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# Ancient and Byzantine Weights from Tire Museum including one Islamic Dirham

Oğuz Tekin

**Abstract:** This article focuses on the balance weights housed in the Tire Museum, a local museum in Western Anatolia. The collection consists of 63 weights made of lead and bronze (including one glass weight). Some of these are dated to the Hellenistic period, while others belong to the Roman and Byzantine periods. Since Ephesus is the closest archaeological site to Tire, it is possible that a significant portion of the weights may have originated from or been used in Ephesus.

**Key words:** Tire, ancient weights, Byzantine weights, Ephesus, libra/litra

**Zusammenfassung:** In diesem Artikel werden die Marktgewichte im Tire-Museum, einem lokalen Museum in Westanatolien, behandelt. Die Sammlung umfasst 63 Gewichte aus Blei und Bronze (einschließlich eines Glasgewichts). Ein Teil davon wird der hellenistischen Zeit, ein anderer Teil der römischen und byzantinischen Epoche zugeordnet. Da Ephesos die nächstgelegene antike Stätte zu Tire ist, kann angenommen werden, dass ein bedeutender Teil der Gewichte aus Ephesos stammt oder dort verwendet wurde.

**Schlagwörter:** Tire, antike Gewichte, byzantinische Gewichte, Ephesos, Libra/Litra

## Introduction

Tire (Tyhra, Theira) is a district of İzmir, located approximately 80 km (about 60 minutes) south-east of İzmir and about 40 km (30 minutes) northeast of Ephesus. Besides Ephesus, in its vicinity, there are sites such as Smyrna, Sardis, Philadelphia, and Hierapolis. So, the location of the Tire Museum is surrounded by many ancient sites, and the weights acquired may have originated from these sites or their vicinity. Since the Tire Museum is a rather small, local museum, it is reasonable to assume that its archaeological artifacts mostly originate from the nearby area. Otherwise, most such objects would be expected to end up in larger museums through purchase or confiscation. Based on an examination of the museum's records, we can say – in the context of this article – that there is no precise information about the provenance of the weights; the records merely note who brought them in and the date. In any case, an artifact found at an archaeological site and brought to the museum could create legal problems for the person who found it, because under Turkish law, it is not permissible to

sell an object found at a registered archaeological site to a museum. Therefore, it is unrealistic to expect accurate information from those who brought the objects in. It is also possible to encounter vague or dubious explanations such as »I found it in my field« or »I found it on the road«. All of this makes determining the exact origin of archaeological finds particularly challenging. Even so, the aim of this article is to introduce the balance weights of this local museum's collection<sup>1</sup>. In this study, 63 balance weights will be studied, 13 of which are from the Hellenistic period and were produced according to the Greek system based on the mna. Since none of the weights bear an ethnic, it is difficult to attribute them to a specific city; however, considering that Tire was located

<sup>1</sup> I would like to thank Hüseyin Vural, the Museum Director, for granting me permission to study and publish the weights of the collection, and Faruk Tekin, the Museum specialist, for assisting me during my work at the museum and facilitating the process. The découpage of the weights was done by Orkun Kurumer; I am indebted to him.

very close to Ephesus, it would be reasonable to attribute most of them to Ephesus. Moreover, the presence of the bee symbol on three of the weights (**nos. 1–3**) is a sufficient reason to attribute them to Ephesus. The female bust on the reverse side of the first weight (**no. 1**) does not conform to the standards of Hellenistic weight design and displays a rather odd style, suggesting the bust was made much later, perhaps in modern times.

Since all the weights in this group bear unit marks, there is no problem in identifying their units. However, the two weights marked as hekteporion (**nos. 8 and 9**) should be treated with caution regarding their unit attributions, as their actual weights fall significantly below the theoretical standard. Some of the weights (**nos. 14–28**) produced according to the Roman system based on the libra – including those from the Late Roman period – are dated to the Roman Imperial period. Indeed, the spherical forms of the first four (**nos. 14–17**) are consistent with this dating. Among others, the six-libra weight (**no. 18**) is particularly interesting and is a rare specimen. This weight was produced under the responsibility and supervision of a certain eirenarchos named Marcus Aurelius Clarus. Similarly, the names Marcianus and »Neopoios« appear on some other weights in this group.

About half of the weights examined in this article are Byzantine, produced in various units ranging from one uncia to eight keratia. One particularly interesting piece (**no. 60**) is made of glass and represents a semissis (half of a solidus). It is in notably good condition compared to similar examples. The name Drosieros, which appears on this weight – thought to have been produced in Constantinople – is also encountered on other glass weights held in the collection of the Berlin State Museums<sup>2</sup> and in other collections<sup>3</sup>.

The cup-shaped weights at the end of the catalogue (**nos. 61–62**) are dated mainly to the 10<sup>th</sup>–14<sup>th</sup> centuries; thus, we have dated them to the Middle or Late Byzantine period. The very last weight (**no. 63**), considering both its

quincunx motif of five bird's-eye designs and its weight, appears to be Islamic, likely based on the two-dirham unit. Based on its weight, it can be suggested that it was produced and used within a broad time span from the 13<sup>th</sup> to the 17<sup>th</sup> centuries.

I would also like to touch upon the issue of dating. **Nos. 1–13** are based on the mna system and are dated to the Hellenistic period; the depictions or unit marks on them indicate this. They are arranged from the largest to the smallest unit. The next group (**nos. 14–29**) is based on the libra system, and these weights are also arranged from the largest to the smallest unit. Based on an assessment that takes into account their form, unit, and in some cases the inscriptions on the reverse, a flexible dating such as the Roman Imperial period has been preferred, rather than giving a precise date. The doubly truncated flattened-sphere weights (**nos. 14–16**) are placed at the beginning of the section titled »Weights in the Roman System«, as they represent the earliest examples; at this point, form becomes important in dating. The weights in the second half of the catalogue (**nos. 30–62**), while still within the libra system, belong to the standard of coin control weights – that is, based on the nomisma. Since these weights remained in use for a long time, precise dating is difficult. They are generally dated to the Late Roman and Early Byzantine periods, as is also the case in this catalogue (except **nos. 61–62** since they date to the middle Byzantine period). In the catalogue arrangement, the metrological system and, when necessary, the form (as it is significant for dating) were prioritized over the type of metal.

<sup>2</sup> Acc. 1885/70 (= [Pondera # 7302](#))

<sup>3</sup> BnF, inv. no. Schlumberger 3978 (= [Pondera # 7283](#)); Antonio Salinas Regional Archaeological Museum (Palermo), inv. No. 1 (= [Pondera # 6401](#)); Bank of Canada Museum (Ottawa), inv. no. NCC2014.33.1 (= [Pondera # 3053](#)).



### Civic Weights in Greek System Based on Mna



- 1) Inv. no. 89-13 (**fig. 1**). Lead, 520 g, 60 x 62 x 15 mm. Mna. Square in form with slightly rounded corners. On the top, large M in relief which stands for  $\mu\nu\tilde{\alpha}$ , and a faint image of a bee below; on the bottom female bust, hair in a back bun r., in relief within raised frame. The female bust on the reverse seems a modern addition and not part of the original piece. The original weight must have decreased as a result of modifications carried out when the frame was created. Therefore, its original weight must have been over 550 g. We know that especially in the Late Hellenistic period, the weight of the mna increased over time and reached approximately 600 grams. It may belong to Ephesus or, more generally, to one of the Ionian cities. It dates to the Hellenistic period. Unpublished.

- 2) Inv. no. 2003-4 (**fig. 2**). Lead, 510 g, 55 x 57 x 15 mm. Mna. Square in form with slightly raised edges on the top and bottom. On the top, large M which stands for  $\mu\nu\tilde{\alpha}$ ; and bee below; all in relief. The bottom is blank. It dates to the Hellenistic period. Published<sup>4</sup>.



<sup>4</sup> Tekin 2016, 115, no. 3 (= [Pondera # 13307](#)). Mistakenly listed as part of the Ephesus Museum collection.





- 3) Inv. no. 95-18 (**fig. 3**). Lead, 480 g, 62 x 63 x 15 mm. Mna. Square in form with slightly raised edges. On the top, large M which stands for  $\mu\nu\tilde{\alpha}$ ; and bee below; all in relief. The bottom is blank. It dates to the Hellenistic period. Published<sup>5</sup>.



- 4) Inv. no. 90-156 (**fig. 4**). Lead, 435 g, 63 x 63 x 11 mm. Mna. Square in form with slightly raised edges and corners are folded inwards. On the top, large M in relief, which stands for  $\mu\nu\tilde{\alpha}$ . The bottom is blank. It dates to the Hellenistic period. Unpublished.



- 5) Inv. no. 2003-95 (**fig. 5**). Lead, 155.35 g, 45 x 48 x 9 mm. Triton (mna of 466.05 g). Square in form with slightly raised edges and rounded corners. On the top, TP in relief which stands for  $\tau\rho\acute{\iota}\tau\omicron\nu$ ; the bottom is blank. It dates to the Hellenistic period. Unpublished.



- 6) Inv. no. 91-22 (**fig. 6**). Lead, 119.10 g, 35 x 35 x 10 mm. Tetarton (mna of 476.4 g). Square in form. On the top, TE in relief which stands for  $\tau\acute{\epsilon}\tau\alpha\rho\tau\omicron\nu$ ; monogram  $\Pi\text{H}\text{M}$  in square stamp on the upper left corner. Although the monogram consists of the letters  $\Pi$ , H, and M (with one or two additional letters possibly added through conjecture), it is not easy to find out its full form. At the very least, in order to avoid being misleading, it would be more appropriate to present the monogram as it appears. The bottom is blank. It dates to the Hellenistic period. Unpublished.

<sup>5</sup> Tekin 2016, 115, no. 4 (= [Pondera # 13308](#)). Mistakenly listed as part of the Ephesus Museum collection.





- 7) Inv. no. 91-218 (**fig. 7**). Lead, 116.15 g, 32 x 34 x 12 mm. Tetarton (mna of 464.6). Square in form with slightly raised edges. On the top, TE in relief which stands for for τέταρτον. The bottom is blank. It dates to the Hellenistic period. Unpublished.



- 8) Inv. no. 89-458 (**fig. 8**). Lead, 31.0 g, 35 x 35 x 3 mm. Uncertain unit or hektemorion? Square in form. On the top, EK in relief which may stand for ἐκτημόριον<sup>6</sup>. but its mass doesn't correspond to it. The bottom is blank. It dates to the Hellenistic period. Unpublished.



- 9) Inv. no. 91-26 (**fig. 9**). Lead, 55.75 g, 23 x 30 x 8 mm. Hektemorion (mna of 334.5 g, too low for this unit.) Rectangular in form. On the top, engraved with E which stands for ἐκτημόριον; two deep diagonal scratches on the E, possibly applied to indicate cancellation. Indeed, its weight does not conform to the  $\frac{1}{6}$  mina standard, being significantly lower than expected. The bottom is blank. It dates to the Hellenistic period. Unpublished.



- 10) Inv. no. 2003-5 (**fig. 10**). Lead, 42.30 g, 25 x 26 x 5 mm. Decadrachm (drachm of 4.23 g)<sup>7</sup>. Square in form with slightly rounded corners. On the top, Δ in relief which stands for δέκα. The bottom is blank. It dates to the Hellenistic period. Unpublished.



- 11) Inv. no. 92-185 (**fig. 11**). Lead, 39.60 g, 23 x 25 x 10 mm. Decadrachm (drachm of 3.96 g). Square in form with beveled edges. On the top, Δ in relief which stands for δέκα. The bottom is blank. It dates to the Hellenistic period. Unpublished.



- 12) Inv. no. 92-67 (**fig. 12**). Lead, 39.30 g, 23 x 24 x 9 mm. Decadrachm (drachm of 3.93 g). Square in form with beveled edges. On the top, Δ in relief which stands for δέκα. The bottom is blank. It dates to the Hellenistic period. Unpublished.

<sup>6</sup> Cf. CPAI 3/1, no. 234 (80.75 g) = [Pondera # 2216](#). For another example (E, not EK) weighing 30.70 g see [Pondera #16703](#).

<sup>7</sup> Cf. CPAI 3/1, no. 268 ff.; *Pondera »ten drachmas«*.



- 13) Inv. no. 94-112 (**fig. 13**). Lead, 37.30 g, 22 x 22 x 10 mm. Decadrachm (drachm of 3.73 g). Square in form with beveled edges. On the top,  $\Delta$  in relief which stands for δέκα. The bottom is blank. It dates to the Hellenistic period. Unpublished.



### Weights in the Roman System Based on the Libra (including Byzantine weights)



- 14) Inv. no. 89-536 (**fig. 14**). AE 51.90 g, 23 x 18 mm. Two unciae (uncia of 25.95 g). Flattened sphere doubly truncated in form. Centring points on the top and bottom. Silver inlaid on the top with the denominational mark 8 B. The bottom is blank. It dates to the 3<sup>rd</sup>–5<sup>th</sup> century AD. Unpublished.



- 15) Inv. no. 2017-432 (**fig. 15**). AE 26.3 g, 17 x 15 mm. One uncia. Flattened sphere doubly truncated in form. Centring points on the top and bottom. Engraved on the top with the denominational mark 8 A, may be inlaid but inlay is missing or not inlaid. The bottom is blank. It dates to the 3<sup>rd</sup>–5<sup>th</sup> century AD. Unpublished.



[Scale 2:1]

- 16) Inv. no. 2017-434 (**fig. 16**). AE 25.8 g, 15 x 14 mm. One uncia. Flattened sphere doubly truncated in form. Centring points on the top and bottom. Inlaid (?) on the top with the denominational mark 8 A. In fact, due to the slightly deep engraving, it gives the impression of being inlaid; however, since there are no visible traces of inlay, we cannot be certain. The bottom is blank. It dates to the 3<sup>rd</sup>–5<sup>th</sup> century AD. Unpublished.



[Scale 2:1]

- 17) Inv. no. 2017-429 (**fig. 17**). AE 13.2 g, 12 x 12 mm. Twelve grammata (gramma of 1.1 g). Flattened sphere doubly truncated in form. Centring points on the top and bottom. Engraved on the top with the denominational mark I B. The bottom is blank. It dates to the 3<sup>rd</sup>–5<sup>th</sup> century AD. Unpublished.





[reduced size]

- 18) Inv. no. 87-50 (**fig. 18**). Lead, 2108.1 g, 125 x 125 x 15 mm. Six Italic heavy librae (libra of 351.35 g). Square in form with raised and beveled edges and a handle at the top; herringbone pattern on the edges. Six librae. On the top, ΛΕΙ / ΤΡΑΙ / ΕΞ which stands for six (= ἕξ) librae. It may be a heavy libra italike. The stamp on the handle of the weight shows a standing male figure facing left, holding an object in his right hand, and with his left arm hanging down. On the bottom, inscription in five lines:  
 Τ[Ω]Ν / ΠΕΡΙ ΜΑΡ / ΑΥΡΚΛΑΡ / ΟΝΕΙΡΗΝΑ / ΡΧ[Ω]Ν  
 Τ[ῶ]ν περὶ Μαρ[κον] Αύρ[ηλιον] Κλάρον εἰρήναρχ[ω]ν  
 It gives the name of a certain Marcus Aurelius Clarus and the eirenarchs associated with him. It may be attributed to one of the cities of Ionia and is dated to the late 2<sup>nd</sup> or 3<sup>rd</sup> century AD. Published<sup>8</sup>.



- 19) Inv. no. 79-24 (**fig. 19**). Lead, 320 g, 63 x 65 x 10 mm. One libra. Square in form with raised edges; handle is broken. On the top, Inside, ΛΕΙ / ΤΡΑ in relief. The bottom is blank but bears blow marks. It dates to the Roman Imperial period. Unpublished.

<sup>8</sup> Tekin 2024a, no. 61 (misidentified as five-mna / seven-litra but corrected as six-litra by the author in Tekin 2024b, 19, fig. 1).



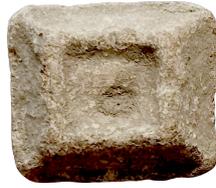


- 20) Inv. no. 91-178 (**fig. 20**). Lead, 228.20 g, 50 x 54 x 10 mm (+ handle 17 mm). ½ libra (libra of 456.4 g). Square in form with raised and beveled edges and handle above. On the top, HMEI / ΛEIT / PON in three lines and in relief. Stamp on handle but illegible. On the bottom, PYA / ATH / H[.]T in three lines and in relief. It dates to the Roman Imperial period. Unpublished.

- 21) Inv. no. 2003-7 (**fig. 21**). Lead, 97.10 g, 39 x 37 x 9 mm (except handle). Three unciae (uncia of 32.36 g, too heavy for this unit). Square in form with raised and beveled edges and handle above. On the top, reversed Γ in relief. On the handle, MAP/KIAN/OY. The bottom is blank. It gives a certain Marcianus as magistrate. It dates to the Roman Imperial period. Unpublished.



- 22) Inv. no. 274 (**fig. 22**). Lead, 82.30 g, 44 x 46 x 7 mm. Three unciae (uncia of 27.43). Square in form with raised and beveled edges and handle above. On the top, Γ in relief. On the bottom, M·APT / A·ΛΟΥ·K / Y·EΛΠ in three lines and in relief. It dates to the Roman Imperial period. Unpublished.



- 23) Inv. no. 2003-9 (**fig. 23**). Lead, 28.10 g, 22 x 23 x 8 mm. One uncia. Square in form with raised and beveled edges. On the top, a faint A in relief. The bottom is blank. It dates to the Roman Imperial period. Unpublished.



- 24) Inv. no. 91-179 (**fig. 24**). Lead, 25.90 g, 27 x 28 x 5 mm. One uncia. Square in form with raised and beveled edges. On the top, A in relief. The bottom is blank. It dates to the Roman Imperial period. Unpublished.



- 25) Inv. no. 2003-6 (**fig. 25**). Lead, 24.55 g, 25 x 33 x 5 mm (inc. handle). One uncia. Square in form with raised and beveled edges and handle above. On the top, a rotated A in relief. On the bottom, I[.] / AA in relief. It dates to the Roman Imperial period. Unpublished.



- 26) Inv. no. 2017-303 (**fig. 26**). Lead, 23.2 g, 31 x 26 x 5 mm. One uncia. Square in form with raised and beveled edges. On the top, A in relief. On the bottom, NEO / ΠΟΙ in two lines and in relief. It may be the name of a certain Neopios served as magistrate responsible for market. It dates to the Roman Imperial period. Unpublished.



- 27) Inv. no. 2003-10 (**fig. 27**). Lead, 27.70 g, 22 x 21 x 8 mm. One uncia. Square in form with beveled and raised edges. On the top, A with oblique crossbar in relief. The bottom is blank. It dates to the Roman Imperial period.



- 28) Inv. no. 92-187 (**fig. 28**). Lead, 12.75 g, 24 x 24 x 4 mm. ½ uncia (uncia of 25.5 g) Square in form with raised and beveled edges. Small break on the edge. On the top, S in relief which stands for semis. The bottom is blank. It dates to the Roman Imperial period. Unpublished.



- 29) Inv. no. 2017-189 (**fig. 29**). AE 26.2 g, 23 x 23 x 5 mm. One uncia. Square in form with beveled edges; engraved and punched on the top with Latin cross flanked by the denominational mark  $\Gamma$  o A, originally inlaid but inlay is missing; in the upper left and right corners, circular motifs of punched dots. It dates to the 4<sup>th</sup>–6<sup>th</sup> century AD. Unpublished.



[Scale 2:1]



[Scale 2:1]

- 30) Inv. no. 2017-170 (**fig. 30**). AE 4.50 g, 13 x 13 x 2 mm. One nomisma. Square in form with plain profile; engraved and punched on the top with the denominational mark N o; a few punched dots below. The bottom is blank. It dates to the 4<sup>th</sup>–7<sup>th</sup> century AD. Unpublished.

- 31) Inv. no. 2017-171 (**fig. 31**). AE 4.5 g, 15 x 15 x 3 mm. One nomisma. Square in form with plain profile; engraved on the top with the denominational mark N. The bottom is blank. It dates to the 4<sup>th</sup>–7<sup>th</sup> century AD. Unpublished.

[Scale 2:1]

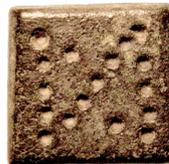


[Scale 2:1]

- 32) Inv. no. 2017-200 (**fig. 32**). AE 4.5 g, 13 x 13 x 3 mm. One nomisma. Square in form with plain edges; engraved and punched on the top with the denominational mark N; three-dot motifs in angles. The bottom is blank. It dates to the 4<sup>th</sup>–7<sup>th</sup> century AD. Unpublished.

- 33) Inv. no. 2017-197 (**fig. 33**). AE 4.40 g, 13 x 14 x 3 mm. One nomisma. Square in form with plain edges; punched on the top with the denominational mark N. The bottom is blank. It dates to the 4<sup>th</sup>–7<sup>th</sup> century AD. Unpublished.

[Scale 2:1]



[Scale 2:1]



- 34) Inv. no. 2017-183 (**fig. 34**). AE 4.4 g, 11 x 11 x 3 mm. One nomisma. Square in form with plain profile; punched on the top with the denominational mark N; two dots in angles. The bottom is blank. It dates to the 4<sup>th</sup>–7<sup>th</sup> century AD. Unpublished.

- 35) Inv. no. 2017-172 (**fig. 35**). AE 4.4 g, 13 x 12 x 2 mm. One nomisma. Square in form with plain profile; engraved and punched on the top with the denominational mark N o. The bottom is blank. It dates to the 4<sup>th</sup>–7<sup>th</sup> century AD. Unpublished.





[Scale 2:1]

- 36) Inv. no. 2017-175 (**fig. 36**). AE 4.4 g, 13 x 13 x 2 mm. One nomisma. Square in form with plain profile; engraved and punched on the top with the denominational mark N o; three dots below. The bottom is blank. It dates to the 4<sup>th</sup>–7<sup>th</sup> century AD. Unpublished.



[Scale 2:1]

- 37) Inv. no. 2017-168 (**fig. 37**). AE 4.3 g, 14 x 13 x 2 mm. One nomisma. Square in form with plain profile; engraved and punched on the top with the denominational mark N. The bottom is blank. It dates to the 4<sup>th</sup>–7<sup>th</sup> century AD. Unpublished.



[Scale 2:1]

- 38) Inv. no. 2017-194 (**fig. 38**). AE 4.25 g, 14 x 13 x 3 mm. One nomisma. Square in form with plain profile; engraved and punched on the top with the denominational mark N; two dot-motifs in angles. The bottom is blank. It dates to the AD 4<sup>th</sup>–7<sup>th</sup> century AD. Unpublished.



[Scale 2:1]

- 39) Inv. no. 2017-187 (**fig. 39**). AE 4.2 g, 13 x 13 x 2 mm. One nomisma. Square in form with beveled edges; engraved and punched on the top with the denominational mark N; one dot in angle. The bottom is blank. It dates to the 4<sup>th</sup>–7<sup>th</sup> century AD. Unpublished.



[Scale 2:1]

- 40) Inv. no. 2017-174 (**fig. 40**). AE 4.1 g, 13 x 13 x 2 mm. One nomisma. Square in form with plain profile; engraved and punched on the top with the denominational mark N; two dots in angles. The bottom is blank. It dates to the 4<sup>th</sup>–7<sup>th</sup> century AD. Unpublished.



[Scale 2:1]

- 41) Inv. no. 2017-198 (**fig. 41**). AE 4.1 g, 13 x 14 x 2 mm. One nomisma. Square in form with plain edges; engraved on the top with the denominational mark N. The bottom is blank. It dates to the 4<sup>th</sup>–7<sup>th</sup> centuries AD. Unpublished.





[Scale 2:1]

- 42) Inv. no. 2017-181 (**fig. 42**). AE 4.1 g, 12 x 12 x 2 mm. One nomisma. Square in form with plain profile; punched on the top with the denominational mark N. The bottom is blank. It dates to the 4<sup>th</sup>–7<sup>th</sup> century AD. Unpublished.



[Scale 2:1]

- 43) Inv. no. 2017-195 (**fig. 43**). AE 4.0 g, 13 x 14 x 2 mm. One nomisma. Square in form with plain profile; punched on the top with the denominational mark N; two dots motifs in angles. The bottom is blank. It dates to the 4<sup>th</sup>–7<sup>th</sup> century AD. Unpublished.



[Scale 2:1]

- 44) Inv. no. 2017-182 (**fig. 44**). AE 4.0 g, 12 x 13 x 2 mm. One nomisma. Square in form with plain profile; engraved and punched on the top with the denominational mark N o; three dots below. The bottom is blank. It dates to the 4<sup>th</sup>–7<sup>th</sup> century AD. Unpublished.



[Scale 2:1]

- 45) Inv. no. 2017-196 (**fig. 45**). AE 4.0 g, 12 x 14 x 3 mm. One nomisma. Square in form with plain edges; engraved and punched on the top with the denominational mark N o; three-dot motifs in below angle. The bottom is blank. It dates to the 4<sup>th</sup>–7<sup>th</sup> century AD. Unpublished.



[Scale 2:1]

- 46) Inv. no. 2017-306 (**fig. 46**). AE 3.8 g, 14 x 13 x 2 mm. One nomisma. Square in form with plain profile; engraved and punched on the top with the denominational mark N o. The bottom is blank. It dates to the 4<sup>th</sup>–7<sup>th</sup> century AD. Unpublished.



[Scale 2:1]

- 47) Inv. no. 2017-208 (**fig. 47**). AE 3.7 g, 12 x 12 x 2 mm. One nomisma. Square in form. Engraved and punched on the top and bottom with an eight-pointed star<sup>9</sup>. It dates to the Roman Imperial – Early Byzantine period. Unpublished.

<sup>9</sup> For a similar example see CPAI 3/2, 463 (misdescribed as N on one side but both sides has an eight-pointed star).





[Scale 2:1]

- 48) Inv. no. 2017-167 (**fig. 48**). AE 2.2 g, 10 x 10 x 2 mm. Twelve grammata (gramma of 0.18 g). Square in form with plain profile. Engraved and punched on the top with the denominational mark I B. The bottom is blank. It dates to the 4<sup>th</sup>–7<sup>th</sup> century AD. Unpublished.



[Scale 2:1]

- 49) Inv. no. 2017-180 (**fig. 49**). AE 2.1 g, 11 x 11 x 2 mm. Twelve grammata (gramma of 0.18 g). Square in form with plain profile. Engraved and punched on the top with the denominational mark I B. The bottom is blank. It dates to the 4<sup>th</sup>–7<sup>th</sup> century AD. Unpublished.



[Scale 2:1]

- 50) Inv. no. 2017-176 (**fig. 50**). AE 1.7 g, 9 x 9 x 2 mm. Eight keratia (keration of 0.21 g). Square in form with plain profile. On the top, punched with the denominational mark H. The bottom is blank. It dates to the 4<sup>th</sup>–6<sup>th</sup> century AD. Unpublished.



[Scale 2:1]

- 51) Inv. no. 2017-207 (**fig. 51**). AE 1.3 g, 9 x 9 x 1 mm. Eight keratia (keration of 0.16 g). Square in form with cut corners. On the top, engraved and punched with the denominational mark H. The bottom is blank. It dates to the 4<sup>th</sup>–6<sup>th</sup> century AD. Unpublished.



[Scale 2:1]

- 52) Inv. no. 2017-435 (**fig. 52**). AE 12.1 g, 19 x 6 mm. Three nomismata (nomisma of 4.03 g). Discoid in form with raised edges and centring points on the top and bottom; convex profile. On the top, punched with the denominational mark with N Γ; motifs of dots above and below. It dates to the 4<sup>th</sup>–6<sup>th</sup> century AD. Unpublished.





[Scale 2:1]

- 53) Inv. no. 2017-199 (**fig. 53**). AE 8.8 g, 24 x 12 mm. Two nomismata (nomisma of 4.4 g). Discoid in form with raised edges on the top and bottom; small centring point on one face; plain profile. Both faces are blank. It dates to the 6<sup>th</sup>–7<sup>th</sup> century AD. Unpublished.



[Scale 2:1]

- 54) Inv. no. 2017-205 (**fig. 54**). AE 4.4 g, 15 x 2 mm. One nomisma. Discoid in form with plain profile; engraved and punched on the top with the denominational mark N. The bottom is blank. It dates to the 4<sup>th</sup>–7<sup>th</sup> century AD. Unpublished.



[Scale 2:1]

- 55) Inv. no. 2017-177 (**fig. 55**). AE 4.4 g, 13 mm. One nomisma. Discoid in form with plain profile. On the top and bottom, engraved and punched with a X. It may be dated to the early Byzantine period. Unpublished.



[Scale 2:1]

- 56) Inv. no. 2017-169 (**fig. 56**). AE 4.3 g, 14 x 2 mm. One nomisma. Discoid in form with plain profile and centring point on the top; punched on the top with the denominational mark N. The bottom is blank. It dates to the 4<sup>th</sup>–7<sup>th</sup> century AD. Unpublished.



[Scale 2:1]

- 57) Inv. no. 2017-206 (**fig. 57**). AE. 4.1 g, 17 x 1 mm. One nomisma. Discoid in form; centring points on the top and bottom; engraved concentric circles from the centring point through the edge; the bottom is blank. It may be dated to the 10<sup>th</sup>–12<sup>th</sup> century AD. Unpublished<sup>10</sup>.

<sup>10</sup> For similar examples cf. CPAI 3 / 2, no. 667 ff.



[Scale 2:1]

- 58) Inv. no. 2017-188 (**fig. 58**). AE 4.00 g, 14 x 2 mm. One nomisma. Discoid in form with raised edges and centring points on the top and bottom; convex profile. On the top, engraved with the denominational mark with N within square frame. The bottom is blank but convex. It dates to the 4<sup>th</sup>–7<sup>th</sup> century AD. Unpublished.



[Scale 2:1]

- 59) Inv. no. 2017-204 (**fig. 59**). AE 2.1 g, 13 x 2 mm. ½ nomisma (nomisma of 4.2 g). Discoid in form with plain profile; raised rim and prominent centring points on the top and bottom. Both faces are blank or illegible. It dates to the 6<sup>th</sup>–7<sup>th</sup> centuries AD. Unpublished.

- 60) Inv. no. 58 (**fig. 60**). Glass 2.25 g, 20 x 4 mm. Semissis (solidus of 4.50 g). Constantinople. Discoid in form with raised edges. Green coloured. On the top, the bust of a dignitary, holding a mappa in his raised right hand. Legend around the bust reads +ΔΡΟΣΕΡΙΩ ΕΠΑΡΧΩ (Δροσερίου ἐπάρχου = of Eparchos Droserios)<sup>11</sup>. Unpublished.



[Scale 2:1]



[Scale 2:1]

- 61) Inv. no. 2017-203 (**fig. 61**). AE 11.4 g, 25 x 7 mm. ½ uncia (uncia of 22.8 g). Bowl-shaped, shallow; centring points in the bottom interior and on the bottom. Concentric circles around the centring point in the interior. It dates to the Middle or Late Byzantine period. Unpublished.

<sup>11</sup> Cf. Schlumberger, 1895: 63, no. 2 (solidus, 4.15 g; [Pondera # 7302](#) [Berlin, 2.17 g]). See also footnote 3 above.





[Scale 2:1]

- 62) Inv. no. 2017-202 (**fig. 62**). AE 8.4 g, 20 x 5 mm. Two nomismata (nomisma of 4.2 g). Bowl-shaped, shallow; centring points in the bottom interior and a small centring point on the bottom. It dates to the Middle or Late Byzantine period. Unpublished.

### Islamic

- 63) Inv. no. 2017-178 (**fig. 63**). AE 5.7 g, 12 x 12 x 4 mm. Islamic two dirhams (dirham of 2.85 g). Thick square in form with plain profile. On the top, a quincunx of five bird's-eye motifs. The same motif is repeated on the bottom as well. It dates to the 13<sup>th</sup>–17<sup>th</sup> centuries. Unpublished.



[Scale 2:1]

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