

EARLY ISLAMIC-PERIOD METAL ARTIFACTS FROM RAMLA

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INTRODUCTION

Twenty-one metal artifacts were discovered in the excavation at Azrieli Mall, Ramla, including household vessels and personal artifacts.¹ They were predominantly retrieved from Area A Strata III–II, dated to the late Abbasid–Fatimid periods, and from various contexts that include floors and fills; a few items were also found in Area A Stratum I and in Areas B and C (see Toueg and Torge, this volume). All the pieces are of rather small dimensions and most are made of brass. The items were produced by techniques such as hammering of metal sheets or sand casting. Some were in secondary use, modified from their original shape by a skilled artisan to serve a different purpose. The assemblage is small and characteristic of a modest-sized household of the Early Islamic period.

THE FINDS

Household Artifacts (Fig. 1:1–14)

Tray Leg (Fig. 1:1).— Such legs, with a recess at the center, were used to support trays. Each such tray was supported by several small feet, either soldered to their walls or secured to the tray by inserting a small peg into a drilled hole in the central recess. They represent a long tradition that began in the Hellenistic period. The foot shape of the Early Islamic-period trays was simple and functional, exhibiting a faceted cross-section and a ball-shaped termination at the top, contrasting with the stylized zoomorphic shape of earlier periods. Various types of similar feet were found at Caesarea Maritima and Tiberias (Lester 2004:66, Fig. 5.3:8; 2011, I:104–109; 2011, II: Pls. 7-12; 13-7; Khamis 2013:89–90, Figs. 329, 449–470), and also in other parts of the Near East, such as Fustat, Egypt (Scanlon 1982: Fig. 7) and Nishapur, Iran (Allan 1982:53, Fig. 178); they have also been found outside the region, e.g., in Spain (Azuar Ruiz 2012: Fig. III.19).

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Fig. 1. Metal objects: household artifacts.

No.	Item	Locus	Basket	Description	Material	Dimensions (mm)
1	Tray foot	149	1281	Sand casting; ovoid base, central part with flat recess int. and polygonal cross-section ext., ball-shaped top with stud; smooth surface, a few holes probably resulting from the release of gas during the cooling process, one large defect on base	Brass	H 85 Base diam. 13 Int. diam. of recess 16
2	Lamp filler with cover	131	1134	Bowl: narrow flat rim, long spout and large clover-shaped handle, flanked by two small projecting handles; the spout is broken, one of the side handles is bent, and there is damage below the rim Cover: bowl-shaped; made of cut brass sheet, bent to form the rim; damage below the rim of the cover	Brass	Diam. 74 Bowl diam. 57 H 27.9 Th 1.3 Cover diam. 50 Th 1.2

◀ Fig. 1. (cont.)

No.	Item	Locus	Basket	Description	Material	Dimensions (mm)
3	Sheath	180	1381	Conical receptacle with a pointed end and very thin and fragile walls	Bronze	L 51 W c. 36 Th 0.6
4	Strainer?	120	1100	Fragment; three holes in the sunken central part	Metal alloy	Diam. 31 Th 0.6 mm
5	Weight	503	4157	Square with pillow-shaped sides; an X is marked on the obverse; denomination: 1 dirham	Brass	Wt 2.9 g W 9.5 H 4.1
6	Weight	247	1761	Oblong with smooth walls; denomination: 1/4 dinar	Brass	Wt 0.99 g L 7.7 W 4.8 H 3.9
7	Weight	513	4155	Denomination: 1/6 dirham	Brass	Wt 0.48 g L 7 W 6 Th 1.6
8	Weight?	222	1740	U-shaped, round base with square projection above; denomination: 3 dinars(?)	Lead	Wt 12.7 g Diam. 18.7 H 10.3
9	Weight	320	3097	Flat with a central protrusion; slightly bent, probably the head of a broken nail that was filed down to serve as a weight; denomination: 2 dirhams	Brass	Wt 5.88 g Diam. 16 H 5.6
10	Part of clasp	309	3111	Small intact rectangular frame with a square section	Brass	W 14 Th 2.4
11	Spindle weight	119	1758	Round lump with round perforation	Lead	Diam. 11.7 Th 3.9
12	Ring	131	1212	Flattened metal strip; the seam is visible on the surface	Metal alloy	Diam. 21 Th 2.1
13	Ring	245	1847	Wire; round section; bent	Metal alloy	Diam. 27 Th 2.3
14	Hoop	185	1630	Thin, round in section; one end sharpened and the other broken; smooth surface	Metal alloy	Diam. 64 Th 2

Lamp Filler with Lid (Fig. 1:2).— Spouted bowls of this type may have been used as lamp fillers (Melikian-Chirvani 1982) or as cosmetic mixing bowls for the preparation of kohl powders, e.g., indigo (Khamis 2013:48). The spout in the present example is broken and therefore, it is unlikely that it was used in that state as a lamp filler. Although the original use of this bowl is not clear, the fact that it was found together with a lid indicates the possibility that it was reused as a cosmetic bowl.

Items of this type are quite common in Early Islamic-period strata: two of different sizes and with different handles were found in previous excavations at Ramla (Sion 2004: Fig. 16; Jakoel 2011: Fig. 10); as many as thirteen such items were found in a metal workshop at

Tiberias (Khamis 2013:48, Nos. 163–175); one is known from Kafr Jinnis (Messika 2006: Fig. 23:6); and another was found at Ḥolot Yavne (Gorzalczany and Barkan 2006: Fig. 3). Early Islamic-period lamp fillers are also known from Iran (Melikian-Chirvani 1982: Nos. 13–15).

Part of a Sheath (Fig. 1:3).— Three refitted pieces and a few small fragments of a conical receptacle with a pointed end may have been part of a sheath for a dagger or a knife. Parallels from the Early Islamic period include a dagger sheath discovered at Paneas (Khamis 2008:184, No. 85), and two sheath bases from Hama, Syria (Ploug and Oldenbourg 1969: Fig. 18:8, 9). Similar metal sheaths dated to the Roman and Byzantine periods include an example from Samaria (Stiebel 2007, II2:19; 2007, III3: Pl. I6A); three different pieces of a copper sheath from Gamla (Stiebel 2008:112–114, Figs. 85–86); two dagger chapes found at Dura-Europos, Syria (James 2004: Nos. 583–584); and a dagger sheath from Sardis, Turkey (Waldbaum 1983: No. 8, Pl. 1:8).

Strainer(?) (Fig. 1:4).— This item, comprising one large fragment and several small ones, may have been a metal strainer. As many as three holes may be identified in its sunken central part. Metal jugs with strainers are not a common find in the Early Islamic period. A jug with a stylized vegetal design was found in the pottery workshop at Tiberias (Khamis 2013: No. 178).

Weights (Fig. 1:5–9; Table 1).— Four square weights and two round ones (weight 0.48–12.07 g) were found. Five of the weights are made of brass (Fig. 1:5–7, 9; one not illustrated: width 9.8 mm, height 6.5 mm, weight 5.76 g, denomination 2 *dirham*) and one of lead (Fig. 1:8). Four of the items are standard weights representing small denominations, a dirham, a dinar, or fractions thereof, indicating that they were used for weighing coins, or gold and silver used in the production of jewelry. The lead item (Fig. 1:8) seems to have been a nonstandard weight, probably a local initiative, as its weight of three dinars is unusual. Figure 1:9, which is flat with a central protrusion, seems to be the broken head of a nail that was filed down to serve as a weight. Such nonstandard weights were regarded illegal in the Early Islamic period, as weights were usually provided by the *muḥtasib*, the supervisor who managed the use of weights and measures in the market. The weight are dated between the Umayyad and Fatimid periods (Table 1).

Part of a Belt Clasp (Fig. 1:10).— This item comprises a small intact round frame, square in section. It could be part of a small clasp, which may have belonged to a delicate leather belt.

Spindle Weight (Fig. 1:11).— This item appears to have been an improvised spindle weight made of lead, a raw material which could have been easily melted to produce such an object.

Table 1. Parallels for the Metal Weights (see Fig. 1)

Weight No.	Denomination	Site/Collection	Publication ⁱ	Date
Not illustrated	2 dirhams	Ophel, Jerusalem	Goodwin 2012: Appendix 7	Early Islamic period
		Ramla	Kletter 2005:117, No. 2	Early Islamic period
		Ramla	Tal 2008: Nos. 6–9	Early Islamic period
		Banias	Khamis 2008:168, No. 7	
		Ayla	Whitcomb 1994: Nos. 2, 3, 9, 14, 25	Phases D and E, 750–850 and 950–1050 CE
		Holland Collection	Holland 2009: Nos. 130–132	Early Islamic period
		Hendin Collection	Hendin 2007: Nos. 442–445	Early Islamic period
		Goodwin Collection	Goodwin 2012: No. 18	Mainly Abbasid (9th c. CE) and Fatimid periods
5	One dirham	Ophel, Jerusalem	Goodwin 2012: No. 2	Mainly Abbasid (9th c. CE) and Fatimid periods
		Ramla	Tal 2008: No. 10	Early Islamic period
		Ayla	Whitcomb 1994: Nos. 4, 12, 20, 30	Phases C and D, 750–850 CE
		Holland Collection	Holland 2009: Nos. 133, 134	Early Islamic period
		Hendin Collection	Hendin 2007: Nos. 447–450	
		Goodwin Collection	Goodwin 2012: Fig. 2, No. 19	
6	Quarter dinar	Hendin Collection	Hendin 2007: No. 451	Early Islamic period
7	Sixth dirham	Ayla	Whitcomb 1994: Nos. 13, 36	Phases B and C, 650–750, and 750–850 CE
		Holland Collection	Holland 2009: Nos. 143, 144	Early Islamic period

ⁱ Parallels from archaeological excavations are listed after those from private collections; the Holland Collection originates from the excavation at Caesarea Maritima.

Standard spindle weights were usually round with a flat base, diagonal walls and a central perforation for suspension.

Rings (Fig. 1:12, 13).— The function of these rings is unclear, although it is apparent that they were not used as links on a chain. Figure 1:12, made of metal alloy and copper, bears a marked seam. Figure 1:13 is round in section and has a recess in one place, possibly to allow the insertion of a key-stem. A comparable ring of a suggested Byzantine date was

found at Sardis (Waldbaum 1983: Nos. 406–407), and a group of keys hanging on rings dated between the tenth and twelfth centuries CE was found at Corinth, Greece (Davidson 1952: Nos. 988–994, Pl. 70). Another ring (not illustrated; thickness 3.5 mm, diam. 64 mm) is thick and round, and may have been part of a mechanical device of unknown nature; its surface is lightly corroded.

Hoop (Fig. 1:14).— Its function is unknown.

Personal Belongings (Fig. 2)

Kohl Sticks (Fig. 2:1, 2).— One complete kohl stick and two fragments, all made of brass, were found. They represent two common types of kohl sticks: one is straight-walled and has two pointed terminations (Fig. 2:1), while the other has an undulating decorative profile (Fig. 2:2). One of the fragments (not illustrated; length 64 mm, diam. 4.27 mm) may be part of Fig. 2:2, as these two items are similar in shape, dimensions and metal quality, which is a little lumpy, probably the result of a defect in the production process. Figure 2:1 was slightly flattened on one side and may have been in secondary use as a stick for mixing liquids, or perhaps a pin that was part of an amulet case, such as the item described in Fig. 2:3 (see below).

Kohl sticks were common among metal artifacts during the Early Islamic period and have been found at Ramla (South; Tal and Taxel 2008:197, Fig. 6.133:1–3).² A large group of about 20 unpublished kohl sticks was found in other excavations at Ramla (South),³ some with smooth and others with rough⁴ surfaces, all probably produced in the same workshop. Metal kohl sticks were also found at Kafr Jinnis in the vicinity of Ramla (Messika 2006: Fig. 16).

Amulet Case (Fig. 2:3).— This amulet case, made of a brass sheet, is a decorated cylindrical receptacle, featuring two opposing V-shaped patterns, with its lid attached at one edge and a pin on its side. A joining seam can be seen on its interior face, parallel to the pin. It appears to be homemade, meant to be worn on a piece of clothing: the pin—a flattened kohl stick, that was initially attached to one end of the case, may have been passed through a loop in the garment, most likely in the sleeve, and then soldered to its other end. This amulet case seems to have been an improvised object, imitating amulet cases made of silver (Lester 2008: Pl. 2).

² Unpublished examples are known from a number of excavations at Ramla led by different IAA archaeologists: Menashe Brosh (Permit No. A-217/1970), Elena Kogan-Zehavi (Permit No. A-3118/1999), Elie Haddad (Permit No. A-4740/2006), Eriola Jakoel (Permit No. A-5794/2009) and Ron Toueg (Permit No. A-6016/2010).

³ One of these excavations was conducted by Amir Gorzalczany (Permit No. A-5331/2007; Basket Nos. 24411, 21353, 25459) and the other by Amir Gorzalczany, Lisa Yehuda and Hagit Torgë (Permit No. A-5118/2007; Basket Nos. 8261, 3597, 8233).

⁴ Two items of this type were found by Amir Gorzalczany (Permit No. A-5331/2007; Basket Nos. 40074, 220548).

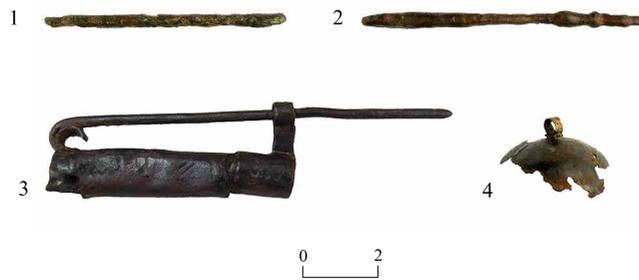


Fig. 2. Metal objects: personal belongings.

No.	Item	Locus	Basket	Description	Material	Dimensions (mm)
1	Kohl stick	180	1396	Straight-walled with pointed end and round section, slightly flattened on one side; one edge is damaged	Brass	L 125 Th 2.5
2	Kohl stick	223	1745	Rounded and thickened end and undulating decorative profile; half of the stick is missing and the surface is rather lumpy	Brass	L 76 Diam. 3.1
3	Amulet case(?) with a securing pin	163	1326	Cylindrical receptacle with a cover attached at one end; a pin, made of a flattened kohl stick, was inserted into two extensions, one of them having a loop; decorated on both sides with V-shaped patterns; its joining seam is on int., parallel to the pin	Brass	L case 56 L including pin 102 Diam. case 11
4	A small box cover(?)	318	3104	Dome-shaped; handle made of a piece of flat bent wire at the center	Metal alloy	Diam. c. 28 Th 0.63

A hexagonally-shaped amulet case made of silver was found at Ramla (Lester 2008:38), and others were part of a jewelry hoard found at Caesarea Maritima (Brosh 1987:10). A possible amulet case found in an excavation at Ramla (South)⁵ was unusually narrow and lacked the pin for attachment to a garment; however, this item may be too narrow to have been an amulet case, or it was an unsuccessful attempt to produce a pin to close a garment. The findings from Caesarea and Ramla demonstrate the existence of a tradition of amulet cases in Palestine during the Fatimid period.

Cylindrical amulet cases made of silver or gold were manufactured in Iran between the eleventh and thirteenth centuries CE (Hasson 1987: Nos. 33, 34). Examples of silver amulet cases, with dome-shaped terminations and rings to allow their suspension from the neck or attachment to clothing, are known from twelfth–thirteenth-century Iran (Hasson 1987:

⁵ The excavation was conducted by Amir Gorzalczany (Permit No. A-4144/2004).

Nos. 36–38). The use of such cases was also adopted by Jewish communities in Morocco and Kurdistan (Schwartz-Be'eri 1981; Müller-Lancet 1983: No. 245). It was customary in Islamic culture to insert an inscribed piece of paper or parchment into the amulet case, containing benedictory inscriptions and Quran verses praising God. They were meant to provide protection against dangers, illness and bad luck.

Miniature Dome-Shaped Lid(?) of Cylindrical Receptacle (Fig. 2:4).— This object, made from very thin hammered brass sheet, has a tiny handle at its center, made of flat bent wire. The lid is damaged and only its central part remains, allowing a good approximation of its diameter at 28 mm. It may have been used with a container for keeping ointment or cosmetics. A similar lid found in the pottery workshop at Tiberias had a diameter of 74 mm (Khamis 2013: No. 592), while another such object found in the Serçe Limanı shipwreck had a diameter of 94 mm (Allan 2004:350–353, Fig. 20-5. MV 9a).

Crucible (not illustrated).— This large and heavy bowl (diam. 46 mm) is made of iron with traces of lead. A few lumps of iron were found inside it, and a few additional lumps of iron and lead were found together with the crucible, all of which are small and seem to be production residue.

DISCUSSION

The group of metal objects described here comprises household artifacts and personal items, many of which were modified to serve a different purpose than originally intended for them. It is evident that the individuals who produced these altered items were familiar with metalworking and the techniques employed for producing such artifacts. The presence of metalworking professionals at Ramla attests that the production of metalware took place in the city between the ninth and eleventh centuries CE, probably not at the excavation site, but elsewhere in the city. Although we presently lack solid evidence for metal production at Ramla, such as kilns and production waste, it would be expected that a metal industry existed within such a large and flourishing city as Ramla in the Early Islamic period.

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