

30	Bust of Justinian I facing, holding in r. hand globus surmounted by a cross; in field r. cross; around: DN --	M on l. and r. A X N X N X O I (Year 31) above, a cross; below: B; in ex.: CON	Surface soil.	Struck at Constantinople in A.D. 557-8.
30	Justin II and Sophia seated to front; illegible.	M on l. and r.: A N 9 N O (year 6) above, a cross; below: A; in ex.: NIKO.	Surface soil.	Struck at Nicomedia in A.D. 570-1.
28	Justin and Sophia seated to front; around: -IVSTI NVS PP --	M on l. and r.: A N 91 N O (year 7) above, a cross; below: A; in ex.: NIKO.	Surface soil.	Struck at Nicomedia in A.D. 571-2.
21	Bust of Tiberius II facing, holding in r. hand globus surmounted by a cross; around: DN ΠΤΑ	K inscr. illegible.	Cave B.	A.D. 574-82. Probably struck at Antioch.
28	Much worn.		Surface soil.	Probably 6th century A.D.
10	Traces of bust of an emperor r.	Monogram (only part visible).	Surface soil.	Probably 6th century A.D.

In addition there were found in the surface soil:

5 Mamluk coins;

7 coins of recent origin (Turkish and Egyptian);

6 also, in Cave A, 1 coin of the Crusader period.

A HOARD OF PHOENICIAN COINS

3

ON the 15th of August 1930, a hoard of Phoenician coins was discovered at Tall Abu Hawwam,¹ near Haifa.

All the coins have the same types and belong to series attributed to Tyre. The types are:

Obverse: Winged sea-horse moving r. over waves, represented by two lines, carrying a bearded male rider,² bust alone visible, with hair in a knot at the back (and bound with diadem?³), arms bare, wearing a garment showing vertical folds, resembling kandys; holding a bow in l. hand, outstretched, and reins in r.; cable border.

Reverse: Eagle-Owl standing r., looking to front; across field, crook and flail, placed diagonally behind owl, also numerals, letters, or both; cable border.

The hoard lay just over one metre below the original surface of the Tall, among stones forming the foundations of a wall of the Hellenistic period. Near the coins was found a broken jug (pl. XVIII. 4) to the inner surfaces of which still adhere short bands of silver corrosion, showing that the coins had been buried in the jug. Sixty-two coins were collected from the loose soil lying between the stones, by personnel of the Department of Antiquities, at the time of the discovery. A further batch of 47 coins, believed to complete the hoard, was sold on the same day to a Haifa antiquity dealer by an unknown individual, probably to be identified with the labourer who found the coins in the first instance and who afterwards left the work and disappeared. A list of the coins is appended; those belonging to the batch of 47 obtained through the antiquity dealer are distinguished by an asterisk (*).

The first fourteen coins in the list are Phoenician staters of thick fabric, considerably worn and apparently struck from worn or imperfectly finished

¹ Tall Abu Hawwam is a small artificial mound lying between the foot of Mount Carmel and the Bay of Acre, a mile and a quarter to the south-east of Haifa Railway Station. The greater part of the mound has been demolished, in the past, to provide material for filling in adjacent swamps and, during the summer of 1930, some earth was taken from the small remaining portion to construct an embankment. During the latter work the hoard was found.

² Melqarth (Hill, *B.M. Catalogue, Phoenicia*, pp. 229-32) or 'Divinité' (Babelon, *Traité*, Pt. 2, Vol. II, p. 618). The appearance of the rider, his hair, clothing—so far as it is distinguishable on the coins—and manner of holding the bow, suggest an imitation of the figure of the Great King on darics; but the rider is not crowned with the kidaris which was a particular attribute of the Great King (Xenophon, *Anab.*, II, 5).

³ The rider seems to be wearing a kind of turban with loose ends on some specimens (Nos. 9, 15) and, on others, a tiara that almost takes the form of the kidaris (No. 99).

dies; they had an outer coating of green corrosion, under which thin layers of red cuprous oxide adhered to the silver surfaces, indicating a large proportion of copper in the alloy.

The remaining 95 coins are of Attic standard, in almost new condition or only a little worn; these had a hard rough greyish-black coating of silver chloride, varying in thickness, but with no visible signs of copper alloy.

The greater number are dated to years 27 and 29. Year 33 is the latest in the hoard. As coins of the same series bearing dates up to year 37 are known, it is likely that the hoard was abandoned about three years before coins of the year 37 came into circulation.¹

The earliest coins attributed to Tyre can be arranged in four groups, differing in fabric and style:

	<i>Obverse.</i>	<i>Reverse.</i>	<i>B.M.C. No.²</i>
<i>Group I:</i> (Phoenician Staters, thick fabric. Not represented in the hoard.)	Dolphin r. over neat triple line of waves; murex shell in exergue.	Owl with ruff indicated by thick continuous crescent; crook and flail; in shallow incuse square.	1, &c.
<i>Group II:</i> (Phoenician Staters, thick fabric. Nos. 1-14 in list.)	Sea-horse and rider over clumsy double line of waves; dolphin in exergue.	Owl with ruff treated naturally, showing feathers; crook and flail, letters, numerals, &c.	11, 14, &c.
<i>Group III:</i> (Phoenician Staters, flat fabric. Not represented in the hoard.)	Sea-horse and rider, over neat triple line of waves; dolphin in exergue.	Owl with ruff as in Group I; crook and flail; in shallow incuse circle.	19, &c.
<i>Group IV:</i> (Attic standard, flat fabric. Nos. 15-109 in list.)	Sea-horse and rider over clumsy double line of waves (as in Group II, but showing greater detail) dolphin in exergue.	Owl with ruff treated naturally (as in Group II). Crook and flail, letters, numerals, &c.	25, 29, 32, &c.

The hoard contains coins of Groups II and IV only, in proportions that might be expected if the latter group followed the former without the interposition of Group III. It seems possible, on grounds of style also, that

¹ For a discussion as to the eras by which these coins of Attic standard may be dated see Hill, *ibid.*, pp. cxxix ff. He regards the Seleucid era as the most probable; this would place the coins of year 37 in 276-5 B.C.; he adds, however, in a note that 'Rouvier's suggestion . . . that the coins of years 23-37 are dated by the Phoenician era of Alexander and belong to 311/10-297/6 B.C., is attractive . . .'

² For complete descriptions the British Museum Catalogue should be consulted.

Group III immediately succeeded Group I; on both groups there is a neat triple line of waves, distinct from the careless double lines on Groups II and IV; the thick continuous crescent passing below the owl's beak, representing the ruff, occurs on Groups I and III, but the ruff is treated differently on Groups II and IV. The reverse type of Group I is in an incuse square, that of Group III in a shallow incuse circle, indicating similar methods of striking, distinct from the method used for Group II which produced no incuse impression.

On the evidence of the Cilician find¹ the coins of Group III were in circulation before 380 B.C. They cannot be attributed to any particular ruler; possibly Evagoras I, of Salamis, introduced them after he seized Tyre in 389 B.C., but, if so, they could have been issued during a short period only (though Babelon states that they are very common²) and Evagoras would have been responsible for introducing the type of rider on sea-horse.

The fabric of Groups II and IV is careless and plated specimens are known; but no plated specimens are recorded in Groups I and III. It has been noted that the coins of Group II found in the hoard are of debased silver. A coin of Group IV in barbarous style, with the reverse type to l. is recorded.³

A characteristic of Groups II and IV is that the types in each Group present a remarkable uniformity in size and contour, at first creating an impression that very few dies were used; but, after taking into account differences due to the re-working of some dies, there remain variations (such as changes in the position of the crook and flail or numerals in relation to the main type) which show that such an impression would be incorrect and that relatively large numbers of dies may have been prepared, by some mechanical means, from one model, each die being afterwards worked up by the wheel. For comparing dies lantern slides were made from photographs of some of the coins; the degree of similarity between the dies could be seen by looking through two slides held together above a bright reflecting surface and adjusting them to obtain coincidence.

(Half the slides were made with the images reversed, so that any pair could be held film to film, to avoid separation by the thickness of the glass.)

The foregoing notes, taken in conjunction with the fact that no coins of Group III occurred in the hoard, would seem to imply that Group II followed Group III. But it is difficult to admit this, owing to the thick fabric of the coins in Group II, if both Groups were issued from the same mint.

The fabric of Group II is not unlike that of imitations of Athenian tetra-

¹ Newell, *Num. Chron.*, 1914, p. 20.

² Babelon, *Les Perses Achéménides*, p. cxc.

³ *B.M. Catalogue, Phoenicia*, p. 231, No. 31.

drachms struck in the East. Is it likely that Group II was similarly issued in imitation of Tyrian coins? Or, alternatively, that Groups II and IV came from the mint of some other Phoenician city connected with Tyre? The latter suggestion may be preferred.

The hoard was found at a considerable distance from Tyre, eight miles south of Acre where Alexander had a mint,¹ yet no coins of Alexander's types are included in it.

If it is held that the coins were struck at Tyre, it is difficult to see why the hoard did not contain also coins of other types which might have been circulating. (It can be assumed that the coins were still current when the hoard was put aside because it does not contain specimens of the latest coins in the series.)

If, however, the coins were struck not at Tyre, but at a mint near the site which yielded the hoard, perhaps at Acre, they would represent the principal local currency and the absence of other types from the hoard would be less striking. Also, incidentally, it would be unnecessary to account for the fact that coins of Group III do not occur, these having been minted at Tyre.

If these suggestions are admitted, can the sign \circ coupled with the numerals on coins of Group IV and generally read as 20, be in reality the letter ψ ? The sign for 20 does not seem to occur as a perfect circle on Phoenician inscriptions till a later date, and on tetradrachms of Alexander bearing the mint name of Acre ($\psi\circ$), the sign for 20 is ω .

If the \circ were a letter and not a numeral, the dates would read from year 1 to 17, consecutively, instead of from 1 to 37 with a gap which may amount to 20 years between years 4 and 23, but it would be necessary to reconsider the question of the era by which the coins are dated, and the remaining signs which represent letters, whether standing by the numerals (as ρ , φ) or not (ψ , χ , φ), would still have to be explained. Possible interpretations of the letters are discussed by Hill² and it seems reasonable to suppose that those letters which are directly associated with the numerals bear some relation, not yet ascertained, to the system of dating.

The combinations which occur are:

Undated (? or with numeral imperfectly struck), φ (No. 15).

Year 1, ρ . (one series only)

„ 2, ω , ψ .

„ 3, $\omega\omega$, $\omega\omega\omega$, ψ .

„ 4, $\omega\omega\omega$ (on a barbarous specimen³), ψ .

¹ Ibid., p. lxxviii.

² Ibid., p. cxxix.

³ Ibid., p. 231, No. 31.

Apart from the sign \circ under consideration, all the letters are found on coins of years 1 to 4 except in the case of a specimen inscribed III° ¹, read as year 23, but which would read year 3 if the \circ were a letter and not a numeral. Supposing that the \circ represents v (standing for the mint name of Acre) the following combinations can be added to the list:

Year 3, III° , III° .

„ 4, IIII° .

Variations then appear only on coins of years 1 to 4, the letter accompanying the numerals on later issues being constant (always v).

Hill states² that the mint name of Acre is found on coins of Alexander 'until 294–293 B.C.', and that 'the city remained in Seleucid hands from this year until Ptolemy II recovered it (perhaps on the death of Seleucus in 281)', but Newell³ proposes to date these Alexander coins by an era beginning about 347 B.C. He mentions also bronze coins of Alexander bearing the inscription TY^{A} and v° , the initial letters of Tyre in Greek and the name of Acre in Phoenician characters, one dated year 26, showing a connexion between the two mints; he further shows that some of the dies used in striking Alexander's coins for Sidon were used also on coins struck at Acre, assuming the existence of separate mints and the transfer of dies from Sidon to Acre. Is it not also possible that the mint of Acre was employed to strike currency needed in other Phoenician cities and that such issues were not limited to the types of Alexander (which may not have been accepted everywhere when first introduced⁵), but included Phoenician types as well?

The subsidiary letter A which is found on a coin of Group IV having the date numeral 3 (No. 21 in the hoard) occurs also on coins of Alexander's types struck at Acre with date numerals from 26 to 29;⁶ there may of course be no connexion, but if the Phoenician coins bearing the letter A were struck when A first appears on the Alexander coins (*c.* 320 B.C. according to Newell) the Phoenician series represented by Group IV would have begun soon after the death of Alexander. In considering possible meanings of the letters on

¹ *B.M. Catalogue, Phoenicia*, p. 232, No. 33.

² *Ibid.*, p. lxxviii.

³ E. T. Newell, *The Dated Alexander Coinage of Sidon and Ake* (Yale, 1916), p. 55.

⁴ *Ibid.*, pp. 60–1.

⁵ 'A number of types are purely imitative and were adopted by states in order to obtain currency for their own issues.' (Hill, *Handbook of Greek and Roman Coins*, p. 177.) As Alexander's types eventually gained almost universal currency in the Near East, any need to imitate local types could have arisen only during the period of the earlier issues. Hill notes similarities in fabric between 'Tyrian coins belonging to the period immediately after the siege of Tyre' (i.e. Group IV) and coins struck at Babylon by Alexander's generals with Persian and other oriental types (*B.M. Catalogue, Arabia*, p. cxlii).

⁶ Newell, *op. cit.*, p. 45.

coins of the first four years it is necessary to remember that the 9 and the 4 appear also on Group II. But given the connexion between the mints of Acre and Tyre shown by the bronze Alexander coin of year 26 (i.e. 320 B.C.?) it would not be difficult to accept the suggestion of Six that the 4 on coins of years 2 to 4 represents Tyre.¹

To summarize, it is suggested that:

- (1) Coins of Groups I and III belong to Tyre.
- (2) Coins of Groups II and IV were struck at some other mint, perhaps Acre.
- (3) Coins of Group IV may have been issued for local requirements concurrently with coins of Alexander's types struck at Acre.
- (4) The sign 0 on Group IV may be 4, instead of the numeral 20; but if this is not accepted, it need not invalidate the attribution of the coins to a mint other than Tyre.

C. L.

LIST OF COINS IN THE TALL ABU HAWWAM HOARD

Note. In this list the reading of the sign 0 as the numeral 20 has been retained.

No.	Size (mm.).	Axis.	Weight (gm.).		Year.	Letters, numerals, &c. on reverse.	Notes.
			Before cleaning.	After cleaning.			
1	23	↗	12.90	12.72	?	4	
2	23	↗	12.36	12.09	?	4 Plate XIX.
*3	21	↘	13.06	12.82	1?	I [-]?	
*4	20	↘	13.05	12.83	2?	II [-]?	
*5	21	↘	13.42	13.20	4	4 IIII Plate.
6	20	↗	13.22	12.99	4?	III [-]?	
7	22½	↘	13.42	13.17	4	IIII Plate.
8	22	↖	13.29	13.07	6	4 IIIIII	Rev. die = 5, re-cut. Plate.
9	22	↗	12.71	12.27	25?	IIII ~? Plate.
10	21	→	13.26	13.09	30	~ ~ Plate.
*11	20	↗	13.22	12.94	30	~ ~	
12	23	↖	13.28	13.02	?	-- Plate.
13	19	→	13.18	13.09	?	9 Plate.
14	24	↖	12.95	12.53	?	4?	
*15	22	↑	8.97	8.53	?	4 Plate.
16	22	↗	8.92	8.59	2	4	Same obv. die as 17, 18. Plate.
17	22	↗	8.87	8.82	3	4	
18	23	↗	9.14	8.22	3	4	

¹ *Num. Chron.*, 1877, p. 191, cited by Hill, *B.M. Catalogue, Phoenicia*, p. cxxix.

LIST OF COINS IN THE TALL ABU HAWWAM HOARD (cont.)

No.	Size (mm.)	Axis.	(Weight (gm.).)		Year.	Letters, numerals, &c. on reverse.	Notes.
			Before cleaning.	After cleaning.			
19	23	↗	9.14	8.47	3	III W	Obv. = 20.
*20	22	↑	8.90	8.80	3	III W	
21	19½	↗	9.00	8.75	3	IIIW X	Part of flail curled up to l. <i>Plate</i> XIX.
22	22	↗	8.89	8.84	3	IIIW	" " "
23	21	↗	8.84	8.82	4	III	Traces of W below. <i>Plate</i> .
*24	21	↑	8.84	8.74	23	III O	
*25	20	↗	9.04	8.17	23?	[III O]	
26	21	↖	9.08	8.31	24?	[IIII O]	Obv. = 27.
27	20	↖	8.90	8.78	24	IIII O	
*28	21	↖	9.01	8.00	24	IIII O	
*29	21	↑	8.99	8.33	24	IIII O	
30	21½	↗	9.17	8.53	24	IIII O	
*31	21	↖	8.89	8.62	25	IIII O <i>Plate</i> .
*32	21	↑	9.00	8.42	25	IIII O	
33	20½	↗	8.80	8.73	26	IIII O <i>Plate</i> .
34	21	↗	8.91	8.81	26	IIII O 	Obv. = 38.
*35	20	↑	8.89	8.87	26	IIII O 	Obv. = 36.
*36	21	↑	8.86	8.63	26	IIII O 	
*37	21	↑	8.81	8.69	26?	[IIII O 	
*38	21	↗	8.93	8.42	26?	[IIII O 	
39	20½	↗	8.86	8.43	27	IIII O II	Rev. = 40, 41.
40	20	↑	8.84	8.80	27	IIII O II	
41	21	↑	9.02	8.28	27	IIII O II	
42	21	↗	9.17	7.96	27	IIII O II	Obv. = 43, 47.
43	22½	↖	9.04	8.41	27	IIII O II	Rev. = 47.

No.	Size (mm.)	Axis.	Weight (gm.).		Year.	Letters, numerals, &c. on reverse.	Notes.
			Before cleaning.	After cleaning.			
44	23	↗	8.92	8.48	27	IIII O II	Obv. = 45, 46, 49. Rev. = 45.
45	20½	↗	8.99	8.62	27	IIII O [II]	
*46	20	↗	8.98	8.55	27?	IIII O II [I]?	
*47	21	↑	8.86	8.67	27	[IIII O II]	
*48	23	↗	9.12	8.27	27?	[IIII O II]?	Obv. = 52.
49	19½	↗	8.89	8.70	27?	[IIII O III]?	
50	22	↖	8.92	8.57	27	IIII O II	
51	21	↖	9.10	8.64	27	IIII O II	
*52	21	↖	9.01	8.45	27	IIII O II	
*53	20	↗	8.89	8.86	27	IIII O II	Obv. = 54. Plate XIX.
*54	20	↗	8.97	8.40	27	IIII O II	Rev. = 56.
*55	20	↗	8.81	8.59	27	IIII O II	
*56	21	↗	9.05	8.57	27	IIII O II	
*57	21	↗	8.75	8.27	27	IIII O II	
58	22	↗	8.85	8.72	28	IIII O IIII	Same dies as 59, 60.
*59	21	↗	8.99	8.61	28	IIII O IIII	
*60	20	↗	8.95	8.71	28	IIII O IIII	
*61	22	↗	8.96	8.57	28	IIII O IIII	
*62	20	↗	8.85	8.61	28	IIII O IIII	
*63	20	↗	8.84	8.54	28	IIII O IIII	
64	21	↑	8.99	8.74	29	IIII O IIII	Same dies as 65, 66, 67; also obv. = 68.

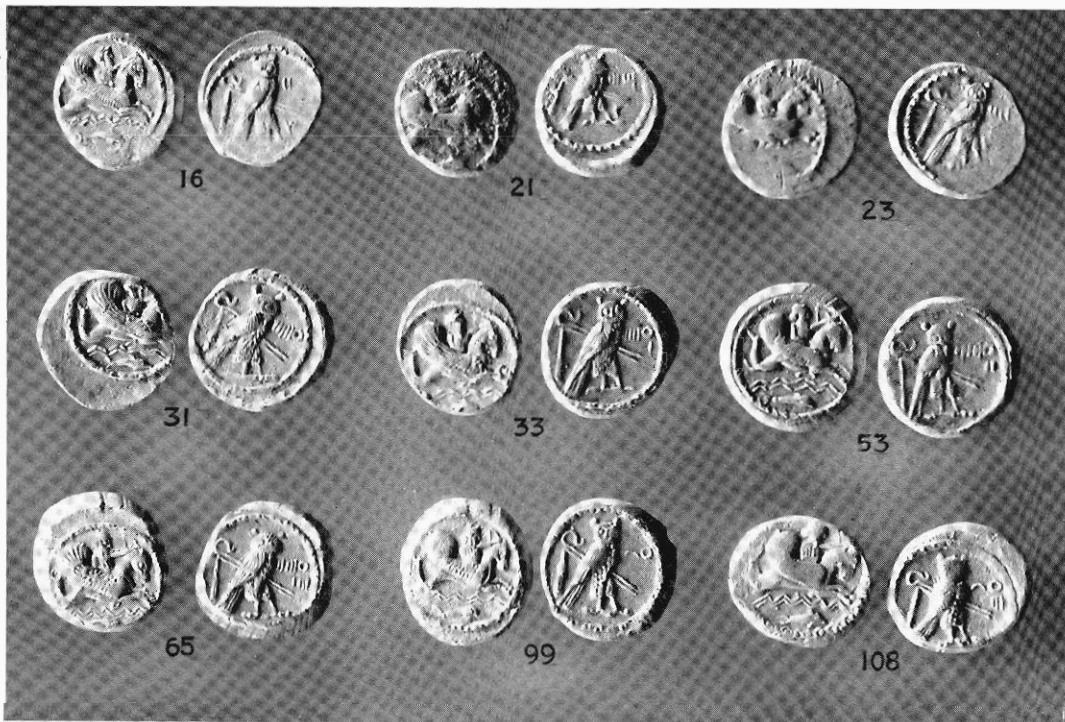
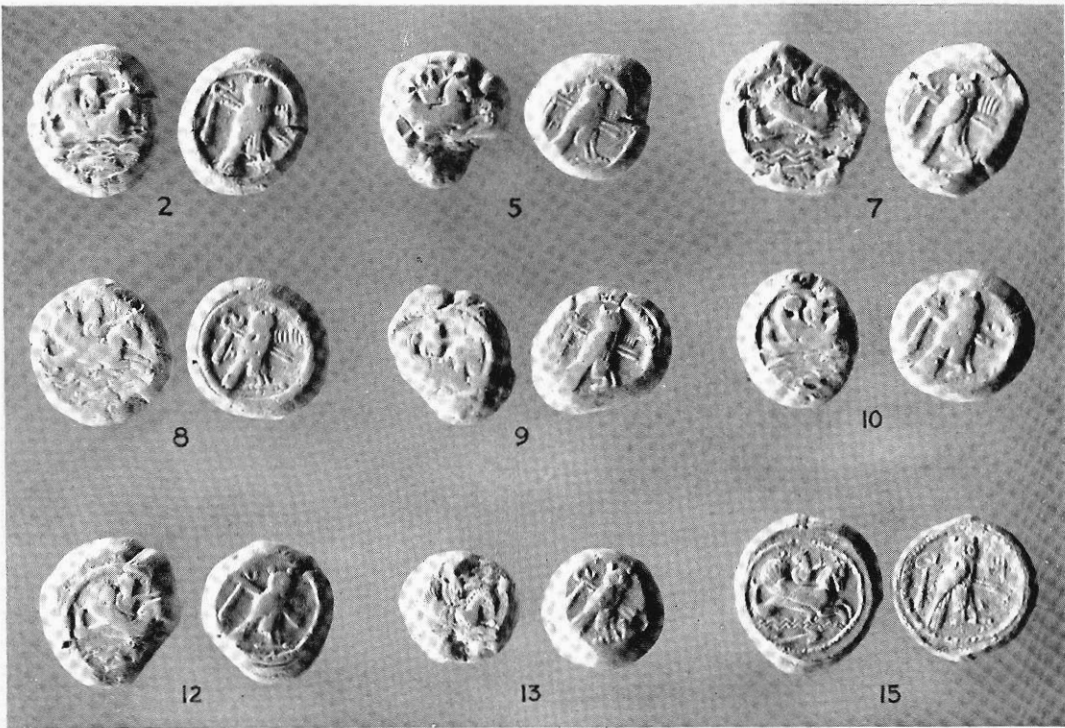
LIST OF COINS IN THE TALL ABU HAWWAM HOARD (cont.)

No.	Size (mm.).	Axis.	Weight (gm.).		Year.	Letters, numerals, &c. on reverse.	Notes.
			Before cleaning.	After cleaning.			
65	21	↑	8.89	8.86	29	IIIIIO III	Plate XIX
66	20	↑	8.86	8.84	29	IIIIIO III	
67	21	↗	8.95	8.82	29	IIIIIO III	
68	21	↑	9.06	8.24	29	IIIIIO III	
69	22½	↑	9.11	8.30	29	IIIIIO III	Obv. = 70, 71, 72, 90.
70	21	↖	8.89	8.70	29	IIIIIO III	Same dies as 71, 90.
71	22½	↗	9.17	8.34	29	IIIIIO III	
72	21	↑	8.95	8.56	29	IIIIIO III	
73	21½	↗	9.08	8.19	29?	[IIIIIO III]?	Obv. = 74, 75, 76, 96.
74	21½	↑	8.92	8.74	29	IIIIIO III	Same dies as 75, 76, 96.
75	21½	↗	8.94	8.87	29	IIIIIO III	
76	22	↑	8.92	8.42	29	IIIIIO III	
77	21	↗	8.94	8.91	29	IIIIIO III	
78	22	↑	8.89	8.56	29	IIIIIO III	Same dies as 79; also rev. = 87.
79	22	↑	8.96	8.27	29	IIIIIO III[I]	
80	21	↗	8.96	8.26	29	IIIIIO III	Obv. = 81, 88, 94.
81	21	↑	9.11	8.24	29	IIIIIO III	
82	20	↑	9.02	8.83	29	IIIIIO III	
83	20	↖	8.91	8.88	29	IIIIIO III	Obv. = 91.
84	22	↗	8.92	8.67	29	IIIIIO III	Rev. = 86, 91.

No.	Size (mm.).	Axis.	Weight (gm.).		Year.	Letters, numerals, &c. on reverse.	Notes.	
			Before cleaning.	After cleaning.				
85	21	↑	8.91	8.82	29	IIIIIO IIII	Rev. = 94, 97.	
*86	20	↑	8.87	8.63	29	IIIIIO IIII		
*87	22	↑	9.11	8.62	29	IIIIIO IIII		
*88	19	↑	8.98	8.39	29	IIIIIO IIII		
*89	20	↑	8.95	8.71	29	IIIIIO IIII		
*90	20	↖	9.03	8.67	29	IIIIIO II[II]		
*91	20	↑	9.01	8.43	29	IIIIIO IIII		
*92	21	↑	8.77	8.72	29	IIIIIO II[II]		Obv. = 93, 95.
*93	19	↑	8.89	8.50	29	IIIIIO IIII		Same dies as 95.
*94	19	↑	8.95	8.73	29	IIIIIO IIII		
*95	19	↑	8.97	8.74	29	IIIIIO IIII		
*96	20	↑	8.96	8.45	29	IIIIIO IIII		
*97	20	↑	9.05	8.10	29	IIIIIO IIII		
98	20	↑	8.88	8.85	30	∩O	Plate XIX.	
99	22	↖	8.84	8.18	30	∩O		
100	19	↑	8.81	8.71	30	∩O		
101	20½	↖	8.82	8.74	30	∩O		
102	22	↑	9.12	8.51	30	∩O		
*103	20	↑	9.00	8.53	30	∩O		
*104	20	↖	8.93	8.54	30	∩O		
*105	21	↖	8.94	8.58	30	∩O		
*106	20	↖	9.08	8.48	30	∩O		
107	21½	↖	8.84	8.79	32	II∩O		
108	22	↖	9.11	8.35	33	∩O IIII	Plate.	
*109	21	↑	9.01	8.49	?	- -		

SUMMARY

<i>Year.</i>	<i>Number of coins.</i>
<i>GROUP II.</i>	
(Undated)	5
1	1 (?)
2	1 (?)
4	3 (?)
6	1
25 (?)	1
30	2
	Total (Group II) 14 coins.
 <i>GROUP IV.</i>	
(Undated ?)	1
2	1
3	6
4	1
23	2
24	5
25	2
26	6
27	19
28	6
29	34
30	9
32	1
33	1
?	1
	Total (Group IV) 95 coins.



A HOARD OF PHOENICIAN COINS

