Size in mm.			Reverse	Date C.E.	Quant.
12	1.54	13			⊙ OC	= 279 = 153/4	7
13	0.54	11			Σ (T)?	= 317 = 191/2?	
14	0.69	11			ς ?	?	
15	0.78	12			⊙ C	?	
16	1.48	13					1
17	1.28	15					6
18	1.41	15					
19	1.46	15					
20	0.64	12					

No.	Wt. in gm.	Size in mm.		Reverse	Date C.E.	Quant.
21	0.64	12				
22	0.57	11				37
23	0.55	10				
24	1.23	14				
25	0.97	12				12
26	0.96	13				
27	0.71	12				
28	0.76	12				
29	0.87	9				18
30	0.34	8				
31	0.60	9				





















No.	Wt. in gm.	Size in mm.	Reverse		Date C.E.	Quant.
32	0.54	9				
33	0.39	8				
34	0.31	7				





















COINS ASSIGNED TO CAESAREA. IIND CENTURY C.E. (78)

No.	Wt. in gm.	Size in mm.	Obverse		Reverse	Quant.
35 ⁴⁰	2.62	15			Hercules IMPCAESTRAI ANAVGGERM Boar SC	1
36	1.21	11			Hercules Boar SC	
37	1.38	11			do. Wolf SC	
38	1.37	10			do. Boar? SC	























* H. MATTINGLY, *Coins of the Roman Empire in the British Museum*, III, London, 1936, Trajan, No. 1062;











H. MATTINGLY and E. A. SYDENHAM, *The Roman Imperial Coinage*, II, London, 1926, Trajan, No. 702.

No.	Wt. in gm.	Size in mm.			Obverse	Reverse	Quant.
39	0.81	10			Hercules	Wolf SC	3
40	0.79	9			do.	Boar SC	
41	0.67	9			do.	Goat? S[C]	
42	0.69	10			do.	Wolf SC?	
43	1.14	11			do.	Boar SC?	
44	1.05	12			Imperial head, laureate	Boar? SC?	
45	0.78	9			Hercules	Horse?	
46	0.70	8			do.	Boar	
47	0.62	8			do.	Wolf	
48	0.69	8			do.	Wolf?	





No.	Wt. in gm.	Size in mm.			Obverse	Reverse	Quant.
49	0.79	9			Hercules	Wolf	65
50	0.60	9			do.	Wolf	
51	0.62	8			do.	Wolf?	
52	0.95	10			do.	Wolf	
53	1.03	8			do. ?	Wolf?	
54	0.57	8			do. ?	Wolf?	10
55	0.57	7			do. ?	Wolf?	
56	0.52	7			do.	Wolf?	
57	0.38	6			Hercules	Wolf	
58	0.37	7			Hercules?	Wolf?	

COINS ASSIGNED TO CAESAREA. IIIRD CENTURY C.E. (125)
















No.	Wt. in gm.	Size in mm.			Obverse	Reverse	Quant.
59	0.64	12			Tyche	Galley	3
60	0.92	11			do.	do.	
61	1.05	13			do.	do.	
62	1.58	13			do.	do.	20
63	0.83	12			do.	do.	
64	0.87	12			do.	do.	
65	0.74	12			do.	do.	
66	0.44	11			do.	do.	
67	0.45	10			do.	do.	57
68	0.41	11			do.	do.	
69	0.57	10			do.	do.	

No.	Wt. in gm.	Size in mm.			Obverse	Reverse	Quant.
70	0.43	10			Tyche	Galley	45
71	0.29	9			do.	do.	
72	0.45	10			do.	do.	
73	0.47	10			do.	do.	
74	0.48	10			Female head	do.	1



















COINS ASSIGNED TO ALEXANDRIA (38)

No.	Wt. in gm.	Size in mm.			Obverse	Reverse	Quant.
75 ⁴¹	1.43	12			Head of Trajan r., laur.	Elephant r. LIS = year 16	
76	0.62	10			Imperial head r., laur.	Elephant	

















⁴¹ Cf. *B. M. C. Alexandria*, Nos. 491-493.

No.	Wt. in gm.	Size in mm.			Obverse	Reverse	Quant.
77 ⁴²	1.55	13			Head of Trajan r., laur.	Crown of horns, uraei, disk and plumes (crown of Monthu); border of dots (date not visible).	1
78 ⁴³	1.62	13			Head of Trajan r., laur.	Hemhem crown of Harpocrates LI Z = year 17	3
79	1.30	14			Head of Trajan r., laur.	Vase LI S = year 16	
80 ⁴⁴	0.56	10			Imperial head r.	Standing male figure. Pan with goat's legs? L II = year 13	1
81 ⁴⁵	0.61	9			Head of Hadrian r.	Ibis [L] IA = year 14	1
82	0.92	13			Head blundered	Ibis	4
83	0.50	10			Head	Ibis	1
84	1.25	13			Imperial head	Ibis	















⁴² Cf. *B.M.C. Alexandria*, No. 559.⁴³ *ibid.*, No. 561.⁴⁴ Cf. *ibid.*, Nos. 700-702.⁴⁵ Cf. *ibid.*, Nos. 831-832.

No.	Wt. in gm.	Size in mm.			Obverse	Reverse	Quant.
85 ⁴⁶	1.69	14			Head of Hadrian r., laur.	Rhinoceros r. LIZ = year 17	
86 ⁴⁷	0.62	10			Male head (barbaric)	Caduceus, winged	
87 ⁴⁸	1.31	12			Head of Hadrian r., laur.	3 ears of corn L IΔ = year 14	
88	0.51	10			Head of Hadrian r., laur.	3 ears of corn L IΔ = year 14	1
89	0.55	9			Head of Hadrian r.	3 ears of corn	5
90	0.79	9			Head r. (blundered)	3 ears of corn	2
91	1.93	13			Imperial head r., laur.	Cornucopia L A = year 1	
92 ⁴⁹	1.12	12			Head of Hadrian r., laur.	Cornucopia L ΔE = year 10	
93	0.56	10			Head of Hadrian r., laur.	Cornucopia LI A = year 11	3

⁴⁶ Cf. *B.M.C. Alexandria*, No. 835.⁴⁷ Cf. *ibid.*, No. 887.⁴⁸ Cf. *ibid.*, No. 891.⁴⁹ *ibid.*, No. 896.















No.	Wt. in gm.	Size in mm.			Obverse	Reverse	Quant.
94	0.96	12			Head of Hadrian r.	Cornucopia L IΔ = year 14	
95 ⁵⁰	0.45	9			Imperial head r. (Hadrian?)	Crown consisting of horns with disk, sur- mounted by plumes, two uraei: headdress of Isis L IΔ = year 14	1
96	0.44	8			Imperial head r.	Headdress of Isis L Γ = year 3	
97	0.70	9			Head r. (barbaric)	Headdress of Isis	
98	0.53	9			Imperial head r. (Hadrian?)	Headdress of Isis	7
99	1.32	14			Head of Hadrian r.	Crown surmounted by conical headdress and disk, flanked by two plumes: Atef crown L IF = year 13	
100	0.50	9			Head of Hadrian?	Crown like No. 99 S = Uraeus? L IΔ = year 14	
101 ⁵¹	1.12	12			Imperial head r., bearded, laur. (Hadrian?)	Hemhem crown of Harpokrates LI Z = year 17	1

⁵⁰ Cf. *B.M.C. Alexandria*, No. 901.⁵¹ Cf. *ibid.*, No. 902.

No.	Wt. in gm.	Size in mm.			Obverse	Reverse	Quant.
102	0.98	12			Imperial head r., bearded (Hadrian?)	Hemhem crown of Harpokrates [ΛΙ]? Ζ=year 17?	2
103	1.03	11			Head r., laur., bearded	Hemhem crown of Harpokrates	1
104 ⁵²	1.15	12			Head of Hadrian, r., in front: Ι	Star of eight rays ΛΙ Α = year 11	1
105	1.11	12			Head of Hadrian, r.	Star of eight rays Λ ΙΓ = year 13	
106	1.10	12			Imperial head r., laur., bearded	Star of six rays	1
107	0.85	12			Imperial head r.	Star of eight rays; fragment of circle	
108	0.71	10			Head, r., barbaric	Griffin, fore-paw on wheel	2










⁵² Cf. *B.M.C. Alexandria*, No. 912.

COINS ASSIGNED TO THE LATE ROMAN
AND BYZANTINE PERIODS (36)







No.	Wt. in gm.	Size in mm.			Obverse	Reverse	Quant.
109	0.37	9			Imperial head r., laur., border of dots	Inside circle: VIT VLT	6
110	0.33	9			Head to r., border of dots	Inside circle: AIT TAT	
111 ⁵³	0.53	9			Head r., barbaric	Cross in wreath	4
112	0.29	8			Bust r., border of dots	Cross inside border of dots	1
113	0.52	8			Bust of emperor r.	Α	12
114	0.47	8			Bust of emperor full-face, cross in field	*Α*	6
115 ⁵⁴	0.42	7			Bust of emperor full-face, cross in field	Π ΑΙΟ	6







⁵³ Cf. J. SABATIER, *Monnaies Byzantines*, I, Paris, 1862, pl. XVII, 32.

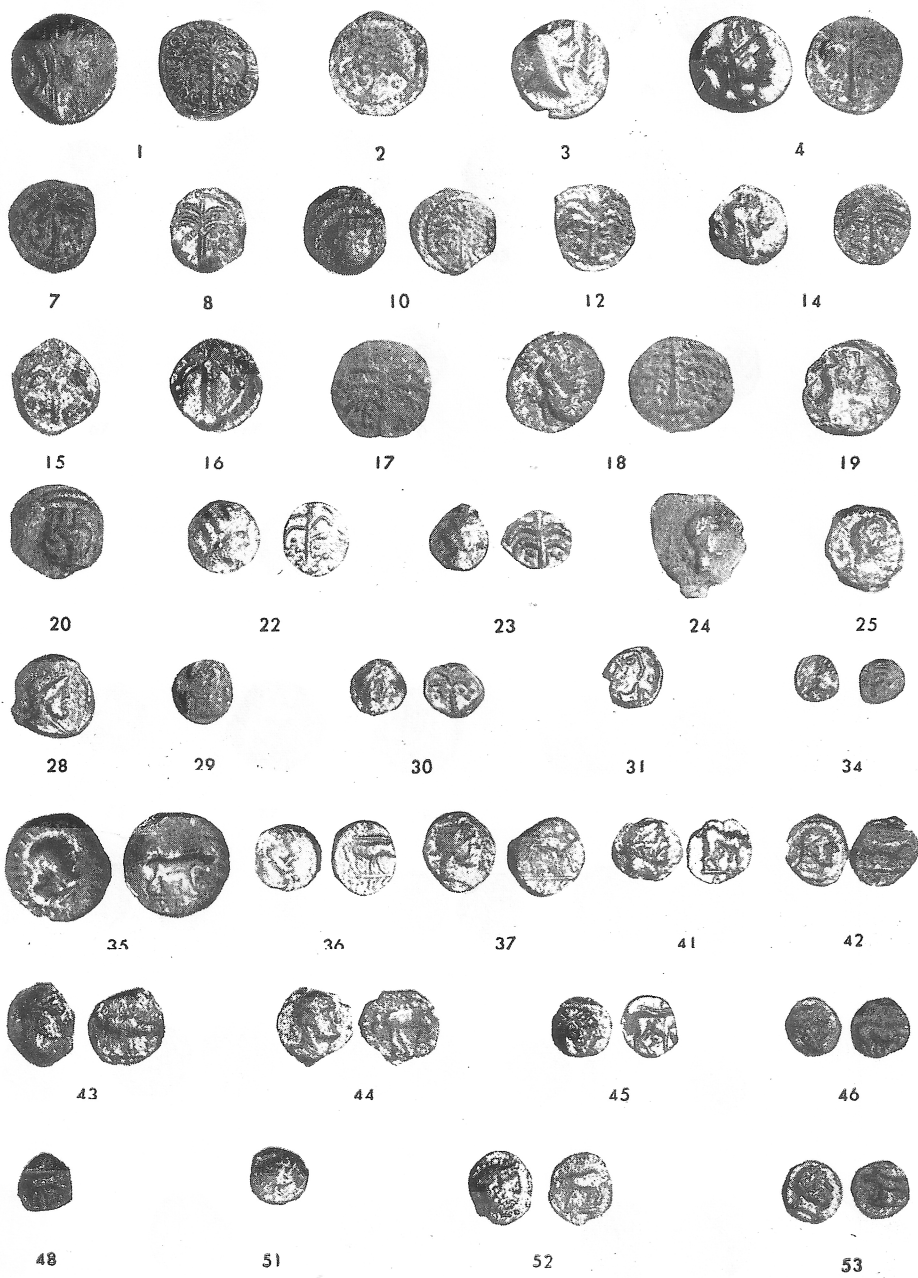
⁵⁴ Cf. *ibid.*, pl. XVII, 36-38.

No.	Wt. in gm.	Size in mm.			Obverse	Reverse	Quant.
116	0.46	8			Bust of emperor (inscription illegible)		2
117	0.58	8			Bust of emperor, full-face		10
118	0.68	9			Bust of emperor, full-face, cross in field		

UNIDENTIFIED (18)

No.	Wt. in gm.	Size in mm.			Obverse	Reverse	Quant.
119	0.45	9			Head of emperor, r., laur.; traces of inscription	2 busts r.	13
120	0.42	9			Head of emperor, r., laur.; traces of inscription	Parts of 3 busts	
121	0.32	9			Male head (bar- baric); traces of inscription	Parts of 4 busts	

No.	Wt. in gm.	Size in mm.			Obverse	Reverse	Quant.
122	0.38	9			Female bust	2 heads	5
123	0.53	10			Female bust	Parts of 3 busts	
124	0.43	9			Female head	Parts of 4 busts	



(Nos. under the coins refer to the Catalogue, pp. 123-138).

